Board of Directors Agenda

February 12, 2026

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Raise Hand	▶	Use the **raise hand** feature every time you wish to make a public comment.
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	▶	This symbol shows you are **muted**, click this icon to unmute your microphone.
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1. If you are joining the meeting audio by phone and viewing the meeting on a device, dial the number provided in the 'join audio' phone call tab of the initial pop-up, and enter the Meeting ID (found in the link).
2. If you are joining by phone only, dial: **+1-669-900-9128** or **+1-253-215-8782** and type the meeting ID found in the link, press #. You will have access to the meeting audio, **but will NOT be able to view the PowerPoint presentations.**

Live Verbal Public Comments: Use the 'Raise Hand' icon every time you wish to make a public comment on an item. Raise your hand once the agenda item you wish to comment on has been called. In person public comments will be taken first, virtual attendees will be taken in the order in which they raise their hand. Requests to speak will not be taken after the public comment period ends, unless under the Chair's discretion. General Public Comment, at the beginning of the Board of Directors meeting only, will be limited to five speakers. Additional speakers with general public comments will be heard at the end of the meeting. Two-minutes of time is allotted per speaker, unless otherwise directed by the Chair.

Public Comments Made Via Zoom

1. Click the link found at the top of this instruction page
2. Click the raise hand icon located in the bottom center of the platform
3. The Clerk will announce your name when it is your turn to speak
4. Unmute yourself to speak

Public Comments Made by Phone Only

1. Dial **+1-669-900-9128**
2. Type in the zoom meeting ID found in the link and press #
3. Dial *9 to raise your hand via phone
4. The Clerk will call out the last 4 digits of your phone number to announce you are next to speak
5. Dial *6 to unmute yourself

Written Public Comments (before the meeting): Written public comments will be recorded in the public record and will be provided to MTS Board Members in advance of the meeting. Comments must be emailed or mailed to the Clerk of the Board* by 4:00pm the day prior to the meeting.

Translation Services: Requests for translation services can be made by contacting the Clerk of the Board* at least four working days in advance of the meeting.

In-Person Participation: In-person public comments will be heard first. Following in-person public comments, virtual attendees will be heard in the order in which they raise their hand via the Zoom platform. Speaking time will be limited to two minutes per person, unless specified by the Chairperson. Requests to speak will not be taken after the public comment period ends, unless under the Chair's discretion.

Instructions for providing in-person public comments:

1. Fill out a speaker slip located at the entrance of the Board Room;
2. Submit speaker slip to MTS staff seated at the entrance of the Board Room;
3. When your name is announced, please approach the podium located on the right side of the dais to make your public comments.

Members of the public are permitted to make general public comment at the beginning of the agenda or specific comments referencing items on the agenda during the public comment period. General Public Comment, at the beginning of the Board of Directors meeting only, will be limited to five speakers. Additional speakers with general public comments will be heard at the end of the meeting.

Assistive Listening Devices (ALDs): ALDs are available from the Clerk of the Board* prior to the meeting and are to be returned at the end of the meeting.

Reasonable Accommodations: As required by the Americans with Disabilities Act (ADA), requests for agenda information in an alternative format or to request reasonable accommodations to facilitate meeting participation, please contact the Clerk of the Board* at least two working days prior to the meeting.

***Contact Information:** Contact the Clerk of the Board via email at ClerkoftheBoard@sdmts.com, phone at **(619) 398-9561** or by mail at **1255 Imperial Ave. Suite 1000, San Diego CA 92101.**

Agenda de la Junta de Directores

February 12, 2026

Haga clic en el enlace para acceder a la reunión:

https://www.zoomgov.com/j/1602805839

ID de la reunión en Zoom

Formas de Participar

Computadora: Haga clic en el enlace más arriba. Recibirá instrucciones para operar el navegador de Zoom o la aplicación de Zoom. Una vez que haya iniciado sesión en la reunión, tendrá la opción de participar usando el sistema de audio de su computadora o teléfono.

Funciones del Seminario En Línea:

Levantar la mano	▶	Use la herramienta de **levantar la mano** cada vez que desee hacer un comentario público.
CC	▶	Los participantes pueden habilitar **el subtitulado** haciendo clic en el ícono CC. También puede ver la transcripción completa y cambiar el tamaño de letra haciendo clic en “configuración de subtítulos”. Estas herramientas no están disponibles por teléfono.
	▶	Este símbolo indica que usted se encuentra en **silencio**, haga clic en este ícono para quitar el silenciador de su micrófono.
	▶	Este símbolo indica que su micrófono se encuentra **encendido**. Haga clic en este símbolo para silenciar su micrófono.
	▶	La herramienta de chat deben usarla los panelistas y asistentes únicamente para asuntos “pertinentes a la reunión”, ya que comentarios realizados a través de esta herramienta no se conservarán como parte del registro de la reunión. Consulte el **Comentario público verbal** en vivo para obtener instrucciones sobre cómo hacer un comentario público.

Teléfono Inteligente o Tableta: Descargue la aplicación de Zoom y participe en la reunión haciendo clic en el enlace o usando el ID del seminario web (que se encuentra en el enlace).

Descarga en el App Store

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Teléfono:

1. Si está participando en la reunión mediante audio de su teléfono y viendo la reunión en un dispositivo, marque el número indicado en la pestaña de llamada telefónica “unirse por audio” en la ventana emergente inicial e ingrese el ID de la reunión (que se encuentra en el enlace).
2. Si está participando solo por teléfono, marque: **+1-669-900-9128** o **+1-253-215-8782** e ingrese el ID de la reunión que se encuentra en el enlace, pulse #. Tendrá acceso al audio de la reunión, **pero NO podrá ver las presentaciones en PowerPoint.**

Comentarios Públicos Verbales en Vivo: Use la herramienta “levantar la mano” cada vez que desee hacer un comentario público sobre alguno de los artículos. Levante la mano una vez que el artículo de la agenda sobre el que desea comentar haya sido convocado. Los comentarios públicos en persona se escucharán primero, se escuchará a los asistentes virtuales en el orden en el que levanten la mano. No se aceptarán solicitudes para hablar después de que termine el periodo para hacer comentarios públicos, a menos de que el presidente determine de otra forma a su discreción. Comentarios públicos generales, únicamente al inicio de la reunión de la Junta de Directores, se limitarán a cinco personas que deseen hablar. Las personas adicionales que deseen aportar comentarios públicos generales podrán hacerlo al final de la reunión. Se otorga dos minutos de tiempo por persona que desee hablar, a menos de que el presidente instruya de otra forma. (*Consulte la página 2 para obtener instrucciones sobre cómo hacer un comentario público.*)

Comentarios Públicos a Través de Zoom

1. Haga clic en el enlace que se encuentra en la parte superior de esta página de instrucciones
2. Haga clic en el ícono de levantar la mano en el centro inferior de la plataforma
3. El secretario anunciará su nombre cuando sea su turno de hablar
4. Desactive el silenciador para que pueda hablar

Comentarios Públicos Realizados Únicamente por Teléfono

1. Marque el **+1-669-900-9128**
2. Ingrese el ID de la reunión en Zoom que se encuentra en el enlace y pulse #
3. Marque *9 para levantar la mano por teléfono
4. El secretario indicará los últimos 4 dígitos de su número de teléfono para anunciar que usted será el siguiente en hablar
5. Marque *6 para desactivar el silenciador

Comentarios Públicos por Escrito (Antes de la Reunión): Los comentarios públicos por escrito se registrarán en el registro público y se entregarán a los miembros de la Junta de MTS antes de la reunión. Los comentarios deben enviarse por correo electrónico o postal al secretario de la Junta* antes de las 4:00 p.m. el día anterior a la reunión.

Servicios de Traducción: Pueden solicitarse servicios de traducción comunicándose con el secretario de la Junta* por lo menos cuatro días hábiles antes de la reunión.

Participación en Persona: Los comentarios públicos en persona se escucharán primero. Después de los comentarios públicos en persona, se escuchará a los asistentes virtuales en el orden en el que levanten la mano a través de la plataforma de Zoom. El tiempo para hablar se limitará a dos minutos por persona, a menos de que el presidente especifique de otra forma. No se recibirán solicitudes para hablar después de que termine el periodo para hacer comentarios públicos, a menos de que el presidente determine de otra forma a su discreción.

Instrucciones para brindar comentarios públicos en persona:

1. Llene la boleta para personas que desean hablar que se encuentran en la entrada de la Sala de la Junta.
2. Entregue la boleta para personas que desean hablar al personal de MTS que se encuentra sentado en la entrada de la Sala de la Junta.
3. Cuando anuncien su nombre, por favor, acérquese al podio ubicado en el lado derecho de la tarima para hacer sus comentarios públicos.

Los miembros del público pueden hacer comentarios públicos generales al inicio de la agenda o comentarios específicos que hagan referencia a los puntos de la agenda durante el periodo de comentarios públicos. Los comentarios públicos generales únicamente al inicio de la reunión de la Junta de Directores, se limitarán a cinco personas que deseen hablar. Las personas adicionales que deseen aportar comentarios públicos generales podrán hacerlo al final de la reunión.

Dispositivos de Asistencia Auditiva (ALD, por sus siglas en inglés): Los ALD están disponibles con el secretario de la Junta* antes de la reunión y estos deberán ser devueltos al final de la reunión.

Facilidades Razonables: Según lo requerido por la Ley de Estadounidenses con Discapacidades (ADA, por sus siglas en inglés), para presentar solicitudes de información de la agenda en un formato alternativo o solicitar facilidades razonables para facilitar su participación en la reunión, por favor, comuníquese con el secretario de la Junta* por lo menos dos días hábiles antes de la reunión.

***Información de Contacto:** Comuníquese con el secretario de la Junta por correo electrónico en ClerkoftheBoard@sdmts.com, por teléfono al **(619) 398-9561** o por correo postal en **1255 Imperial Ave. Suite 1000, San Diego CA 92101.**

Board of Directors

Agenda

February 12, 2026 at 9:00 a.m.

In-Person Participation: James R. Mills Building, 1255 Imperial Avenue, 10th Floor Board Room, San Diego CA 92101

Teleconference Participation: (669) 254-5252; Webinar ID: 160 280 5839, https://www.zoomgov.com/j/1602805839

NO.	ITEM SUBJECT AND DESCRIPTION	ACTION
1.	**Roll Call**	
2.	**Public Comments** This item is limited to five speakers with two minutes per speaker. Others will be heard after Board Discussion items. If you have a report to present, please give your copies to the Clerk of the Board.	
CONSENT ITEMS		
3.	**Approval of Minutes** Action would approve the January 15, 2026 Board of Directors meeting minutes.	Approve
4.	**CEO Report**	Informational
5.	**Rio Vista Platform Design Phase II – Approval and Adoption of Mitigated Negative Declaration (MND) and a Mitigation Monitoring and Reporting Program, Approval of Project, and Authorization of Engineering and Design Support Work Order** Action would 1) Adopt Resolution No. 26-02, Approving and Adopting a MND and a Mitigation Monitoring and Reporting Program, under the California Environmental Quality Act (CEQA) for the Rio Vista Platform Design Phase II Project and Approving the Project; 2) Ratify Work Order Amendment No. WOA353-AE-09.01, under MTS Document No. PWL353.0-22 with Dokken Engineering (Dokken), in the amount of $141,335.96, for the development of environmental documents required for construction, and development of 90% construction plans, specifications, and estimates; and 3) Authorize the Chief Executive Officer (CEO) to execute Work Order Amendment No. WOA353-AE-09.02, under MTS Document No. PWL353.0-22 with Dokken, in the amount of $148,689.69, for implementation and additional engineering and Design Support During Construction (DSDC) services and related right-of-way support for the Rio Vista Platform Design Phase II Project.	Approve

6. **Interior Bus Cleaning Services – Sole Source Contract Award** Approve

Action would authorize the Chief Executive Officer (CEO) to: 1) Execute MTS Doc. No. B0788.0-26, with the ARC of San Diego (ARC), for deep cleaning the interiors of San Diego Transit Corporation (SDTC) buses for a five (5) year base period with two (2) 1-year options for a total of seven (7) years in the amount of $3,710,143.68; and 2) Exercise each option year at the CEO's discretion.

7. **Purchase of Water - Contract Award** Approve

Action would authorize the Chief Executive Officer (CEO) to execute MTS Doc. No. G3131.0-26, with MJ Service Industries LLC, for the purchase of water for five (5) years in the amount of $417,446.92 (including 7.75 % CA Sales Tax).

8. **Printing Timetables – Contract Amendment** Approve

Action would 1) Ratify MTS Doc. No. G2686.1-23, with Neyenesch Printers, Inc. (Neyenesch), in the amount of $85,805.64; 2) Ratify MTS Doc. No. G2686.2-23 (Amendment 2), with Neyenesch, in the amount of $55,303.66; and 3) Authorize the Chief Executive Officer (CEO) to execute MTS Doc. No. G2686.3-23 (Amendment No. 3), with Neyenesch, to add $53,203.74 in additional funds due to an increased demand for printed timetables.

9. **Proposed Revisions to MTS Policy No. 50 (Engineering and Construction Expense Cost Recovery for Plan Review, Real Estate Actions, and Right of Entry Permits) – Policy Revision** Approve

Action would approve revisions to MTS Policy No. 50 (Engineering and Construction Cost Recovery for Plan Review, Real Estate Actions, and Right of Entry Permits) to increase the current right of entry permit and real estate license fees.

10. **HPE Synergy Blades and Nimble Storage – Contract Award** Approve

Action would authorize the Chief Executive Officer (CEO) to execute MTS Doc. No. G3105.0-26, with GigaKOM Corporation (GigaKom), a Small Business (SB), for the purchase of HPE Synergy Blades and Nimble Storage, in the amount of $415,073.54, inclusive of 7.75% CA sales tax.

11. **Homeless Encampment Cleanup Services – Contract Award** Approve

Action would authorize the Chief Executive Officer (CEO) to execute MTS Doc. No. PWG453.0-26, with Urban Corps of San Diego County (Urban Corps), for on-call homeless encampment cleanup services in the amount of $763,045.56 for a five (5) year period.

12. **Purchase of Oil, Lubricants, and Liquids Contract Award** Approve

Action would authorize the Chief Executive Officer (CEO) to: 1) Execute MTS Doc. No. G3182.0-26, with Blue Angel International LLC (Blue Angel), a Small Business (SB), for the purchase of Oil, Lubricants, and Liquids for five (5) years in the amount of $186,999.98 (including 7.75 % CA Sales Tax); and 2) Execute MTS Doc. No. G3183.0-26, with Jamison Transportation Products

(Jamison), a SB, for the purchase of Oil, Lubricants, and Liquids for five (5) years in the amount of $1,023,094.06 (including 7.75 % CA Sales Tax).

13. SAP Support Services – Amendment — Approve

Action would authorize the Chief Executive Officer (CEO) to execute Amendment No. 1 to MTS Doc. No. G2447.0-21, with Labyrinth Solutions, Inc. (LSI), for additional funds for as-needed SAP Support Services in the amount of $326,000.00.

14. Operations Budget Status Report for December 2025 — Informational

DISCUSSION ITEMS

15. California State Transportation Agency (CalSTA) Transit Transformation Task Force Report (Michael Pimentel, California Transit Association) — Informational

16. San Diego Transit Corporation (SDTC) Pension Investment Status (Erik Williams, with RVK Inc., and Mike Thompson) — Informational

17. San Diego Transit Corporation (SDTC) Employee Retirement Plan's Actuarial Valuation as of July 1, 2025 (Anne Harper and Alice Alsberghe with Cheiron Inc., and Mike Thompson) — Approve

Action would (1) Receive the SDTC Employee Retirement Plan's (Plan) Actuarial Valuation as of July 1, 2025; (2) Adopt the staff recommended Unfunded Actuarial Liability (UAL) amortization from the current 12-year remaining term to a recalibrated 20-year amortization; and (3) Adopt the resulting pension contribution amount of $16,470,975 for Fiscal Year (FY) 2027.

OTHER ITEMS

18. Chair, Board Member and Chief Executive Officer's (CEO's) Communications

19. Remainder of Public Comments Not on The Agenda

This item is a continuation of item No. 2 (Public Comment), in the event all speakers who request to comment on item No. 2 are not called. If all Public Comment is accepted during item No. 2, no additional public comment will be accepted under this item.

20. Next Meeting Date

The next Board of Director's meeting is scheduled for March 19, 2026 at 9:00am.

ADJOURNMENT

21. Adjournment

MINUTES

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM

BOARD OF DIRECTORS

January 15, 2026

[Clerk's note: Except where noted, public, staff and board member comments are paraphrased. The full comment can be heard by reviewing the recording at the MTS website.]

1. Roll Call

Chair Whitburn called the Board meeting to order at 9:07 a.m. A roll call sheet listing Board member attendance is attached as Attachment A.

2. Public Comment

Charlotte Iradjpanah – provided a verbal statement to the Board during the meeting. Charlotte thanked the Chief Operating Officer for addressing an ADA issue, noting a paratransit reservation glitch was quickly fixed. She raised concerns about Trolley riders not yielding seats due to phone use and suggested limiting phone distractions. She also urged drivers to ensure disabled passengers are seated safely before moving.

Steve Leiserson – provided a verbal statement to the Board during the meeting. Steve referenced a written statement he had submitted. He recommended making the route map interactive by turning route numbers into clickable buttons. He suggested using AI to improve trip planning and user experience. He also noted that occasional riders struggle to find the most efficient routes, especially when timing between Trolleys and buses is not aligned.

Miguel Aguirre – provided a verbal statement to the Board during the meeting. Miguel introduced himself as the managing partner of Grand Central West, also known as the McDonald's building at the San Ysidro Trolley Station. He urged the Board to initiate an RFP for management of public property currently mismanaged by private transportation activities. He shared that stakeholders had expressed concern about the condition of San Ysidro, especially during recent poor weather. He emphasized the urgency of addressing these issues, particularly with the upcoming World Cup, and offered to follow up with more in-depth outreach before the next Board meeting.

CONSENT ITEMS:

3. Approval of Minutes

Action would approve the December 18, 2025 Board of Directors meeting minutes.

4. CEO Report

5. Community Outreach Consultant Services – Contract Award

Action would 1) Execute MTS Doc No. G3074.0-25, with Brown Marketing Strategies, Inc., dba CENTRIC (CENTRIC), a Women Owned Business Enterprise (WBE) and Small Business (SB), to provide Community Outreach Consultant Services in the amount of $616,974.79 for a three (3) year base period with (2) two 1-year options, for a total of five (5) years; and 2) Exercise the option years at the CEO's discretion.

6. Kearny Mesa Division (KMD) Zero Emission Bus (ZEB) Overhead Charging Phase I – Work Order Amendment 3

Action would 1) Ratify Work Order Amendment WOA356-AE-46.01, under MTS Doc No. PWL356.0-22 with Pacific Rail Enterprises, Inc. (PRE), a Women Owned Business Enterprise (WBE) and Small Business (SB), in the amount of $46,150.00 for professional services for geotechnical exploration; and
2) Authorize the Chief Executive Officer (CEO) to execute Work Order Amendment No. WOA356-AE-46.03, under MTS Doc. No. PWL356.0-22, with PRE, in the amount of

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$471,236.88 for additional engineering services and authorizing design support during construction (DSDC) services for Phase 1 of the KMD Overhead Charging project.

7. San Diego Transit Corporation (SDTC) Pension Plan Administration Services – Contract Award

Action would authorize the Chief Executive Officer (CEO) to: 1) Execute MTS Doc No. G3110.0-26, with The Howard E. Nyhart Co., Inc., dba Nyhart (Nyhart), to provide SDTC Pension Plan Administration Services in the amount of $664,000.00 for five (5) base years with five (5) 1-year options for a total of 10 years; and 2) Exercise the option years at the CEO's discretion.

8. Commvault Software and Hardware Support Subscription Two-Year Renewal – Contract Award

Action would authorize the Chief Executive Officer (CEO) to execute MTS Doc. No. G3123.0-26, with Concourse Tech Inc. (Concourse), for a two-year renewal of Commvault software and hardware support services, in the amount of $314,387.92

9. Operations Budget Status Report for November 2025 (Gordon Meyer)

10. Master Concessionaire Services – Contract Amendment

Action would authorize the Chief Executive Officer (CEO) to execute MTS Doc. G2653.1-23, with BriceHouse Station LLC (BriceHouse), related to the proposed rehabilitation of the San Ysidro Retail Kiosks.

Public Comment

There were no Public Comments.

Board Comment

There were no Board Comments.

Action Taken

Board Member Hall moved to approve Consent Agenda Item Nos. 3 to 10. Chair Whitburn seconded the motion, and the vote was 13 to 0 in favor with Vice Chair Goble and Board Member Vaus absent.

DISCUSSION ITEMS:

11. Elect Chair Pro Tem and Committee Appointments (Sharon Cooney)

Chair Whitburn explained the methodology of the Ad Hoc Nominating Committee and its proposed slate. Chair Whitburn took nominations for the remaining open positions on MTS related committees, such as the MTS Accessible Service Advisory Committee (ASAC) and San Diego Association of Governments (SANDAG), noting that members could nominate themselves if they were interested in serving. The Chair prompted further discussion on the matter.

Public Comment

There were no Public Comments.

Board Comment

Sharon Cooney, MTS Chief Executive Officer (CEO), explained that the schedule for ASAC was coordinated with the appointed Chair to ensure it aligned with their availability. She added that staff support would also be provided to assist the Chair in their role.

Board Member Hall asked for clarification on the specific days ASAC would be meeting. Ms. Cooney responded that historically, the committee met at 1:00 PM on Board meeting days to avoid extra commuting for the ASAC Chair. She added that the schedule was flexible and the committee typically meets three to four times a year.

Board Member Mendoza offered to serve on the SANDAG Regional Planning Committee as either the representative or alternate. She noted she would be unavailable for the first meeting on January 30 but confirmed availability for the remaining three meetings of the year.

Board Member Mendoza nominated Board Member Fernandez to serve as the alternate for the SANDAG Regional Planning Committee and as Chair of the MTS ASAC.

Board Member Montgomery Steppe formally nominated Board Member Mendoza to the SANDAG Regional Planning Committee.

Board Member Leyba-Gonzalez thanked the Board for allowing him to continue as the MTS representative for the SANDAG Board. He explained that due to full-time work commitments, he could only attend one of SANDAG's two monthly meetings. He requested that the alternate commit to attending the first meeting, while he would cover the second. Board Member Moreno agreed to that approach as alternate.

Chair Whitburn summarized the nominations: Board Member Fernandez as Chair of ASAC, Board Member Mendoza as the representative to the SANDAG Regional Planning Committee, and Board Member Fernandez as the alternate. He noted that this completed the slate and invited any final comments, also recommending that Board Member Montgomery Steppe continue in her role as Chair Pro Tem.

Chair Whitburn thanked the Board Members for stepping up to serve in various committee roles and expressed appreciation for their support and contributions to MTS.

Action Taken

The Board elected Board Member Montgomery Steppe as Chair Pro-Tem and approved the appointment of representatives to MTS and Non-MTS committees for 2026, as proposed by the Ad Hoc Nominating Committee including the following changes: Board Member Fernandez appointed Chair of ASAC, Board Member Mendoza appointed primary representative of the SANDAG Regional Planning Committee and Board Member Fernandez as the alternate representative of the SANDAG Regional Planning Committee. The vote was 13 to 0 in favor with Vice Chair Goble and Board Member Vaus absent.

12. Public Hearing: Route 910 (Blue Line Overnight Express Bus) (Brent Boyd and Beverly Neff)

Brent Boyd, MTS Director of Planning and Scheduling, and Beverly Neff, MTS Manager of Planning and Reporting, presented on Public Hearing: Route 910 (Blue Line Overnight Express Bus). They presented on: the Blue Line San Ysidro ridership (by time of day), Route 910 timeline, ridership, performance metrics, Title VI Analysis, public input, and staff recommendation.

Public Comment

Barbara Perez – provided a written statement to the Board prior to the meeting. Barbara expressed support for Route 910. The written comment is provided in the January 15, 2026, Final Meeting packet.

Anonymous – provided a written statement to the Board prior to the meeting. Anonymous expressed concerns over Route 910. The written comment is provided in the January 15, 2026, Final Meeting Packet.

Anonymous – provided a written statement to the Board prior to the meeting. Anonymous expressed support and concerns over Route 910. The written comment is provided in the January 15, 2026 Final Packet.

Alex Forsman – provided a verbal statement to the Board during the meeting. Alex emphasized the importance of overnight transit service, stating that public transit had enabled him to participate in school, work, and community activities. He noted that early service shutdowns often left him without transportation, requiring family support and limiting opportunities. He stated that Route 910 improved late-night access and urged the Board to maintain the route to ensure equitable transit access and support climate goals.

Board Comment

Board Member Bush thanked staff and members of the public for their comments and expressed enthusiasm about the positive results of the pilot program. He stated that he was pleased with the observed growth and asked staff to elaborate on the growth trajectory, including trends, month-over-month increases, and expectations moving forward. Mr. Boyd explained that ridership had generally increased month-over-month, with a slight dip in September for unknown reasons and expected seasonal declines during the November and December holidays. He stated that ridership was expected to continue growing gradually. He noted that the second-to-last northbound trip had the highest ridership, likely because the final trip was close enough to the first morning Trolley that riders chose to wait for the Trolley. He added that the service had helped reduce overcrowding on the first Trolley trip and improved capacity. He also explained that operational changes, including running trains out of service southbound before beginning northbound service, had eliminated previous crowding issues and reduced the need for riders to backtrack to secure space.

Board Member Bush asked about the marketing and promotional efforts for the pilot program, including available data on the budget and overall impact. He inquired whether increased promotional efforts could potentially lead to even greater ridership growth. Mark Olson, MTS Director of Marketing and Communications, reported that two major waves of outreach and promotion had been conducted, first at the launch in January and again in the fall, which appeared to correlate with ridership increases. He stated that the most effective strategy had been on-the-ground outreach, particularly in the San Ysidro area, where staff and passenger support representatives directly informed riders about the new service. He explained that marketing efforts also included digital advertising, cross-border billboard placements in Tijuana, and Spanish-language radio advertising. He concluded that a diversified marketing approach had been used and that significant growth potential remained for the route.

Board Member Bush thanked Mr. Olson and stated that many people were still unaware of the service, noting significant opportunity for increased promotion. He highlighted National City and airport workers with off-hour shifts as key populations that could benefit and expressed willingness to support additional marketing investments. He stated that increased spending could yield strong returns based on current trends and asked for data on rider destinations, including whether trips were primarily to the airport, downtown, or other locations. Mr. Boyd explained that ridership destinations were spread across the route, with approximately 60% of riders boarding at San Ysidro. He estimated that about half of those riders traveled to downtown San Diego, while the remainder exited at intermediate stops. He noted that, contrary to initial expectations, many riders were using inner stops between San Ysidro and downtown, resulting in significant activity throughout the corridor. He added that detailed ridership data by stop could be provided. Board Member Bush expressed his strong support for the program and expressed satisfaction with the observed growth and future potential. He requested detailed ridership data by stop to help identify additional marketing opportunities and improve outreach efforts. He stated that targeted promotion could further expand usage and noted his appreciation for the limited-stop design, which balanced efficiency with accessibility by providing service in each city without slowing operations. He also commended the data-driven planning process used to

determine stop locations and recommended continued engagement with drivers, noting their direct interaction with riders and valuable insights.

Board Member Moreno thanked staff for the presentation and praised Route 910 as a valuable addition to MTS's service portfolio. She stated that the route successfully combined efforts to increase overall ridership while expanding service for existing customers. She highlighted that ridership had increased by 31% in the first six months, with more than 75,000 total passengers, approximately 7,000 riders per month, and about 220 riders daily, calling the results exceptional. She emphasized that the route demonstrated MTS's ability to create services that meet customer needs and serve as a model for future growth. She encouraged further analysis of rider travel patterns beyond downtown destinations and noted the significance of cross-border travel to MTS ridership. She commended staff and overnight bus drivers for their work and expressed support for continued innovation, expanded marketing and outreach efforts, including social media engagement. She made a motion on the action to approve the staff recommendation and requested ongoing updates.

Board Member Elo-Rivera thanked staff for the presentation and echoed prior comments in support of Route 910. He stated that the service was thoughtfully designed around the realities of riders' lives rather than standard schedules and emphasized its significant impact on overnight workers, students, and families. He explained that without this service, many riders faced high transportation costs or major disruptions to family routines. He expressed appreciation for the route as a meaningful way to improve quality of life for hardworking individuals and voiced strong support for making the service permanent.

Board Member McCann thanked staff for the presentation and noted that the Blue Line was among the most heavily used lines in the MTS system. He commended the innovative approach taken to expand service to meet the needs of a 24-hour society and highlighted that more than 75,000 passengers had already used the route. He stated that the service provided safe, reliable, and affordable transportation for work and other essential travel, and expressed appreciation for the positive impact on riders.

Action Taken

Board Member Moreno moved to 1) Receive public testimony and 2) Approve the conversion of Pilot Route 910 into a permanent route. Board Member McCann seconded the motion, and the vote was 13 to 0 in favor with Vice Chair Goble and Board Member Vaus absent.

13. Autonomous Vehicle Passenger Service (Samantha Leslie)

Samantha Leslie, MTS Deputy General Counsel, presented on Autonomous Vehicle Passenger Service. She provided details on: MTS For-Hire Vehicle Regulations, Waymo, MTS Taxicab Advisory Committee (TAC), TAC Motion, TAC Motion to MTS Board, and staff recommendation.

Public Comment

Mikaiil Hussein – provided a verbal statement to the Board during the meeting. Mikaiil expressed support for the recommendation and resolution while raising concerns about the impact of autonomous taxi services on human drivers. He stated that robot taxis created unfair competition and threatened the livelihoods of hardworking taxi drivers who serve seniors, visitors, and the community. He urged MTS to seek greater regulatory authority to ensure fairness and protect drivers.

Matthew Fish – provided a verbal statement to the Board during the meeting. Matthew introduced himself as the Business Manager of International Brotherhood of Electrical Workers (IBEW) Local 465 and stated their support for the resolution.

Crisoforo Gomez – provided a verbal statement to the Board during the meeting. Crisoforo expressed support for the resolution, stating solidarity with taxi workers and highlighting the

financial challenges they faced. He warned that driverless vehicle deployment would further harm workers and urged the Board to approve the item to ensure public input and prioritize worker and community impacts.

Board Comment

Board Member Elo-Rivera thanked staff for their work and emphasized the urgency of addressing autonomous vehicle operations, noting that Waymo intended to begin operating in San Diego. He expressed concern about the lack of local oversight, potential safety risks, operational disruptions, and negative impacts on transit, rideshare, and taxi workers. He argued that autonomous vehicles threatened jobs, public safety, and local control, and stressed the importance of regulatory authority and community input. He made a motion on staff recommendation and stated that he preferred handling this effort with internal MTS resources whenever possible, rather than outsourcing or relying on outside legal counsel. Board Member Foster seconded the motion.

Board Member Fleming stated his opposition to the motion, expressing concern about labor union influence and arguing that human-operated vehicles caused more disruptions than autonomous vehicles. He said he would support efforts focused solely on increasing local control but felt the motion aimed to hinder technological innovation. He emphasized that autonomous vehicle technology represented progress, compared it to other historical innovations, and noted his positive experiences observing Waymo operations in other cities. He concluded that resisting this technology would hold the region back and stated his intent to vote against the motion.

Board Member Mendoza stated that her questions regarding safety concerns had been addressed by Board Member Elo-Rivera and acknowledged that significant safety issues appeared to exist in other cities. She then asked for clarification on the resolution's reference to the San Diego County Regional Airport Authority, specifically whether it concerned prohibiting services such as Waymo at the airport or related to potential airport-operated autonomous shuttle services between terminals. Ms. Leslie clarified that the draft resolution did not address airport-operated autonomous vehicle services and stated that she was not aware of any current plans for autonomous vehicles to transport passengers within the airport. Board Member Elo-Rivera clarified that the resolution specifically targeted Waymo-type autonomous passenger vehicles and was not intended to affect airport-operated people movers or shuttle services between terminals. He emphasized that the intent was not to impede airport transportation operations or MTS service to and from the airport, but rather to address individual autonomous vehicles operating without drivers.

Board Member Montgomery Steppe shared the airport's perspective, stating that the San Diego International Airport was currently awaiting guidance from the CPUC, which did not yet allow autonomous vehicle operations in the airport vicinity. She noted that there was no current conflict, as the airport was proceeding with traditional transportation methods, but expected the issue to be discussed further by the Airport Authority Board.

Board Member Elo-Rivera responded to concerns about innovation and safety, stating that while some safety data on autonomous vehicles appeared positive, he believed it was selectively framed and did not reflect broader operational risks. He cited recent disruptions in San Francisco during a power outage as evidence of the system's vulnerability and potential impacts on transit operations. He emphasized that the issue was not opposition to innovation, but the need to protect workers, public safety, and community interests. He defended labor participation in public processes and argued that technological advances should benefit everyday people, not only large corporations. He warned that unchecked deployment could eliminate driving jobs, reduce competition, and ultimately increase costs for passengers, citing past experiences with rideshare services. He concluded by stressing the importance of local control, fair regulation, and prioritizing workers and communities in the transition to new transportation technologies.

Board Member Hall stated that the primary intent of the motion was to ensure local control. He emphasized the importance of knowing which autonomous services were entering his city and addressing concerns as they arose.

Karen Landers, MTS General Counsel, explained that the final recommendation presented was intended to capture the committee's requests by providing broader authority to explore options to communicate the Board's position, including submitting a protest or position letter. She stated that this approach allowed staff flexibility to assess available actions and effectively communicate the Board's direction and position following the meeting.

Board Member Elo-Rivera stated that he supported the staff recommendation as presented and explained that differences from the TAC motion reflected evolving regulatory approvals that occurred during the process. He noted that these changes highlighted the challenges of responding to rapidly developing autonomous vehicle policies and confirmed that the current recommendation represented the appropriate motion.

Chair Whitburn clarified the motion to ensure accurate documentation, stating that it authorized the CEO or her designee to participate in potential proceedings before the CPUC or DMV, communicate the Board's position on autonomous vehicle passenger services, and engage with the San Diego International Airport regarding these concerns. He confirmed that the motion included only the first three action items and did not include the final bullet point, and asked staff to confirm their understanding. Ms. Landers clarified that the position statement under consideration sought to restore local control and oppose autonomous vehicle passenger services operating without meaningful local oversight.

Chair Whitburn requested clarification regarding whether outreach to the CPUC and/or DMV would take the form of a formal protest or a comment letter. He asked whether this decision would be left to staff discretion and emphasized the need to clearly define the Board's intent. Board Member Elo-Rivera asked Ms. Cooney for clarification on how she interpreted the difference between submitting a formal protest and a comment letter, noting that the distinction was important to him. Ms. Cooney explained that the formal requirements for submitting an official protest were not yet fully known and would depend on specific procedural steps, including demonstrating standing and potential harm to the agency. She stated that many agencies had submitted position or opposition letters, which was the more common approach, but noted that staff could explore the formal protest process further if directed. Ms. Landers explained that the recommendation was intentionally written broadly to allow flexibility as regulatory processes evolved. She stated that Waymo was expected to submit an advice letter application to the CPUC to operate passenger services in San Diego, and that agencies typically respond during the protest period through position or opposition letters. She noted that while formal technical protests could be explored, they involved complex procedural requirements. She added that the broader authorization would allow MTS to participate in future CPUC proceedings without returning to the Board for additional approval, ensuring timely and proactive engagement. Board Member Elo-Rivera stated that the clarification was helpful and expressed support for beginning with a position letter while further evaluating additional engagement options. He emphasized the importance of minimizing reliance on outside counsel and confirmed his understanding that MTS would clearly state its position and pursue opposition through the CPUC. He added that it was important for the agency to build internal capacity on these issues, noting that autonomous vehicle impacts would continue to grow, including in delivery and freight, with potential implications for MTS.

Ms. Cooney stated that if the City of San Diego had already taken a position, MTS could potentially collaborate and share resources, particularly if a more formal protest process became necessary. Board Member Elo-Rivera noted that the City of San Diego had taken a position through its legislative platform, though he stated that the current MTS action differed and was moving more quickly. He added that the TAC action was driving the timing and urgency of the item.

Action Taken

Board Member Elo-Rivera moved to 1) Adopt Resolution 2026-01; and 2) Authorize the Chief Executive Officer (CEO), or her designee(s), to participate in potential future proceedings at the California Public Utilities Commission (CPUC) or the California Department of Motor Vehicles (DMV), if any, to communicate the Board's position statement or concerns regarding autonomous vehicle passenger services; and 3) Authorize the CEO, or her designee(s) to communicate the Board's position statement or concerns regarding autonomous vehicle passenger services at the San Diego International Airport. Board Member Foster seconded the motion, and the vote was 12 in favor (Board Members Fernandez, Foster, Mendoza, McCann, Bush, Leyba-Gonzalez, Montgomery Steppe, Dillard, Hall, Elo-Rivera, Whitburn, and Moreno) to 1 opposed (Board Member Fleming) with Vice Chair Goble, and Board Member Vaus absent.

14. Project Labor Agreement (PLA) Monitoring (Samantha Leslie and Katie Rich, The Solis Group)

Samantha Leslie, MTS Deputy General Counsel, and Katie Rich, Solis Group Project Manager, presented on Project Labor Agreement (PLA) Monitoring. They presented on: MTS roles and responsibilities, 2025 MTS PLA projects, future PLA projects, and future efforts.

Public Comment

There were no Public Comments.

Board Comment

Board Member Dillard thanked staff for their presentation and commended their efforts, particularly highlighting the importance of supporting local employees in the San Diego region. She requested follow-up information regarding the Orange Line, specifically asking for an approximate breakdown of project costs invested in the City of La Mesa. She asked that the information be provided via email and concluded by expressing appreciation for the team's work.

Board Member Foster asked a clarifying question regarding the presentation, specifically referencing a chart that listed journeyman and apprentice labor hours. He inquired whether the unchanged heading indicated that no apprenticeship hours had been utilized to date on the project. Ms. Rich explained that the chart appeared to contain a duplication error and clarified that apprenticeship hours had been utilized, estimating approximately 9,000 hours with a compliance rate of about 75%. She stated that the information would be corrected. Board Member Foster thanked staff for the clarification and stated that he wanted to ensure compliance with apprenticeship requirements. He acknowledged that projects typically had until completion to meet obligations but emphasized the importance of monitoring progress. He also asked whether staff had observed any instances of apprentices working without proper supervision during site visits. Ms. Rich stated that instances of apprentices working unsupervised occurred occasionally and, when identified, required restitution. She noted that contractors generally complied with supervision requirements and documented apprentice participation through payroll reporting. She added that staff regularly cross-checked certified payroll, site observations, and reported work activities to ensure compliance, emphasizing that while such issues were not common, they did occur from time to time. Board Member Foster asked whether staff utilized an electronic certified payroll system. Ms. Rich responded that they used DIR reporting along with platforms such as LCPtracker, and in some cases direct submissions via Dropbox, depending on the contractor.

Action Taken

No action taken. Informational item only.

15. Grants Administration Report (Julia Tuer and Kena Teon)

Julia Tuer, MTS Manager of Government Affairs, and Kena Teon, MTS Grants Administrator, presented on the Grants Administration Report. They outlined the following information: team structure, administration of grants, regional support and collaboration, types of grants: formula and competitive, formula grant summary, stimulus / SB 125 summary, competitive grant summary, competitive funding challenges, Operation Lifesaver Program, Clean Californica Local Grant Program, Transit and Intercity Rail Capital Program, Specialized Transportation Grant Program, strategic partnerships, and compliance audits.

Public Comment

There were no Public Comments.

Board Comment

There were no Board Comments.

Action Taken

No action taken. Informational item only.

16. Fiscal Year 2025 Annual Operating Reports (Brian Riley and Devin Braun)

The Board agreed to receive this report based on the written materials. No presentation was provided during the meeting.

Public Comment

There were no Public Comments.

Board Comment

There were no Board Comments.

Action Taken

No action taken. Informational item only.

OTHER ITEMS:

17. Chair, Board Member and Chief Executive Officer's (CEO's) Communications

Board Member Hall noted that it was Vice Chair Goble's birthday and extended birthday wishes.

Ms. Cooney highlighted the PRONTO commemorative cards presented to the Board as part of MTS's community celebration program, which showcased local artists and the communities MTS served. She explained that the program included neighborhood beautification efforts and featured artwork highlighted in the agency's annual report. She introduced a special Black History Month PRONTO card titled American Sketches, created by Ibn Edwards, MTS Manager of Rail Facilities. It was inspired by the montage technique of his father, local artist and former art teacher, Eddie Edwards. She noted that the artwork celebrated Black history and community pride, had been featured in a recent KUSI interview, and would also appear on a wrapped bus during a local parade. She concluded by expressing pride in the program and congratulating Mr. Edwards for his contribution.

Board Member Bush thanked MTS staff for their efforts on the 24th Street mural project and provided a brief update, stating that work was scheduled to resume that evening with completion of the west façade expected later in the week. He noted that the project was

intended to serve as a catalyst to address graffiti issues in the area and expressed appreciation for staff's diligence and support.

18. Remainder of Public Comments Not on The Agenda

There were no additional public comments.

19. Next Meeting Date

The next regularly scheduled Board meeting is February 12, 2026 at 9:00 a.m.

CLOSED SESSION:

20. Public Comment for Closed Session

There were no Public Comments.

The Board convened to Closed Session at 10:52 a.m.

21. Closed Session - Conference With Legal Counsel – Anticipated Litigation Initiation of litigation pursuant to Government Code 54956.9 (d)(4) (one potential case)

22. Closed Session – Conference with Legal Counsel – Existing Litigation Pursuant to California Government Code Section 54956.9(d)(1)
Angela McGaff, et al. vs. San Diego Metropolitan Transit System, et al.
San Diego Superior Court Case No. 37-2022-00049144-CU-PO-CTL

Closed Session Reconvening

The Board reconvened to Open Session at 11:58 a.m.

Karen Landers, General Counsel, reported the following oral report of final actions taken in Closed Session:

21. The Board received a report and gave instructions to staff.

22. The Board received a report from legal counsel and gave instructions.

ADJOURNMENT

23. Adjournment

The meeting was adjourned at 11:59 a.m.

_____
Chairperson
San Diego Metropolitan Transit System

Filed by:

Approved as to form:

_____
Clerk of the Board
San Diego Metropolitan Transit System

_____
General Counsel
San Diego Metropolitan Transit System

Attachment: A. Roll Call Sheet

SAN DIEGO METROPOLITAN TRANSIT SYSTEM
BOARD OF DIRECTORS
ROLL CALL

MEETING OF (DATE): January 15, 2026 CALL TO ORDER (TIME): 9:07 a.m.
RECESS: RECONVENE:
CLOSED SESSION: 10:52 a.m. RECONVENE: 11:58 a.m.
ORDINANCES ADOPTED: ADJOURN: 11:59 a.m.

JURISDICTION	BOARD MEMBER		ALTERNATE		PRESENT (TIME ARRIVED)	ABSENT (TIME LEFT)
City of Chula Vista	Cesar Fernandez	☒	Jose Preciado	☐	9:07 a.m.	11:59 a.m.
City of Chula Vista	John McCann	☒	Jose Preciado	☐	9:07 a.m.	11:59 a.m.
City of Coronado	Carrie Downey	☐	Mark Fleming	☐	9:07 a.m.	11:59 a.m.
County of San Diego	Monica Montgomery Steppe	☒	Paloma Aguirre	☐	9:07 a.m.	11:59 a.m.
City of El Cajon	Steve Goble (Vice-Chair)	☒	Phil Ortiz	☐	10:38 a.m.	11:59 a.m.
City of Imperial Beach	Matthew Leyba-Gonzalez	☒	Mariko Nakawatase	☐	9:07 a.m.	11:59 a.m.
City of La Mesa	Patricia Dillard	☒	Mark Arapostathis	☐	9:07 a.m.	11:59 a.m.
City of Lemon Grove	Jennifer Mendoza	☒	Jessyka Heredia	☐	9:07 a.m.	11:59 a.m.
City of National City	Marcus Bush	☒	Jose Rodriguez	☐	9:07 a.m.	11:59 a.m.
City of Poway	Steve Vaus	☐	Peter De Hoff	☐	ABSENT	11:59 a.m.
City of San Diego	Vivian Moreno	☒	Jennifer Campbell	☐	9:07 a.m.	11:59 a.m.
City of San Diego	Sean Elo-Rivera	☒	Joe LaCava	☐	9:07 a.m.	11:59 a.m.
City of San Diego	Todd Gloria	☐	Henry Foster	☒	9:07 a.m.	11:59 a.m.
City of San Diego	Stephen Whitburn (Chair)	☒	Kent Lee	☐	9:07 a.m.	11:59 a.m.
City of Santee	Ronn Hall	☒	Laura Koval John Minto	☐ ☐	9:07 a.m.	11:59 a.m.

SIGNED BY THE CLERK OF THE BOARD: /s/ Lucia Mansour

Agenda Item No. 4

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM
BOARD OF DIRECTORS

February 12, 2026

SUBJECT:

Chief Executive Officer's (CEO) Report

INFORMATIONAL

In accordance with Board Policy No. 52, "Procurement of Goods and Services", attached are listings of contracts, purchase orders, and work orders that have been approved within the CEO's authority (up to and including $150,000) for the period January 8, 2026 – February 4, 2026.

CEO TRAVEL REPORT (since last Board meeting)

N/A

BOARD MEMBER TRAVEL REPORT (since last Board meeting)

N/A

Attachments: A. Purchase Orders
B. Expense and Revenue Contracts
C. Emergency Procurement Memo – SacPower

Purchase Orders							
Purchase Orders	PO Date	Name	Prime Business Certification	Material Group	PO Value	DBE Subcontracted Amount	Non DBE Subcontracted Amount
4400003680	1/13/2026	W.W. Grainger Inc		G130-SHOP TOOLS	$ 260.44	$ -	$ -
4400003681	1/13/2026	ODP Business Solutions, LLC		G200-OFFICE SUPPLIES	$ 55.88	$ -	$ -
4400003682	1/13/2026	Mcmaster-Carr Supply Co		R230-RAIL/LRV MECHANICAL	$ 69.06	$ -	$ -
4400003683	1/14/2026	ODP Business Solutions, LLC		G200-OFFICE SUPPLIES	$ 168.56	$ -	$ -
4400003684	1/15/2026	ODP Business Solutions, LLC		G200-OFFICE SUPPLIES	$ 1,678.40	$ -	$ -
4400003685	1/16/2026	Mcmaster-Carr Supply Co		G130-SHOP TOOLS	$ 80.05	$ -	$ -
4400003686	1/21/2026	Mcmaster-Carr Supply Co		M180-STATION ELECTRICAL	$ 1,066.35	$ -	$ -
4400003687	1/21/2026	ODP Business Solutions, LLC		G200-OFFICE SUPPLIES	$ 598.76	$ -	$ -
4400003688	1/21/2026	ODP Business Solutions, LLC		G200-OFFICE SUPPLIES	$ 355.78	$ -	$ -
4400003689	1/22/2026	ODP Business Solutions, LLC		G200-OFFICE SUPPLIES	$ 1,640.24	$ -	$ -
4400003690	1/22/2026	ODP Business Solutions, LLC		G200-OFFICE SUPPLIES	$ 85.13	$ -	$ -
4400003691	1/22/2026	ODP Business Solutions, LLC		G200-OFFICE SUPPLIES	$ 404.70	$ -	$ -
4400003692	1/23/2026	ODP Business Solutions, LLC		G200-OFFICE SUPPLIES	$ 38.79	$ -	$ -
4400003693	1/23/2026	Mcmaster-Carr Supply Co		G270-ELECTRICAL/LIGHTING	$ 58.12	$ -	$ -
4400003694	1/26/2026	ODP Business Solutions, LLC		G200-OFFICE SUPPLIES	$ 82.30	$ -	$ -
4400003695	1/26/2026	ODP Business Solutions, LLC		G200-OFFICE SUPPLIES	$ 189.51	$ -	$ -
4400003696	1/26/2026	W.W. Grainger Inc		G130-SHOP TOOLS	$ 248.52	$ -	$ -
4400003697	1/29/2026	W.W. Grainger Inc		G130-SHOP TOOLS	$ 240.81	$ -	$ -
4400003698	1/29/2026	ODP Business Solutions, LLC		G200-OFFICE SUPPLIES	$ 3,447.89	$ -	$ -
4400003699	1/29/2026	ODP Business Solutions, LLC		G200-OFFICE SUPPLIES	$ 721.56	$ -	$ -
4400003700	1/30/2026	W.W. Grainger Inc		G200-OFFICE SUPPLIES	$ 66.79	$ -	$ -
4400003701	2/2/2026	Mcmaster-Carr Supply Co		G190-SAFETY/MED SUPPLIES	$ 132.08	$ -	$ -
4500072772	1/8/2026	Transit Holdings Inc		B120-BUS MECHANICAL PARTS	$ 2,215.04	$ -	$ -
4500072773	1/8/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 3,541.09	$ -	$ -
4500072774	1/8/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 4,426.37	$ -	$ -
4500072775	1/8/2026	Arts Lawnmower and Repairs LLC		G130-SHOP TOOLS	$ 4,977.00	$ -	$ -
4500072776	1/8/2026	Transit Holdings Inc		B130-BUS BODY	$ 134.40	$ -	$ -
4500072777	1/8/2026	Access Professional Inc.	Small Business	M200-YARD FACILITIES	$ 1,000.00	$ -	$ -
4500072778	1/8/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 5,547.44	$ -	$ -
4500072779	1/8/2026	Waxie's Enterprises, LLC		G180-JANITORIAL SUPPLIES	$ 886.72	$ -	$ -
4500072780	1/8/2026	Transit Holdings Inc		B140-BUS CHASSIS	$ 1,480.90	$ -	$ -
4500072781	1/8/2026	Parts Authority, LLC		B160-BUS ELECTRICAL	$ 3,674.60	$ -	$ -
4500072782	1/8/2026	Signal Hill Auto Enterprises, Inc.		G180-JANITORIAL SUPPLIES	$ 835.07	$ -	$ -
4500072783	1/8/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 4,076.34	$ -	$ -
4500072784	1/8/2026	The Infurmary Veterinary		G120-SECURITY	$ 78.87	$ -	$ -
4500072785	1/8/2026	VCA Animal Hospitals, Inc.		G120-SECURITY	$ 70.54	$ -	$ -
4500072786	1/8/2026	Mohawk Mfg & Supply Co		B130-BUS BODY	$ 1,173.40	$ -	$ -
4500072787	1/8/2026	Ace Uniforms LLC	Small Business	C120-SPECIALTY CONTRACTOR	$ 380.35	$ -	$ -
4500072788	1/8/2026	Muncie Reclamation and Supply Co		B120-BUS MECHANICAL PARTS	$ 20,715.96	$ -	$ -
4500072789	1/8/2026	711 Print Enterprises Inc		G230-PRINTED MATERIALS	$ 4,987.75	$ -	$ -
4500072790	1/8/2026	VCA Animal Hospitals, Inc.		G120-SECURITY	$ 176.35	$ -	$ -
4500072791	1/8/2026	Transit Holdings Inc		B250-BUS REPAIR PARTS	$ 14,293.65	$ -	$ -
4500072792	1/8/2026	The Infurmary Veterinary		G120-SECURITY	$ 305.27	$ -	$ -
4500072793	1/8/2026	Motion Industries, Inc.		G130-SHOP TOOLS	$ 151.16	$ -	$ -
4500072794	1/8/2026	San Diego Geographic		I110-INFORMATION TECH	$ 24,024.00	$ -	$ -
4500072795	1/8/2026	Harbor Diesel & Equipment, Inc		G170-LUBRICANTS	$ 10,417.93	$ -	$ -
4500072796	1/8/2026	Siemens Mobility, Inc.		B200-BUS PWR TRAIN EQUIP	$ 4,337.15	$ -	$ -
4500072797	1/8/2026	Gillig LLC		B120-BUS MECHANICAL PARTS	$ 1,559.89	$ -	$ -
4500072798	1/8/2026	Transit Holdings Inc		B250-BUS REPAIR PARTS	$ 336.94	$ -	$ -
4500072799	1/8/2026	Sylvester Roofing Co Inc		C120-SPECIALTY CONTRACTOR	$ 1,500.00	$ -	$ -
4500072800	1/9/2026	Trane U.S. Inc.		F110-SHOP/BLDG MACHINERY	$ 25.01	$ -	$ -
4500072801	1/9/2026	W.W. Grainger Inc		F110-SHOP/BLDG MACHINERY	$ 60.78	$ -	$ -
4500072802	1/9/2026	Waxie's Enterprises, LLC		G180-JANITORIAL SUPPLIES	$ 249.04	$ -	$ -
4500072803	1/9/2026	Waxie's Enterprises, LLC		G180-JANITORIAL SUPPLIES	$ 323.76	$ -	$ -
4500072804	1/9/2026	Transit Holdings Inc		B160-BUS ELECTRICAL	$ 543.49	$ -	$ -
4500072805	1/9/2026	Transit Holdings Inc		B130-BUS BODY	$ 1,107.22	$ -	$ -
4500072806	1/9/2026	Transit Holdings Inc		B120-BUS MECHANICAL PARTS	$ 314.09	$ -	$ -
4500072807	1/9/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 492.37	$ -	$ -
4500072808	1/9/2026	Waxie's Enterprises, LLC		G180-JANITORIAL SUPPLIES	$ 1,426.31	$ -	$ -
4500072809	1/9/2026	Transit Holdings Inc		B200-BUS PWR TRAIN EQUIP	$ 1,318.56	$ -	$ -
4500072810	1/9/2026	Transit Holdings Inc		B200-BUS PWR TRAIN EQUIP	$ 5,613.16	$ -	$ -
4500072811	1/9/2026	SC Commercial, LLC		B120-BUS MECHANICAL PARTS	$ 6,704.52	$ -	$ -
4500072812	1/9/2026	Willy's Electronic Supply Co Inc		G130-SHOP TOOLS	$ 517.20	$ -	$ -
4500072813	1/12/2026	Siemens Mobility, Inc.		R120-RAIL/LRV CAR BODY	$ 2,918.69	$ -	$ -
4500072814	1/12/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 4,437.64	$ -	$ -
4500072815	1/12/2026	Mohawk Mfg & Supply Co		B140-BUS CHASSIS	$ 21.69	$ -	$ -
4500072816	1/12/2026	Transit Holdings Inc		B140-BUS CHASSIS	$ 11,141.80	$ -	$ -
4500072817	1/12/2026	Home Depot USA Inc		G140-SHOP SUPPLIES	$ 566.19	$ -	$ -
4500072818	1/12/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 2,265.43	$ -	$ -
4500072819	1/12/2026	Waxie's Enterprises, LLC		G180-JANITORIAL SUPPLIES	$ 108.01	$ -	$ -

Purchase Orders							
Purchase Orders	PO Date	Name	Prime Business Certification	Material Group	PO Value	DBE Subcontracted Amount	Non DBE Subcontracted Amount
4500072820	1/12/2026	Transit Holdings Inc		B200-BUS PWR TRAIN EQUIP	$ 1,204.97	$ -	$ -
4500072821	1/12/2026	Transit Holdings Inc		B130-BUS BODY	$ 387.80	$ -	$ -
4500072822	1/12/2026	A to Z Enterprises, Inc.		P300-TOWING SVCS	$ 140.00	$ -	$ -
4500072823	1/12/2026	Cummins Inc		B250-BUS REPAIR PARTS	$ 1,600.00	$ -	$ -
4500072824	1/12/2026	Siemens Mobility, Inc.		R160-RAIL/LRV ELECTRICAL	$ 6,098.65	$ -	$ -
4500072825	1/12/2026	Siemens Mobility, Inc.		M130-CROSSING MECHANISM	$ 14,029.05	$ -	$ -
4500072826	1/12/2026	Transit Holdings Inc		B250-BUS REPAIR PARTS	$ 8,005.18	$ -	$ -
4500072827	1/12/2026	Network Industries, Inc.		F200-TANK EQUIPMENT	$ 262.82	$ -	$ -
4500072828	1/12/2026	Shilpark Paint Corporation		G160-PAINTS & CHEMICALS	$ 1,074.90	$ -	$ -
4500072829	1/12/2026	Rambuilt Glass LLC		G190-SAFETY/MED SUPPLIES	$ 2,650.00	$ -	$ -
4500072830	1/12/2026	Intelligence Press, Inc.		P280-GENERAL SVC AGRMNTS	$ 4,236.00	$ -	$ -
4500072831	1/12/2026	ODP Business Solutions, LLC		G200-OFFICE SUPPLIES	$ 83.53	$ -	$ -
4500072832	1/12/2026	Jeffery Kraus	Small Business	P280-GENERAL SVC AGRMNTS	$ 33,838.49	$ -	$ -
4500072833	1/12/2026	MAC-IMPULSE, LLC		M120-OVRHEAD CATENARY SYS	$ 2,458.00	$ -	$ -
4500072834	1/12/2026	Downtown SD General Auto Repair		B250-BUS REPAIR PARTS	$ 482.95	$ -	$ -
4500072835	1/12/2026	Jeffery Kraus	Small Business	B250-BUS REPAIR PARTS	$ 28,681.29	$ -	$ -
4500072836	1/12/2026	San Diego Friction Products, Inc.		B120-BUS MECHANICAL PARTS	$ 4,285.22	$ -	$ -
4500072837	1/12/2026	Southern Counties Lubricants LLC		G170-LUBRICANTS	$ 3,448.00	$ -	$ -
4500072838	1/12/2026	Jeffery Kraus	Small Business	P130-EQUIP MAINT REPR SVC	$ 143,977.09	$ -	$ -
4500072839	1/12/2026	Laird Plastics, Inc		M180-STATION ELECTRICAL	$ 2,492.04	$ -	$ -
4500072841	1/12/2026	B and H Photo and Electronics		R160-RAIL/LRV ELECTRICAL	$ 1,563.73	$ -	$ -
4500072842	1/12/2026	ColorID LLC	Small Business	G200-OFFICE SUPPLIES	$ 786.58	$ -	$ -
4500072843	1/12/2026	Southern Counties Lubricants LLC		G170-LUBRICANTS	$ 1,481.57	$ -	$ -
4500072844	1/12/2026	The Sherwin-Williams Company		F120-BUS/LRV PAINT BOOTHS	$ 665.28	$ -	$ -
4500072845	1/12/2026	Transit Holdings Inc		B250-BUS REPAIR PARTS	$ 1,149.40	$ -	$ -
4500072846	1/12/2026	Freeby Signs		B250-BUS REPAIR PARTS	$ 678.90	$ -	$ -
4500072847	1/12/2026	Vehicle Technical Consultants Inc		G140-SHOP SUPPLIES	$ 3,781.72	$ -	$ -
4500072848	1/12/2026	Merrimac Petroleum Inc	Woman Owned Business	A120-AUTO/TRUCK GASOLINE	$ 2,319.74	$ -	$ -
4500072849	1/12/2026	Supreme Oil Co.		A120-AUTO/TRUCK GASOLINE	$ 12,830.93	$ -	$ -
4500072850	1/12/2026	Robcar Corporation	Woman Owned Business	G160-PAINTS & CHEMICALS	$ 341.00	$ -	$ -
4500072851	1/12/2026	Home Depot USA Inc		F180-BUILDING MATERIALS	$ 516.13	$ -	$ -
4500072852	1/12/2026	Siemens Mobility, Inc.		R120-RAIL/LRV CAR BODY	$ 943.89	$ -	$ -
4500072853	1/12/2026	Allied Refrigeration Inc		B250-BUS REPAIR PARTS	$ 224.66	$ -	$ -
4500072854	1/12/2026	Midwest Bus Corporation		B130-BUS BODY	$ 306.15	$ -	$ -
4500072855	1/12/2026	Charter Industrial Supply Inc	Small Business	B250-BUS REPAIR PARTS	$ 171.87	$ -	$ -
4500072856	1/12/2026	Data Alliance Inc		R150-RAIL/LRV COMM EQUIP	$ 75.21	$ -	$ -
4500072857	1/12/2026	Motion Industries, Inc.		G140-SHOP SUPPLIES	$ 138.60	$ -	$ -
4500072858	1/12/2026	Harbor Diesel & Equipment, Inc		B200-BUS PWR TRAIN EQUIP	$ 282.88	$ -	$ -
4500072859	1/12/2026	Freeby Signs		B130-BUS BODY	$ 25.43	$ -	$ -
4500072860	1/12/2026	Mcmaster-Carr Supply Co		F110-SHOP/BLDG MACHINERY	$ 585.42	$ -	$ -
4500072861	1/12/2026	Home Depot USA Inc		F190-LANDSCAPING MAT'LS	$ 944.82	$ -	$ -
4500072862	1/12/2026	Gillig LLC		B130-BUS BODY	$ 1,638.16	$ -	$ -
4500072863	1/12/2026	Init Innovations in Transportation		G290-FARE REVENUE EQUIP	$ 956.85	$ -	$ -
4500072864	1/12/2026	Clarran Inc.	DBE	G150-FASTENERS	$ 127.81	$ -	$ -
4500072865	1/12/2026	Gillig LLC		B130-BUS BODY	$ 3,201.67	$ -	$ -
4500072866	1/12/2026	R.S. Hughes Co Inc		G140-SHOP SUPPLIES	$ 1,693.80	$ -	$ -
4500072867	1/12/2026	Transit Holdings Inc		B250-BUS REPAIR PARTS	$ 1,920.19	$ -	$ -
4500072868	1/13/2026	Transit Holdings Inc		B120-BUS MECHANICAL PARTS	$ 1,476.69	$ -	$ -
4500072869	1/13/2026	Transit Holdings Inc		B250-BUS REPAIR PARTS	$ 166.56	$ -	$ -
4500072870	1/13/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 785.89	$ -	$ -
4500072871	1/13/2026	Transit Holdings Inc		B160-BUS ELECTRICAL	$ 2,333.29	$ -	$ -
4500072872	1/13/2026	Transit Holdings Inc		B250-BUS REPAIR PARTS	$ 677.10	$ -	$ -
4500072873	1/13/2026	Waxie's Enterprises, LLC		G180-JANITORIAL SUPPLIES	$ 239.04	$ -	$ -
4500072874	1/13/2026	Siemens Mobility, Inc.		R160-RAIL/LRV ELECTRICAL	$ 17,017.61	$ -	$ -
4500072875	1/13/2026	Transit Holdings Inc		B200-BUS PWR TRAIN EQUIP	$ 305.23	$ -	$ -
4500072876	1/13/2026	Gillig LLC		B130-BUS BODY	$ 1,093.80	$ -	$ -
4500072877	1/13/2026	Winzer Franchise Company		G130-SHOP TOOLS	$ 195.90	$ -	$ -
4500072878	1/13/2026	FRS Environmental, Inc	DBE	C120-SPECIALTY CONTRACTOR	$ 3,188.00	$ -	$ -
4500072879	1/13/2026	Grah Safe & Lock Inc	Small Business	G120-SECURITY	$ 400.00	$ -	$ -
4500072880	1/13/2026	Westflex, Inc.		R120-RAIL/LRV CAR BODY	$ 1,404.09	$ -	$ -
4500072881	1/13/2026	Gillig LLC		B250-BUS REPAIR PARTS	$ 464.66	$ -	$ 113,565.01
4500072883	1/13/2026	CDW LLC		I110-INFORMATION TECH	$ 265.35	$ -	$ -
4500072884	1/13/2026	Quadient, Inc.		G200-OFFICE SUPPLIES	$ 436.45	$ -	$ -
4500072885	1/13/2026	The Infurmary Veterinary		G120-SECURITY	$ 548.98	$ -	$ -
4500072886	1/13/2026	The Infurmary Veterinary		G120-SECURITY	$ 701.71	$ -	$ -
4500072887	1/13/2026	VCA Animal Hospitals, Inc.		G120-SECURITY	$ 169.60	$ -	$ -
4500072888	1/13/2026	RS Americas, Inc.		R140-RAIL/LRV DOORS/RAMP	$ 101.66	$ -	$ -
4500072889	1/14/2026	Trentman Corp	Small Business	P280-GENERAL SVC AGRMNTS	$ 2,104.15	$ -	$ -
4500072890	1/14/2026	Waxie's Enterprises, LLC		G180-JANITORIAL SUPPLIES	$ 656.85	$ -	$ -
4500072891	1/14/2026	Transit Innovations LLC		M120-OVRHEAD CATENARY SYS	$ 4,094.50	$ -	$ -

Purchase Orders							
Purchase Orders	PO Date	Name	Prime Business Certification	Material Group	PO Value	DBE Subcontracted Amount	Non DBE Subcontracted Amount
4500072892	1/14/2026	Transit Holdings Inc		B250-BUS REPAIR PARTS	$ 869.53	$ -	$ -
4500072893	1/14/2026	The Infurmary Veterinary		G120-SECURITY	$ 2,025.83	$ -	$ -
4500072894	1/14/2026	Harbor Diesel & Equipment, Inc		B250-BUS REPAIR PARTS	$ 16,265.33	$ -	$ -
4500072895	1/14/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 7,804.06	$ -	$ -
4500072896	1/14/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 203.78	$ -	$ -
4500072897	1/14/2026	Transit Holdings Inc		B200-BUS PWR TRAIN EQUIP	$ 19.59	$ -	$ -
4500072898	1/14/2026	Transit Holdings Inc		B140-BUS CHASSIS	$ 155.16	$ -	$ -
4500072899	1/14/2026	Transit Holdings Inc		B130-BUS BODY	$ 109.69	$ -	$ -
4500072900	1/14/2026	Digi-Key Corporation		R160-RAIL/LRV ELECTRICAL	$ 900.33	$ -	$ -
4500072901	1/14/2026	Tennant Sales & Serv Co		F110-SHOP/BLDG MACHINERY	$ 867.14	$ -	$ -
4500072902	1/14/2026	Patco Industries Inc		M150-PWR SWITCHES/LOCKS	$ 9,918.39	$ -	$ -
4500072903	1/14/2026	Westair Gases and Equipment Inc	Small Business	G140-SHOP SUPPLIES	$ 4,292.00	$ -	$ -
4500072904	1/14/2026	Integrity Newspapers Inc.		P310-ADVERTISING SERVICES	$ 1,895.33	$ -	$ -
4500072905	1/14/2026	Tennant Sales & Serv Co		F110-SHOP/BLDG MACHINERY	$ 280.23	$ -	$ -
4500072906	1/14/2026	Dimensional Silk Screen Inc		G230-PRINTED MATERIALS	$ 624.68	$ -	$ -
4500072907	1/14/2026	Warren Communications Inc		P310-ADVERTISING SERVICES	$ 1,353.00	$ -	$ -
4500072911	1/14/2026	Gemini Forest Products Inc	Small Business	T110-TRACK, RAIL	$ 3,197.25	$ -	$ -
4500072912	1/14/2026	Home Depot USA Inc		G140-SHOP SUPPLIES	$ 537.68	$ -	$ -
4500072913	1/14/2026	Transit Holdings Inc		B250-BUS REPAIR PARTS	$ 331.38	$ -	$ -
4500072914	1/14/2026	Gillig LLC		B250-BUS REPAIR PARTS	$ 3,561.37	$ -	$ -
4500072915	1/14/2026	Init Innovations in Transportation		G290-FARE REVENUE EQUIP	$ 500.00	$ -	$ -
4500072916	1/14/2026	Daily Journal Corporation	Small Business	P310-ADVERTISING SERVICES	$ 4,000.00	$ -	$ -
4500072917	1/15/2026	San Diego Friction Products, Inc.		B120-BUS MECHANICAL PARTS	$ 937.02	$ -	$ -
4500072918	1/15/2026	Waxie's Enterprises, LLC		G180-JANITORIAL SUPPLIES	$ 1,321.19	$ -	$ -
4500072919	1/15/2026	Transit Holdings Inc		B130-BUS BODY	$ 192.22	$ -	$ -
4500072920	1/15/2026	Midwest Bus Corporation		B250-BUS REPAIR PARTS	$ 637.79	$ -	$ -
4500072921	1/15/2026	Transit Holdings Inc		B140-BUS CHASSIS	$ 1,588.86	$ -	$ -
4500072922	1/15/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 4,426.37	$ -	$ -
4500072923	1/15/2026	Transit Holdings Inc		B120-BUS MECHANICAL PARTS	$ 5,906.33	$ -	$ -
4500072924	1/15/2026	Siemens Mobility, Inc.		R120-RAIL/LRV CAR BODY	$ 3,370.42	$ -	$ -
4500072925	1/15/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 2,755.62	$ -	$ -
4500072926	1/15/2026	Waxie's Enterprises, LLC		G180-JANITORIAL SUPPLIES	$ 685.29	$ -	$ -
4500072927	1/15/2026	Transit Holdings Inc		B130-BUS BODY	$ 939.48	$ -	$ -
4500072928	1/15/2026	Prudential Overall Supply		G140-SHOP SUPPLIES	$ 636.15	$ -	$ -
4500072929	1/15/2026	Transit Holdings Inc		B130-BUS BODY	$ 2,082.86	$ -	$ -
4500072930	1/15/2026	Airgas Inc		R160-RAIL/LRV ELECTRICAL	$ 2,525.23	$ -	$ -
4500072931	1/15/2026	Applied Industrial		G140-SHOP SUPPLIES	$ 982.68	$ -	$ -
4500072932	1/15/2026	Aztec Fire & Safety, Inc.		B250-BUS REPAIR PARTS	$ 672.36	$ -	$ -
4500072933	1/15/2026	Fastenal Company		G200-OFFICE SUPPLIES	$ 2,268.96	$ -	$ -
4500072934	1/15/2026	Blue Angel International LLC	Small Business	G190-SAFETY/MED SUPPLIES	$ 79.65	$ -	$ -
4500072935	1/15/2026	Brady Industries of California, LLC		G180-JANITORIAL SUPPLIES	$ 263.53	$ -	$ -
4500072936	1/15/2026	Supreme Oil Co.		A120-AUTO/TRUCK GASOLINE	$ 12,288.90	$ -	$ -
4500072937	1/15/2026	Home Depot USA Inc		F110-SHOP/BLDG MACHINERY	$ 1,416.84	$ -	$ -
4500072938	1/15/2026	W.W. Grainger Inc		F110-SHOP/BLDG MACHINERY	$ 225.76	$ -	$ -
4500072939	1/15/2026	Sunbelt Rentals, Inc		P160-EQUIPMENT RENTALS	$ 765.07	$ -	$ -
4500072940	1/15/2026	CDW LLC		R160-RAIL/LRV ELECTRICAL	$ 98.59	$ -	$ -
4500072941	1/15/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 1,330.62	$ -	$ -
4500072942	1/15/2026	Arts Lawnmower and Repairs LLC		G140-SHOP SUPPLIES	$ 1,526.87	$ -	$ -
4500072943	1/15/2026	ON-LINE STAMPCO INC	Small Business	G200-OFFICE SUPPLIES	$ 206.74	$ -	$ -
4500072944	1/15/2026	Allied Refrigeration Inc		F110-SHOP/BLDG MACHINERY	$ 1,802.56	$ -	$ -
4500072945	1/16/2026	W.W. Grainger Inc		F110-SHOP/BLDG MACHINERY	$ 1,269.47	$ -	$ -
4500072946	1/16/2026	Transit Holdings Inc		B140-BUS CHASSIS	$ 1,848.07	$ -	$ -
4500072947	1/16/2026	Transit Holdings Inc		B250-BUS REPAIR PARTS	$ 253.75	$ -	$ -
4500072948	1/16/2026	NS Corporation		F110-SHOP/BLDG MACHINERY	$ 17,962.98	$ -	$ -
4500072949	1/16/2026	A to Z Enterprises, Inc.		P210-NON-REV VEH REPAIRS	$ 90.00	$ -	$ -
4500072950	1/16/2026	Reid and Clark Screen Arts Co		G230-PRINTED MATERIALS	$ 84.05	$ -	$ -
4500072951	1/16/2026	Transit Holdings Inc		B120-BUS MECHANICAL PARTS	$ 1,424.01	$ -	$ -
4500072952	1/16/2026	Transit Holdings Inc		B130-BUS BODY	$ 361.59	$ -	$ -
4500072953	1/16/2026	Gillig LLC		B130-BUS BODY	$ 149.38	$ -	$ -
4500072954	1/20/2026	Transit Holdings Inc		B140-BUS CHASSIS	$ 4,433.85	$ -	$ -
4500072955	1/20/2026	Waxie's Enterprises, LLC		G180-JANITORIAL SUPPLIES	$ 344.20	$ -	$ -
4500072956	1/20/2026	Siemens Mobility, Inc.		R160-RAIL/LRV ELECTRICAL	$ 1,165.25	$ -	$ -
4500072957	1/20/2026	Signal Hill Auto Enterprises, Inc.		G180-JANITORIAL SUPPLIES	$ 1,115.22	$ -	$ -
4500072958	1/20/2026	Waxie's Enterprises, LLC		G180-JANITORIAL SUPPLIES	$ 323.76	$ -	$ -
4500072959	1/20/2026	San Diego Friction Products, Inc.		B120-BUS MECHANICAL PARTS	$ 4,285.22	$ -	$ -
4500072960	1/20/2026	Transit Holdings Inc		B130-BUS BODY	$ 6,915.06	$ -	$ -
4500072961	1/20/2026	Transit Holdings Inc		B250-BUS REPAIR PARTS	$ 3,382.16	$ -	$ -
4500072962	1/20/2026	Transit Holdings Inc		B250-BUS REPAIR PARTS	$ 23,941.13	$ -	$ -
4500072963	1/20/2026	Pape Group, Inc.		F110-SHOP/BLDG MACHINERY	$ 1,495.74	$ -	$ -
4500072964	1/20/2026	Staples Contract & Commercial LLC		G180-JANITORIAL SUPPLIES	$ 143.72	$ -	$ -

Purchase Orders							
Purchase Orders	PO Date	Name	Prime Business Certification	Material Group	PO Value	DBE Subcontracted Amount	Non DBE Subcontracted Amount
4500072965	1/20/2026	Staples Contract & Commercial LLC		G200-OFFICE SUPPLIES	$ 126.67	$ -	$ -
4500072966	1/20/2026	Staples Contract & Commercial LLC		G200-OFFICE SUPPLIES	$ 53.56	$ -	$ -
4500072967	1/20/2026	ISC Applied Systems Corp		R150-RAIL/LRV COMM EQUIP	$ 2,155.00	$ -	$ -
4500072968	1/20/2026	White Cap, LP		G140-SHOP SUPPLIES	$ 104.04	$ -	$ -
4500072969	1/20/2026	Cummins Inc		B250-BUS REPAIR PARTS	$ 2,392.76	$ -	$ -
4500072970	1/20/2026	Chingon Custom Metal		F190-LANDSCAPING MAT'LS	$ 1,126.40	$ -	$ -
4500072971	1/20/2026	Gillig LLC		B250-BUS REPAIR PARTS	$ 15,263.50	$ -	$ -
4500072972	1/20/2026	Transit Holdings Inc		B250-BUS REPAIR PARTS	$ 33.10	$ -	$ -
4500072973	1/20/2026	Southern Counties Oil Co, LP		F110-SHOP/BLDG MACHINERY	$ 3,432.92	$ -	$ -
4500072974	1/20/2026	Arizona Machinery LLC		A140-AUTO/TRUCK REPAIR	$ 300.00	$ -	$ -
4500072975	1/20/2026	Gillig LLC		B250-BUS REPAIR PARTS	$ 5,207.86	$ -	$ -
4500072976	1/20/2026	Init Innovations in Transportation		G290-FARE REVENUE EQUIP	$ 318.95	$ -	$ -
4500072977	1/20/2026	Vern Rose Inc		G140-SHOP SUPPLIES	$ 540.42	$ -	$ -
4500072978	1/20/2026	Freeby Signs		B130-BUS BODY	$ 235.33	$ -	$ -
4500072979	1/20/2026	American Battery Corporation	Small Business	P280-GENERAL SVC AGRMNTS	$ 4,776.56	$ -	$ -
4500072980	1/20/2026	Digi-Key Corporation		R170-RAIL/LRV HVAC	$ 2,258.87	$ -	$ -
4500072981	1/20/2026	Fastenal Company		G180-JANITORIAL SUPPLIES	$ 514.62	$ -	$ -
4500072982	1/20/2026	Fehr Brothers Industries, Inc.		G140-SHOP SUPPLIES	$ 74.46	$ -	$ -
4500072984	1/20/2026	Genfare, LLC		B190-BUS FARE EQUIP	$ 3,855.18	$ -	$ -
4500072985	1/20/2026	Genuine Parts Company Inc		R180-RAIL/LRV LIGHTING	$ 4,396.04	$ -	$ -
4500072986	1/20/2026	Hanning & Kahl LP		M140-WAYSIDE SIGNALS	$ 4,594.46	$ -	$ -
4500072987	1/20/2026	Hitachi Rail STS USA, Inc.		G130-SHOP TOOLS	$ 500.77	$ -	$ -
4500072988	1/20/2026	Kurt Morgan		G200-OFFICE SUPPLIES	$ 1,359.95	$ -	$ -
4500072989	1/20/2026	Midwest Motor Supply Co. Inc		G180-JANITORIAL SUPPLIES	$ 1,712.97	$ -	$ -
4500072990	1/20/2026	Supreme Oil Co.		A120-AUTO/TRUCK GASOLINE	$ 8,777.43	$ -	$ -
4500072991	1/20/2026	National Carwash Solutions Inc		G160-PAINTS & CHEMICALS	$ 807.19	$ -	$ -
4500072992	1/20/2026	Southern Counties Oil Co, LP		A120-AUTO/TRUCK GASOLINE	$ 2,422.85	$ -	$ -
4500072993	1/20/2026	OneSource Distributors, LLC		G180-JANITORIAL SUPPLIES	$ 1,380.93	$ -	$ -
4500072994	1/20/2026	Daniels Tire Service, Inc		P210-NON-REV VEH REPAIRS	$ 255.33	$ -	$ -
4500072995	1/20/2026	RJ International LLC	DBE	G140-SHOP SUPPLIES	$ 1,293.00	$ -	$ -
4500072996	1/20/2026	VSI Technologies Inc	Woman Owned Business	G190-SAFETY/MED SUPPLIES	$ 1,750.94	$ -	$ -
4500072997	1/20/2026	Rush Truck Centers of California		B200-BUS PWR TRAIN EQUIP	$ 377.13	$ -	$ -
4500072998	1/20/2026	San Diego Friction Products, Inc.		G140-SHOP SUPPLIES	$ 906.30	$ -	$ -
4500072999	1/21/2026	W.W. Grainger Inc		M180-STATION ELECTRICAL	$ 2,540.20	$ -	$ -
4500073000	1/21/2026	Southern Counties Lubricants LLC		G170-LUBRICANTS	$ 2,331.24	$ -	$ -
4500073001	1/21/2026	Transit Holdings Inc		B200-BUS PWR TRAIN EQUIP	$ 11.86	$ -	$ -
4500073002	1/21/2026	Siemens Mobility, Inc.		R160-RAIL/LRV ELECTRICAL	$ 1,291.15	$ -	$ -
4500073003	1/21/2026	Signal Hill Auto Enterprises, Inc.		G180-JANITORIAL SUPPLIES	$ 5,198.50	$ -	$ -
4500073004	1/21/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 4,524.62	$ -	$ -
4500073005	1/21/2026	Transit Holdings Inc		B140-BUS CHASSIS	$ 259.14	$ -	$ -
4500073006	1/21/2026	Cummins Inc		B250-BUS REPAIR PARTS	$ 1,860.33	$ -	$ -
4500073007	1/21/2026	Transit Holdings Inc		B200-BUS PWR TRAIN EQUIP	$ 71.63	$ -	$ -
4500073008	1/21/2026	Transit Holdings Inc		B130-BUS BODY	$ 1,159.19	$ -	$ -
4500073009	1/21/2026	Arts Lawnmower and Repairs LLC		F190-LANDSCAPING MAT'LS	$ 944.82	$ -	$ -
4500073010	1/21/2026	TK Services Inc		B250-BUS REPAIR PARTS	$ 1,201.69	$ -	$ -
4500073011	1/21/2026	Arts Lawnmower and Repairs LLC		F190-LANDSCAPING MAT'LS	$ 1,820.98	$ -	$ -
4500073012	1/21/2026	Cummins Inc		B120-BUS MECHANICAL PARTS	$ 59,641.38	$ -	$ -
4500073013	1/21/2026	Muncie Reclamation and Supply Co		B130-BUS BODY	$ 7,380.86	$ -	$ -
4500073014	1/21/2026	Transit Holdings Inc		B250-BUS REPAIR PARTS	$ 7,154.30	$ -	$ -
4500073015	1/21/2026	ODP Business Solutions, LLC		P400-FINANCIAL & AUDIT	$ 218.35	$ -	$ -
4500073016	1/21/2026	Mohawk Mfg & Supply Co		B120-BUS MECHANICAL PARTS	$ 5,334.22	$ -	$ -
4500073017	1/21/2026	Rush Truck Centers of California		B200-BUS PWR TRAIN EQUIP	$ 96.64	$ -	$ -
4500073018	1/21/2026	TK Services Inc		B110-BUS HVAC SYSTEMS	$ 58.87	$ -	$ -
4500073019	1/21/2026	Gillig LLC		B140-BUS CHASSIS	$ 1,829.75	$ -	$ -
4500073020	1/21/2026	Transit Holdings Inc		B140-BUS CHASSIS	$ 2,817.51	$ -	$ -
4500073021	1/21/2026	San Diego Friction Products, Inc.		B250-BUS REPAIR PARTS	$ 253.50	$ -	$ -
4500073022	1/21/2026	Motion Industries, Inc.		F110-SHOP/BLDG MACHINERY	$ 1,816.48	$ -	$ -
4500073023	1/21/2026	JDK Railroad Materials, Inc.		P280-GENERAL SVC AGRMNTS	$ 2,300.00	$ -	$ -
4500073024	1/21/2026	Clarran Inc.	DBE	G150-FASTENERS	$ 418.19	$ -	$ -
4500073025	1/21/2026	Prochem Specialty Products Inc	Small Business	G180-JANITORIAL SUPPLIES	$ 2,794.82	$ -	$ -
4500073026	1/21/2026	Vehicle Technical Consultants Inc		B140-BUS CHASSIS	$ 1,564.00	$ -	$ -
4500073027	1/21/2026	Vehicle Technical Consultants Inc		B250-BUS REPAIR PARTS	$ 1,380.00	$ -	$ -
4500073028	1/21/2026	Siemens Mobility, Inc.		R160-RAIL/LRV ELECTRICAL	$ 19,398.95	$ -	$ -
4500073029	1/21/2026	R.S. Hughes Co Inc		G160-PAINTS & CHEMICALS	$ 888.91	$ -	$ -
4500073030	1/21/2026	Waxie's Enterprises, LLC		G180-JANITORIAL SUPPLIES	$ 1,390.20	$ -	$ -
4500073031	1/21/2026	Dunn-Edwards Corporation		F110-SHOP/BLDG MACHINERY	$ 135.28	$ -	$ -
4500073032	1/21/2026	Hi-Tec Enterprises		R160-RAIL/LRV ELECTRICAL	$ 2,241.20	$ -	$ -
4500073033	1/22/2026	Transit Holdings Inc		B200-BUS PWR TRAIN EQUIP	$ 157.44	$ -	$ -
4500073034	1/22/2026	Transit Holdings Inc		B120-BUS MECHANICAL PARTS	$ 1,759.32	$ -	$ -
4500073035	1/22/2026	SC Commercial, LLC		A120-AUTO/TRUCK GASOLINE	$ 2,044.73	$ -	$ -

Purchase Orders							
Purchase Orders	PO Date	Name	Prime Business Certification	Material Group	PO Value	DBE Subcontracted Amount	Non DBE Subcontracted Amount
4500073036	1/22/2026	Transit Holdings Inc		B140-BUS CHASSIS	$ 700.85	$ -	$ -
4500073037	1/22/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 1,317.03	$ -	$ -
4500073038	1/22/2026	Gillig LLC		B140-BUS CHASSIS	$ 1,426.67	$ -	$ -
4500073039	1/22/2026	Transit Holdings Inc		B130-BUS BODY	$ 2,241.22	$ -	$ -
4500073040	1/22/2026	Ace Uniforms LLC	Small Business	C120-SPECIALTY CONTRACTOR	$ 110.94	$ -	$ -
4500073041	1/22/2026	Ace Uniforms LLC	Small Business	C120-SPECIALTY CONTRACTOR	$ 326.46	$ -	$ -
4500073042	1/22/2026	Chula Vista Chamber of Commerce		G260-MEDIA	$ 700.00	$ -	$ -
4500073043	1/22/2026	San Diego East County		P310-ADVERTISING SERVICES	$ 430.00	$ -	$ -
4500073044	1/22/2026	The Infurmary Veterinary		G120-SECURITY	$ 122.72	$ -	$ -
4500073045	1/22/2026	VCA Animal Hospitals, Inc.		G120-SECURITY	$ 260.30	$ -	$ -
4500073046	1/22/2026	Data Controls Printworks, Inc.	Small Business	G230-PRINTED MATERIALS	$ 628.94	$ -	$ -
4500073047	1/22/2026	Square Signs LLC	Small Business	G230-PRINTED MATERIALS	$ 16,804.50	$ -	$ -
4500073048	1/22/2026	Vortex Industries LLC		F150-DOORS, OVERHEAD	$ 6,115.20	$ -	$ -
4500073049	1/22/2026	Siemens Mobility, Inc.		R160-RAIL/LRV ELECTRICAL	$ 397.62	$ -	$ -
4500073050	1/22/2026	Allied Refrigeration Inc		B250-BUS REPAIR PARTS	$ 149.78	$ -	$ -
4500073051	1/22/2026	Fastenal Company		G140-SHOP SUPPLIES	$ 387.90	$ -	$ -
4500073052	1/22/2026	Blue Angel International LLC	Small Business	G190-SAFETY/MED SUPPLIES	$ 296.09	$ -	$ -
4500073053	1/22/2026	Genuine Parts Company Inc		B120-BUS MECHANICAL PARTS	$ 659.86	$ -	$ -
4500073054	1/22/2026	Hi-Tec Enterprises		R160-RAIL/LRV ELECTRICAL	$ 4,396.20	$ -	$ -
4500073055	1/22/2026	Day Management Corp		G220-OFFICE EQUIPMENT	$ 1,224.04	$ -	$ -
4500073056	1/22/2026	Mcmaster-Carr Supply Co		B120-BUS MECHANICAL PARTS	$ 111.27	$ -	$ -
4500073057	1/22/2026	Motion Industries, Inc.		G140-SHOP SUPPLIES	$ 433.82	$ -	$ -
4500073058	1/22/2026	Newark Corporation		R220-RAIL/LRV TRUCKS	$ 712.54	$ -	$ -
4500073059	1/22/2026	OneSource Distributors, LLC		G130-SHOP TOOLS	$ 366.56	$ -	$ -
4500073060	1/22/2026	San Diego Compressed Air Power LLC		F110-SHOP/BLDG MACHINERY	$ 244.60	$ -	$ -
4500073061	1/22/2026	Flyers Energy LLC		G170-LUBRICANTS	$ 9,165.22	$ -	$ -
4500073062	1/22/2026	Staples Contract & Commercial LLC		G200-OFFICE SUPPLIES	$ 289.56	$ -	$ -
4500073063	1/22/2026	Staples Contract & Commercial LLC		G200-OFFICE SUPPLIES	$ 144.78	$ -	$ -
4500073064	1/22/2026	Transit Innovations LLC		M120-OVRHEAD CATENARY SYS	$ 3,523.43	$ -	$ -
4500073065	1/22/2026	W.W. Grainger Inc		M180-STATION ELECTRICAL	$ 694.46	$ -	$ -
4500073066	1/22/2026	White Cap, LP		M180-STATION ELECTRICAL	$ 882.80	$ -	$ -
4500073067	1/22/2026	All Industrial Tool Supply		B250-BUS REPAIR PARTS	$ 3,043.78	$ -	$ -
4500073068	1/22/2026	Transit Holdings Inc		B130-BUS BODY	$ 2,693.76	$ -	$ -
4500073069	1/22/2026	Gillig LLC		B130-BUS BODY	$ 390.76	$ -	$ -
4500073070	1/22/2026	Vern Rose Inc		B130-BUS BODY	$ 502.87	$ -	$ -
4500073071	1/22/2026	Winzer Franchise Company		G150-FASTENERS	$ 407.32	$ -	$ -
4500073072	1/23/2026	Waxie's Enterprises, LLC		G180-JANITORIAL SUPPLIES	$ 512.55	$ -	$ -
4500073073	1/23/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 2,705.62	$ -	$ -
4500073074	1/23/2026	Transit Holdings Inc		B200-BUS PWR TRAIN EQUIP	$ 37.76	$ -	$ -
4500073075	1/23/2026	Transit Holdings Inc		B120-BUS MECHANICAL PARTS	$ 5,585.73	$ -	$ -
4500073076	1/23/2026	Digi-Key Corporation		R150-RAIL/LRV COMM EQUIP	$ 638.38	$ -	$ -
4500073077	1/23/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 450.35	$ -	$ -
4500073078	1/23/2026	Transit Holdings Inc		B200-BUS PWR TRAIN EQUIP	$ 1,242.68	$ -	$ -
4500073079	1/23/2026	Network Industries, Inc.		G140-SHOP SUPPLIES	$ 925.09	$ -	$ -
4500073080	1/23/2026	Cummins Inc		B250-BUS REPAIR PARTS	$ 29,890.93	$ -	$ -
4500073081	1/23/2026	Transit Holdings Inc		B250-BUS REPAIR PARTS	$ 807.15	$ -	$ -
4500073082	1/23/2026	Hanning & Kahl LP		M140-WAYSIDE SIGNALS	$ 3,885.47	$ -	$ -
4500073083	1/23/2026	Accenture LLP		I120-INFO TECH, SVCS	$ 135,610.00	$ -	$ -
4500073084	1/23/2026	ISC Applied Systems Corp		R150-RAIL/LRV COMM EQUIP	$ 2,693.75	$ -	$ -
4500073085	1/23/2026	Louis Sardo Upholstery Inc		B130-BUS BODY	$ 2,058.23	$ -	$ -
4500073086	1/23/2026	Init Innovations in Transportation		B190-BUS FARE EQUIP	$ 788.75	$ -	$ -
4500073087	1/23/2026	Mcmaster-Carr Supply Co		G150-FASTENERS	$ 212.78	$ -	$ -
4500073088	1/23/2026	All Industrial Tool Supply		B250-BUS REPAIR PARTS	$ 3,036.03	$ -	$ -
4500073089	1/23/2026	Init Innovations in Transportation		G290-FARE REVENUE EQUIP	$ 375.00	$ -	$ -
4500073090	1/26/2026	Transit Holdings Inc		B250-BUS REPAIR PARTS	$ 53.40	$ -	$ -
4500073091	1/26/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 1,422.55	$ -	$ -
4500073092	1/26/2026	Transit Holdings Inc		B120-BUS MECHANICAL PARTS	$ 39.50	$ -	$ -
4500073093	1/26/2026	Transit Holdings Inc		B160-BUS ELECTRICAL	$ 4,082.64	$ -	$ -
4500073094	1/26/2026	Transit Holdings Inc		B140-BUS CHASSIS	$ 9,175.37	$ -	$ -
4500073095	1/26/2026	Signal Hill Auto Enterprises, Inc.		G180-JANITORIAL SUPPLIES	$ 76.44	$ -	$ -
4500073096	1/26/2026	Transit Holdings Inc		B250-BUS REPAIR PARTS	$ 145.12	$ -	$ -
4500073097	1/26/2026	Home Depot USA Inc		F110-SHOP/BLDG MACHINERY	$ 134.61	$ -	$ -
4500073098	1/26/2026	Westech Metal Fabrication Inc		F110-SHOP/BLDG MACHINERY	$ 360.97	$ -	$ -
4500073099	1/26/2026	CDW LLC		G200-OFFICE SUPPLIES	$ 403.26	$ -	$ -
4500073100	1/26/2026	Init Innovations in Transportation		B190-BUS FARE EQUIP	$ 788.75	$ -	$ -
4500073101	1/26/2026	Home Depot USA Inc		F110-SHOP/BLDG MACHINERY	$ 303.92	$ -	$ -
4500073102	1/26/2026	South Bay Fence Inc	Small Business	F110-SHOP/BLDG MACHINERY	$ 2,425.85	$ -	$ -
4500073103	1/26/2026	W. Baker Management Inc		R160-RAIL/LRV ELECTRICAL	$ 29,389.89	$ -	$ -
4500073104	1/26/2026	Lazer West Engineering	Small Business	P540-MAINTENANCE TRAINING	$ 4,850.00	$ -	$ -
4500073105	1/26/2026	Reg-A-Car Inc		B250-BUS REPAIR PARTS	$ 458.00	$ -	$ -

Purchase Orders							
Purchase Orders	PO Date	Name	Prime Business Certification	Material Group	PO Value	DBE Subcontracted Amount	Non DBE Subcontracted Amount
4500073106	1/26/2026	Clarran Inc.	DBE	G150-FASTENERS	$ 178.07	$ -	$ -
4500073107	1/26/2026	Air & Lube Systems Inc	DBE	F110-SHOP/BLDG MACHINERY	$ 285.10	$ -	$ -
4500073108	1/26/2026	D's Kustom Sales & Services, LLC		T110-TRACK, RAIL	$ 2,808.39	$ -	$ -
4500073109	1/26/2026	JDK Railroad Materials, Inc.		M200-YARD FACILITIES	$ 3,200.00	$ -	$ -
4500073110	1/26/2026	OneSource Distributors, LLC		G190-SAFETY/MED SUPPLIES	$ 3,350.10	$ -	$ -
4500073111	1/26/2026	Western Materials Inc	DBE	T160-TRACK, AGGREGATES	$ 4,451.25	$ -	$ -
4500073113	1/26/2026	Canada Ticket Inc.		G280-FARE MATERIALS	$ 8,296.75	$ -	$ -
4500073114	1/26/2026	Digi-Key Corporation		R150-RAIL/LRV COMM EQUIP	$ 963.18	$ -	$ -
4500073115	1/26/2026	Fastenal Company		G130-SHOP TOOLS	$ 357.90	$ -	$ -
4500073116	1/26/2026	General Signals Inc		M130-CROSSING MECHANISM	$ 7,446.85	$ -	$ -
4500073117	1/26/2026	Louis Sardo Upholstery Inc		B130-BUS BODY	$ 4,363.87	$ -	$ -
4500073118	1/26/2026	Gillig LLC		B140-BUS CHASSIS	$ 713.34	$ -	$ -
4500073119	1/26/2026	Harbor Diesel & Equipment, Inc		B120-BUS MECHANICAL PARTS	$ 394.29	$ -	$ -
4500073120	1/26/2026	Hi-Tec Enterprises		R160-RAIL/LRV ELECTRICAL	$ 377.13	$ -	$ -
4500073121	1/26/2026	Home Depot USA Inc		F180-BUILDING MATERIALS	$ 279.17	$ -	$ -
4500073122	1/26/2026	Transit Holdings Inc		B250-BUS REPAIR PARTS	$ 427.78	$ -	$ -
4500073123	1/26/2026	Transit Holdings Inc		B250-BUS REPAIR PARTS	$ 381.40	$ -	$ -
4500073124	1/26/2026	Southern Counties Oil Co, LP		A120-AUTO/TRUCK GASOLINE	$ 2,515.32	$ -	$ -
4500073125	1/26/2026	Init Innovations in Transportation		G290-FARE REVENUE EQUIP	$ 875.00	$ -	$ -
4500073126	1/26/2026	Supreme Oil Co.		A120-AUTO/TRUCK GASOLINE	$ 11,231.11	$ -	$ -
4500073127	1/26/2026	Thompson Fetter		P280-GENERAL SVC AGRMNTS	$ 15,220.68	$ -	$ -
4500073128	1/26/2026	Jamison Professional Services, LLC	DBE	G170-LUBRICANTS	$ 2,326.37	$ -	$ -
4500073129	1/26/2026	The Infurmary Veterinary		G120-SECURITY	$ 43.22	$ -	$ -
4500073130	1/26/2026	MAC-IMPULSE, LLC		M120-OVRHEAD CATENARY SYS	$ 5,932.72	$ -	$ -
4500073131	1/26/2026	Midwest Bus Corporation		B130-BUS BODY	$ 1,523.84	$ -	$ -
4500073132	1/26/2026	Professional Contractors Supplies		G140-SHOP SUPPLIES	$ 550.84	$ -	$ -
4500073133	1/26/2026	RJ International LLC	DBE	G140-SHOP SUPPLIES	$ 339.42	$ -	$ -
4500073134	1/26/2026	RS Americas, Inc.		G170-LUBRICANTS	$ 2,366.19	$ -	$ -
4500073135	1/26/2026	San Diego Seal, Inc.	Small Business	R140-RAIL/LRV DOORS/RAMP	$ 1,130.73	$ -	$ -
4500073136	1/26/2026	Schunk Carbon Technology LLC		R190-RAIL/LRV PANTOGRAPH	$ 4,014.87	$ -	$ -
4500073137	1/26/2026	The Sherwin-Williams Company		G160-PAINTS & CHEMICALS	$ 149.63	$ -	$ -
4500073138	1/26/2026	Blue Angel International LLC	Small Business	G190-SAFETY/MED SUPPLIES	$ 14.96	$ -	$ -
4500073139	1/26/2026	Western-Cullen-Hayes Inc		M130-CROSSING MECHANISM	$ 1,745.55	$ -	$ -
4500073140	1/26/2026	PSOMAS		P520-A & E/DESIGN	$ 111,327.76	$ -	$ -
4500073141	1/26/2026	Willy's Electronic Supply Co Inc		M180-STATION ELECTRICAL	$ 917.28	$ -	$ -
4500073142	1/26/2026	Winzer Franchise Company		G130-SHOP TOOLS	$ 93.96	$ -	$ -
4500073143	1/26/2026	Siemens Mobility, Inc.		R120-RAIL/LRV CAR BODY	$ 10,059.55	$ -	$ -
4500073144	1/26/2026	Digi-Key Corporation		R160-RAIL/LRV ELECTRICAL	$ 870.08	$ -	$ -
4500073145	1/27/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 133.40	$ -	$ -
4500073146	1/27/2026	Transit Holdings Inc		B200-BUS PWR TRAIN EQUIP	$ 72.73	$ -	$ -
4500073147	1/27/2026	Transit Holdings Inc		B140-BUS CHASSIS	$ 1,135.03	$ -	$ -
4500073148	1/27/2026	Siemens Mobility, Inc.		R160-RAIL/LRV ELECTRICAL	$ 252.14	$ -	$ -
4500073149	1/27/2026	Signal Hill Auto Enterprises, Inc.		G180-JANITORIAL SUPPLIES	$ 282.31	$ -	$ -
4500073150	1/27/2026	Transit Holdings Inc		B200-BUS PWR TRAIN EQUIP	$ 3,157.99	$ -	$ -
4500073151	1/27/2026	Jamison Professional Services, LLC	DBE	G170-LUBRICANTS	$ 2,668.75	$ -	$ -
4500073152	1/27/2026	Prudential Overall Supply		G140-SHOP SUPPLIES	$ 1,396.44	$ -	$ -
4500073153	1/27/2026	Clarran Inc.	DBE	G150-FASTENERS	$ 93.29	$ -	$ -
4500073154	1/27/2026	B & S Graphics Inc		B130-BUS BODY	$ 289.57	$ -	$ -
4500073155	1/27/2026	Blue Angel International LLC	Small Business	G190-SAFETY/MED SUPPLIES	$ 877.56	$ -	$ -
4500073156	1/27/2026	Home Depot USA Inc		G130-SHOP TOOLS	$ 954.63	$ -	$ -
4500073157	1/27/2026	Genfare, LLC		G290-FARE REVENUE EQUIP	$ 168.22	$ -	$ -
4500073158	1/28/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 4,856.22	$ -	$ -
4500073159	1/28/2026	Parts Authority, LLC		B160-BUS ELECTRICAL	$ 4,409.52	$ -	$ -
4500073160	1/28/2026	Craigslist Inc.		P280-GENERAL SVC AGRMNTS	$ 4,950.00	$ -	$ -
4500073161	1/28/2026	Mcmaster-Carr Supply Co		G140-SHOP SUPPLIES	$ 46.15	$ -	$ -
4500073162	1/28/2026	Uline Inc		G200-OFFICE SUPPLIES	$ 372.06	$ -	$ -
4500073163	1/28/2026	Madden Construction Inc		P280-GENERAL SVC AGRMNTS	$ 4,998.90	$ -	$ -
4500073164	1/28/2026	Network Industries, Inc.		F110-SHOP/BLDG MACHINERY	$ 337.29	$ -	$ -
4500073165	1/28/2026	Staples Contract & Commercial LLC		G200-OFFICE SUPPLIES	$ 3,528.30	$ -	$ -
4500073166	1/28/2026	Freeby Signs		B130-BUS BODY	$ 599.25	$ -	$ -
4500073167	1/28/2026	Mohawk Mfg & Supply Co		B200-BUS PWR TRAIN EQUIP	$ 1,048.37	$ -	$ -
4500073168	1/28/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 685.18	$ -	$ -
4500073169	1/28/2026	Transit Holdings Inc		B200-BUS PWR TRAIN EQUIP	$ 2,375.89	$ -	$ -
4500073170	1/28/2026	Transit Holdings Inc		B130-BUS BODY	$ 3,709.88	$ -	$ -
4500073171	1/28/2026	Transit Innovations LLC		M120-OVRHEAD CATENARY SYS	$ 2,155.00	$ -	$ -
4500073172	1/28/2026	Digi-Key Corporation		R150-RAIL/LRV COMM EQUIP	$ 175.22	$ -	$ -
4500073173	1/28/2026	Arts Lawnmower and Repairs LLC		P130-EQUIP MAINT REPR SVC	$ 354.57	$ -	$ -
4500073174	1/28/2026	All Industrial Tool Supply		G130-SHOP TOOLS	$ 794.40	$ -	$ -
4500073175	1/28/2026	U.S. Train Products LLC		R120-RAIL/LRV CAR BODY	$ 2,578.00	$ -	$ -
4500073176	1/28/2026	NS Corporation		F110-SHOP/BLDG MACHINERY	$ 2,818.24	$ -	$ -

Purchase Orders							
Purchase Orders	PO Date	Name	Prime Business Certification	Material Group	PO Value	DBE Subcontracted Amount	Non DBE Subcontracted Amount
4500073177	1/28/2026	Carlos Guzman Inc	DBE	R220-RAIL/LRV TRUCKS	$ 11,450.00	$ -	$ -
4500073178	1/28/2026	Gillig LLC		B130-BUS BODY	$ 4,205.60	$ -	$ -
4500073179	1/28/2026	Home Depot USA Inc		G140-SHOP SUPPLIES	$ 299.99	$ -	$ -
4500073180	1/28/2026	Muncie Reclamation and Supply Co		B200-BUS PWR TRAIN EQUIP	$ 3,782.91	$ -	$ -
4500073181	1/28/2026	Cummins Inc		B130-BUS BODY	$ 786.38	$ -	$ -
4500073182	1/28/2026	Midwest Motor Supply Co. Inc		F180-BUILDING MATERIALS	$ 2,732.11	$ -	$ -
4500073183	1/28/2026	Motion Industries, Inc.		B250-BUS REPAIR PARTS	$ 263.97	$ -	$ -
4500073184	1/28/2026	Fastenal Company		G200-OFFICE SUPPLIES	$ 2,734.44	$ -	$ -
4500073185	1/28/2026	Laird Plastics, Inc		M180-STATION ELECTRICAL	$ 4,101.51	$ -	$ -
4500073186	1/28/2026	CalACT		P250-PARATRANSIT	$ 1,750.00	$ -	$ -
4500073187	1/28/2026	W.W. Grainger Inc		G160-PAINTS & CHEMICALS	$ 1,630.77	$ -	$ -
4500073188	1/28/2026	SiteOne Landscape Supply Holding		F190-LANDSCAPING MAT'LS	$ 745.21	$ -	$ -
4500073189	1/28/2026	Professional Contractors Supplies		G160-PAINTS & CHEMICALS	$ 890.83	$ -	$ -
4500073190	1/28/2026	R.S. Hughes Co Inc		G140-SHOP SUPPLIES	$ 79.65	$ -	$ -
4500073191	1/28/2026	San Diego Power LLC		P130-EQUIP MAINT REPR SVC	$ 1,448.49	$ -	$ -
4500073192	1/28/2026	Charter Industrial Supply Inc	Small Business	G150-FASTENERS	$ 2,494.19	$ -	$ -
4500073193	1/28/2026	DIRECTV, LLC		G260-MEDIA	$ 3,569.76	$ -	$ -
4500073194	1/28/2026	San Diego Friction Products, Inc.		B250-BUS REPAIR PARTS	$ 126.74	$ -	$ -
4500073195	1/28/2026	Genfare, LLC		B250-BUS REPAIR PARTS	$ 1,011.70	$ -	$ -
4500073196	1/28/2026	Jamaica Bearings Co Inc		R220-RAIL/LRV TRUCKS	$ 1,563.46	$ -	$ -
4500073197	1/28/2026	Kurt Morgan		G200-OFFICE SUPPLIES	$ 1,110.38	$ -	$ -
4500073198	1/28/2026	Waxie's Enterprises, LLC		G140-SHOP SUPPLIES	$ 1,502.69	$ -	$ -
4500073199	1/28/2026	Vern Rose Inc		G160-PAINTS & CHEMICALS	$ 517.26	$ -	$ -
4500073200	1/28/2026	Willy's Electronic Supply Co Inc		G270-ELECTRICAL/LIGHTING	$ 646.50	$ -	$ -
4500073201	1/28/2026	Blue Angel International LLC	Small Business	G190-SAFETY/MED SUPPLIES	$ 2,834.21	$ -	$ -
4500073202	1/28/2026	OneSource Distributors, LLC		G180-JANITORIAL SUPPLIES	$ 920.61	$ -	$ -
4500073203	1/28/2026	Newark Corporation		R220-RAIL/LRV TRUCKS	$ 407.17	$ -	$ -
4500073204	1/28/2026	Blue Angel International LLC	Small Business	G190-SAFETY/MED SUPPLIES	$ 685.29	$ -	$ -
4500073205	1/28/2026	Rush Truck Centers of California		B200-BUS PWR TRAIN EQUIP	$ 1,323.59	$ -	$ -
4500073206	1/28/2026	Blue Angel International LLC	Small Business	G190-SAFETY/MED SUPPLIES	$ 261.84	$ -	$ -
4500073207	1/28/2026	Hitachi Rail STS USA, Inc.		M130-CROSSING MECHANISM	$ 777.37	$ -	$ -
4500073208	1/28/2026	Team One Repair Inc		G290-FARE REVENUE EQUIP	$ 2,180.32	$ -	$ -
4500073209	1/28/2026	VSI Technologies Inc	Woman Owned Business	G190-SAFETY/MED SUPPLIES	$ 2,101.13	$ -	$ -
4500073210	1/28/2026	ODP Business Solutions, LLC		G200-OFFICE SUPPLIES	$ 97.10	$ -	$ -
4500073211	1/29/2026	Waxie's Enterprises, LLC		G180-JANITORIAL SUPPLIES	$ 323.76	$ -	$ -
4500073212	1/29/2026	Signal Hill Auto Enterprises, Inc.		G180-JANITORIAL SUPPLIES	$ 1,002.08	$ -	$ -
4500073213	1/29/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 3,050.02	$ -	$ -
4500073214	1/29/2026	Transit Holdings Inc		B250-BUS REPAIR PARTS	$ 6,170.20	$ -	$ -
4500073215	1/29/2026	Freeby Signs		B250-BUS REPAIR PARTS	$ 463.39	$ -	$ -
4500073216	1/29/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 7.30	$ -	$ -
4500073217	1/29/2026	Waxie's Enterprises, LLC		G180-JANITORIAL SUPPLIES	$ 2,055.87	$ -	$ -
4500073218	1/29/2026	Waxie's Enterprises, LLC		G180-JANITORIAL SUPPLIES	$ 832.01	$ -	$ -
4500073219	1/29/2026	Transit Holdings Inc		B200-BUS PWR TRAIN EQUIP	$ 9.04	$ -	$ -
4500073220	1/29/2026	Transit Holdings Inc		B130-BUS BODY	$ 198.50	$ -	$ -
4500073221	1/29/2026	Transit Holdings Inc		B250-BUS REPAIR PARTS	$ 590.62	$ -	$ -
4500073222	1/29/2026	Transit Holdings Inc		B120-BUS MECHANICAL PARTS	$ 2,303.54	$ -	$ -
4500073223	1/29/2026	Waxie's Enterprises, LLC		G130-SHOP TOOLS	$ 28.86	$ -	$ -
4500073224	1/29/2026	Central Dispatch Inc		P280-GENERAL SVC AGRMNTS	$ 839.40	$ -	$ -
4500073225	1/29/2026	Vehicle Maintenance Program, Inc.	Woman Owned Business	B250-BUS REPAIR PARTS	$ 215.50	$ -	$ -
4500073226	1/29/2026	Sportworks Global LLC		B130-BUS BODY	$ 117.56	$ -	$ -
4500073227	1/29/2026	Blue Angel International LLC	Small Business	G190-SAFETY/MED SUPPLIES	$ 508.67	$ -	$ -
4500073228	1/29/2026	RJ International LLC	DBE	G140-SHOP SUPPLIES	$ 1,422.30	$ -	$ -
4500073229	1/29/2026	Mohawk Mfg & Supply Co		B250-BUS REPAIR PARTS	$ 920.87	$ -	$ -
4500073230	1/29/2026	Gillig LLC		B140-BUS CHASSIS	$ 2,406.45	$ -	$ -
4500073231	1/29/2026	Home Depot USA Inc		G140-SHOP SUPPLIES	$ 80.49	$ -	$ -
4500073232	1/29/2026	Clarran Inc.	DBE	G150-FASTENERS	$ 182.77	$ -	$ -
4500073233	1/29/2026	Muncie Reclamation and Supply Co		B160-BUS ELECTRICAL	$ 953.25	$ -	$ -
4500073234	1/29/2026	Freeby Signs		B250-BUS REPAIR PARTS	$ 11.42	$ -	$ -
4500073235	1/29/2026	Network Industries, Inc.		F200-TANK EQUIPMENT	$ 460.92	$ -	$ -
4500073236	1/29/2026	Jamison Professional Services, LLC	DBE	G170-LUBRICANTS	$ 324.80	$ -	$ -
4500073237	1/29/2026	Inland Kenworth (US) Inc		B250-BUS REPAIR PARTS	$ 1,212.91	$ -	$ -
4500073238	1/29/2026	San Diego Friction Products, Inc.		B250-BUS REPAIR PARTS	$ 1,159.86	$ -	$ -
4500073239	1/29/2026	FW Fleet Clean LLC		P140-MAINTENANCE, HVAC	$ 1,567.77	$ -	$ -
4500073240	1/29/2026	San Diego Housing Federation		P280-GENERAL SVC AGRMNTS	$ 1,000.00	$ -	$ -
4500073241	1/30/2026	Waxie's Enterprises, LLC		G180-JANITORIAL SUPPLIES	$ 688.00	$ -	$ -
4500073242	1/30/2026	Home Depot USA Inc		F180-BUILDING MATERIALS	$ 162.40	$ -	$ -
4500073243	1/30/2026	Home Depot USA Inc		F190-LANDSCAPING MAT'LS	$ 180.08	$ -	$ -
4500073244	1/30/2026	Ahlee Backflow Service, Inc	Small Business	F110-SHOP/BLDG MACHINERY	$ 1,398.89	$ -	$ -
4500073245	1/30/2026	Air & Lube Systems Inc	DBE	F110-SHOP/BLDG MACHINERY	$ 917.01	$ -	$ -
4500073246	1/30/2026	W.W. Grainger Inc		F110-SHOP/BLDG MACHINERY	$ 419.54	$ -	$ -

Purchase Orders							
Purchase Orders	PO Date	Name	Prime Business Certification	Material Group	PO Value	DBE Subcontracted Amount	Non DBE Subcontracted Amount
4500073247	1/30/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 218.30	$ -	$ -
4500073248	1/30/2026	Muncie Reclamation and Supply Co		B200-BUS PWR TRAIN EQUIP	$ 401.04	$ -	$ -
4500073249	1/30/2026	Transit Holdings Inc		B160-BUS ELECTRICAL	$ 1,845.87	$ -	$ -
4500073250	1/30/2026	Reg-A-Car Inc		B250-BUS REPAIR PARTS	$ 439.00	$ -	$ -
4500073251	1/30/2026	Ace Uniforms LLC	Small Business	G240-UNIFORM PROCUREMENT	$ 769.11	$ -	$ -
4500073252	1/30/2026	Network Industries, Inc.		F110-SHOP/BLDG MACHINERY	$ 514.29	$ -	$ -
4500073253	1/30/2026	Transit Holdings Inc		B250-BUS REPAIR PARTS	$ 1,939.39	$ -	$ -
4500073254	1/30/2026	EDCO Disposal Corporation		S130-DISPOSAL, OTHER	$ 475.40	$ -	$ -
4500073255	1/30/2026	Clarran Inc.	DBE	G150-FASTENERS	$ 195.05	$ -	$ -
4500073256	1/30/2026	Siemens Mobility, Inc.		R150-RAIL/LRV COMM EQUIP	$ 14,420.19	$ -	$ -
4500073257	1/30/2026	Siemens Mobility, Inc.		R160-RAIL/LRV ELECTRICAL	$ 3,085.96	$ -	$ -
4500073258	1/30/2026	Western-Cullen-Hayes Inc		M130-CROSSING MECHANISM	$ 96.98	$ -	$ -
4500073259	1/30/2026	Magaldi & Magaldi Inc		G130-SHOP TOOLS	$ 1,774.08	$ -	$ -
4500073260	1/30/2026	Siemens Mobility, Inc.		R220-RAIL/LRV TRUCKS	$ 48,325.88	$ -	$ -
4500073261	1/30/2026	Gillig LLC		B130-BUS BODY	$ 2,048.05	$ -	$ -
4500073262	1/30/2026	Transit Holdings Inc		B250-BUS REPAIR PARTS	$ 881.24	$ -	$ -
4500073263	1/30/2026	EDCO Disposal Corporation		S130-DISPOSAL, OTHER	$ 733.00	$ -	$ -
4500073264	1/30/2026	Init Innovations in Transportation		B190-BUS FARE EQUIP	$ 831.85	$ -	$ -
4500073265	1/30/2026	W.W. Grainger Inc		P280-GENERAL SVC AGRMNTS	$ 39.47	$ -	$ -
4500073266	1/30/2026	Grah Safe & Lock Inc	Small Business	G120-SECURITY	$ 1,600.00	$ -	$ -
4500073267	2/2/2026	Mohawk Mfg & Supply Co		B140-BUS CHASSIS	$ 7.91	$ -	$ -
4500073268	2/2/2026	Transit Holdings Inc		B200-BUS PWR TRAIN EQUIP	$ 13.19	$ -	$ -
4500073269	2/2/2026	Transit Holdings Inc		B140-BUS CHASSIS	$ 690.55	$ -	$ -
4500073270	2/2/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 3,104.93	$ -	$ -
4500073271	2/2/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 4,187.57	$ -	$ -
4500073272	2/2/2026	Mohawk Mfg & Supply Co		B140-BUS CHASSIS	$ 7.91	$ -	$ -
4500073273	2/2/2026	Transit Holdings Inc		B200-BUS PWR TRAIN EQUIP	$ 279.02	$ -	$ -
4500073274	2/2/2026	Transit Holdings Inc		B160-BUS ELECTRICAL	$ 3,597.38	$ -	$ -
4500073275	2/2/2026	Transit Holdings Inc		B130-BUS BODY	$ 461.29	$ -	$ -
4500073276	2/2/2026	Freeby Signs		B250-BUS REPAIR PARTS	$ 279.59	$ -	$ -
4500073277	2/2/2026	Arts Lawnmower and Repairs LLC		G130-SHOP TOOLS	$ 234.87	$ -	$ -
4500073278	2/2/2026	Home Depot USA Inc		G140-SHOP SUPPLIES	$ 515.61	$ -	$ -
4500073279	2/2/2026	W.W. Grainger Inc		F110-SHOP/BLDG MACHINERY	$ 2,364.44	$ -	$ -
4500073280	2/2/2026	Siemens Mobility, Inc.		R160-RAIL/LRV ELECTRICAL	$ 18,864.08	$ -	$ -
4500073281	2/2/2026	Siemens Mobility, Inc.		R160-RAIL/LRV ELECTRICAL	$ 18,263.17	$ -	$ -
4500073282	2/2/2026	PayScale, Inc.		P410-CONSULTING	$ 10,000.00	$ -	$ -
4500073283	2/2/2026	General Signals Inc		M130-CROSSING MECHANISM	$ 14,403.56	$ -	$ -
4500073284	2/2/2026	SiteOne Landscape Supply Holding		F190-LANDSCAPING MAT'LS	$ 126.74	$ -	$ -
4500073285	2/2/2026	SiteOne Landscape Supply Holding		F190-LANDSCAPING MAT'LS	$ 228.30	$ -	$ -
4500073286	2/2/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 11,854.29	$ -	$ -
4500073287	2/2/2026	Romaine Electric Corporation		B160-BUS ELECTRICAL	$ 7,645.20	$ -	$ -
4500073288	2/2/2026	Siemens Mobility, Inc.		R160-RAIL/LRV ELECTRICAL	$ 26,499.88	$ -	$ -
4500073289	2/2/2026	Schunk Carbon Technology LLC		R190-RAIL/LRV PANTOGRAPH	$ 3,720.44	$ -	$ -
4500073290	2/2/2026	Digi-Key Corporation		R220-RAIL/LRV TRUCKS	$ 2,909.04	$ -	$ -
4500073291	2/2/2026	Electric Motor Services, Inc.		M150-PWR SWITCHES/LOCKS	$ 1,650.00	$ -	$ -
4500073292	2/2/2026	Init Innovations in Transportation		B190-BUS FARE EQUIP	$ 788.75	$ -	$ -
4500073293	2/2/2026	Delphin Computer Supply	Small Business	G200-OFFICE SUPPLIES	$ 483.80	$ -	$ -
4500073294	2/2/2026	Init Innovations in Transportation		B190-BUS FARE EQUIP	$ 788.75	$ -	$ -
4500073295	2/2/2026	Supreme Oil Co.		A120-AUTO/TRUCK GASOLINE	$ 11,975.51	$ -	$ -
4500073296	2/2/2026	Southern Counties Oil Co, LP		A120-AUTO/TRUCK GASOLINE	$ 2,638.62	$ -	$ -
4500073297	2/2/2026	W.W. Grainger Inc		F110-SHOP/BLDG MACHINERY	$ 71.18	$ -	$ -
4500073298	2/2/2026	Western Materials Inc	DBE	T160-TRACK, AGGREGATES	$ 4,247.13	$ -	$ -
4500073299	2/2/2026	Transit Holdings Inc		B250-BUS REPAIR PARTS	$ 505.19	$ -	$ -
4500073300	2/2/2026	Norman Industrial Materials Inc.		G140-SHOP SUPPLIES	$ 1,702.12	$ -	$ -
4500073301	2/2/2026	Midwest Bus Corporation		B250-BUS REPAIR PARTS	$ 319.50	$ -	$ -
4500073302	2/2/2026	NS Corporation		F110-SHOP/BLDG MACHINERY	$ 2,818.24	$ -	$ -
4500073303	2/2/2026	Staples Contract & Commercial LLC		G210-OFFICE FURNITURE	$ 193.94	$ -	$ -
4500073304	2/2/2026	W.W. Grainger Inc		G140-SHOP SUPPLIES	$ 94.55	$ -	$ -
4500073305	2/2/2026	Motion Industries, Inc.		G140-SHOP SUPPLIES	$ 304.35	$ -	$ -
4500073306	2/2/2026	Motion Industries, Inc.		R140-RAIL/LRV DOORS/RAMP	$ 3,011.85	$ -	$ -
4500073307	2/2/2026	Digi-Key Corporation		R140-RAIL/LRV DOORS/RAMP	$ 1,385.67	$ -	$ -
4500073308	2/2/2026	Prochem Specialty Products Inc	Small Business	G180-JANITORIAL SUPPLIES	$ 2,794.82	$ -	$ -
4500073309	2/2/2026	Mid-Eastern Partners		G200-OFFICE SUPPLIES	$ 710.83	$ -	$ -
4500073310	2/2/2026	TVEyes, Inc.		G260-MEDIA	$ 3,175.00	$ -	$ -
4500073311	2/2/2026	W.W. Grainger Inc		G150-FASTENERS	$ 116.27	$ -	$ -
4500073312	2/2/2026	Clarran Inc.	DBE	G150-FASTENERS	$ 31.60	$ -	$ -
4500073313	2/2/2026	Kurt Morgan		G200-OFFICE SUPPLIES	$ 1,903.50	$ -	$ -
4500073314	2/2/2026	Neyenesch Printers Inc	Small Business	G230-PRINTED MATERIALS	$ 2,948.31	$ -	$ -
4500073315	2/2/2026	Dimensional Silk Screen Inc		G230-PRINTED MATERIALS	$ 491.34	$ -	$ -
4500073316	2/2/2026	Harbor Diesel & Equipment, Inc		B250-BUS REPAIR PARTS	$ 16,371.27	$ -	$ -

Purchase Orders							
Purchase Orders	PO Date	Name	Prime Business Certification	Material Group	PO Value	DBE Subcontracted Amount	Non DBE Subcontracted Amount
4500073317	2/3/2026	Waxie's Enterprises, LLC		G180-JANITORIAL SUPPLIES	$ 1,465.93	$ -	$ -
4500073318	2/3/2026	Transit Holdings Inc		B160-BUS ELECTRICAL	$ 1,866.86	$ -	$ -
4500073319	2/3/2026	Siemens Mobility, Inc.		R120-RAIL/LRV CAR BODY	$ 25,659.59	$ -	$ -
4500073320	2/3/2026	Cummins Inc		B200-BUS PWR TRAIN EQUIP	$ 691.27	$ -	$ -
4500073321	2/3/2026	Transit Holdings Inc		B130-BUS BODY	$ 1,195.10	$ -	$ -
4500073322	2/3/2026	Freeby Signs		B250-BUS REPAIR PARTS	$ 141.43	$ -	$ -
4500073323	2/3/2026	Home Depot USA Inc		F110-SHOP/BLDG MACHINERY	$ 435.42	$ -	$ -
4500073324	2/3/2026	San Diego Friction Products, Inc.		B140-BUS CHASSIS	$ 799.07	$ -	$ -
4500073325	2/3/2026	Prudential Overall Supply		G140-SHOP SUPPLIES	$ 1,396.44	$ -	$ -
4500073326	2/3/2026	San Diego Friction Products, Inc.		B140-BUS CHASSIS	$ 799.07	$ -	$ -
4500073327	2/3/2026	W.W. Grainger Inc		F110-SHOP/BLDG MACHINERY	$ 37.93	$ -	$ -
4500073328	2/3/2026	Airgas Inc		G140-SHOP SUPPLIES	$ 62.58	$ -	$ -
4500073329	2/3/2026	Genfare, LLC		G290-FARE REVENUE EQUIP	$ 168.22	$ -	$ -
4500073330	2/3/2026	FW Fleet Clean LLC		P140-MAINTENANCE, HVAC	$ 195.00	$ -	$ -
4500073331	2/3/2026	San Diego Friction Products, Inc.		B140-BUS CHASSIS	$ 1,564.15	$ -	$ -
4500073332	2/3/2026	R.S. Hughes Co Inc		G140-SHOP SUPPLIES	$ 1,439.44	$ -	$ -
4500073333	2/3/2026	W.W. Grainger Inc		G150-FASTENERS	$ 2,339.98	$ -	$ -
4500073334	2/3/2026	EDCO Disposal Corporation		S130-DISPOSAL, OTHER	$ 475.00	$ -	$ -
4500073335	2/3/2026	Hi-Tec Enterprises		G130-SHOP TOOLS	$ 1,346.88	$ -	$ 89,563.29

EXPENSE CONTRACTS				
Doc #	**Organization**	**Subject**	**Amount**	**Day**
G2899.1-24	MAESTRONIC	UPDATE PILOT QUANTITY AND TARIFF COSTS	$6,048.43	1/9/2026
PWB371.5-23	GPG	CCO4 & 5	$58,266.07	1/13/2026
G2434.1-21	MSDS SDS	EXERCISE OPTIONS	$4,480.00	1/21/2026
G2941.1-25	ACCENTURE	NAME CHANGE	$0.00	1/21/2026
PWL443.1-25	WHILLOCK	CCO1	$21,763.36	1/21/2026
PWB380.4-24	HAZARD	CCOs 17-23	$126,890.82	1/26/2026
PWG432.0-25JOC432-01	HMS	BLUE LINE 8TH ST FOC REPAIR	$70,184.75	2/3/2026

REVENUE CONTRACTS AND MOUs				
Doc #	**Organization**	**Subject**	**Amount**	**Day**
L5300.0-26	CITY OF SANTEE	RACEWALK EVENT JAN 2026	$750.00	1/9/2026
G3154.0-26	DIVERSIFIED COMMUNICATIONS SERVICES, LLC	ROW PERMIT KIOSK INSTALLATION 427 C STREET	$1,214.48	1/26/2026

Metropolitan Transit System

MEMORANDUM

DATE: February 12, 2026

TO: Board of Directors

FROM: Sharon Cooney, Chief Executive Officer

SUBJECT: **Report of Non-Competitive Contract Award Under "Immediate Remedial Measures"**
Emergency Procurement of Goods: Operations Control Center (OCC) Uninterruptible Power Supply (UPS) Units
Installation Contractor: Sacramento Computer Power (SacPower)
Estimated Cost: $180,065.94

Authority for Emergency Contracting Actions

In the event that MTS property is damaged, destroyed, or imminently threatened **and** immediate remedial measures are needed to avert or alleviate damage to, or to repair or restored damaged or destroyed MTS property to ensure that MTS can continue to serve the transportation needs of the general public, MTS's enabling legislation (Public Utilities Code section 120224.1) authorizes the MTS Chief Executive Officer (CEO) to authorize the expenditure of money and enter into a sole source contract for the direct purchase of goods or services. MTS Board Policy No 52 (Procurement of Goods and Services), section (F) (v), and Board Policy No. 41 (Signature Authority) section 41.4.10 also provide this authority.

These emergency contracting and expenditure provisions require that the CEO submit a report to the Board explaining the necessity for such actions. The following is a report of emergency contracting actions taken in January 2026.

Report of Emergency Contracting - SacPower for Purchase of Two (2) Replacement UPS Units

On January 1, 2026, heavy rain in San Diego caused widespread flooding and power outages. These outages disrupted the IT Operations Control Center, resulting in UPS failures, IT system outages, and interruptions to trolley and bus services.

The outages and UPS failures placed the data center at immediate risk of data loss, equipment damage, and service disruption. Restoring reliable backup power was urgently required to protect IT systems. To address these risks, under the emergency authority described above, the CEO authorized the immediate purchase of two (2) new UPS units as soon as possible to maintain IT operations and safeguard data. [1]

[1] Installation of the UPS units was provided under MTS's competitively bid on-call electrical services contract with Advanced Railway Innovations, Inc. (MTS Doc. No. PWG383.0-24). The estimated cost of installation was $25,000.

MTS selected SacPower as the vendor for purchasing the UPS units. Over the past five years, SacPower has successfully partnered with MTS on multiple UPS system installations and maintenance, demonstrating both strong expertise and a deep understanding of our specific needs. Their familiarity with our systems, combined with their reliability and experience, made them the clear choice for ensuring a swift and effective response to this emergency.

A competitive procurement process would delay remediation by at least three to six months and increase the risk of extended outages, further equipment failures, and service disruptions. Based on this risk, a non-competitive procurement was deemed necessary to allow MTS to ensure continued operations.

Cost Justification

The estimated price of $180,065.94 includes two new UPS units and delivery. Considering the urgent situation, the staff has determined that the price is fair and reasonable.

Metropolitan Transit System

Agenda Item No. 05

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM
BOARD OF DIRECTORS

February 12, 2026

SUBJECT:

Rio Vista Platform Design Phase II – Approval and Adoption of Mitigated Negative Declaration (MND) and a Mitigation Monitoring and Reporting Program, Approval of Project, and Authorization of Engineering and Design Support Work Order

RECOMMENDATION:

That the San Diego Metropolitan Transit System (MTS) Board of Directors:

1) Adopt Resolution No. 26-02 (Attachment A), Approving and Adopting a MND and a Mitigation Monitoring and Reporting Program (in substantially the same format as Attachment A – Exhibit 1 and 2), under the California Environmental Quality Act (CEQA) for the Rio Vista Platform Design Phase II Project and Approving the Project;

2) Ratify Work Order Amendment No. WOA353-AE-09.01, under MTS Document No. PWL353.0-22 (Attachment B) with Dokken Engineering (Dokken), in the amount of $141,335.96, for the development of environmental documents required for construction, and development of 90% construction plans, specifications, and estimates; and

3) Authorize the Chief Executive Officer (CEO) to execute Work Order Amendment No. WOA353-AE-09.02, under MTS Document No. PWL353.0-22 (in substantially the same format as Attachment C) with Dokken, in the amount of $148,689.69, for implementation and additional engineering and Design Support During Construction (DSDC) services and related right-of-way support for the Rio Vista Platform Design Phase II Project.

Budget Impact

The total cost of this Work Order amendment is estimated to be $148,689.69, and the total Work Order is estimated at $860,871.54 (inclusive of this amendment). The project will be funded by Capital Improvement Program (CIP) WBSE account 2005003902 - Rio Vista/Morena Wall Buttress.

DISCUSSION:

The Rio Vista Station is one of the twenty-four (24) stations along the MTS Green Line, where MTS maintains the right-of-way to ensure Trolley movements take priority and support safe, efficient operations. MTS proposes to retrofit existing infrastructure at this station to enhance

safety and ensure long-term structural stability. As the lead agency under CEQA, a draft Initial Study and MND was prepared to evaluate the potential environmental impacts of the proposed project.

The Rio Vista Station, located north of the I-8/Texas Street/Qualcomm Way interchange, was originally constructed in 1999. The station's retaining walls and platform have experienced settlement and movement due to a combination of factors, including loose surface materials, unsuitable wall backfill, and reinforcement slackening.

To address these issues, structural retrofits and site improvements are proposed to include installation of tie rods, tie-back anchors, cast-in-place wall replacement, and surface drainage enhancements. These measures are designed to stabilize the existing retaining walls and platform, ensuring the continued safe operation of the Rio Vista Station. The project also includes related track replacement within the Rio Vista Station platform limits.

The project area includes two (2) Mechanically Stabilized Embankment (MSE) retaining walls, approximately seven hundred (700) feet in length and up to seventeen (17) feet tall, that run parallel to the trolley tracks. The platform itself is approximately three hundred eighty (380) feet long. The site is located in a developed urban area adjacent to residential uses and the San Diego River. Construction activities would include retrofitting existing retaining walls using soil anchors, tie-back systems, and structural walers, as well as reconstructing the platform wall coping, station lighting, tree wells, and surface drainage features. Temporary construction access would be provided via a graded access road from the San Diego River Parkway. Construction is anticipated to begin in Fall 2026 and would take approximately thirty (30) weeks to complete. All work would occur during daytime hours, and phased construction would be implemented to maintain trolley service throughout the project duration.

The MND identified potentially significant impacts related to aesthetics, biological resources, cultural resources/tribal cultural resources, land use, and noise. With the implementation of the proposed mitigation measures, all impacts would be reduced to less than significant levels. The MND was circulated for public review from October 1, 2025, through November 1, 2025. No public comments were received during the review period.

Based on the analysis contained in the final MND, staff have determined that the project, with mitigation incorporated, would not have a significant effect on the environment.

On June 15, 2023 (Agenda Item (AI) 6), the MTS Board of Directors authorized the execution of Work Order WOA353-AE-09 under MTS Doc. No. PWL353.0-22 with Dokken in the amount of $570,845.89 for design and environmental review services for the Rio Vista/Morena Wall Buttress. This item requested Board approval to proceed with Design Phase II of the Rio Vista Platform project, including the associated scope necessary to address constructability, operational, and right-of-way requirements identified during project development.

On May 7, 2024, under Board Policy 41, the CEO approved Work Order Amendment WOA353-AE-09.01 ($141,335.96) for the development of environmental documents required for construction, and development of 90% construction plans, specifications, and estimates. Today's proposed action would ratify this Work Order Amendment approval. (See Attachment B.)

The final part of today's proposed action would approve Work Order Amendment No. WOA353-AE-09.02 ($148,689.69) with Dokken (Attachment C). This amendment defines the work

required to advance the project toward construction in a coordinated, efficient, and operationally feasible manner. As part of the project, MTS Maintenance of Way (MOW) specifically requested that track replacement within the Rio Vista Station platform limits be incorporated into the scope of work for the retaining wall design. MOW determined that replacing the tracks concurrently with the wall improvements would improve constructability, reduce future maintenance needs, and take advantage of planned service outages, thereby minimizing impacts to transit operations. In response to this direction, the amendment adds scope for the preparation of Plans, Specifications, and Estimates (PS&E) for track replacement, including conversion from concrete track sections to an open ballast track system and the design of ADA-compliant pedestrian ramps in accordance with SANDAG Light Rail Transit (LRT) standards.

The amendment also includes expanded project management services to support schedule compliance, coordination with internal and external stakeholders, and regular reporting. Additional right-of-way services are included to address a newly identified third parcel (APN 438-362-14-00), requiring updated preliminary title reports, property owner notifications, coordination with the City of San Diego regarding existing easements, and potential appraisal, negotiation, and escrow activities. Any project-related work within the third parcel, as well as any associated potential impacts, was considered and fully analyzed in the MND.

From a structural perspective, the amendment authorizes evaluation of alternative retaining wall repair methods consistent with the project analyzed in the MND, including a top-down construction approach made feasible by the proposed track replacement and associated transit closures.

The amendment further identifies eminent domain and condemnation support services as an optional task should negotiations be unsuccessful, ensuring the project remains on schedule if such actions become necessary.

Approval of this item would allow MTS to proceed with the Design Phase II work necessary to integrate track replacement with wall improvements, reduce construction and operational risk, and advance the Rio Vista Platform project toward implementation in alignment with MTS operational priorities and Board-approved objectives.

There are no subconsultants for this Amendment.

The Work Order and subsequent Amendments are summarized below:

Work Order No.	Purpose	Amount	Board Approval Date
WOA353-AE-09	Original Work Order for design and environmental review services.	$570,845.89	June 15, 2023 (AI 6)
WOA353-AE-09.01	Add the development of environmental documents required for construction, and the development of 90% construction plans, specifications, and estimates.	$141,335.96	Approved by CEO May 9, 2025 (Policy 41) Today's Proposed Action: Ratify

Work Order No.	Purpose	Amount	Board Approval Date
WOA356-AE-46.03	Additional engineering and DSDC services and related right-of-way support.	$148,689.69	Today's Proposed Action: Approve
	TOTAL	*$860,871.54*	

Therefore, staff recommends that the MTS Board of Directors:

1) Adopt Resolution No. 26-02 (Attachment A), Approving and Adopting a MND and a Mitigation Monitoring and Reporting Program (in substantially the same format as Attachment A – Exhibit 1 and 2), under CEQA for the Rio Vista Platform Design Phase II Project and Approving the Project;

2) Ratify Work Order Amendment No. WOA353-AE-09.01, under MTS Document No. PWL353.02-22 (Attachment B) with Dokken, in the amount of $141,335.96, for the development of environmental documents required for construction, and development of 90% construction plans, specifications, and estimates; and

3) Authorize the CEO to execute Work Order Amendment No. WOA353-AE-09.02, under MTS Document No. PWL353.02-22 (in substantially the same format as Attachment C) with Dokken, in the amount of $148,689.69, for implementation and additional engineering and DSDC services and related right-of-way support for the Rio Vista Platform Design Phase II Project.

/s/ Sharon Cooney
Sharon Cooney
Chief Executive Officer

Key Staff Contact: Julia Tuer, 619.557.4515, Julia.Tuer@sdmts.com

Attachments: A. Resolution No. 26-02 – Exhibit 1 (MTS Rio Vista Platform Final ISMND with Appendices) and Exhibit 2 (Mitigation Monitoring and Reporting Program)
B. Executed Work Order Amendment No. WOA353-AE-09.01
C. Draft Work Order Amendment No. WOA353-AE-09.02

SAN DIEGO METROPOLITAN TRANSIT SYSTEM
Resolution No. 26-02

Resolution Approving and Adopting a Mitigated Negative Declaration and a Mitigation Monitoring and Reporting Program for the Rio Vista Platform Design Phase II Project and Approving the Project

WHEREAS, the San Diego Metropolitan Transit System ("MTS") intends to implement the Rio Vista Platform Design Phase II Project ("Project") to address settlement and movement at two existing Mechanically Stabilized Embankment (MSE) retaining walls, which are approximately 700 feet in length and up to 17 feet tall and run parallel to the trolley tracks and the Rio Vista Station Platform on the MTS Green Line. The Project site is in the City of San Diego located north of the I-8/Texas Street/Qualcomm way interchange in an urbanized area and consists of approximately 1.45 acres (Accessor Parcel Numbers 438-362-11-00 and 438-362-12-00) in the Mission Valley East neighborhood. The Project would retrofit the existing walls and include general platform improvements as well as related track replacement, with construction beginning in Fall 2026 and taking approximately 30 weeks to complete; and

WHEREAS, MTS is the lead agency for the Project under the California Environmental Quality Act ("CEQA"), Public Resources Code section 21000 *et seq*., and the accompanying State CEQA Guidelines, Title 14 of the California Code of Regulations, section 15000 *et seq*.; and

WHEREAS, based on the information contained in the Initial Study, which concluded that the Project would not have significant impacts on the environment with mitigation incorporated, MTS determined that a Mitigated Negative Declaration should be prepared for the Project, and a Draft Initial Study/MND ("MND"), State Clearinghouse No. 2025091373, was prepared in accordance with CEQA and the State CEQA Guidelines; and

WHEREAS, pursuant to State CEQA Guidelines section 15072, a Notice of Intent to Adopt the MND was circulated for the required 30-day public review period, including posting notice with the County Clerk and in a newspaper of general circulation and mailing notice to properties within 500 feet of the project site and interested stakeholders; and

WHEREAS, the Notice of Intent to Adopt the MND was also submitted to the State Clearinghouse for state agency review under State CEQA Guidelines section 15073; and

WHEREAS, during the public comment period, copies of the Draft MND, including any technical appendices, were available for review and inspection at the offices of MTS, at the Malcom X Library (5841 Market Street), and on MTS's website; and

WHEREAS, MTS did not receive any comment letters during the public review period; and

WHEREAS, the Final MND is attached hereto as Exhibit 1 and the Mitigation Monitoring and Reporting Program ("MMRP") is attached hereto as Exhibit 2; and

WHEREAS, in compliance with Public Resources Code section 21080.3.1, MTS solicited tribal input on the Project on March 1, 2024, by email based on the tribal contacts provided by the California Native American Heritage Commission. One tribe (Camp Band of Mission Indians) responded on April 15, 2024, to request consultation, which has concluded. Though the project area has been heavily disturbed due to the construction of the existing station, the active recreational trail to the south of the station, and the surrounding apartment complex, there is potential to discover previously unknown tribal cultural resources at the project site. Implementation of CR-1 and CR-2,

which include a monitoring program and retention of a qualified archaeologist and a Native American monitor from the Campo Band of Mission Indians, would reduce potential impacts to less than significant; and

WHEREAS, on February 12, 2026, the Board of Directors held a duly noticed public hearing on this matter; and

WHEREAS, as contained herein, the Board of Directors has endeavored in good faith to set forth the basis for its decision on the Project; and

WHEREAS, all the requirements of the Public Resources Code and the State CEQA Guidelines have been satisfied by MTS in connection with the preparation of the MND. The MND is sufficiently detailed so that all potentially significant environmental effects of the Project, as well as feasible mitigation measures, have been adequately evaluated; and

WHEREAS, all of the findings and conclusions made by the Board of Directors pursuant to this Resolution are based upon the oral and written evidence presented to it as a whole and the entirety of the administrative record for the Project, which are incorporated herein by this reference, and not based solely on the information provided in this Resolution; and

WHEREAS, prior to acting, the Board of Directors has heard, been presented with, reviewed and considered all of the information and data in the administrative record, including but not limited to the MND and MMRP; and

WHEREAS, the MND reflects the independent judgment and analysis of the Board of Directors and is deemed adequate for purposes of making decisions on the merits of the Project; and

WHEREAS, no comments submitted during the public review period, or made during the public hearing conducted by the Board of Directors, and no additional information submitted to MTS require substantial revisions to the MND necessitating recirculation or additional environmental review of the Project under State CEQA Guidelines section 15073.5; and

WHEREAS, all other legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE BE IT RESOLVED by the Governing Board that MTS finds the foregoing recitals are true and correct and are incorporated herein as substantive findings of this Resolution; and

BE IT FURTHER RESOLVED as the decision-making body for the Project, the Board of Directors has reviewed and considered the information contained in the MND, any comments received, other documents contained in the administrative record, and all other written and oral evidence presented to the Board of Directors for the Project. The Board of Directors further finds that the MND and the MMRP have been completed in compliance with CEQA and the State CEQA Guidelines; and

BE IT FURTHER RESOLVED based on the whole record before it, the Board of Directors finds that the Project would have potentially significant impacts but that those impacts can be mitigated to less than significant through mitigation measures outlined in the MND and the MMRP. The Board of Directors finds that the MND contains a complete, objective, and accurate reporting of the environmental impacts associated with the Project and reflects the independent judgment and analysis of the Board of Directors; and

BE IT FURTHER RESOLVED no new significant environmental effects have been identified in

the Final MND and no changes to the Final MND constitute substantial revisions requiring recirculation under State CEQA Guidelines section 15073.5. All the mitigation measures contained in the MMRP have been made conditions of Project approval in accordance with State CEQA Guidelines 15074(d); and

BE IT FURTHER RESOLVED the Final MND for the Project, attached hereto as Exhibit 1, is approved and adopted; and

BE IT FURTHER RESOLVED the MMRP for the Project, attached hereto as Exhibit 2, is approved and adopted; and

BE IT FURTHER RESOLVED staff is directed to file a Notice of Determination with the San Diego County Clerk and the State Clearinghouse in the Governor's Office of Land Use and Climate Innovation within five (5) working days of approval of the Project; and

BE IT FURTHER RESOLVED the documents and materials associated with the Project and the MND that constitute the record of proceedings on which these findings are based are located at 1255 Imperial Avenue, San Diego, California 92101. The Clerk of the Board is the custodian of the record of proceedings; and

BE IT FURTHER RESOLVED this Resolution shall become effective immediately upon its adoption.

PASSED AND ADOPTED by the Board of Directors this 12th day of February, 2026 by the following vote:

AYES:

NAYS:

ABSENT:

ABSTAINING:

[signatures]

Attachments:

Exhibit 1 – Final Initial Study/Mitigated Negative Declaration with Appendices A-H as follows:

A. First San Diego River Improvement Project – Development and Mitigation Guidelines
B. CalEEMod Air Quality Results
C. Biological Resources Technical Report
D. Cultural Resources Inventory Memorandum
E. Geotechnical Memorandum
F. Envirostor and Geotracker
G. FEMA Firmette
H. Construction Noise Control Plan

Exhibit 2 - Mitigation Monitoring and Reporting Program

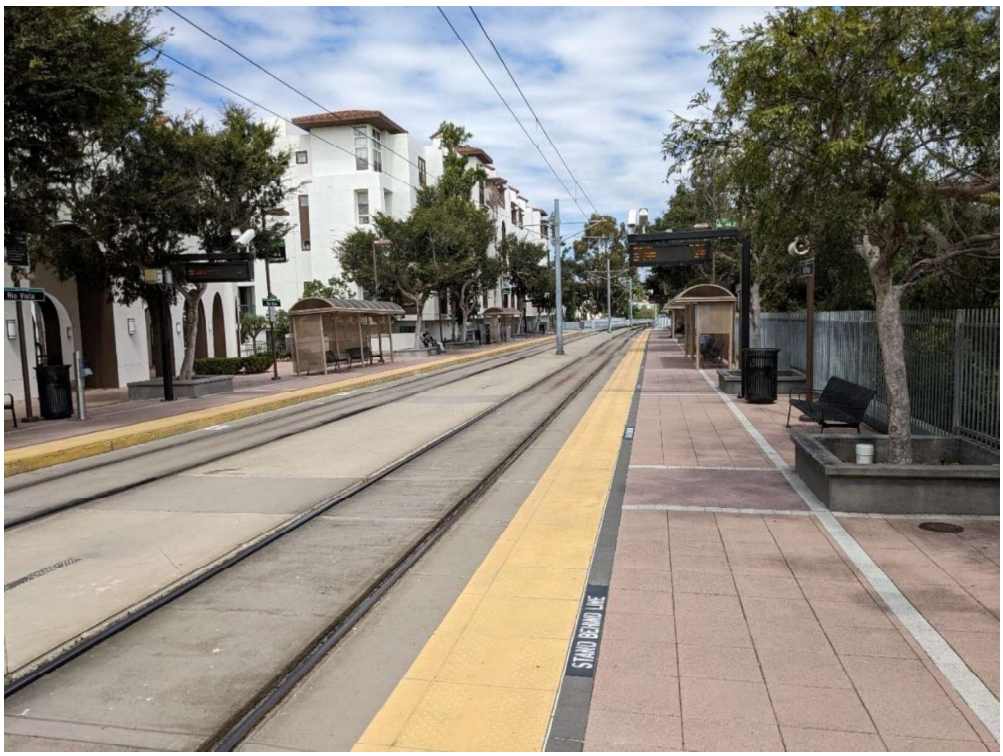
Attachment A: Exhibit 1

Rio Vista Platform Design Phase II Project

Final Initial Study with Mitigated Negative Declaration

Rio Vista Platform Design – Phase II Project

Final Initial Study/Mitigated Negative Declaration



Prepared for:

Metropolitan Transit System

1255 Imperial Avenue, Suite 1000
San Diego, CA 92101

Prepared by:
Dokken Engineering
1450 Frazee Rd #100 • San Diego, CA 92108

January 2026

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MITIGATED NEGATIVE DECLARATION

Project Title:	Rio Vista Platform Design – Phase II Project
Project Location:	North of San Diego River: Mission Valley East community in the southern portion of the City of San Diego
Assessor Parcel Numbers:	438-362-11-00 and 438-362-12-00
Lead Agency:	San Diego Metropolitan Transit System (MTS) 1255 Imperial Avenue, Suite 1000 San Diego, CA 92101
Project Proponent:	San Diego Metropolitan Transit System (MTS)

The Lead Agency, having reviewed the Initial Study of this proposed project, having reviewed the written comments received prior to the public meeting of the Lead Agency, and having reviewed the recommendation of the Lead Agency's Staff, does hereby find and declare that the proposed project will not have a significant effect on the environment. Brief statements explaining the reasons supporting the Lead Agency's findings are as follows: The proposed project is located north of the I-8/Texas Street/Qualcomm way Interchange in an urbanized area primarily dominated by residential and open space uses. The project proposes to retrofit infrastructure at the Rio Vista Station on the MTS Green Line in the City of San Diego. The project would be consistent with local and state policies aimed at reducing air pollutant and greenhouse gas emissions, as proposed project would not result in any new or increased emissions. The Initial Study identifies potentially significant effects to biological resources (impacts to habitat of special status species), cultural resources (unknown subsurface archaeological resources), land use and planning (Multiple Habitat Planning Area), noise (construction noise at adjacent habitat and surrounding property lines), and tribal cultural resources (unknown subsurface tribal cultural resources) for the proposed project. The implementation of mitigation measures identified in the Initial Study would ensure potentially significant impacts are reduced to less than significant levels. All other environmental impacts would be less than significant, or no impact would occur. Therefore, the project would not result in significant impacts to the environment.

The Lead Agency hereby finds that the Mitigated Negative Declaration reflects its independent judgment. A copy of the Initial Study is attached.

The location and custodian of the documents and any other material which constitute the record of proceedings are as follows:

MTS
1255 Imperial Avenue, Suite 1000
San Diego, CA 92101

On the basis of the Initial Study, it has been determined that the proposed project would not

result in a significant effect on the environment with implementation of mitigation measures identified in the Initial Study and agreed upon by the project proponents.

_____ _____

Heather Furey
MTS Director of Capital Projects

Date

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ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
Act	Alquist-Priolo Earthquake Fault Zoning Act
ADT	average daily traffic
ALUCP	Airport Land Use Compatibility Plan
APN	Accessor's Parcel Number
Attainment Plan	2020 Plan for Attaining the National Ambient Air Quality Standards for Ozone in San Diego County
BSA	biological study area
BMPs	best management practices
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standard
CAL FIRE	California Department of Forestry and Fire
Protection CalEEMod	California Emissions Estimator Model
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
CEQA	California Environmental Quality Act
cfs	cubic feet/foot per second
CH_4	methane
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CRHR	California Register of Historic Resources
CTAC	Clean Transit Advancement Campus
CWA	Clean Water Act
dBA	A-weighted decibel
DOC	California Department of Conservation
DPM	diesel particulate matter
EO	Executive Order
ESL	Environmentally Sensitive Lands
FEMA	Federal Emergency Management Agency
FMMP	Farmland Mapping and Monitoring Program
FSDRIP	First San Diego River Improvement Project
FTA	Federal Transit Administration
GHG	greenhouse gas

ACRONYMS AND ABBREVIATIONS (cont.)

HFCs	hydroflourocarbons
HRA	health risk assessments
IS	Initial Study
IS/MND	Initial Study/Mitigated Negative Declaration
kWhr	kilowatt hours
L_{EQ}	time-averaged noise level
L_{MAX}	maximum noise level
LOS	level of service
MBTA	Migratory Bird Treaty Act
MHPA	Multi-Habitat Planning Area
MLD	most likely descendant
MMT	million metric ton
MRZ	Mineral Resource Zone
MSCP	Multiple Species Conservation Program
MTS	San Diego Metropolitan Transit System
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O_3	Ozone
OEHHA	Office of Environmental Health Hazard Assessment
PAL	project area limits
PCE	perchloroethylene
PCF	perflourocarbons
PM_{10}	particulate matter 10 microns or less in diameter
$PM_{2.5}$	particulate matter 2.5 microns or less in diameter
PPV	peak particle velocity
PRC	Public Resources Code

RAQS	Regional Air Quality Strategy
RECs	recognized environmental conditions
RWQCB	Regional Water Quality Control Board
SANDAG	San Diego Association of Governments
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
Scoping Plan	Climate Change Scoping Plan
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SDCWA	San Diego County Water Authority
SDFD	San Diego Fire Department
SDIA	San Diego International Airport
sf	square feet
SF_5	sulfur hexafluoride
SO_X	sulfur oxides
SR	State Route
SWPPP	Storm Water Pollution Prevention Plan
SWQMP	Storm Water Quality Management Plan
TAC	Toxic Air Contaminant
USEPA	U.S. Environmental Protection Agency
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOCs	volatile organic compounds

1.0 Introduction

The San Diego Metropolitan Transit System (MTS) proposes to retrofit infrastructure at the Rio Vista Station on the MTS Green Line in the City of San Diego ("proposed project" or "project site").

The proposed project is located north of the I-8/Texas Street/Qualcomm way Interchange in an urbanized area primarily dominated by residential uses. The project site is bounded by the San Diego River to the south; Qualcomm Way to the east; residential uses to the north and west. Figure 1, *Project Vicinity*, depicts the regional location of the project site, and Figure 2, *Project Location*, shows the location of the project site and surrounding areas on an aerial photograph. Figure 3, *Project Features*, shows the project features and footprint. The proposed Project is subject to compliance with CEQA, and the MTS is the CEQA lead agency. The Project is expected to be fully constructed by the spring of 2026.

As the Lead Agency for the proposed project under CEQA, MTS has prepared an Initial Study (IS) to determine if the proposed project could have a significant effect on the environment. The IS identifies potentially significant effects to biological resources, cultural resources, noise, and tribal cultural resources, but mitigation measures incorporated into the proposed project by MTS would mitigate these effects to less than significant. There is no substantial evidence, in light of the whole record before the agency, that the project with the implementation of mitigation measures would have a significant effect on the environment. Therefore, pursuant to the Guidelines for Implementation of the California Environmental Quality Act (CEQA Guidelines) (§15070[b]), MTS has prepared a Mitigated Negative Declaration (MND) for the proposed project. Included in this Final MND is the IS documenting the reasons supporting the finding of no significant effect on the environment.

The Draft IS/MND was made available for a 30-day public review period pursuant to CEQA Guidelines Section 15105. The public review period began on October 1, 2025 and ended November 1, 2025. Written comments regarding the adequacy of the Draft IS/MND were requested to be received by November 1, 2025. Comments were requested to be provided in writing via the MTS webpage (https://www.sdmts.com/inside-mts/current-projects/rio-vista-platform-project) or emailed to riovistaplatform@sdmts.com or mailed to:

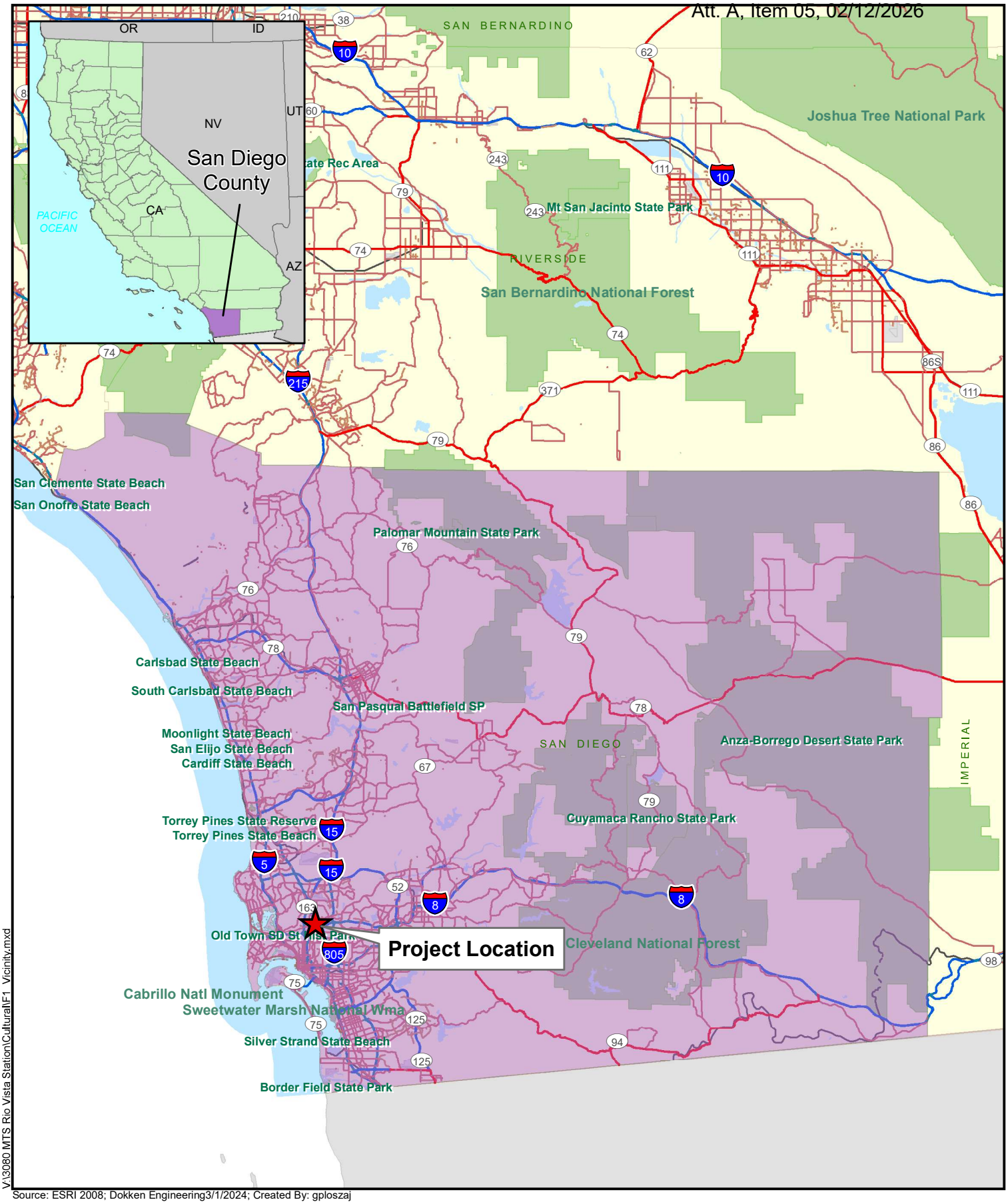
MTS, ATTN: Rio Vista Platform Project Comments 1255 Imperial Avenue, Suite 1000 San Diego, CA, 92101

Copies of the Draft IS/MND were also made available at the MTS offices at the addresses provided on the cover of this Final IS/MND and online at: https://www.sdmts.com/inside-mts/current-projects/rio-vista-platform-project

A copy of the Draft IS/MND was also made available at the following public library:

Malcolm X Library
5841 Market Street
San Diego, CA 92114

No public comments were received during the public and agency review period.



Source: ESRI 2008; Dokken Engineering3/1/2024; Created By: gploszaj

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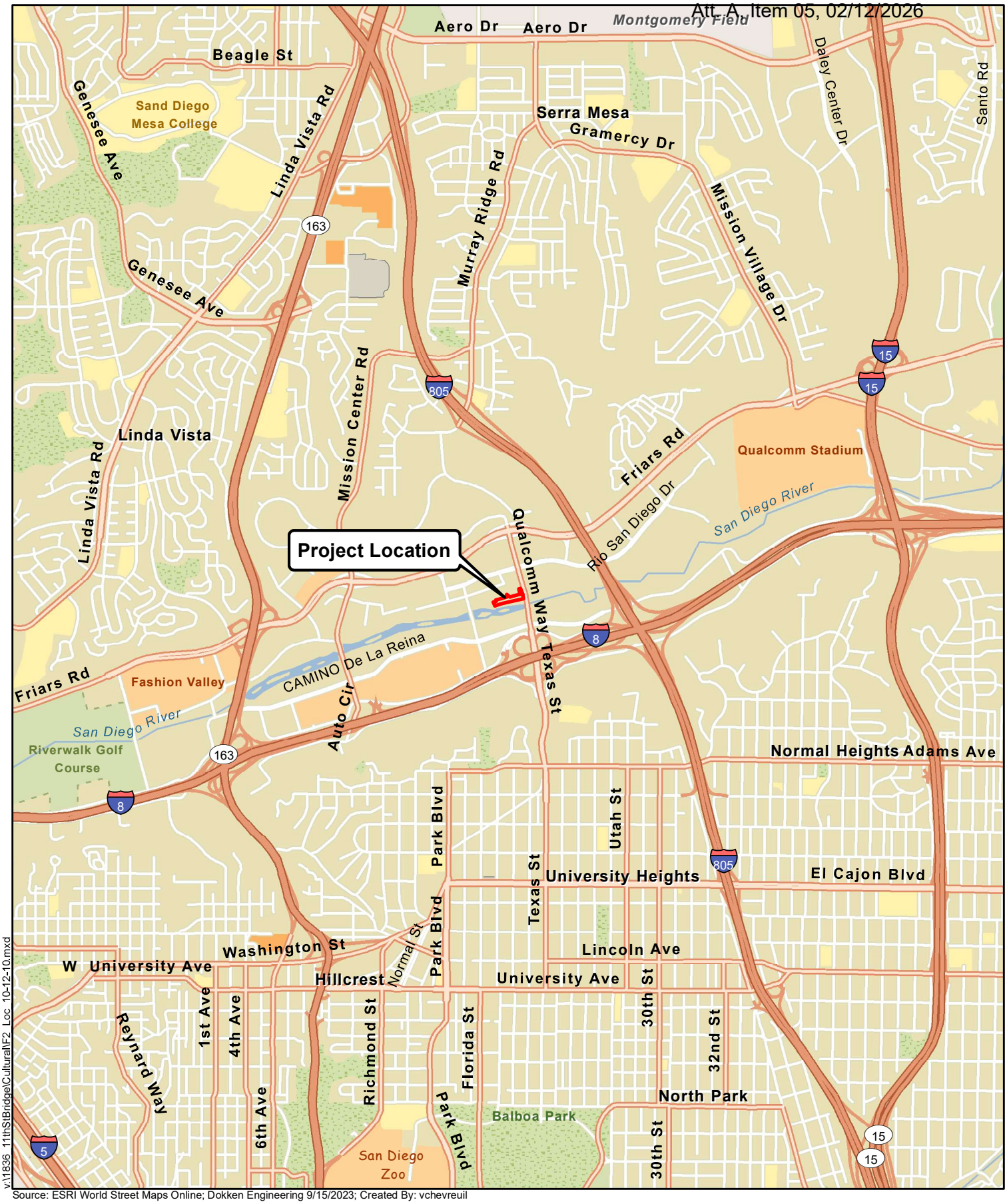
FIGURE 1
Project Vicinity
Rio Vista Platform Design - Phase II
San Diego County, California



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Source: ESRI World Street Maps Online; Dokken Engineering 9/15/2023; Created By: vchevreuil

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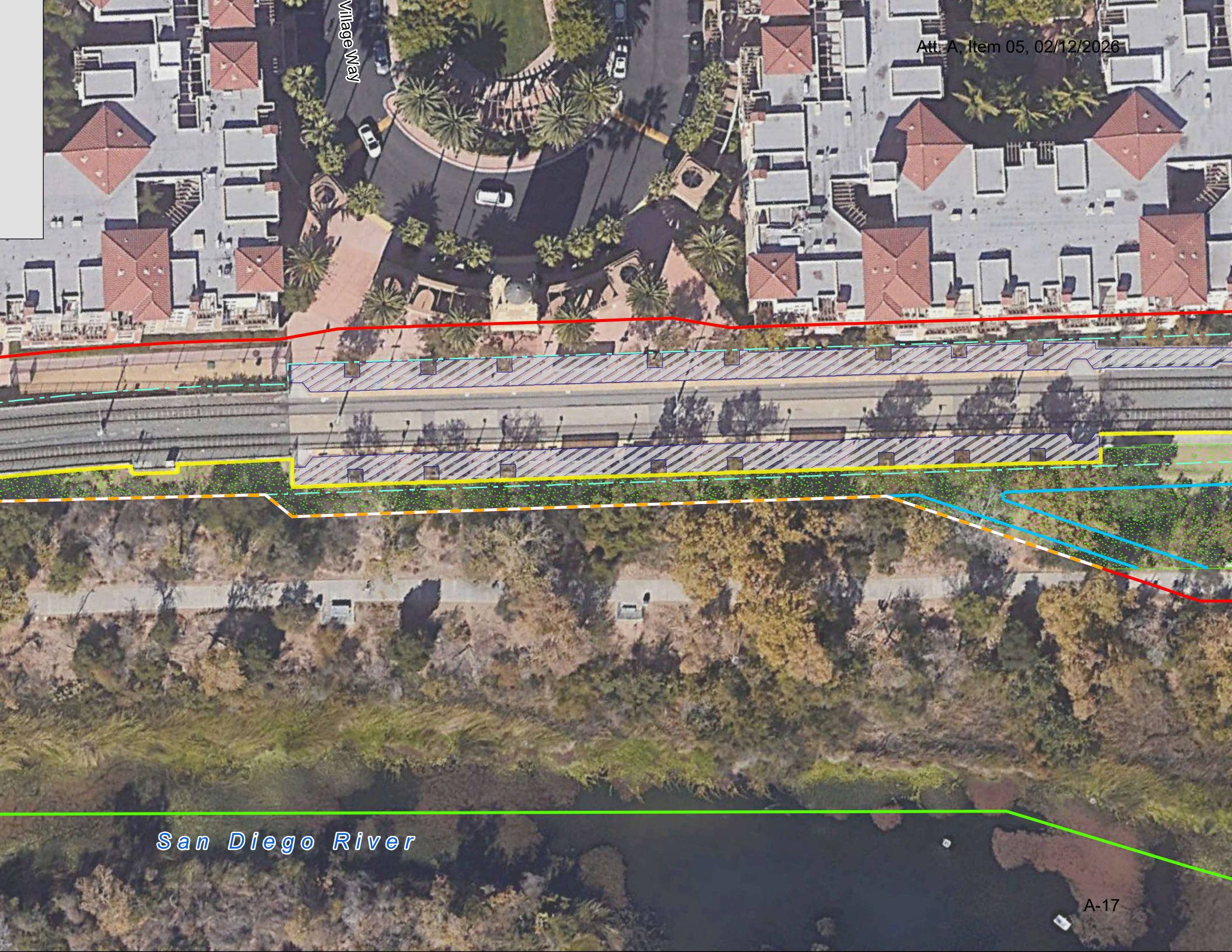
FIGURE 2
Project Location

Rio Vista Platform Design - Phase II
San Diego County, California


Village Way
San Diego River

2.0 Project Description

This section includes a description of the proposed project, project background, and the environmental setting, as well as anticipated discretionary actions and approvals. The project description is used as the basis for analyzing the proposed project's impacts on the existing physical environment, pursuant to CEQA, throughout this IS/MND.

2.1 Project Background

The Rio Vista Platform Design Project is a retrofit of infrastructure at the Rio Vista Station on the San Diego Metropolitan Transit System. The Rio Vista Station is on the MTS Green Line in the City of San Diego, located north of the I-8/Texas Street/Qualcomm way interchange in an urbanized area primarily dominated by residential users.

The MTS Rio Vista Station and apartment complex to the north were constructed in 1999 and 2003, respectively. There are various retaining wall configurations used to support the tracks between the grade separation structures at the Rio Vista Transit Station. A combination of precast concrete panel faced and welded wire (gabion basket) faced Mechanically Stabilized Embankment (MSE) with soil reinforcement are utilized as the main earth retaining system supporting the North County Transit District tracks. A supplemental cast-in-place (CIP) concrete curb wall is in place above the welded wire faced MSE wall along the left (north) side of the transit station platform.

MTS recently installed a series of monitor points to observe movement of the station's infrastructure. Several factors were determined to attribute to the movement of the walls and platform including:

- Presence of loose/soft materials in the upper five feet below the platform
- Unsuitable and potentially expansive materials used for the MSE walls
- Slackening of the MSE reinforcement behind the walls
- Settlement of the fill materials

To address observed settlement/movement at this station, the following retrofit recommendations will be needed to secure the station's infrastructure: tie rods, tie-back anchors, cast-in-place wall replacement, and surface drainage improvements.

2.2 Project Location and Setting

The proposed project is located in the southern portion of the City of San Diego in southwestern San Diego County (Figure 1). The project site encompasses approximately 1.45 acres comprised of Accessor's Parcel Numbers (APNs) 438-362-11-00 and 438-362-12-00. The site is located within the Mission Valley East neighborhood and occurs within an urbanized area primarily developed with residential uses. The project site is bounded by the San Diego River trail and river to the south; Qualcomm Way to the east; residential uses to the north and west (Figure 2).

Additional surrounding development includes residential and commercial retail uses to the north, west, and south beyond the Sacramento River; open space, recreational,

commercial retail uses to the east of Qualcomm Way; The Interstate 8/Qualcomm Way/Texas Street interchange lies to the southeast, and the Interstate-8 freeway runs parallel to the project in a southwest/northeast fashion.

The Project falls within the jurisdiction of the First San Diego River Improvement Project (FSDRIP), which is the segment of the San Diego River located between Qualcomm Way and Highway 163. Development within this region is subject to the FSDRIP Natural Resource Management Plan (NRMP) (City of San Diego 2004) (Appendix A), which outlines specific Development and Mitigation Guidelines to ensure the continuing protection of the natural resources created under the FSDRIP Revegetation Plan.

The project site is entirely developed on the north side with 4-story residential buildings, paved surface parking and pedestrian walkways, and limited ornamental landscaping. Topographically, the site varies with elevations ranging between 36 feet and 69 feet above mean sea level (amsl). Access is currently provided via Station Village Way.

2.3 Project Characteristics

There are two existing Mechanically Stabilized Embankment (MSE) retaining walls about 700 feet long that run parallel to the trolley tracks and Rio Vista Station Platform. The retaining walls are up to 17 feet tall, connecting the raised section of track between the existing Camino Del Este Bridge and Stadium Way Bridge. The platform itself is about 380 feet long inside the limits of the retaining walls. The project site is located between apartments, and the San Diego River which is an environmentally sensitive area.

The existing retaining walls and platform were constructed in 1999 and have had a history of settlement issues. There are gaps between wall panels, uneven walking surfaces, and cracking of some retaining wall components. There have been previous investigations to determine the extent of the damage and settlements that resulted in controlled monitoring.

This project retrofits the existing walls and includes general platform improvements. A combination of soil anchors, tie-back walls, and dead-man anchors will support the existing walls due to various constraints. Walers will be constructed on the outside of the existing concrete MSE panels to transfer loads from the panels to the tie rod anchor systems. The platform will see additional improvements including reconstruction of the wall coping, tree wells, station lighting, surface drainage improvements, track replacement[1], and various other improvements.

A temporary construction access road from the San Diego River Parkway will be constructed within the natural area to the South of the platform to allow access to where the drilling and installing of wall tie rod anchors will occur. Specific impacts as a result of the project are described in Section 5.0 of the IS/MND.

[1] The Project includes replacement of the existing track within the Rio Vista Station platform limits. Replacing the track concurrently with the wall improvements will improve construction, reduce future maintenance needs, and take advantage of planned service outages, thereby minimizing impacts to transit operations. Replacement of the existing track includes only minimal groundwork and will not result in any new potentially significant impacts or substantially increase previously identified potentially significant impacts.

Construction of the project is estimated to begin in Fall 2026 and take approximately 30 weeks to complete, for a projected opening year of 2027. Project construction would involve grading to build a temporary access road that will be constructed to the south of the site to allow equipment to access the platform. The analysis also assumes that construction activities would occur during daytime hours. Construction staging is anticipated to occur within the project site and construction access would be provided via the pedestrian path accessed from Qualcomm Way to the south of the platform and Station Village Way to the north of the platform. Construction of the project will be phased with a variety of equipment, as shown in Table 1 below.

Table 1. Construction Phasing

Phase*	Work Description	Equipment
Pre-Construction	Clearing and Grubbing & Access Road Grading	Small Excavator, Bulldozer
1	Demolition	Small Excavator, Power-driven Saw, Jackhammer, Dump Truck, Air Compressor, Generator
2	Tie-Rod Installation	Drill Rig, Concrete Mixer/Concrete Pump Truck, Hydraulic Jack
3	Anchor Block Installation	Excavator, Concrete Mixer/Concrete Pump Truck, Dump truck/hauler
4	Backfill	Excavator, Dump truck/hauler, Compactor
5	Resurfacing Station and Installing Station Amenities	Concrete Mixer, Compact crane or boom truck

**Work is broken up into segments to maintain operation/services during construction. Phases 1-4 would occur multiple times.*

2.4 Lead Agency Discretionary Actions

MTS Board discretionary actions related to the proposed project include:

- Adopt the Final IS/MND for the proposed project.
- Consider project for approval.

2.5 Other Agency Permits and Approvals

2.5.1 City of San Diego Building Permit

MTS is exempt from local land use and zoning ordinances and are therefore not required to obtain City of San Diego building permits to construct the proposed project (Public Utilities Code section 120050(c) and 132354.4; Gov. Code sections 53090 and 53091). Traffic control permits may be required during construction. Coordination with the City of San Diego regarding construction will occur throughout design and construction pursuant to the July 13, 2003 Memorandum of Understanding (MOU) between MTS and the City.

2.5.2 Stormwater Compliance

The project would also be required to adhere to the NPDES Construction General Permit

(NPDES No. CAS000002, SWRCB Order No. 2009-0009-DWQ; as amended by Order No. 2010-0014-DWQ and Order No. 2012-0014-DWQ), administered by the Regional Water Quality Control Board (RWQCB) during construction, which includes BMPs that serve to protect water and groundwater quality. Specific NPDES requirements associated with the proposed project include conformance with General Permit for Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (Municipal Permit, NPDES No. CAS 00000004, State Water Resources Control Board Order No. 2013-0001-DWQ, as amended by Order Nos. 2015-0133-EXEC, 2016-0069-EXEC, WQ 2018-0001-EXEC, WQ 2018-0007-EXEC, and 2017-XXXX-DWQ) (the "Small MS4 Permit"). The project would be subject to storm water regulations under the MTS Small MS4 Permit.

3.0 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

■ Aesthetics	☐ Agriculture and Forestry Resources	■ Air Quality
■ Biological Resources	■ Cultural Resources	☐ Energy
☐ Geology and Soils	☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials
☐ Hydrology and Water Quality	■ Land Use and Planning	☐ Mineral Resources
■ Noise	☐ Population and Housing	☐ Public Services
☐ Recreation	☐ Transportation	■ Tribal Cultural Resources
☐ Utilities and Service Systems	☐ Wildfire	■ Mandatory Findings of Significance

4.0 Determination

On the basis of this initial evaluation:

☐	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
■	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
☐	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☐	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
☐	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

_____ _____

Signature
Brent Boyd, Director of Planning
San Diego Metropolitan Transit System

Date

5.0 Environmental Initial Study Checklist

This IS checklist identifies potentially significant effects to biological resources, cultural resources, noise, and tribal cultural resources for the proposed project. The implementation of mitigation measures identified in this IS would ensure potentially significant impacts are less than significant with mitigation incorporated. All other environmental impacts would be less than significant, or no impact would occur. MTS has not adopted thresholds for use in CEQA documents where they are the Lead Agency or Responsible Agency. In the absence of MTS adopted thresholds, the analysis in this IS checklist relies on Appendix G of the CEQA Guidelines and in some cases (as specified and where relevant to the particular impact), the City of San Diego's (2020) guidelines for determining significance, which are based on Appendix G of the CEQA Guidelines. The following impact conclusion definitions are from Appendix G of the CEQA Guidelines and are used throughout the IS checklist:

- "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

- "Less Than Significant With Mitigation Incorporated" applies where the inclusion of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." All mitigation measures are described, including a brief explanation of how the measures reduce the effect to a less than significant level. Mitigation measures from earlier analyses may be cross-referenced.

- "Less Than Significant Impact" applies where the project does not create an impact that exceeds a stated significance threshold.

- "No Impact" applies where a project does not create an impact in that category. "No Impact" answers do not require an explanation if they are adequately supported by the information sources cited by the lead agency which show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project specific screening analysis).

I. Aesthetics

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	■
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	■	☐	☐
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	■
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	■

a) Would the project have a substantial adverse effect on a scenic vista?

No Impact. Scenic vistas are generally defined as public viewpoints that provide expansive or notable views of a highly valued landscape and are typically identified in planning documents, such as a general plan, but can also include locally known areas or locations where high-quality public views are available. Impacts to scenic vistas can result from development directly diminishing the scenic quality of the view or by blocking view corridors. The City of San Diego's General Plan (City of San Diego 2008a) does not identify or otherwise designate any scenic vistas, public viewpoints, view corridors, or protected viewsheds on the project site or adjacent areas in the project vicinity. The area surrounding the project site mostly consists of industrial development and transportation infrastructure.

Open space associated with the San Diego River is located directly adjacent to the project site to the south. This area consists of a vegetated slope extends south, is crossed by the paved San Diego River Trail, and then continues to slope south in the banks of the San Diego River. The San Diego River is identified in the Mission Valley Community Plan (City of San Diego 2018) as a "major visual asset of the Mission Valley Community". Public views of the river are accessible from the San Diego River Trail south of the project site between the San Diego River and the Qualcomm Way crossing to the east of the project site. The proposed retrofits would not affect views of the San Diego River from public vantage points in the project area, such as Qualcomm Way or the San Diego River Trail. Therefore, no Impact would occur.

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Less than Significant with Mitigation Incorporated. There are no officially designated state scenic highways in the vicinity of the project site. The nearest officially designated state scenic highway is the segment of SR 163 that extends through Balboa Park, which is approximately 2.25 miles southwest of the project site. The nearest eligible state scenic highway not officially designated is I-8, which is approximately ¼ mile south of the project site (Caltrans 2024). At these distances, project elements would not affect views from SR 163 or I-8. In addition, the project site is completely developed and does not contain notable scenic resources, such as large stands of mature trees or rock outcroppings. No historic-era buildings are present at the project site that would be affected.

The Project falls within the jurisdiction of the FSDRIP, which is the segment of the San Diego River located between Qualcomm Way and Highway 163. Development within this region is subject to the FSDRIP Natural Resource Management Plan (City of San Diego 2004), which outlines specific Development and Mitigation Guidelines to ensure the continuing protection of the natural resources created under the FSDRIP Revegetation Plan.

The project would include some site grading and construction of a temporary access road. Riparian vegetation directly south of the Rio Vista Station platform will be removed and a temporary access road will be graded from the San Diego River Parkway to allow construction access to the platform. Following the conclusion of the Project, temporary impacts to upland riparian habitat will be restored to pre-construction conditions in accordance with the FSDRIP.

The Project will be consistent with the Development and Mitigation Guidelines outlined in the NRMP of the FSDRIP. In addition, the implementation of avoidance and minimization measures BIO-1 through BIO-6, discussed further below in Section IV, Biological Resources, will reduce impacts to the riparian corridor. Thus, the project would not result in a substantial adverse effect on a scenic vista. Therefore, the proposed project would not substantially damage scenic resources including those within a state scenic highway. With implementation of mitigation measures BIO-1 through BIO-6, impacts would be Less than Significant with Mitigation Incorporated.

c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

No Impact. Public Resources Code (PRC) 21071 defines the term "urbanized area" for the purpose of CEQA to mean an incorporated city that has a population of at least 100,000 persons or has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons. According to U.S. Department of Commerce Bureau of the Census (U.S. Census Bureau) data from 2021, the City of San Diego has a population of 1,381,611 (U.S. Census Bureau 2021). Thus, the project site is within an urbanized area as defined by PRC 21071 and is therefore evaluated relative to applicable zoning and other regulations governing scenic quality.

The area north of the project footprint is zoned RM-3-9 for multiple-unit residences, and the area to the south where the San Diego River is located is zoned OF-1-1 for Open Space-Floodplain. The project area itself falls within the MTS right-of-way. While MTS is statutorily exempt from local

zoning requirements, the proposed retrofits would not require any change in visual character, nor would it require changes to any zoning to adjacent land uses. The proposed Project consists of retrofitting the existing walls and platform of the Rio Vista Station. No new structures would degrade the existing visual character or quality of public views to or from the adjacent San Diego River pedestrian path. Therefore, the proposed project would not conflict with applicable zoning or other regulations governing scenic quality. No Impact would occur.

d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

No Impact. There are two primary artificial sources of light that generally affect an urban environment: light emanating from building interiors that passes through windows to the outside, and light from exterior sources (e.g., street lighting, parking lot lighting, building illumination, security lighting, and landscape lighting) that affect the natural ambient light level. The introduction of light can be a nuisance by affecting adjacent areas and diminishing the view of the clear night sky depending on the location of the light sources and its proximity to nearby light-sensitive areas.

The project site is located in a developed area with residential development as well as adjacent open space. The existing light sources in the project area include streetlights and vehicle lights along surrounding roadways, as well as from interior and exterior building lighting emanating from the existing buildings both on site and on the surrounding properties. There is also overhead lighting associated with the MTS rail line that traverses through the project site.

The proposed project would include improvements to the existing lighting throughout the station; however, no new sources of light would be installed. Construction would occur during the day; therefore, no temporary lighting at night would occur. Therefore, the project would not create a new source of substantial light which would adversely affect views in the area and no impact would occur.

Glare impacts can occur because of artificial light or sunlight reflecting off a surface. Glare can create discomfort or present safety concerns (i.e., if glare is directed into the eyes of motorists). The project would comply with City of San Diego building code standards, including Section 142.0730 of the City of San Diego Municipal Code that regulates glare by allowing a maximum of 50 percent of the exterior of a building to be comprised of reflective material that has a light reflectivity factor greater than 30 percent. This regulation also prohibits use of reflective building materials where it is determined that such use would contribute to potential traffic hazards, diminished quality of riparian habitat, or reduced enjoyment of public open space. As such, the project would not create a new source of glare that would adversely affect views in the area and no impact would occur.

II. Agriculture and Forestry Resources

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	■
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	■
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	■
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	■
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non- forest use?	☐	☐	☐	■

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The Farmland Mapping and Monitoring Program (FMMP) is a statewide program that designates farmland among several categories, including Prime Farmland, Unique Farmland, and Farmland of Statewide Importance. The FMMP is maintained by the California Department of Conservation (DOC) and is the agency responsible for overseeing farmland classification throughout the state. Agricultural land is rated according to soil quality and irrigation status; the best quality land is called Prime Farmland. Unique farmland is land, other than Prime Farmland, which has combined conditions to produce sustained high quality and high yields of specialty crops. Farmland of Statewide Importance may include tracts of land that have been designated for agriculture by State law. In some areas that are not identified as having national or statewide importance, land is Farmland of Local Importance. The project site does not include any farmland and would not result in any land use changes. According to the California Important Farmland Finder map tool by the DOC, the project site is classified as Urban and Built-Up Land and Other Land and does not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Therefore, the project would not convert Farmland to non-agricultural use. No Impact would occur.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The Williamson Act is designed to prevent the premature and unnecessary conversion of open space lands and agricultural areas to urban uses. The Williamson Act enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use; in return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value. The Williamson Act is only applicable to parcels within an established agricultural preserve consisting of at least 20 acres of Prime Farmland, or at least 40 acres of land not designated as Prime Farmland. The Williamson Act is designed to prevent the premature and unnecessary conversion of open space lands and agricultural areas to urban uses.

As stated in item II(a), the project site is located in an area classified by the DOC as Urban and Built-Up Land where neither farmland nor agricultural resources are present. The area north of the project footprint is zoned RM-3-9 for multiple-unit residences, and the area to the south where the San Diego River is located is zoned OF-1-1 for Open Space-Floodplain. The project would not result in any zoning changes. Additionally, the project site is not encumbered by a Williamson Act Contract and would not affect any properties zoned for agricultural use or affected by a Williamson Act Contract, as there are none within the project vicinity. Therefore, the project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. No Impact would occur.

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

No Impact. PRC Section 12220(g) defines “forest land” as land that can support 10 percent native cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. Based on this definition, no forest land occurs within or adjacent to the project site. Moreover, there is no land zoned as forest land or timberland that exists within the project site or within its vicinity. While trees and vegetation exist on the south side of the site;, there is no concentration of trees within the site that would constitute a forest. Therefore, the project would not conflict with existing zoning for or cause a rezoning of forest land, timberland, or timberland zoned as Timberland Production. No Impact would occur.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. As stated in item II(c), there is no forest land present on site or vicinity. The site has not been historically and is not currently used or planned to be used for forest land. As such, implementation of the proposed project would not result in the loss of forest land or conversion of forest land to
non-forest use. No impact would occur.

e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. As stated in items II(a) through II(d), the project site is located in an area where no agricultural resources are present on the project site or immediate vicinity. The site and surrounding area are classified as Urban and Built-Up Land. Additionally, no existing agricultural or forest land uses are located in the proximity of the project site. Therefore, the project would not involve changes in the existing environment that could result in the conversion of farmland or forest land into non-agricultural or non-forest use. No Impact would occur.

III. Air Quality

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	■	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	■	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	■	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	■	☐

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. The proposed project is located within the San Diego Air Basin (SDAB). Air quality in the SDAB is regulated by the San Diego Air Pollution Control District (SDAPCD). The SDAPCD is the government agency that regulates sources of air pollution within the County. Currently, the SDAB is in "non-attainment" status for criteria pollutants ozone (O_3), 10-micron or less particulate matter (PM_{10}), and 2.5-micron or less particulate matter ($PM_{2.5}$). The federal Clean Air Act (CAA) required the United States Environmental Protection Agency (USEPA) to establish National Ambient Air Quality Standards (NAAQS), which identify concentrations of pollutants in the ambient air below which no adverse effects on the public health and welfare are anticipated. The SDAPCD and SANDAG are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SDAB. The current regional air quality plan for the NAAQS is SDAPCD's 2020 Plan for Attaining the National Ambient Air Quality Standards for Ozone in San Diego County (Attainment Plan; SDAPCD 2020). The regional air quality plan for the CAAQS is SDAPCD's 2016 Revision to the Regional Air Quality Strategy for San Diego County (RAQS; SDAPCD 2016). A 2022 update to the 2016 RAQS continues to be in progress as of May 2024.

Strategies to achieve these emissions reductions are developed in the Attainment Plan and RAQS, prepared by the SDAPCD for the region. Both the Attainment Plan and RAQS rely on information from the California Air Resources Board (CARB) and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in San Diego County, to project future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population and vehicle trends and land use plans developed by the cities and by the County. As such, projects that propose development that is consistent with the growth anticipated by the local jurisdictions' general plans would be consistent with the

Attainment Plan and RAQS. In the event that a project proposes development that is less intensive than anticipated within the General Plan, the project would likewise be consistent with the Attainment Plan and RAQS. If a project proposes development that is greater than that anticipated in the General Plan and SANDAG's growth projections upon which the Attainment Plan and RAQS are based, the project would be in conflict with the Attainment Plan and RAQS and might have a potentially significant impact on air quality.

The proposed project is located within the Mission Valley Community Plan Area and is consistent with the zoning of RM-3-9 for multiple-unit residences and OF-1-1 for Open Space-Floodplain. Community plans work together with the General Plan to provide location-based policies and recommendations in the City's 50-plus community planning areas. Community plans are written to refine the General Plan's citywide policies, designate land uses and housing densities, and include additional site-specific recommendations as needed. The proposed project has been designed to be compatible with the existing and potential future uses in the general area. As the project would not result in any zoning or land use changes, the project would continue to be in conformance with the Mission Valley Community Plan and would therefore be consistent with the Attainment Plan and RAQS. Thus, impacts associated with consistency with regional air quality plans would be Less than Significant.

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact. By its very nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development within the SDAB. The region is a federal and/or state nonattainment area for ozone, PM_{10} and $PM_{2.5}$. MTS has not adopted thresholds for use in CEQA documents where they are the Lead Agency or Responsible Agency. In the absence of MTS adopted thresholds, this analysis relies on the City of San Diego's (2020) guidelines for determining significance, which are based on Appendix G of the CEQA Guidelines. The screening criteria were developed by SDAPCD and the South Coast Air Quality Management District (SCAQMD) with the purpose of attaining the NAAQS and California Ambient Air Quality Standards (CAAQS). The NAAQS and CAAQS identify concentrations of pollutants in the ambient air below which no adverse effects on the public health and welfare are anticipated. Therefore, for CEQA purposes, these screening criteria can be used as numeric methods to demonstrate that a project's total emissions would not result in a significant impact to air quality or have an adverse effect on human health. The screening thresholds are included in Table 1, *Screening-level Thresholds for Air Quality Impact Analysis*.

Table 1
SCREENING-LEVEL THRESHOLDS FOR AIR QUALITY IMPACT ANALYSIS

Pollutant	Total Emissions Pounds per Hour	Total Emissions Pounds per Day	Total Emissions Tons per Year
Respirable Particulate Matter (PM_{10})	---	100	15
Fine Particulate Matter ($PM_{2.5}$)[1]	---	67	10
Oxides of Nitrogen (NO_X)	25	250	40
Oxides of Sulfur (SO_X)	25	250	40
Carbon Monoxide (CO)	100	550	100
Lead and Lead Compounds	---	3.2	0.6
Volatile Organic Compounds (VOC)	---	137	15

Source: City of San Diego 2020
[1] The City of San Diego does not specify a threshold for $PM_{2.5}$. Threshold here is based on SDAPCD Rules 20.1, 20.2, and 20.3.

The proposed project would generate criteria pollutants and precursors in the short-term during construction and the long-term during operation.

Construction Emissions

The project's construction emissions were estimated using CalEEMod. Construction was assumed to begin in May 2025 and lasting for 30 weeks with all construction activities occurring sequentially. Project-specific input was based on information provided by MTS and default model settings to estimate reasonably conservative conditions. Additional details of phasing, selection of construction equipment, and other input parameters, including CalEEMod data, are included in Appendix B.

The results of the calculations for the various phases of project construction are shown in Table 2, *Maximum Daily Construction Emissions*. The data are presented as the maximum anticipated daily emissions for comparison with the SDAPCD thresholds.

Table 2
MAXIMUM DAILY CONSTRUCTION EMISSIONS

Year	VOC*	NO_X*	CO*	SO_X*	PM_{10}*	$PM_{2.5}$*
Site Preparation	0.4	3.4	3.5	<0.1	0.2	0.2
Grading	3.1	27.3	29.4	<0.1	1.2	1.1
Maximum Daily Emissions	**3.1**	**27.3**	**29.4**	**<0.1**	**1.2**	**1.1**
Significance Thresholds	*137*	*250*	*550*	*250*	*100*	*55*
Significant Impact?	***No***	***No***	***No***	***No***	***No***	***No***

* Pollutant Emissions (pounds per day)
VOC = volatile organic compound; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides;
PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter

As shown in Table 2, emissions of criteria pollutants and ozone precursors from project construction would be below the applicable significance thresholds. Additionally, project construction would use clean engine technology in compliance with USEPA Tier 4 emissions standards and also comply with SDAPCD Regulation IV, Rule 55 Fugitive Dust Control. Therefore, direct impacts associated with criteria pollutants generated during project construction would be Less than Significant.

Operational Emissions

Upon completion of construction, the proposed Project would continue to operate as it did under existing conditions. There would be no change in operational emissions or new direct impacts associated with criteria pollutants generated during project operations.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant. CARB and the California Office of Environmental Health Hazard Assessment (OEHHA) have identified the following groups of individuals as the mostly likely to be affected by air pollution: adults over 65, children under 14, infants (including in utero in the third trimester of pregnancy), and persons with cardiovascular and chronic respiratory diseases such as asthma,

emphysema, and bronchitis (CARB 2005). These groups are considered sensitive receptors. The closest existing sensitive receptors to the project site include multi-family residences immediately adjacent north of the project site. Impacts to sensitive receptors are typically analyzed for operational period carbon monoxide (CO) hotspots and exposure to toxic air contaminants (TACs). An analysis of the project's potential to expose sensitive receptors to these pollutants is provided below.

Carbon Monoxide Hotspots

Localized air quality effects can occur when emissions from vehicular traffic increase in local areas. The primary mobile source pollutant of local concern is CO, which is a direct function of vehicle idling time and, thus, traffic flow conditions. CO transport is extremely limited—it disperses rapidly with distance from the source under normal meteorological conditions. However, under certain extreme meteorological conditions, CO concentrations proximate to a congested roadway or intersection may reach unhealthful levels affecting local sensitive receptors (residents, school children, the elderly, hospital patients, etc.). Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. If a project generates vehicular traffic that increases average delay at signalized intersections operating at Level of Service (LOS) E or F or causes an intersection that would operate at LOS D or better without the project to operate at LOS E of F with the project, the project could result in significant CO hotspot-related effects to sensitive receptors.

The proposed project would contribute to a temporary increase in truck traffic at nearby intersections during construction, which would result in a temporary increase in localized CO concentrations associated with vehicle idling; however, as shown in Table 2, the increase is well below significance thresholds and would be minimal and temporary in nature. Upon construction completion, the proposed project would have no impact related to LOS or traffic. Therefore, the project would not have the potential to result in a CO hotspot, and impacts would be Less than Significant.

Toxic Air Contaminants

Construction

Diesel engines emit a complex mixture of air pollutants, including gaseous material and diesel particulate matter (DPM). DPM emissions would be released from operation of the on-site construction equipment used for project construction. CARB has declared that DPM from diesel engine exhaust is a TAC. Additionally, the OEHHA has determined that chronic exposure to DPM can cause carcinogenic and non-carcinogenic health effects. For this reason, although other pollutants would be generated, DPM would be the primary pollutant of concern.

The dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Thus, the risks estimated for a maximally exposed individual are higher if a fixed exposure occurs over a longer time period. According to the OEHHA, health risk assessments (HRAs), which determine the exposure of sensitive receptors to TAC emissions, should be based on a 30-year exposure period; however, such assessments should be limited to the period/duration of activities associated with a project.

There would be few pieces of off-road, heavy-duty diesel equipment operating at a given time

during project construction, and the construction period would be relatively short, especially when compared to the 30-year exposure period utilized for assessment (as noted above). In addition, the highest daily emission of PM_{10} (which includes equipment emissions of DPM) during construction is estimated to be approximately 10 pounds per day, which would be well below the 100 pounds per day significance level threshold. The significance level thresholds were developed with the purpose of attaining the NAAQS and CAAQS, which identify concentrations of pollutants in the ambient air below which no adverse effects on the public health and welfare are anticipated. Combined with the highly dispersive properties of DPM, construction-related emissions would not expose sensitive receptors to substantial emissions of TACs. Impacts from construction emissions would be Less than Significant.

Operation

CARB siting recommendations within the *Air Quality and Land Use Handbook* suggest a detailed HRA should be conducted for sensitive receptors within 1,000 feet of a warehouse distribution center, within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater), 50 feet of a typical gas dispensing facilities, or within 300 feet of a dry cleaning facility that uses perchloroethylene (PCE), among other siting recommendations (CARB 2005). The project would not result in conditions with respect to any CARB siting recommendations associated with exposure of sensitive receptors to TAC emissions such that preparation of an HRA would be warranted. Impacts would be Less than Significant.

Based on the above analysis, implementation of the project would not expose sensitive receptors to substantial pollutant concentrations. Impacts would be Less than Significant.

d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact. The State of California Health and Safety Code Sections 41700 and 41705, and SDAPCD Rule 51, prohibit emissions from any source whatsoever in such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to the public health or damage to property. Any unreasonable odor discernible at the property line of the project site would be considered a significant odor impact.

The proposed project could produce odors during proposed construction activities from construction equipment exhaust, application of asphalt, and/or the application of architectural coatings; however, standard construction practices would minimize the odor emissions and their associated impacts.
Furthermore, odors emitted during construction would be temporary, short-term, and intermittent in nature, and would cease upon the completion of the respective phase of construction. Accordingly, the proposed project would not create objectionable odors affecting a substantial number of people during construction, and short-term impacts would be Less than Significant.

Upon completion of construction, operation of the proposed project would not result in any new emissions that would lead to odors adversely affecting a substantial number of people. Impacts would be Less than Significant.

IV. Biological Resources

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	■	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	■	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	■
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	■	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	■	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	■	☐	☐

The discussion below is summarized and based on the analysis and conclusions contained within the Biological Resources Technical Report (Dokken 2023) prepared for the proposed project. The report is included as Appendix C to this IS/MND.

Prior to field surveys, the BSA was defined as the area required for the staging, access, and construction of the Project with an approximate 150-foot buffer along the Project's southern margin in order to evaluate potential visual, noise, vibratory and other indirect impacts to sensitive biological resources along the San Diego River. The BSA measures approximately 730 feet wide and measures approximately 390 feet from north to south at its widest point. The total acreage of the BSA is approximately 3.75 acres.

A biological field survey was conducted on August 10, 2023, by Dokken Engineering biologist Scott Salembier. Habitat assessments were conducted within the BSA to assess the vegetative communities present, identify biological resources which may be impacted by the Project, and

evaluate the potential for special status species to occur on-site.

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant With Mitigation Incorporated. The project site is primarily developed and paved. However, the area south of the project site where a temporary access road would be constructed consists of willow riparian habitat and upland riparian habitat associated with the San Diego River, which have been identified as natural communities of special concern by CDFW. In addition, the coastal sage scrub habitat located directly east of the Project limits may provide suitable habitat for a variety of special status wildlife species.

Special Status Plant Species

Prior to field surveys, a list of regional special status plant species with potential to occur within the Project vicinity was compiled from database searches. The potential for each species to occur within the BSA was determined by analyzing the habitat requirements of each species and comparing the habitat requirements to available habitat within the BSA. After a careful comparison between habitat requirements and the habitat available within the BSA, no special status plants are anticipated to occur within the BSA. As such, no impacts to special status plants species will result from the construction of this Project.

Federally Listed Wildlife Species

Three federally and state listed species, coastal California gnatcatcher (*Polioptila californica californica*), least Bell's vireo (*Vireo bellii pusillus)*, and Southwestern willow flycatcher (*Empidonax traillii extimus)* have the potential to occur within the BSA due to the presence of locally suitable habitat as well as recent, local occurrences.

Coastal California Gnatcatcher (*Polioptila californica californica*)

The BSA does not encompass arid coastal sage scrub habitat; however, the San Diego River riparian corridor may provide marginally suitable habitat for this species. In addition, there are numerous local CNDDB occurrences in the vicinity of the BSA, including a 2003 occurrence located 0.42 miles northeast of the BSA. Due to the presence of marginally suitable habitat as well as the recent local occurrences, the species may have a low potential to occur within the BSA. As such, incidental take of this species is not permitted without prior authorization under Section 7 or Section 10 Consultation with the USFWS. Approximately 0.27 acres of upland riparian habitat will be temporarily impacted during construction to allow for construction access to the proposed work area; however, all clearing, grubbing, grading, and other Project-related construction activities will occur outside the coastal California gnatcatcher breeding season (February 15 – August 15). Following the conclusion of the Project, temporary impacts to upland riparian habitat will be restored to pre-construction conditions in accordance with the FSDRIP. No permanent impacts to the species are anticipated; therefore, consultation with the USFWS is not required.

Least Bell's Vireo (*Vireo bellii pusillus)*

The BSA includes low elevation riparian habitat adjacent to the San Diego River. In addition, there are numerous recent CNDDB occurrences of this species within the San Diego River corridor, including a recent (2011) occurrence located directly upstream of the Project. Due to the presence of locally suitable habitat as well as the recent local occurrence, the species may have a high potential to occur within the BSA. As such, incidental take of this species is not permitted without prior authorization under Section 7 or Section 10 Consultation with the USFWS. Approximately 0.27 acres of upland riparian habitat will be temporarily impacted during construction to allow for construction access to the proposed work area; however, all clearing, grubbing, grading, and other Project-related construction activities will occur outside the coastal California gnatcatcher breeding season (March 15 - September 15). Following the conclusion of the Project, temporary impacts to upland riparian habitat will be restored to pre-construction conditions in accordance with the FSDRIP. No permanent impacts to the species are anticipated; therefore, consultation with the USFWS and an incidental take permit from CDFW is not required.

Southwestern Willow Flycatcher (*Empidonax traillii extimus)*

There are no CNDDB occurrences of this species within 10 miles of the BSA. However, the BSA includes suitable dense riparian habitat adjacent to the San Diego River. In addition, the Project occurs within the anticipated range of this species. Due to the presence of locally suitable habitat, the species may have a low potential to occur within the BSA. As such, incidental take of this species is not permitted without prior authorization under Section 7 or Section 10 Consultation with the USFWS. Approximately 0.27 acres of upland riparian habitat will be temporarily impacted during construction to allow for construction access to the proposed work area; however, all clearing, grubbing, grading, and other Project-related construction activities will occur outside the southwestern willow flycatcher breeding season (April 15 - August 31). Following the conclusion of the Project, temporary impacts to upland riparian habitat will be restored to pre-construction conditions in accordance with the FSDRIP. No permanent impacts to the species are anticipated; therefore, consultation with the USFWS is not required.

In addition to avoidance and minimization measures BIO-1 through BIO-4, the implementation of measures BIO-8 and BIO-9 will ensure that Project-related impacts to coastal California gnatcatcher, least Bell's vireo and southwestern willow flycatcher are mitigated to less than significant. The Project will be consistent with the Development and Mitigation Guidelines outlined in the NRMP of the FSDRIP. No further consultation with USFWS or CDFW is required regarding impacts to coastal California gnatcatcher, least Bell's vireo, and southwestern willow flycatcher.

Species of Special Concern

The least bittern (*Ixobrychus exilis*) is not a state or federally listed species but is considered a SSC under CDFW. This species prefers to nest in emergent vegetation above or along the margin of open water habitat. Within the BSA, the willow riparian habitat located adjacent to the San Diego River provides a suitable nesting location for least bittern. In addition, there are numerous recent eBird occurrences of this species within approximately 2.5 miles of the BSA, including a recent (2016) occurrence confirmed with photo identification. Due to the presence of locally suitable habitat as well as the recent local occurrences, the species may have a high potential to nest within

the willow riparian habitat located adjacent to the San Diego River. With the implementation of avoidance and minimization measures BIO-1 through BIO-4, Project activities will be excluded from willow riparian habitat and be restricted to north of the San Diego River Parkway Trail. No impacts to willow riparian habitat will result from this project. Furthermore, Project activities will be limited to outside the least bittern breeding season in accordance with avoidance and minimization measure BIO-9, minimizing indirect construction impacts to the species.

The yellow warbler (*Setophaga petechia)* is not a state or federally listed species but is considered a SSC under CDFW. There are numerous recent eBird occurrences within the San Diego River corridor, including 2023 occurrences of the species directly south of the Project. In addition, the BSA encompasses riparian habitat suitable for nesting. Due to the presence of potentially suitable habitat as well as the recent local occurrences, yellow warbler has a high potential to occur within the BSA. No permanent impacts to yellow warbler habitat are anticipated. Temporary impacts will be returned to pre-construction conditions following the completion of construction activities and revegetated in accordance with avoidance and minimization measure BIO-7.

The western red bat (*Lasiurus frantzii*)is not a state or federally listed species but is considered a SSC under CDFW. There is a recent (2003) CNDDB occurrence of this species within the San Diego River corridor, approximately 5.7 miles northeast of the Project. The BSA includes dense riparian habitat with stands of cottonwood and willow that may be suitable for nesting. Due to the presence of locally suitable habitat, the species may have a low potential to occur within the BSA. In addition to avoidance and minimization measures BIO-1 through BIO-4, the implementation of measures BIO-8 through BIO-10 will ensure that Project-related impacts to western red bat are mitigated to less than significant.

The western yellow bat (*Lasiurus xanthinus*) is not a state or federally listed species but is considered a SSC under CDFW. There is a historic (1985) CNDDB occurrence of this species located approximately 2 miles south of the Project. In addition, the BSA includes dense riparian habitat that may be suitable for maternal colonies of this species. Furthermore, the San Diego River provides a proximal open water source directly south of the BSA. Due to the presence of locally suitable habitat as well as the local historic occurrence, the species may have a low potential to occur within the BSA. In addition to avoidance and minimization measures BIO-1 through BIO-4, the implementation of measures BIO-8 through BIO-10 will ensure that Project-related impacts to western yellow bat are mitigated to less than significant.

The two-striped gartersnake (*Thamnophis hammondii*) is not a state or federally listed species but is a SSC under CDFW. There is a recent (2001) CNDDB occurrence of this species located approximately 4.1 miles southeast of the Project Area. The BSA encompasses a dense riparian corridor adjacent to the San Diego River and may provide suitable upland habitat for the species. As such, there is a low potential for the species to occur within the BSA. In addition to avoidance and minimization measures BIO-1 through BIO-4, the implementation of measures BIO-9 and BIO-11 through BIO-14 will ensure that Project-related impacts to two-striped gartersnake are mitigated to less than significant.

The Project will be consistent with the Development and Mitigation Guidelines outlined in the NRMP of the FSDRIP. Furthermore, the project would not result in adverse indirect effects on special status species with implementation of mitigation measures BIO-1 through BIO-14. Impacts to species identified as a candidate, sensitive, or special-status species in local or regional plans or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service would be

Less than Significant with Mitigation Incorporated.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant Impact with Mitigation Incorporated. Riparian habitat associated with the San Diego River is present to the south of the project site. Within the BSA, the willow riparian habitat and upland riparian habitat associated with the San Diego River have been identified as natural communities of special concern by CDFW (Figure 4). In addition, the coastal sage scrub habitat located directly east of the Project limits may provide suitable habitat for a variety of special status wildlife species. Table 3. Impacts to Sensitive Natural Habitats and Figure 5. Project Impacts outline the impacts to sensitive habitat communities within the BSA. Project impacts and the associated avoidance, minimization, and mitigation measures for the riparian corridor and coastal sage scrub habitat are discussed in their respective sections below.

Table 3
IMPACTS TO SENSITIVE NATURAL HABITATS

Impact Type (acres)	Sensitive Natural Habitat		
	Upland Riparian	Willow Riparian	Coastal Sage Scrub
Temporary	0.27 acres	0 acres	0 acres
Permanent	0 acres	0 acres	0 acres
Total	**0.27 acres**	**0 acres**	**0 acres**

Approximately 0.27 acres of upland riparian habitat will be temporarily impacted during construction to allow for construction access to the proposed work area. Riparian vegetation directly south of the Rio Vista Station platform will be removed and a temporary access road will be graded from the San Diego River Parkway to allow construction access to the platform. Following the conclusion of the Project, temporary impacts to upland riparian habitat will be restored to pre-construction conditions in accordance with the FSDRIP. No permanent impacts to upland riparian habitat will result from the proposed platform improvements.

The Project will be consistent with the Development and Mitigation Guidelines outlined in the NRMP of the FSDRIP. In addition, the implementation of avoidance and minimization measures BIO-1 through BIO-6 will reduce impacts to the riparian corridor. Therefore, impacts to riparian habitat or other sensitive natural community would be Less Than Significant with Mitigation Incorporated.

c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. There are no state or federally protected wetlands within the project area. There would be No Impact.

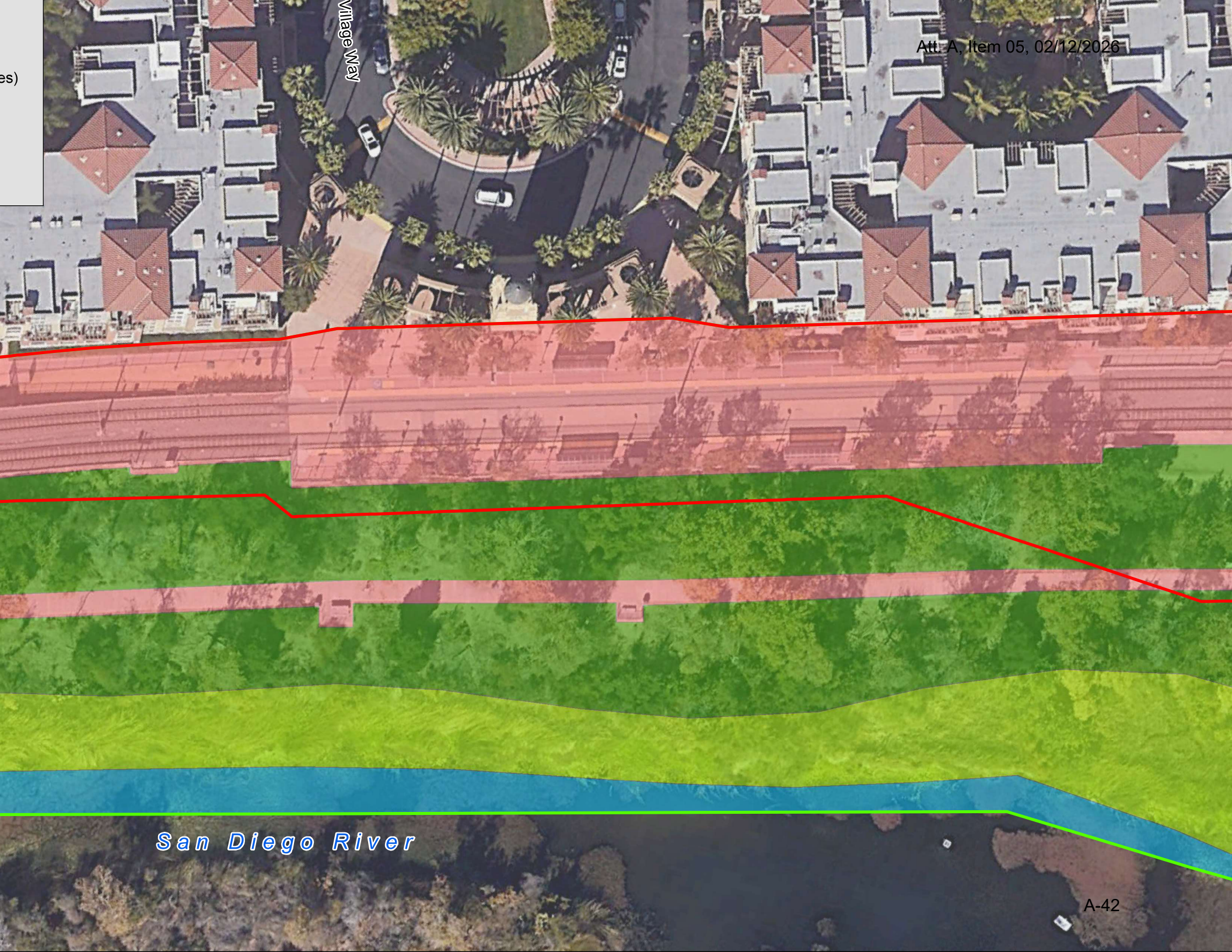
d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

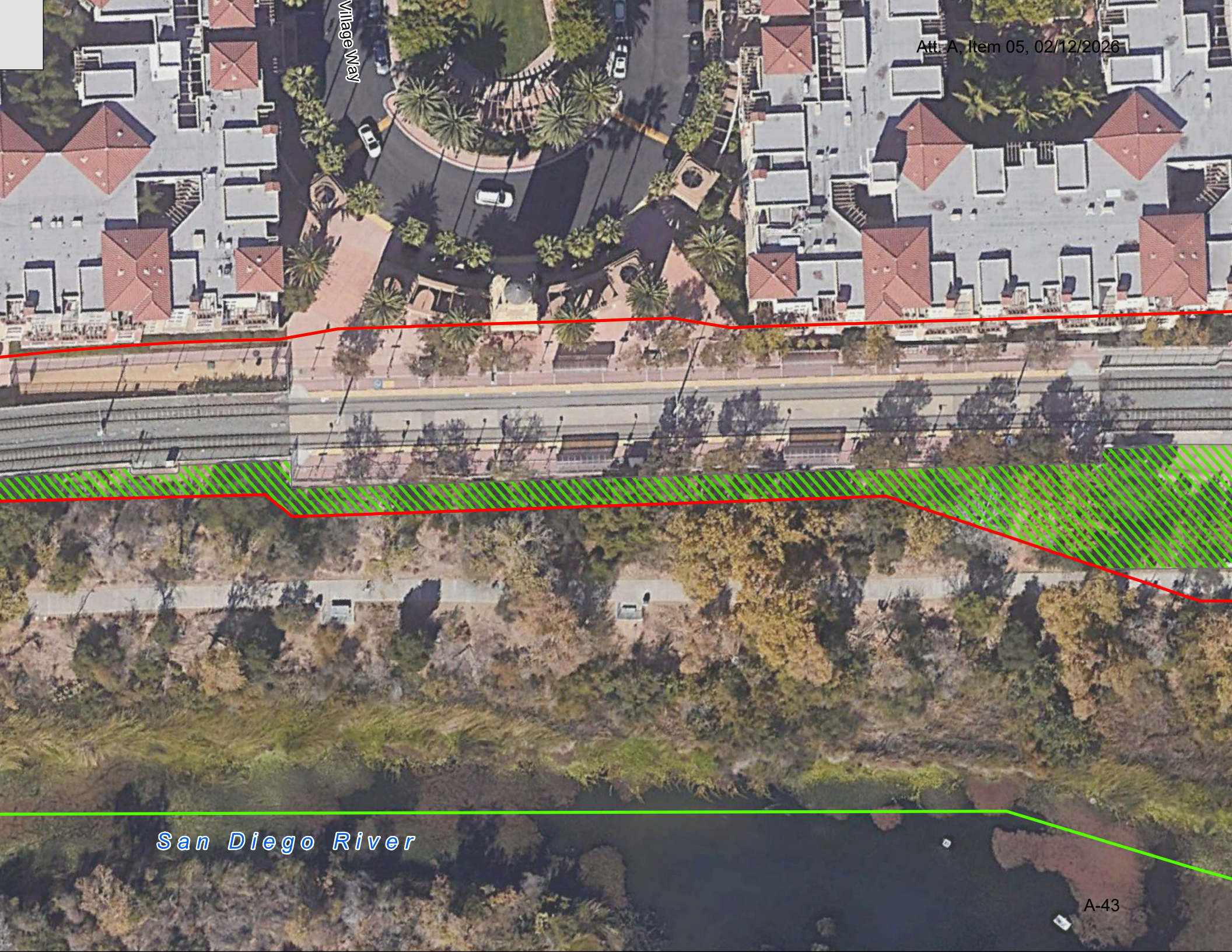
Less Than Significant Impact with Mitigation Incorporated. The project site is primarily developed and located adjacent to the San Diego River. The San Diego River itself, however, acts as a wildlife corridor for wildlife species.

According to the NOAA habitat conservation Essential Fish Habitat View Tool, the BSA does not fall within Essential Fish Habitat (EFH) for any of the identified species (NOAA 2023) and no work within the San Diego River would occur; therefore, no impacts to migratory fish would occur.

The San Diego River and its associated habitat acts as a migratory corridor for native birds. Native birds are protected by the MBTA and CFG Code Section 3513. The implementation of measures BIO-8 and BIO-9 would avoid all potential impacts to migratory birds.

The project is adjacent to open space to the south associated with the San Diego River. The project, however, would not interfere with the function as a wildlife corridor and would not constrain wildlife movement through the area. In addition, the implementation of avoidance and minimization measures BIO-1 through BIO-6 will reduce impacts to the riparian corridor. Impacts to wildlife movement would be Less Than Significant with Mitigation Incorporated.


es)
Village Way
San Diego River


Village Way
San Diego River

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than Significant with Mitigation Incorporated. The Project falls within the jurisdiction of the FSDRIP, which is the segment of the San Diego River located between Qualcomm Way and Highway 163. Development within this region is subject to the FSDRIP Natural Resource Management Plan, which outlines specific Development and Mitigation Guidelines to ensure the continuing protection of the natural resources created under the FSDRIP Revegetation Plan.

Approximately 0.27 acre of riparian vegetation, which includes trees species such as coast live oak (*Quercus agrifolia*) and Fremont cottonwood (*Populus fremontii*), directly south of the platform will be removed to provide construction access and restored following the completion of construction. Removal of vegetation would conducted in accordance with the FSDRIP Revegetation Plan protecting biological resources and include all required measures, such as BIO-7 regarding implementing a post-construction revegetation and monitoring plan; therefore, impacts would be Less than Significant with mitigation.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Less Than Significant With Mitigation Incorporated. The project site occurs within the boundaries of the City of San Diego's adopted MSCP Subarea Plan (City of San Diego 1997) and in close proximity (as close as 150 feet) to the City of San Diego's Multi-Habitat Planning Area (MHPA); however, MTS is not a covered participant in the MHPA and those provisions do not apply to this Project. The Project also falls within the jurisdiction of the FSDRIP, which is the segment of the San Diego River located between Qualcomm Way and Highway 163. Development within this region is subject to the FSDRIP NRMP, which outlines specific Development and Mitigation Guidelines to ensure the continuing protection of the natural resources created under the FSDRIP Revegetation Plan.

Approximately 0.27 acres of upland riparian habitat will be temporarily impacted during construction to allow for construction access to the proposed work area. Riparian vegetation directly south of the Rio Vista Station platform will be removed and a temporary access road will be graded from the San Diego River Parkway to allow construction access to the platform. Following the conclusion of the Project, temporary impacts to upland riparian habitat will be restored to pre-construction conditions in accordance with the FSDRIP. No permanent impacts to upland riparian habitat will result from the proposed platform improvements.

The Project will be consistent with the Development and Mitigation Guidelines outlined in the NRMP of the FSDRIP. In addition, the implementation of avoidance and minimization measures BIO-1 through BIO-6 will reduce impacts to the riparian corridor. Therefore, impacts related to consistency with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan would be Less than Significant with Mitigation Incorporated.

<u>Avoidance, Minimization, and Mitigation Measures</u>

BIO-1: Every individual working on the Project must attend a biological awareness training session delivered by a CDFW qualified biologist. This training program will include

information regarding the sensitive habitats and special status species occurring or potentially occurring within the Project area, and the importance of avoiding impacts to these species and their habitat.

BIO-2: Prior to the start of construction activities, the Project limits within the San Diego River Parkway will be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking in accordance with the First San Diego River Improvement Plan to ensure construction will not further encroach into sensitive resources.

BIO-3: Best Management Practices (BMPs) will be incorporated into Project design and Project management to minimize impacts on the environment including erosion and the release of pollutants (e.g., oils, fuels):

- Exposed soils and material stockpiles will be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities;
- All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters;
- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life will be prevented from contaminating the soil or entering jurisdictional waters;
- All erosion control measures, and storm water control measures would be properly maintained until the site has returned to a pre-construction state;
- All construction materials would be hauled off-site after completion of construction.

BIO-4: Vegetation removal will be avoided to the greatest extent practicable. Where feasible, trees and shrubs will be trimmed rather than removed.

BIO-5: Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants must remain outside of sensitive habitat marked with high-visibility fencing. Any necessary equipment washing must occur where the water cannot flow into sensitive habitat communities.

BIO-6: A chemical spill kit must be kept onsite and available for use in the event of a spill.

BIO-7: MTS will develop a post-construction revegetation and monitoring plan to restore the Project's temporary impacts to riparian vegetation. Revegetation of the temporarily impacted Project areas will be conducted in accordance with the Development and Mitigation Guidelines outlined in the NRMP of the FSDRIP. The revegetation plan, monitoring period, and associated success criteria will be determined in coordination with CDFW during the permitting phase of the Project.

BIO-8: Prior to vegetation removal or initial ground disturbance during the nesting bird season

(February 1 – September 30) a pre-construction nesting bird survey must be conducted by a Project biologist prior to the start of work. The nesting bird survey must include the Project area plus a 250-foot buffer. Within 2 weeks of the nesting bird survey, all areas surveyed by the biologist must be cleared by the contractor or a supplemental nesting bird survey is required.

A minimum 100 foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 300 foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the buffer area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the Project biologist and in coordination with wildlife agencies) in the buffer area until a qualified biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by the Project biologist and approved by CDFW.

BIO-9: To avoid impacts to special status migratory birds, clearing, grubbing, grading, and other Project-related construction activities willwill occur between September 15 and February 15, outside the southwestern willow flycatcher breeding season (April 15 - August 31), the coastal California gnatcatcher breeding season (February 15 – August 15), and the least Bell's vireo breeding season (March 15 - September 15). No incidental take of the above species is permitted by this Project.

BIO-10: To avoid impacts to roosting bats, trees that may contain roosting bats must be removed between September 1 and March 1, outside of the bat maternity season.

BIO-11: Prior to vegetation removal or initial ground disturbance, a pre-construction clearance survey must be conducted by a Project biologist within two-striped gartersnake habitat (riparian corridor). Within 2 weeks of the pre-construction survey, all areas surveyed by the biologist must be cleared by the contractor or a supplemental clearance survey is required.

BIO-12: All excavated steep-walled holes and trenches within two-striped gartersnake habitat that are more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps at an angle of no more than 30 degrees constructed of earth fill or wooden planks at the end of each workday or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within two-striped gartersnake habitat will be inspected for two-striped gartersnake prior to being moved.

BIO-13: If erosion control is implemented within two-striped gartersnake habitat (riparian corridor), nonentangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure snakes are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.

BIO-14: If a two-striped gartersnake is encountered during construction activities, the Project

biologist will be notified and construction activities will be suspended in a 50-foot radius of the animal until it leaves the project site on its own volition. A qualified biologist may relocate a two-striped gartersnake to outside the project area.

V. Cultural Resources

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	■
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	■	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	■	☐	☐

The discussion below is summarized and based on the analysis and conclusions contained within the Cultural Resources Inventory Report (Dokken 2024) prepared for the proposed project. The report is included as Appendix D to this IS/MND.

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

No Impact. The Cultural Resources Survey Report conducted a records search, Sacred Lands File search, a review of historic aerial photographs and maps, historic background research, a pedestrian survey, and historic structures evaluation for the proposed project to determine the potential effects on historical resources. The National Register of Historic Places (NRHP) was established by the National Historic Preservation Act to protect historically significant properties. Similarly, the California Register of Historical Resources (CRHR) requires the identification and mitigation of substantial adverse impacts that may affect the significance of eligible historical resources. To be eligible for listing in the NRHP or CRHR, a resource must meet specific criteria which are described in detail in the Cultural Resources Survey Report (Dokken 2024).

The area north of the project site has been disturbed by residential development, as well as transportation and utility installation, while disturbance to the south of the site is associated with the active recreational trail. The MTS Rio Vista Station (Station) platform and apartment complex to the north were constructed in 1999 and 2005, respectively. The records search conducted at the South Coastal Information Center (SCIC) yielded five previously recorded cultural resources within a half-mile radius of the project, none of which have been recorded within the project area of potential effect (APE), which coincides with the boundaries of the project site. Previously recorded historic resources include two historic buildings, two prehistoric sites, and a site with both prehistoric and historic components.

The structures within the APE do not appear eligible for federal or state listing. They are not included on a register of designated properties, and they are not contributors to any designated historic district.
Therefore, they do not qualify as historical resources under CEQA. Based on the results of the Cultural Resources Inventory Memorandum (Dokken 2024, Appendix D), no historic properties or historical resources would be affected by implementation of the proposed project.

Therefore, the project would not cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5. No Impact would occur.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less Than Significant With Mitigation Incorporated. As noted above in item V(a), the records search conducted for the project identified 5 previously recorded cultural resources within a half-mile of the project site, but none within the project site. Previously recorded prehistoric resources consist of two lithic procurement and reduction areas, a low-density lithic scatter, and a shell scatter.

No archaeological resources were observed during the field survey. Due to the construction of the Station, the active recreational trail to the south of the Station, and the surrounding apartment complexes, the Project Area Limits (PAL) and surrounding area has been heavily disturbed. The degree of disturbance and development throughout the Project vicinity suggests that the probability to locate intact subsurface archaeological deposits is low.

While no Indigenous or historic-era resources are noted within the PAL, and the potential of encountering intact cultural resources is low, the Measures CR-1 and CUL-2 should be implemented in case cultural material is encountered. As a result, implementation of the proposed project could result in a potentially significant impact to archaeological resources. Implementation mitigation measure CR-1 and CR-2 would reduce impacts to Less than Significant with Mitigation Incorporated.

c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less Than Significant with Mitigation Incorporated. There are no known grave sites within the project limits, and the potential for encountering human remains during construction activities is considered low, since grading and excavation activities would occur within a previously disturbed area. In the unlikely event that human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance will occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. The County Coroner must be notified of any human remains find immediately. If the remains are determined to be prehistoric, the Coroner would notify the NAHC, which would determine and notify a Most Likely Descendant (MLD). The MLD would have the opportunity to make recommendations to the NAHC on the disposition of the remains. With implementation of mitigation measure CR-2, impacts would be Less than Significant with Mitigation Incorporated.

<u>Avoidance, Minimization, and Mitigation Measures</u>

CR-1 The construction contractor will implement an archaeological and Native American monitoring program during initial grading and other ground-disturbing construction activities. The monitoring program will include the retention of a qualified archaeologist and a Native American monitor from the Campo Band of Mission Indians. The archaeological and Native American monitors will attend a pre-construction meeting with the construction manager and be in attendance during initial ground disturbing activities at the project site. The monitors will determine the extent of their presence during soil disturbing activities.

The archaeological and Native American monitors will have the authority to temporarily halt or redirect grading and other ground-disturbing activity if cultural resources are encountered. If a resource is encountered, all operations within 50 feet of where the resource was found will be suspended immediately, MTS will be notified, and the qualified archaeologist, in consultation with the Native American monitor, will evaluate the significance of the find. If cultural material is determined to be significant, the qualified archaeologist will coordinate with the consulting tribes and MTS staff to develop and implement appropriate treatment measures. Pursuant to California PRC § 21083.2(b), avoidance is the preferred method of preservation. The archaeologist and the tribal representative will make recommendations to MTS on the measures that will be implemented to protect the newly discovered cultural resource(s), including but not limited to, avoidance in place, excavation, relocation, and further evaluation of the discoveries in accordance with CEQA. No further ground disturbance will occur in the area of the discovery until MTS approves the measures to protect the significant cultural resource(s).

CR-2 Section 5097.94 of the PRC and Section 7050.5 of the California Health and Safety Code protect Native American burials, skeletal remains and grave goods, regardless of age and provide method and means for the appropriate handling of such remains. If human remains are encountered, work would halt in that vicinity and the county coroner would be notified immediately. At the same time, an archaeologist would be contacted to evaluate the situation. If the human remains are of Native American origin, the coroner must notify the NAHC within twenty-four hours of such identification. CEQA details steps to be taken if human burials are of Native American origin.

VI. Energy

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	■	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	■	☐

a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact. The project would consume energy resources during construction of the platform. Operation of the proposed facility upon construction completion would be the same as under existing conditions. The proposed project's direct electricity usage were estimated from the air quality emissions project modeling completed using CalEEMod. Fuel consumption factors in terms of gallons per hour of diesel for off-road equipment were calculated by inputting emissions results from the CalEEMod into the U.S. EPA Greenhouse Gas Equivalencies Calculator (U.S. EPA January 2024).

Construction Energy

Energy consumed for project construction would primarily consist of fuels in the form of diesel and gasoline. Fuel consumption would result from the use of on-road trucks for the transportation of construction materials and water, construction worker vehicles traveling to and from the project site, and from the use of off-road construction equipment. The estimated fuel and total energy consumed during project construction is shown in Table 4, *Construction Energy Use*.

Table 4 CONSTRUCTION ENERGY USE

Source	Annual Construction Emissions (MT/year)	Gallons Diesel	MMBtu
Off-Road Construction Equipment	160.28	15,745	2,163

MMBtu = million British thermal units

While construction activities would consume petroleum-based fuels, consumption of such resources would be temporary and would cease upon the completion of construction. The petroleum consumed during project construction would be typical of similar projects and would not require the use of new petroleum resources beyond those typically consumed in California annually for construction activities. Based on these considerations, construction of the project would not result in wasteful, inefficient, or unnecessary consumption of energy resources and the impact would be less than significant.

Operational Energy

Upon completion of construction, the proposed Project would continue to operate as it did under existing conditions. There would be no change in energy use. Therefore, operation of the project would not result in wasteful, inefficient, or unnecessary consumption of energy resources. Impacts would be Less than Significant.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. The 2022 Title 24 Part 6, Building Energy Efficiency Standards, and 2019 Title 24 Part 11, CALGreen, include provisions applicable to all buildings, which are mandatory requirements for efficiency and design. The project would be consistent with the requirements of Title 24 through implementation of energy-reduction measures, such as energy efficient lighting for the platform. Therefore, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Impacts would be Less than Significant.

VII. Geology and Soils

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	■	☐
ii. Strong seismic ground shaking?	☐	☐	■	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	■	☐
iv. Landslides?	☐	☐	☐	■
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	■	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	■	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	■	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	■
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	■	☐

The discussion below is summarized and based on the analysis and conclusions contained within the Geotechnical Memorandum (Atlas 2023) prepared for the proposed project. The report is included as Appendix E to this IS/MND.

a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?

Less Than Significant Impact. Seismically induced surface or ground rupture occurs when

movement on a fault deep within the earth breaks through to the surface as a result of seismic activity. Fault rupture almost always follows preexisting faults, which are zones of weakness. Sudden displacements are more damaging to structures because they are accompanied by shaking. Under the Alquist-Priolo Earthquake Fault Zoning Act (Act), the California State Geologist identifies areas in the State that are at risk from surface fault rupture. The Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Act also requires the State Geologist to establish regulatory zones, known as Alquist-Priolo Earthquake Fault Zones around the surface traces of active faults and to issue appropriate maps that identify these zones.

According to the USGS Quaternary Fault and Fold Database Interactive Mapper (USGS 2017), active faults near the project site include the Texas Street Fault and the Florida Canyon Fault, approximately 0.5 miles south and southwest, respectively. The Texas Street fault is a north-trending fault mapped from just north of State Route 94 to the south rim of Mission Valley. About 0.5 mile to the west, the Florida Canyon fault is another north-trending fault extending from the south end of Florida Canyon near Pershing Drive to the south rim of Mission Valley. Both sites are considered potentially active.

According to the Department of Conservation California Earthquake hazards Zone Application (EQ Zapp), the nearest active fault zone is the Rose Canyon Fault Zone approximately 3 miles west of the project site.

Despite the presence of active fault lines and fault zones within the general project vicinity, the proposed project is intended to retrofit existing MTS infrastructure and would not directly or indirectly exacerbate risk of loss, injury, or death related to rupture of a known earthquake fault. Impacts would Less than Significant.

ii. Strong seismic ground shaking?

Less Than Significant Impact. The project site is located in a seismically active region and is likely to be subjected to moderate to severe seismic ground shaking in response to a major earthquake occurring on the Rose Canyon fault zone or another major regional active fault, as identified in item VII(a)(i). An earthquake along any of these known active fault zones could result in severe ground shaking, and consequently cause injury and/or property damage in the project vicinity. However, the proposed retrofit of the existing infrastructure is intended to improve the stability of the station. Compliance with applicable seismic design criteria would ensure that people are not exposed to substantial adverse effects, including risk of loss, injury, or death, involving strong seismic ground shaking. Impacts related to strong seismic ground shaking would be Less than Significant.

iii. Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Seismic-induced soil liquefaction is a phenomenon during which loose, saturated granular materials undergo matrix rearrangement, develop high pore water pressure, and lose shear strength due to cyclic ground vibrations induced by earthquakes. Manifestations of soil liquefaction can include loss of bearing capacity below foundations, surface settlements and tilting in level ground, and instabilities in areas of sloping ground. Soil liquefaction can also result in increased lateral and uplift pressures on buried structures.

The project site is mapped in the City of San Diego Seismic Study Geologic Hazards and Faults Map

(City of San Diego 2008b) as an area of High Potential for liquefaction. However, as the purpose of the project is to retrofit existing MTS infrastructure, the project would improve rather than exacerbate the risk of exposure to substantial adverse effects, including risk of loss, injury, or death, involving liquefaction. Impacts associated with seismic-related ground failure, including liquefaction would be Less than Significant.

iv. Landslides?

No Impact. Based on a review of published geologic maps, there are no known historical landslides in the project area. Furthermore, the San Diego Seismic Safety Study Geologic Hazards and Faults map (City of San Diego 2008b) indicates the project site is not located in an area that is susceptible to landslide hazards. Thus, the proposed project would not expose people to substantial adverse effects, including risk of loss, injury, or death, involving landslides. No Impact would occur.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. Soil exposed by construction activities could be subject to erosion if exposed to heavy rain, winds, or other storm events. There is the potential for soil erosion or loss of topsoil during construction activities as the ground is cleared and graded for the temporary access road. Compliance with the National Pollutant Discharge Elimination System (NPDES) General Construction Permit would include preparation of a Storm Water Pollution Prevention Plan (SWPPP) that requires implementation of standard erosion control practices and construction BMPs to prevent soil erosion and loss of topsoil from construction activities. BMPs may include the use of silt fencing, fiber rolls, and sandbags.

The proposed project would not result in long-term, operational impacts associated with soil erosion or loss of topsoil as the site would not result in an increased amount of exposed soil. Therefore, impacts related to soil erosion and the loss of topsoil would be Less than Significant.

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Less Than Significant Impact. As discussed in items VII(a)(iii) and VII(a)(iv) above, the project site is mapped in an area of High Potential for Liquefaction but not landslides. Lateral spreading occurs when an underlying soil layer liquefies, and blocks of overlying surficial soil displace downslope or towards a sloping surface or unsupported “free face” such as riverbank. The lateral displacement typically ranges from a few inches to several feet and can cause severe damage to structures. However, as the purpose of the project is to retrofit existing MTS infrastructure, the project would improve rather than exacerbate the risk associated with an unstable geologic unit, subsidence or collapse. Impacts related unstable geologic units or soils would be Less than Significant.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less Than Significant Impact. Per the Geotechnical Memorandum, the project site is underlain by fill and alluvium. Fill is expected to extend for about 25 to 30 feet below the bottom of the MSE walls and generally consists of loose to very dense, clayey sand and soft to hard, sandy, or silty clay with

varying amounts of gravel. Alluvium encountered at the site consists of medium dense to very dense poorly graded sand with varying amounts of silt.

As part of the proposed project, the existing Mechanically Stabilized Earth walls on the north and south side of the Rio Vista Platform would be repaired. The geotechnical memorandum determined that potentially expansive soils exist within the MSE walls as well as top of the slope of the south embankment. However, as the purpose of the project is to retrofit existing MTS infrastructure, including repair or replacement of the existing MSE walls with no expansive materials, the project would improve rather than exacerbate the risk associated with expansive soils. In addition, the project would incorporate standard engineering techniques in accordance with the CBC to avoid adverse effects of expansive soils. Therefore, Impacts related to expansive soils would be Less than Significant.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. The proposed project does not include the use of septic tanks or alternative wastewater disposal systems. The project would connect to the existing sewer infrastructure within the project area. No Impact would occur.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact. Based on the geotechnical memorandum, the majority of the project site itself is anticipated to be underlain by artificial fill materials at various depths. Artificial fill materials are assigned a zero sensitivity rating for paleontological resources. Ground-disturbing activities associated with the proposed project are anticipated to occur in previously graded and disturbed areas that are underlain by artificial fill materials. As such, the potential for encountering intact paleontological resources during ground- disturbing activities is considered very low. Impacts to paleontological resources or unique geological features would be Less than Significant.

VIII. Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	■	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	■

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. Global climate change refers to changes in average climatic conditions on Earth as a whole, including temperature, wind patterns, precipitation, and storms. Global temperatures are moderated by atmospheric gases. These gases are commonly referred to as greenhouse gases (GHGs) because they function like a greenhouse by letting sunlight in but preventing heat from escaping, thus warming the Earth's atmosphere. The GHGs defined under California's Assembly Bill 32 (AB 32) include carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6). Global climate change impacts are by nature cumulative; direct impacts cannot be evaluated because the impacts themselves are global rather than localized impacts.

Pursuant to CEQA Guidelines Sections 15183.5(b), 15064(h)(3), and 15130(d), a lead agency may determine that a project's incremental contribution to a cumulative GHG effect is not cumulatively considerable if the project complies with the requirements of a previously adopted GHG emission reduction plan. MTS has not adopted thresholds for use in CEQA documents where they are the Lead Agency or Responsible Agency. In the absence of locally adopted thresholds, agencies commonly rely on thresholds identified in guidance prepared by the California Air Pollution Control Officers Association (CAPCOA) and by regional air districts. These include a 1,100 MT CO_2e/year threshold (South Coast Air Quality Management District) and a 3,000 MT CO_2e/year threshold (cited by CAPCOA and used by several agencies as a bright-line threshold for land use projects).

The proposed project would result in temporary construction-related emissions of approximately 972 MT CO_2e (see Appendix B). Negligible long-term operational emissions would occur associated with maintenance once construction is complete. Because construction emissions would be below the conservative 1,100 MT CO_2e/year threshold, the project would not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment. Impacts would therefore be less than significant.

b) Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact. Although the project is located within the City of San Diego, the MTS is the CEQA lead agency and is not a covered entity under the City's CAP. MTS does not maintain its own CAP.

Nevertheless, the project has been evaluated for consistency with applicable statewide GHG reduction goals and policies, including AB 32, SB 32, and Executive Orders S-3-05 and B-30-15, which establish targets for reducing statewide GHG emissions.

The project consists of a retrofit to an existing light rail platform and would not result in any new operational GHG emissions or induce growth. Construction-related GHG emissions would be temporary and below conservative thresholds recommended by CAPCOA and regional air districts. As such, the project would not interfere with implementation of statewide GHG reduction targets and would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions and no impact would occur.

IX. Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	■	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	■	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	■	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	■	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	■	☐
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	■	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	■	☐

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact. Materials and waste are generally considered hazardous if they are poisonous (toxicity), can be ignited by open flame (ignitability), corrode other materials (corrosivity), or react violently, explode, or generate vapors when mixed with water (reactivity). The term "hazardous material" is defined in the State Health and Safety Code (Chapter 6.95, Section 25501[o]) as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment. Hazardous waste is defined as any hazardous material that is abandoned, discarded, or recycled, as defined in the State Health and Safety Code (Chapter 6.95, Section 25125). The transportation, use, and disposal of hazardous materials, as well as the potential

releases of hazardous materials to the environment, are closely regulated through many state and federal laws.

During the project construction period, hazardous substances used to maintain and operate construction equipment (such as fuel, lubricants, adhesives, and solvents) would be present. The use of these materials could potentially result in significant impacts through accidental discharge associated with use and storage of hazardous materials. The transport, use, and disposal of hazardous materials and/or wastes would be conducted in accordance with applicable federal and state laws. In addition, implementation of the proposed project would require conformance with the NPDES Construction General Permit. Specifically, this would entail implementation of a SWPPP to address the use of hazardous materials and the potential discharge of contaminants including construction-related hazardous wastes through the installation of appropriate BMPs. While specific BMPs would be determined during the SWPPP process, the suite of BMPs would include standard industry measures and guidelines contained in the NPDES Construction Permit text and Stormwater Best Management Practices Construction Handbook (California Stormwater Quality Association 2019). Based on compliance with applicable regulations and implementation of appropriate BMPs, hazardous material impacts related to construction activities would be Less than Significant.

Upon completion of the propose retrofit, operation of the proposed project would remain the same as existing conditions and not result in any new storage, use, or generation of hazardous materials or wastes. Impacts would be Less than Significant.

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant Impact. Hazardous materials releases can occur if there are existing hazardous materials at the project site that would be disturbed by project construction or operation, or if project construction or operation activities involve the handling of substantial amounts of hazardous materials with a potential to result in upset and accident conditions. Based on a review of Envirostor and Geotracker (See Appendix F), no documented unauthorized releases of hazardous materials are known to have occurred at the project site. The closest occurrence is located at Mission Valley Chevron approximately 875 feet to the southeast, and the status of the cleanup site is closed.

During the construction period, there is also the possibility of accidental release of hazardous substances such as spilling of hydraulic fluid or diesel fuel associated with construction equipment maintenance. The level of risk associated with the accidental release of these hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials. The construction contractor would be required to implement standard construction controls and safety procedures to avoid or minimize the potential for accidental release of such substances into the environment.

Impacts with respect to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be Less than Significant.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact. There are no existing or proposed schools within one-quarter mile of the project site. The nearest school is Warren-Walker Middle School approximately 0.4 miles south of the project site. The proposed project would involve the temporary use and/or storage of fuels, oils, and other potential hazardous materials typically used during construction, and ongoing use/storage of lithium batteries, solvents, cleaners, oils, lubricants, and paint during operation. No acutely hazardous materials would be used. The project's use of hazardous materials during construction would be handled in accordance with NPDES SWPPP requirements, as well as compliance with applicable federal, state, and local regulations associated with hazardous materials.

Upon construction completion, use of hazardous materials during ongoing operations would not be increased compared to existing conditions and would continue to be required to comply with applicable federal, state, and local regulations. Adherence to applicable regulations would avoid exposure to construction-related and operational hazardous materials from occurring to nearby schools. Therefore, impacts related to emissions or handling of hazardous materials, substances, or wastes near schools would be Less than Significant.

d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Less Than Significant Impact. Based on a review of Envirostor and Geotracker, no documented unauthorized releases of hazardous materials are known to have occurred at the project site. The database review identified a total of eight recognized environmental conditions (RECs) sites/cases in the project area (beyond the project site within ½ mile) that are considered to pose a minimal risk to the project site. These sites/cases previously or currently have underground and/or above ground storage tanks, documented leaking underground storage tanks leaks/releases, documented major spills, environmental site investigations, mitigations and/or cleanups, and past solid waste landfills/burn ash facilities. These cases/sites are generally considered to pose minimal risk to the project site based on the following factors:

- Age and status of the case;
- Unauthorized releases at the site impacted soil only;
- Distance of the site from the project site;
- Direction of groundwater at the site is away from the project site; and
- Depth of groundwater or lack of groundwater.

There are no known reported unauthorized releases of hazardous materials or wastes at the project site. Impacts related to listed hazardous materials sites would be Less than Significant.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project site?

Less Than Significant Impact. The nearest airport to the project site is the San Diego International Airport (SDIA), located approximately nine miles to the southwest. As identified in the SDIA

Airport Land Use Compatibility Plan (ALUCP), the project site is outside of the Airport Influence Area (AIA) for SDIA (SDSIA 2024) . Additionally, the proposed project would not result in any change in use that would increase the number of people residing or working in the project area that could be exposed to excessive noise levels. Impacts would be less than significant. Furthermore, the project does not propose features that could result in hazards impacts on aircraft safety or operation. Impacts would be Less than Significant.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. Access to surrounding roadways would be maintained throughout the construction period. Identified emergency evacuation routes in the vicinity, including I-8, I-805, and SR 163 would not be affected during construction or operation. Site access would be provided by a temporary access road that would be constructed off of southbound Qualcomm Way and connect to the existing San Diego River Trail. Impacts related to impairment of emergency response plans or emergency evacuation plans would be Less than Significant.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less Than Significant Impact. The potential for wildland fires represents a hazard, particularly on undeveloped properties or where development exists adjacent to open space or within proximity to wildland fuels. State law requires that all local jurisdictions identify Very High Fire Hazard Severity Zones (VHFHSZ) within their areas of responsibility (California Government Code Sections 51175–51189).
These maps, which are prepared by the local agency in collaboration with the California Department of Forestry and Fire Protection (CAL FIRE) determine fire hazards zones based on vegetation density, slope severity, and other relevant factors that contribute to fire severity.

The project site is located in a developed area but is adjacent to open space along the San Diego River. Given the proximity to a vegetated area, portions of the site are located within an area designated as a VHFHSZ by the City of San Diego Fire-Rescue Department's VHFHSZ Mapper. The project however would not increase the potential for wildfires in the project area, as the site is already entirely developed, and the project would retrofit existing MTS structures. The proposed site retrofit would be required to comply with applicable wildland fire risk reduction and prevention requirements of the CBC and the California Fire Code. The project therefore would not increase or exacerbate exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires in the project area. Impacts would be Less than Significant. See Section XX, *Wildfire*, for additional discussion of wildfire.

X. Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	■	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	■	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. Result in substantial erosion or siltation on- or off-site?	☐	☐	■	☐
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off- site?	☐	☐	■	☐
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional resources of polluted runoff?	☐	☐	■	☐
iv. Impede or redirect flood flows?	☐	☐	■	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	■	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	■	☐

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact. The project is subject to compliance with applicable elements of the Clean Water Act (CWA) and NPDES requirements. CWA Section 402 establishes the NPDES for regulating the discharge of pollutants into waters of the U.S. Specific NPDES requirements associated with the proposed project include conformance with General Permit for Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (Municipal Permit, NPDES No. CAS 00000004, State Water Resources Control Board Order No. 2013-0001-DWQ, as amended by Order Nos. 2015-0133-EXEC, 2016-0069-EXEC, WQ 2018-0001-EXEC, WQ 2018-0007-EXEC, and 2017-

XXXX-DWQ) (the "Small MS4 Permit"). The project would be subject to storm water regulations under the MTS Small MS4 Permit.

The project would also be required to adhere to the NPDES Construction General Permit (NPDES No. CAS000002, SWRCB Order No. 2009-0009-DWQ; as amended by Order No. 2010-0014-DWQ and Order No. 2012-0014-DWQ), administered by the Regional Water Quality Control Board (RWQCB) during construction, which includes BMPs that serve to protect water and groundwater quality. The project would retrofit existing elevated MTS infrastructure and would not permanently add any new impervious surface. As a result, the project is considered a "Linear Underground/Overhead Project" (LUP) under the Small MS4 Permit and is required to implement standard construction and post- construction BMPs in compliance with the Small MS4 Permit such as source control. Implementation of standard construction and post-construction BMPs would further avoid potential violations of applicable standards and discharge violations.

In addition to CWA NPDES requirements, states are required to identify and document polluted surface water bodies, with the resulting documentation referred to as the CWA Section 303(d) List of Water Quality Limited Segments. This list of water bodies identifies the associated pollutants and total maximum daily loads (TMDLs), along with projected TMDL implementation schedules/status. A TMDL establishes the maximum amount of an impairing substance or stressor that a water body can assimilate and still meet water quality standards and allocates that load among pollution contributors. The San Diego RWQCB is responsible for developing the 303(d) list in the San Diego region. The receiving waters for the project site that are currently listed as impaired (based on the 2020-2022 303[d] List) include the San Diego River. The San Diego River is listed for the following pollutants: Benthic Community Effects, Bifenthrin, Chlordane, Chloride, Color, Cyfluthrin, Cypermethrin, Indicator Bacteria, Nitrogen, Oxygen, Dissolved, Permethrin, Phosphorus, Pyrethroids, Total Dissolved Solids, Toxicity, and Turbidity. Implementation of standard construction and post-construction BMPs would ensure that the proposed project would not create adverse water quality impacts to the San Diego River.

Compliance with the requirements of the CWA (including Section 402 [NPDES requirements] and Section 303 [impaired water segments], and NPDES Construction General Permit) would ensure that the proposed project would not violate any water quality standards or waste discharge requirements. According to the Geotechnical Memorandum (Atlas 2024), groundwater at elevations of about 27 feet above mean sea level (MSL) was encountered in the past at the project site. However, the proposed project would not require the use of or otherwise substantially impair groundwater quality or interfere with groundwater recharge. Impacts would be Less than Significant.

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant Impact. The proposed project would not require the use of, or otherwise substantially interfere with, groundwater supplies or recharge compared to existing conditions. The project would not involve any long-term use of groundwater and would temporarily connect to the City of San Diego's municipal system for any water needs, which purchases water from the San Diego County Water Authority, the regional wholesale water provider. In all, groundwater comprises a very small portion of the San Diego County Water Authority (SDCWA) water portfolio (five percent). In addition, the City of San Diego Urban Water Management Plan (UWMP; City of

San Diego 2020) serves as a planning tool to document existing and future water demands and identify deficiencies and surpluses in relation to planning projections. The City of San Diego's General Plan land use designations work in concert with the UWMP in accurately forecasting water demands. The proposed project is consistent with the General Plan land uses for the site and would not generate any new water demand. Thus, the project would not substantially deplete groundwater supplies.

In relation to impervious surfaces that could interfere with groundwater recharge, the project site is primarily developed and would remain so with the proposed project.
Although project construction would require a temporary access road, the graded area would be restored to pre-project conditions; thus, the project would not result in a permanent increase in impervious surfaces. As a result, the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. Impacts would be Less than Significant.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on- or off-site?

Less Than Significant Impact. Existing drainage on the project site consists of storm drains along the MTS railway. The proposed project would not substantially alter the overall existing drainage patterns. Upon construction, runoff from the site would continue to be directed across the site in generally the same direction and conveyed to existing storm drains along the MTS railway. Post-development site conditions would not change applicable regulatory mechanisms with regard to erosion or siltation.

In addition, the project would comply with applicable storm water regulations associated with MTS' Small MS4 Permit. Therefore, the proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in substantial erosion or siltation on- or off-site. Impacts would be Less than Significant.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Less Than Significant Impact. As discussed above in item X(c)(i), the proposed project would not substantially alter the overall existing drainage patterns, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner in a manner which would result in flooding on- or off site. Impacts would be Less than Significant.

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant Impact. The project would have no net increase in impervious surface are and would not generate an increase in runoff volumes. Thus, the proposed project would not

create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. Impacts would be Less than Significant.

iv. Impede or redirect flood flows?

Less Than Significant Impact. According to the Federal Emergency Management Agency (FEMA) Flood Map Service Center (FEMA 2012), the southern portion of the project site is mapped within a 0.2% Annual Chance Flood Hazard Area, and is adjacent to areas mapped Zone AE, which is a Special Flood Hazard Area (See Appendix G). However, the proposed project would not result in any permanent changes to the topography that would cause impediment or redirection of flood flows. Impacts would be Less than Significant.

d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

Less than Significant Impact. As discussed above in item X(c)(iii), although the project site is mapped within a FEMA flood hazard or special flood hazard area (FEMA 2012), the project would not result in a permanent change that would exacerbate flood risk. Therefore, there would not be any new significant impact related to risk of pollutant release during a flood. Tsunamis are usually caused by displacement of the ocean flood causing large waves and are typically generated by seismic activity. The proposed project is located approximately seven miles inland from the Pacific Ocean and is not located within a designated tsunami inundation zone, according to the San Diego County Tsunami Hazrd Area Mapper. Therefore, there is little to no potential risk from a tsunami inundating the project site. A seiche is a standing wave in an enclosed or partly enclosed body of water. Seiches are normally caused by earthquake activity, and can affect harbors, bays, lakes, rivers, and canals. The nearest body of water is the San Diego River immediately adjacent south of the project site, however, the proposed retrofits of existing MTS infrastructure would not create any land use change that would exacerbate risks related to pollutant release as a result of a seiche at the San Diego River. No Impacts related to the release of pollutants due to floods, tsunamis, or seiches would occur.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. The project site is located within the Coastal Plain of San Diego Groundwater Basin and the regulatory boundaries of the RWQCB. The RWQCB is responsible for the adoption and implementation of water quality control plans, issuance of discharge permits, and performs other functions in relation to regulating the region's water quality. The Water Quality Control Plan for the San Diego Basin (Basin Plan; RWQCB 2021) identifies the project site as within the Chollas hydrologic subarea (HSA) of the San Diego Mesa hydrologic area of the San Diego hydrologic unit (908.22). As identified in item X(a), the San Diego River is listed as impaired on the Section 303(d) List for the following pollutants: Benthic Community Effects, Bifenthrin, Chlordane, Chloride, Color, Cyfluthrin, Cypermethrin, Indicator Bacteria, Nitrogen, Oxygen, Dissolved, Permethrin, Phosphorus, Pyrethroids, Total Dissolved Solids, Toxicity, and Turbidity. Runoff from the project site would be collected by the on-site storm drain system along the MTS railway and treated in accordance with the water quality regulations. The proposed project would be required to comply with applicable storm water quality standards during construction and operation. Conformance with the Basin Plan water quality objectives would be demonstrated

through compliance with applicable regulations and implementation of construction and post-construction BMPs. Thus, the project would be consistent with the Basin Plan.

In relation to sustainable groundwater management, the project site is located within the larger Coastal Plain of San Diego Basin. The Coastal Plan of San Diego Basin has multiple users, is not adjudicated, and currently does not have an overall groundwater basin management plan. To comply with the Sustainable Groundwater Management Act and the California Statewide Groundwater Elevation Monitoring Program, several local jurisdictions and water agencies formed a cooperative to monitor groundwater. Currently the Coastal Plain of San Diego Basin is not exhibiting signs of overdraft or being at risk of overdraft. Moreover, the project would not directly involve groundwater use. Thus, the project would not conflict with a sustainable groundwater management plan.

Implementation of the proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be Less than Significant.

XI. Land Use and Planning

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	☐	☐	■	☐
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	■	☐	☐

a) Would the project physically divide an established community?

Less than Significant Impact. The physical division of an established community typically refers to the construction of a linear feature, such as an interstate highway or railroad tracks, or removal of a means of access, such as a local road or bridge that would impact mobility within an existing community or between a community and outlying area. The project would occur in a developed site already served by existing roadways and utility infrastructure. While the proposed project would require construction of a temporary access road, this access road would be restored to pre-construction conditions and would not physically divide or separate neighborhoods. No other new linear features would be constructed. Therefore, the project would not physically divide an established community. Impacts would be Less than Significant.

b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Less Than Significant Impact with Mitigation Incorporated. The proposed project is located within the Mission Valley Community Plan Area and has a land use designation of MTS right-of-way. The project proposes to retrofit existing MTS infrastructure and would have no impacts related to the site or adjacent land use designations.

The Project falls within the jurisdiction of the FSDRIP, which is the segment of the San Diego River located between Qualcomm Way and Highway 163. Development within this region is subject to the FSDRIP Natural Resource Management Plan, which outlines specific Development and Mitigation Guidelines to ensure the continuing protection of the natural resources created under the FSDRIP Revegetation Plan. Approximately 0.27 acre of riparian vegetation directly south of the platform will be removed to provide construction access and restored following the completion of construction. Removal of vegetation would conducted in accordance with the FSDRIP Revegetation Plan protecting biological resources and include all required measures, such as BIO-7 regarding implementing a post-construction revegetation and monitoring plan; therefore, impacts would be Less than Significant with Mitigation. Based on the above analysis, the project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Impacts would be Less than Significant with Mitigation Incorporated.

XII. Mineral Resources

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	■	☐
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	■

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Less than Significant Impact. The Surface Mining and Reclamation Act of 1975 required the classification of land into mineral resource zones (MRZ), according to known or inferred mineral resource potential. As such, the DOC classifies the availability of mineral resources in a region into four MRZ categories: MRZ 1 for no mineral resources, MRZ 2 for significant resources areas with the quality and quantity known, MRZ 3 for significant resource areas with the quality and quantity unknown, and MRZ 4 for areas with no information. According to the Conservation Element in the City of San Diego's General Plan, the DOC is primarily interested in the preservation of significant resources in MRZ 2 regions. The project site is classified as MRZ 2; however, the project site is not currently being utilized for mineral extraction and would not require any activity that would result in extractive uses or loss of availability of a known mineral resource that would be of value to the region and the residents of the state. Impacts would be Less than Significant.

b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

No Impact. As stated above in item XII(a), the City of San Diego's General Plan does not consider the project site to be a significant mineral resource area. Additionally, the project site is not used for mineral extraction and is not known as a locally important mineral resource recovery site. Further, the project site is not delineated on any plan for mineral resource recovery uses. No Impact would occur.

XIII. Noise

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	■	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	■	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	■	☐

a) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant With Mitigation Incorporated. MTS has not adopted thresholds for use in CEQA documents where they are the Lead Agency or Responsible Agency. In the absence of MTS adopted thresholds, this analysis relies on the City of San Diego's (2020) approved guidelines for determining significance, which are based on Appendix G of the CEQA Guidelines. Construction noise thresholds are determined by the City of San Diego Noise Abatement and Control Ordinance. As such, the project would have a significant noise impact if it would:

- Result in temporary construction noise that exceeds:
  - 75 A-weighted decibel (dBA) time-averaged noise level (L_{EQ}) (12 hour) at the property line of a residentially zoned property from 7:00 a.m. to 7:00 p.m. If construction work is to occur outside of the hours of 7:00 a.m. to 7:00 p.m., the City of San Diego's property line noise limits would be the significance threshold. Therefore, for construction during the evening and nighttime hours, a significant noise impact would occur if the project's construction noise exceeds 45 dBA L_{EQ} (12 hour) from 7:00 p.m. to 10:00 p.m. or 40 dBA L_{EQ} (12 hour) from 10:00 p.m. to 7:00 a.m. at the property line of a single-family residential zone.
  - 60 dBA L_{EQ} or the average ambient noise level, whichever is greater, at the edge of sensitive biological habitat during the breeding season.
- Result in or create a significant permanent increase in the existing noise levels that creates an exceedance of local standards. For the purposes of this analysis, a significant increase

would be greater than a perceptible change (3 dBA) over existing conditions that creates an exceedance of City of San Diego standards, the generation of noise levels at a common property line that exceed the applicable limits, or operational noise that exceeds 60 dBA L_{EQ} or the average ambient noise level, whichever is greater, at the edge of sensitive biological habitat.

Temporary Construction Noise

The proposed project would generate temporary increases in noise during its construction. Construction of the project would require vegetation clearing and grubbing, grading, and construction related to the proposed retrofit and platform improvements. Noise levels would fluctuate, depending on the construction activity, equipment type, and distance between noise source and receiver. Additionally, noise from construction equipment would vary dependent on the construction phase and the number and type of equipment in use at any given time. A portion of the project site to the south encompasses the upland riparian habitat, which will be utilized for temporary construction access. For the purposes of this analysis, construction activity is assumed to be located and will be operated within 50 feet of the riparian habitat and the nearest adjacent residences. Table 5, *Construction Noise Levels by Phase*, shows the anticipated construction noise levels for the proposed project.

Table 5
CONSTRUCTION NOISE LEVELS BY PHASE

Phase	Equipment Type	Equipment L_{MAX} at 50 feet	Composite L_{EQ} at 50 feet
Site Preparation (Clearing and Grubbing)	Tractor/Loader/Backhoe	79.1	79.1
	Rubber Tired Dozer	81.7	
Grading	Rubber Tired Dozer	81.7	85.0
	Tractor/Loader/Backhoe	77.6	
	Grader	85.0	
	Excavator	80.7	
	Scraper	81.7	
Retrofit and Platform Improvements	Crane	80.6	83.7
	Forklift	80.6	
	Tractor/Loader/Backhoe	77.6	
	Generator	80.6	
	Welder	80.6	

L_{EQ} = time-averaged noise level

At a distance of 50 feet, the loudest noise levels during construction (grading activities) are projected at 85 dBA LEQ at residential locations, which would exceed the City of San Diego's 75 dBA LEQ daytime limit. Construction is not planned to occur during evening hours; however, construction may occur during weekend hours. Pursuant to the City of San Diego's Noise Ordinance, should construction on sundays be necessary, MTS will obtain a noise variance permit from the City of San Diego Noise Abatement and Control Administrator.

Due to the likelihood of working in close proximity to one another, it was conservatively assumed that all equipment needed for grading would be in operation simultaneously at 50 feet from the

edge of the riparian habitat located south of the platform. At a distance of 50 feet, these pieces of equipment could generate an hourly combined average noise level of 85 dBA L_{EQ}. The use of construction equipment during site preparation, grading, and constructing the proposed retrofits and platform improvements would therefore result in a potentially significant impact at the edge of habitat for sensitive bird species. To avoid significant impacts to biological species, measure BIO-9 from the previous section would be implemented and work will not occur during the breeding season (April 15 – September 15). However, temporary construction noise generation could still result in a potentially significant impact to nearby residences.

A Construction Noise Control Plan was prepared for the Project by Eilar Associates, Inc. (2025) (Appendix H). An on-site inspection and ambient noise measurements were performed on Wednesday, March 5, 2025. The purpose of these measurements was to obtain information regarding existing ambient noise levels on site.

Construction noise levels were calculated at the nearest residential receivers to the north, designated herein as the east building and west building. As the noise-sensitive receptors would be within the building, noise levels have been calculated at the building facades at each story of the four-story buildings. Any other potentially noise-sensitive receivers are located at a greater distance from construction activity, and therefore, would be exposed to lesser noise impacts due to distance attenuation and shielding provided by intervening structures.

Calculations demonstrated that during the Preconstruction Phase, Phase 2, and Phase 5 of the Project, noise impacts at residential receivers are not expected to exceed a 12-hour average noise level of 75 dBA during construction activity. During Phase 1, Phase 3, and Phase 4, temporary sound barriers will be required. During Phase 1, a sound barrier with a minimum height of 12 feet is required when the power-driven saw and/or jackhammer will be used within 50 feet of residential buildings. For Phases 3 and 4, a sound barrier with a minimum height of 8 feet is required when activities will take place within 30 feet of residential buildings.

Further, the Project may require work to be completed at night and/or on Sundays and holidays. Pursuant to the City of San Diego's noise ordinance (Section 59.5.0404) construction activity is prohibited between the hours of 7 p.m. and 7 a.m. and on Sundays or legal holidays, and that during permissible hours of operation, noise levels from construction activity must be limited to a 12-hour average of no greater than 75 dBA at any residential use. Should work need to be completed outside of the allowable hours or on Sundays, a permit will be applied for and granted beforehand by the City of San Diego's Noise Abatement and Control Administrator. With the implementation of NOI-1 and NOI-2, the project is expected to comply with the noise regulations of the City of San Diego and impacts would be less than significant with mitigation.

Operational Noise

The proposed retrofit of the existing MTS infrastructure would have no impact on the operational noise of the MTS transit system upon completion of the proposed retrofit. Therefore, the proposed project would not result in a substantial permanent increase in ambient noise levels and there would be No Impact.

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. MTS have not adopted thresholds for use in CEQA documents where they are the Lead Agency or Responsible Agency. In the absence of MTS adopted thresholds, this analysis relies on the City of San Diego's (2020) approved guidelines for determining significance, which are based on Appendix G of the CEQA Guidelines. As such, the project would have a significant vibration impact if it would:

> Subject vibration-sensitive land uses to construction-related ground-borne vibration from continuous/frequent intermittent construction sources (such as impact pile drivers, vibratory pile drivers, and vibratory compaction equipment) that exceeds the vibration criterion of
> 0.3 inch per second peak particle velocity (PPV), as specified by the Federal Transit Administration (FTA) for engineered buildings.

Construction of the proposed project would include the use of a vibratory compaction roller and has the potential to result in temporary vibration impacts to structures and humans. Based on the potential site locations, compaction activities would not occur closer than 50 feet to the nearest off-site structures.

Other construction activities would be less intensive than compaction and would produce less vibration. Therefore, vibration levels from compaction are considered conservative for the project construction.

Operation of a vibratory compactor would create approximately 0.21 inch per second PPV at a distance of 25 feet. At 50 feet, the compactor would create 0.098 PPV.[4] This would be lower than what is considered the damage criteria of 0.3 inch per second PPV for engineered concrete and masonry structures by the FTA. Therefore, although a vibratory roller may be perceptible to nearby human receptors, temporary impacts associated with the roller and other potential equipment used during project construction would be less than significant. The proposed project does not include operational components that would generate substantial vibration. Operational vibration impacts would be Less than Significant.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Less Than Significant Impact. As noted in item IX(e), the project site is outside of the Airport Influence Area (AIA) for San Diego International Airport. Additionally, the proposed project would not result in any change in use that would increase the number of people residing or working in the project area that could be exposed to excessive noise levels. Impacts would be Less than Significant.

<u>Avoidance, Minimization, and Mitigation Measures</u>

BIO-9: To avoid impacts to special status migratory birds, clearing, grubbing, grading, and other Project-related construction activities will occur between September 15 and February 15, outside the southwestern willow flycatcher breeding season (April 15 - August 31), the coastal California gnatcatcher breeding season (February 15 – August 15), and the least Bell's vireo breeding season (March 15 - September 15). No incidental take of the

above species is permitted by this Project.

NOI-1 During Phase 1, Phase 3, and Phase 4 of construction of the Project, temporary sound barriers will be required. During Phase 1, a sound barrier with a minimum height of 12 feet is required when the power-driven saw and/or jackhammer will be used within 50 feet of residential buildings. For Phases 3 and 4, a sound barrier with a minimum height of 8 feet is required when activities will take place within 30 feet of residential buildings.

NOI-2 The Project will comply with the construction noise limits found within Section 59.5.0404 of the San Diego Municipal Code. Construction activity is prohibited between the hours of 7 p.m. and 7 a.m. and on Sundays or legal holidays, and that during permissible hours of operation, noise levels from construction activity must be limited to a 12-hour average of no greater than 75 dBA at any residential use unless a permit has been applied for and granted beforehand by the City of San Diego's Noise Abatement and Control Administrator.

XIV. Population and Housing

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	■
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	■

a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact. The proposed project does not include housing or employment opportunities that would induce population growth. Furthermore, the project would not result in the extension of roads or other infrastructure that would indirectly induce substantial population growth. Therefore, the proposed project would not induce substantial population growth in an area, either directly or indirectly. There would be No Impact.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed project would not involve the demolition of any existing habitable structures. Thus, the proposed project would not displace existing housing, necessitating the construction of replacement housing elsewhere. There would be No Impact.

XV. Public Services

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?	☐	☐	■	☐
ii. Police protection?	☐	☐	■	☐
iii. Schools?	☐	☐	☐	■
iv. Parks?	☐	☐	☐	■
v. Other public facilities?	☐	☐	☐	■

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i. Fire protection?

Less Than Significant Impact. The project site is located in a developed area currently served by fire protection services, and project implementation would not require the construction of new or expanded fire facilities. The San Diego Fire-Rescue Department (SDFD) provides fire protection services in the project area. Currently the project site supports industrial land uses that like most land uses, may during the lifespan of the uses require a need for fire protection services. The closest fire stations are located approximately 2.1 miles from the project site and include San Diego Fire Station 45 (9366 Friars Road) to the northeast and San Diego Fire Station 18 (4676 Felton Street) to the southeast. These stations serve the project area, including the current on-site uses. The project, however, would not increase population in the project area or cause increased traffic congestion on streets in the project area, or otherwise interfere with the ability of fire services to maintain acceptable service ratios, meet target response times, or other performance objectives for fire protection. During construction, fire protection may be required, but these would be short-term demands and would not require increases in the level of public service offered or affect response times. Impacts would be Less than Significant.

ii. Police protection?

Less Than Significant Impact. The project site is located in a developed area currently served by police protection services, and project implementation would not require the construction of new or expanded police facilities. The San Diego Police Department provides law enforcement services in the project area, with the closest police station (North Park Storefront Office) located approximately 2 miles to the south at 2745 Howard Ave. The project would not increase population in the project area or cause increased traffic congestion on streets in the project area, or otherwise interfere with the ability of police services to maintain acceptable service ratios, meet target response times, or other performance objectives for police protection. Impacts would be Less than Significant.

iii. Schools?

No Impact. The project does not propose new housing or other uses that would directly or indirectly induce population growth such that there would be an increase in demand for school services.
Therefore, implementation of the proposed project would not result in the need for construction of additional school facilities. No Impact would occur.

iv. Parks?

No Impact. The project would not induce growth that would require alteration to existing parks or the construction of a new park. No Impact would occur.

v. Other public facilities?

No Impact. The project site is located in a developed area where public services are already provided. The project would improve the safety of the existing MTS Rio Vista Station and facilities. No Impacts to other public facilities would occur.

XVI. Recreation

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	■	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	■

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Less than Significant Impact. The proposed project consists of retrofitting existing infrastructure and would not induce growth that would substantially increase the use of existing neighborhood or regional parks or other recreational facilities. Although access through the portion of the San Diego River Trail within the project area may be temporarily impacted during construction, the trail will be restored to pre-project conditions. The project is therefore not anticipated to result in the use of available parks or facilities such that substantial deterioration occurs, or that would require the construction or expansion of recreational facilities to satisfy demand. Impacts would be Less than Significant.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The proposed project consists of retrofitting existing infrastructure that would not require or result in the need to construct or expand recreational facilities. No Impact would occur.

XVII. Transportation

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☐	☐	■
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	■	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	■	☐
d) Result in inadequate emergency access?	☐	☐	■	☐

a) Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

No Impact. The proposed project would retrofit existing MTS infrastructure. Thus, the proposed project would be consistent with the goals of the 2021 Regional Plan (SANDAG 2021) of improving and enhancing the region's transit network as it would maintain and improve existing infrastructure that would support the goal of an improved regional transit system and bolstering additional transportation mode choices to reduce reliance on the automobile and reducing regional emissions of criteria pollutants and GHGs.

Similarly, the project would be consistent with the goals of the City of San Diego General Plan Mobility Element to improve mobility through development of a balanced multi-modal transportation network, and to increase transit ridership and mode share through increased transit service accessibility, frequency, connectivity, and availability.

The project would improve the existing MTS Rio Vista transit station but otherwise have no impact to any existing transit (e.g., bus stops), bike lanes, and pedestrian (e.g., sidewalks) facilities in the project area. The proposed project would include a temporary construction access road off of Qualcomm way. However, this temporary access road would be removed upon construction completion and would not adversely affect operations of the roadways or intersections in the project area, including Qualcomm Way. Based on the above analysis, the proposed project would not conflict with a program plan, ordinance or policy addressing the circulation system. No Impact would occur.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less Than Significant Impact. As of the implementation of Senate Bill (SB) 743 on July 1, 2020, VMT is the new performance measure used in CEQA transportation studies. According to the City of San Diego Transportation Study Manual, as a transit facility, this project is considered to be a Locally Serving Public Facility that does not require transportation VMT CEQA analysis. The proposed project would retrofit existing MTS infrastructure and would no have impact related to VMT. Therefore, the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). There would be No Impact.

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less Than Significant Impact. The project site does not include any design features that would increase traffic hazards. The project is consistent with the on-site and surrounding land use and zoning designations, and implementation of the project would not introduce incompatible uses to the project site. Additionally, during construction, the proposed project would comply with local regulations regarding temporary road closures and/or one-way traffic controls. Therefore, the project would not substantially increase hazards due to a geometric design feature or incompatible uses. Impacts would be Less than Significant.

d) Would the project result in inadequate emergency access?

Less Than Significant Impact. Operation of the proposed project would not result in any new increase in project- related traffic that would cause a significant increase in congestion on local roadways such that it would interfere with emergency response access.

Access to surrounding roadways would be maintained throughout the construction period. Identified emergency access routes in the vicinity, including I-8, I-805, and SR 163 would not be affected during construction or operation. Site access would be provided by a temporary access road that would be constructed off of southbound Qualcomm Way and connect to the existing San Diego River Trail. Impacts related to emergency access would be Less than Significant.

XVIII. Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	■	☐	☐
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency will consider the significance of the resource to a California Native American tribe.	☐	■	☐	☐

The discussion below is summarized and based on the analysis and conclusions contained within the Cultural Resources Inventory Report (Dokken 2024) prepared for the proposed project. The report is included as Appendix D to this IS/MND.

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

Less Than Significant With Mitigation Incorporated. A Tribal Cultural Resource (TCR) may be considered significant if included in a local or state register of historical resources; determined by the lead agency to be significant pursuant to criteria set forth in PRC §5024.1; is a geographically defined cultural landscape that meets one or more of these criteria; is a historical resource described in PRC §21084.1, a unique archaeological resources described in PRC §21083.2; or is a non-unique archaeological resource if it conforms with the above criteria.

On November 7, 2023, a letter and a map depicting the Project vicinity was sent to the NAHC, asking the NAHC commission to review the Sacred Lands File (SLF) for any Native American cultural resources that might be affected by the Project (Appendix D). The request to the NAHC seeks to identify any Native

American cultural resources within the Project vicinity. A list of Native American individuals who might have information or concerns about the Project was also requested. On November 30, 2023, Pracilla Torres-Fuentes, Cultural Resources Analyst, informed via email that a review of the sacred lands file returned positive results.

Consultation under Assembly Bill 52 (AB52) was initiated on March 1, 2024 by MTS. A response was received from the Campo Band of Mission Indians on April 15, 2024 requesting consultation under AB52. The Tribe requested to be included in surveys, mitigation planning, and monitoring. Although the pedestrian survey had been completed at that time, a copy of the Cultural Resources Inventory Memorandum was provided to the Tribe on May 24, 2024. The response also stated that outreach would be made to the Tribe when biological revegetation plans were being developed and that the environmental document would be provided when available.

No Indigenous-era or historic-era cultural resources were identified during the January 11, 2024, pedestrian inspection. Due to the construction of the Station, the active recreational trail to the south of the Station, and the surrounding apartment complexes, the project area limit (PAL) and surrounding area has been heavily disturbed. In consideration of these factors, the overall potential for encountering intact archaeological resources within the PAL is considered low. Consultation under AB 52 has been concluded.

Although there is potential to discover previously unknown TCRs at the project site, implementation of mitigation measures CR-1 and CR-2 identified in item V(b) of this IS/MND would reduce potential impacts to TCRs to less than significant levels. Less than Significant with Mitigation Incorporated.

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency will consider the significance of the resource to a California Native American tribe?

Less Than Significant With Mitigation Incorporated. Refer to item XVIII(a) above. Impacts would be Less than Significant with Mitigation Incorporated with implementation of mitigation measures CR-1 and CR-2.

XIX. Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	■	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☐	■
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	■
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	■	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	■	☐

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less Than Significant Impact. The proposed project is located in a developed area with existing infrastructure and utilities. The proposed project would not result in increased demand for water, wastewater, electric power, natural gas, or telecommunications services. While the proposed project would involve some surface drainage improvements, the project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. Impacts would be Less than Significant.

b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

No Impact. The project is located in a developed area with existing water infrastructure. However, the proposed project would not result in any new connections to local water mains or any increased demand of water supply. Water use during construction would be minimal and used for dust control. There would be No Impact.

c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact. The proposed project is located in a developed area with existing wastewater infrastructure. However, the proposed project would not result in any new connections to local sewer mains or any increased demand for sewer capacity. Therefore, the project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. There would be No Impact.

d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact. The proposed project is located in a developed area with solid waste collection services provided by the City of San Diego. Construction activities may generate solid waste that would be disposed of in a local landfill. The construction contractor would be required to dispose of construction waste through appropriate coordination with landfills in accordance with existing laws and regulations governing the types of waste that are allowed to be disposed of in landfills. The proposed project would be required to comply with the City of San Diego's Construction Demolition and Debris Deposit Ordinance (San Diego Municipal Code §66.0601), which requires that at least 65 percent of construction waste be diverted from landfills via reuse and recycling.

Operation of the proposed project would not result in any new generation of solid waste. Therefore, the project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Impacts would be Less than Signfiicant.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact. Refer to item XIX(d) above. By incorporating waste reduction, recycling, and diversion measures, the project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. Impacts would be Less than Signfiicant.

XX. Wildfire

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	■	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	■	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	■	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	■	☐

According to the Safety Element of the City's General Plan, wildfires typically pose minimal threat to people and buildings in urban areas but increasing human encroachment into natural areas increases the likelihood of bodily harm or structural damage. This encroachment occurs in areas called the wildland-urban interface, which is considered an area within the high and very high fire hazard severity zone, as defined by Cal FIRE. The City of San Diego's Wildfire Hazards map shows that the project site is partially located within a Very High Fire Hazard Severity Zone (City of San Diego 2022). Therefore, the proposed project could potentially expose people or structures to wildland fires and the following wildfire issues apply to the project.

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. Access to surrounding roadways would be maintained throughout the construction period. Identified emergency evacuation routes in the vicinity, including Rio San Diego Drive, Camino Del Este, Qualcomm Way, and Interstate 8 would not be affected during construction or operation. The additional trucks used for construction would not cause severe congestion that would impede emergency response. Therefore, the project would not substantially impair an adopted emergency response plan or emergency evacuation plan. Impacts would be Less than Significant.

b) Would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Less Than Significant Impact. As discussed in item IX(g), the project site is located in a developed area

but is adjacent to open space along the San Diego River. Given the proximity to this open space canyon, portions of the site are located within an area designated as a VHFHSZ by the City of San Diego Fire-Rescue Department (City of San Diego 2022). The project however would not increase the potential for wildfires in the project area, as the site is already entirely developed, and the project would replace existing structures with new ones. The new buildings and other proposed site improvements would be required to comply with applicable wildland fire risk reduction and prevention requirements of the CBC and the California Fire Code. The project therefore would not exacerbate wildfire risks or expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Impacts would be Less than Significant.

c) Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Less Than Significant Impact. The project site is located in a developed area that is served by existing utilities and roadways. Although the project would require construction of a temporary access road, the removal of riparian vegetation would not exacerbate fire risk. Following construction of the Project, the site of the temporary access road will be restored to pre-construction conditions. The project would not require the installation or maintenance of fuel breaks, emergency water sources, power lines, or other utilities. Therefore, the project would not exacerbate fire risk associated with these types of improvements. Impacts would be Less than Significant.

d) Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less Than Significant Impact. The site is located adjacent to an open space area characterized by the San Diego River, However, the project site is developed and entirely paved and this condition would remain upon project implementation. As discussed in items VII(a)(iv) and X(a)(ii), the project is not subject to landslides or flooding and thus, the risk of people and structures experiencing significant risks such as downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes is negligible. Impacts would be Less than Significant.

XXI. Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	■	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of past, present, and probable future projects)?	☐	☐	■	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	■	☐	☐

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number, or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant With Mitigation Incorporated. With the incorporation of mitigation measures identified in this IS/MND, the proposed project would not have the potential to substantially degrade the quality of the environment, reduce the habitat of a sensitive plant or animal species, or eliminate important examples of California history or prehistory.

As discussed in Section IV, *Biological Resources*, the proposed project could result in potentially significant indirect impacts to sensitive wildlife. Implementation of mitigation measures BIO-1 through BIO-18 would reduce potentially significant impacts to biological resources to less than significant levels.

As described in Section V, *Cultural Resources*, and Section XVIII, *Tribal Cultural Resources*, there is a potential for unknown subsurface archaeological resources/Tribal Cultural Resources given the presence of known Native American habitation sites along the Chollas Creek corridor. Such resources, if present, could provide material to address important research questions and may contain culturally sensitive material. Therefore, encountering unforeseen archaeological resources and/or Tribal Cultural Resources during ground-disturbing activities may result in potentially significant impacts. With implementation of mitigation measures CR-1 and CR-2, impacts would be Less than Significant with Mitigation Incorporated.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of past, present, and probable future projects)?

Less Than Significant. Cumulative environmental impacts are those impacts that by themselves are not significant, but when considered with impacts occurring from other projects in the vicinity would result in a cumulative impact. Related projects considered to have the potential of creating cumulative impacts in association with the project consist of projects that are reasonably foreseeable and that would be constructed or operated during the life of the project. The project is located in a developed area that is largely built out. No other construction projects are anticipated in the immediate area of the project site.

Implementation of the proposed project would not result in individually limited, but cumulatively considerable significant impacts. As discussed under item III(b), the project's operational activities would not result in long-term emissions of criteria pollutants and precursors that would exceed the SDAPCD daily or annual screening thresholds. Therefore, the project's operational activities would not result in a cumulatively considerable net increase of criteria pollutants that would violate any air quality standard or contribute substantially to an existing or projected air quality violation. Similarly, the project would have a less than significant impact in relation to GHG (refer to Section VIII, *Greenhouse Gas Emissions*), and VMT (refer to Section XVII, *Transportation*) which is inherently discussed in terms of cumulative impacts.

Other future projects within the surrounding area would be required to comply with applicable local, state, and federal regulations to reduce potential impacts to less than significant, or to the extent possible. As such, the project is not anticipated to contribute to potentially significant cumulative environmental impacts. Project cumulative impacts would be Less than Significant.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant With Mitigation Incorporated. The project would not consist of any uses or activities that would negatively affect any persons in the vicinity. The air quality analysis summarized in III, Air Quality, concluded that with incorporation of mitigation measures AQ-1 and AQ-2, the project would have less than significant impacts in relation to toxic air contaminants and other air quality health concerns. The proposed project would cause an increase in ambient noise levels during construction, which would be addressed with mitigation measures NOI-1 and NOI-2. However, impacts would be temporary and in compliance with local ordinances. The increased noise levels would not cause substantial adverse impacts on human beings. No documented unauthorized releases of hazardous materials are known to have occurred at the project site. Therefore, there would not be any substantial adverse risks to humans from encountering hazardous materials, as identified in Section IX, *Hazards and Hazardous Materials*. Risks to humans associated with wildfires would be less than significant as proposed buildings and other proposed site improvements would be required to comply with applicable wildland fire risk reduction and prevention requirements of the CBC and the California Fire Code. Additionally, no substantial adverse effects to humans would occur with respect to geological (refer to Section VII, *Geology and Soils*) or hydrologic (refer to Section X, *Hydrology and Water Quality*) hazards. With implementation of identified mitigation measures, impacts resulting in substantial adverse effects on human beings would be reduced to Less than Significant with Mitigation Incorporated.

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Attachment A: Exhibit 1

Rio Vista Platform Design Phase II Project

Final Initial Study with Mitigated Negative Declaration Appendices A-H as follows:

A. First San Diego River Improvement Project – Development and Mitigation Guidelines

B. CalEEMod Air Quality Results

C. Biological Resources Technical Report

D. Cultural Resources Inventory Memorandum

E. Geotechnical Memorandum

F. Envirostor and Geotracker

G. FEMA Firmette

H. Construction Noise Control Plan

Appendix A

DEVELOPMENT AND MITIGATION GUIDELINES

DEVELOPMENT GUIDELINES

The following development guidelines are provided to assure minimal impacts to FSDRIP during the construction of projects adjacent to FSDRIP or maintenance of utilities (such as the sewer) or other facilities (such as the MVLRT) within FSDRIP itself. These guidelines also assure conformance with the community plan.

1. Temporary fencing along FSDRIP's outer edge between the proposed construction and FSDRIP shall be installed before construction. This fence shall remain in place until the end of construction, and shall be inspected on a regular basis. Damaged portions of the fence shall be repaired in a timely manner from the construction side of the fence.

2. Buffer areas should be located along the entire length of an adjacent project and/or development. The buffer is defined as the area between the top of the floodway and development. The width of the buffer is specified in the amended Specific Plan. Changes to a uniform buffer were necessary to accommodate a meandering sidewalk design and usage by service vehicles and bicycles. At no point should private development intrude into the river corridor. Buffer areas, including the FSDRIP buffer area where it exists, and adjacent landscaped ornamental areas of private developments, shall meet the following criteria:

   - The average buffer width should be at least 20 feet.
   - Maximum buffer widths should be 50 feet, with a minimum buffer of ten feet.
   - Buffer areas should be widest when adjacent to sensitive habitat.

- Buffer areas within FSDRIP should be planted with a combination of native trees and shrubs, particularly riparian woodland and coastal sage scrub species. (Note: the exception to this rule is the narrow portion of the FSDRIP buffer zone (approximately two feet) on the outside of the sidewalk edges may be planted with ornamental species similar to the adjacent development). The buffer should provide some woodland overstory, but should be more open then the riparian woodland.

3. To avoid impacts to breeding least Bell's vireo and other migrating birds, construction activities which will impact FSDRIP, directly or indirectly, shall include the following conditions as part of any project authorization, permit, construction specifications and shall show these conditions on the construction drawings.

No clearing, grubbing, grading, or other construction activities shall occur between March 15 and September 15, the least Bell's vireo breeding season, until the following requirements have been met to the satisfaction of the City Manager. Coordination with the USFWS and CDFG will be required if least Bell's vireo are present.

Surveys for least Bell's vireo should be conducted pursuant to the recommended protocol survey guidelines as established by the USFWS. If full protocol surveys cannot be conducted, then a qualified biologist (has a valid 10(a)(1)(A) recovery permit from the USFWS for least Bell's vireo) shall survey any adjacent wetland habitat considered potentially suitable for the least Bell's vireo weekly for a minimum of four weeks (within the breeding season) prior to the commencement of any construction.

I. If the least Bell's vireo is detected during the initial survey or may be present (see Section II below), then one of the following conditions must be met:

A. Between March 15 and September 15, no clearing, grubbing, grading, or

other construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 dB hourly average at the edge of occupied least Bell's vireo habitat. An analysis showing that noise generated by construction activities would not exceed 60 dB hourly average at the edge of occupied habitat must be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the City Manager at least two weeks prior to commencement of construction activities.

B. At least two weeks prior to commencement of construction activities, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from clearing, grubbing, grading, or other construction activities will not exceed 60 dB hourly average at the edge of habitat occupied by least Bell's vireo. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring* shall be conducted at the edge of the occupied habitat area to ensure that noise levels do not exceed 60dB hourly average. If the noise attenuation techniques implemented are determined to be inadequate by the qualified acoustician or biologist, then the above activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (September 16).

*Construction noise monitoring shall continue to be monitored at least once weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60dB hourly average or to the ambient noise level if it already exceeds 60dB hourly average. If not, other measures shall be implemented in consultation with the biologist and the City

Manager, as necessary, to reduce noise levels to below 60dB hourly average or to the ambient noise level if it already exceeds 60 dB hourly average. Such measures include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.

II If least Bell's vireo are not detected during the initial survey, the qualified biologist shall submit substantial evidence to the City Manger and applicable resource agencies which demonstrates whether or not mitigation measures such as noise walls are necessary between March 15 and September 15 as follows.

A. If this evidence indicates the potential is high for least Bell's vireo to be present based on historical records or site conditions, then Condition I.B. shall be adhered to as specified above.

B. If this evidence concludes that no impacts to this species are anticipated, no mitigation measures would be necessary.

4. Dikes, embankments, etc. should be vegetated or otherwise protected against erosion. Riprap may be used in limited areas where scouring is likely to occur during high velocity water flow.

5. All pedestrian walks within FSDRIP should be a minimum width of 10 feet. In areas of high development intensity, widths of 15-20 feet or greater should be considered.

6. Item Deleted

7. Grading required to accommodate any new development should have minimal disturbance

to the natural terrain.

8. Contours should maintain the overall landform.

9. Plant and seed recontoured slopes with local native drought-resistant trees, shrubs, and grasses to restore a natural appearance and prevent erosion.

10. Use specialized plantings to serve as natural barriers to inappropriate human access, or in areas with little or no buffer between the wetland and development.

11. Do not plant invasive, exotic plant species, such as pampas grass (*Cortaderia* sp.), giant cane (*Arundo donax*), tamarisk (*Tamarix* sp.) and Brazilian pepper (*Schinus terebinthifolius*), in adjacent ornamental landscapes.

12. All development projects along FSDRIP edges will be required to inform residents and/or tenants within the development of the permitted and non-permitted uses within FSDRIP.

MITIGATION GUIDELINES

If impacts to FSDRIP vegetation are unavoidable, approval from the City of San Diego is required. In emergency situations, impacts to vegetation may occur without approval, if human health and safety or property damage may occur. All impacts to FSDRIP's vegetation require mitigation.

If unavoidable impacts to FSDRIP habitat occurs, the following guidelines provide an appropriate structure for mitigation. The mitigation options for habitat impacts are the creation of new habitat and/or the enhancement of degraded habitat.

1. No net loss of all habitats at FSDRIP will be permitted without replacement of the same habitat with equal or greater habitat value.

2. Revegetation of impacted area will be required. Additional mitigation at an offsite location may also be required.

3. Impacts to wetland vegetation may require a CDFG 1601 Streambed Alteration Agreement, except for dredging of the open water areas of the channel.

4. Revegetation should be scheduled in the fall to early spring to take advantage of the winter rains and avoid impacts to nesting sensitive birds.

5. Any disturbance to streambanks which would cause erosion or create a potential erosion risk will be mitigated by revegetating the disturbed area as soon as possible. Erosion control measures shall follow Best Management Practices.

6. A mitigation and monitoring program will be required for all wetland mitigation projects subject to approval by City and other appropriate agencies. The program will outline the installation, maintenance, monitoring, and the success standards for the mitigation project.

7. Only native plants that are known to occur in the area will be used for revegetation. Appendix D provides native plant palettes appropriate for revegetation at FSDRIP.

8. Human impacts should be considered in designing revegetation, such as the use of thorny shrubs to limit access to sensitive areas.

9. Temporary irrigation, if necessary, will be provided to help establish revegetation plants.

10. During revegetation, non-native, invasive and weedy species need to be removed on a regular basis between September 15 and March 1. During the rest of the year, noxious, invasive weeds may be removed by hand after the work area has been visually inspected for bird nests. If nests are found and inhabited, weed removal will be deferred until the nests

are abandoned.

11. Revegetation sites will be monitored on a regular basis. Appropriate recommendations will be made for enhancing revegetation efforts to ensure success criteria are met in a timely manner.

12. Prior to their implementation, all projects involving revegetation or mitigation within FSDRIP must be reviewed and approved by Park and Recreation and appropriate agencies.

13. Measures will be taken to limit human intrusion problems. This may include installation of fencing and/or new buffer plantings.

14. During revegetation, pest species, such as ground squirrels, cowbirds, gophers and weedy plants (such as pampas grass, arundo, tamarisk, etc.) will be controlled if they endanger the intended habitats and species composition. With the presence of least Bell's vireo, a cowbird trapping program is a priority.

15. Control agents for animal and plant pest will be carefully selected to avoid adverse effects on wildlife. These agents could be fertilizers, insecticides, algal control agents, and vertebrate poisons. There are a number of safe biological control methods for mosquitos. A licensed pest control advisor should be consulted regarding correct control agents devices, or methods to be used. Any control agents used shall be approved for use in a wetland by CDFG and USFWS.

16. Impacts to CORPS jurisdictional wetlands and waters of the United States may require a Section 404 permit pursuant to the Clean Water Act.

17. Impacts to least Bell's vireo or other rare, threatened, or endangered species may require a Section 7 consultation or Section 10 (a) permit pursuant to the Endangered Species Act.

18. The City-owned FSDRIP property is subject to deed restriction.

Appendix B

Rio Vista Platform Design – Phase II Project Summary Report

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Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Climate Risk Detailed Report

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

Health and Equity Details

7.3. Overall Health & Equity Scores

7.5. Evaluation Scorecard

Basic Project Information

1. Basic Project Information

ta Field	Value
oject Name	Rio Vista Platform Design – Phase II Project
nstruction Start Date	5/1/2025
ad Agency	—
nd Use Scale	Project/site
alysis Level for Defaults	County
ndspeed (m/s)	2.50
ecipitation (days)	19.8
cation	32.77350444297876, -117.1420731549464
unty	San Diego
y	San Diego
District	San Diego County APCD
Basin	San Diego
Z	6386
FZ	12
ctric Utility	San Diego Gas & Electric
s Utility	San Diego Gas & Electric
p Version	2022.1.1.23

2. Land Use Types

nd Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
ad Construction	0.16	Mile	0.27	0.00	—	—	—	—

3. User-Selected Emission Reduction Measures by Emissions Sector

measures selected

Emissions Summary

1. Construction Emissions Compared Against Thresholds

teria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
ily, mmer ax)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
mit.	3.84	3.24	27.4	30.8	0.06	1.21	3.44	4.65	1.11	0.40	1.52	—	6,805	6,805	0.28	0.07	1.13	6,833
erage ily ax)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
mit.	0.55	0.47	3.95	4.41	0.01	0.18	0.50	0.68	0.16	0.06	0.22	—	968	968	0.04	0.01	0.07	972
nual ax)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
mit.	0.10	0.09	0.72	0.81	< 0.005	0.03	0.09	0.12	0.03	0.01	0.04	—	160	160	0.01	< 0.005	0.01	161

Climate Risk Detailed Report

2. Initial Climate Risk Scores

mate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
mperature and Extreme Heat	N/A	N/A	N/A	N/A
treme Precipitation	N/A	N/A	N/A	N/A
a Level Rise	1	0	0	N/A
ldfire	1	0	0	N/A
ooding	0	0	0	N/A

ought	N/A	N/A	N/A	N/A
owpack Reduction	N/A	N/A	N/A	N/A
Quality Degradation	N/A	N/A	N/A	N/A

sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest osure.
adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the atest ability to adapt.
overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures

3. Adjusted Climate Risk Scores

mate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
mperature and Extreme Heat	N/A	N/A	N/A	N/A
treme Precipitation	N/A	N/A	N/A	N/A
a Level Rise	1	1	1	2
ldfire	1	1	1	2
ooding	1	1	1	2
ought	N/A	N/A	N/A	N/A
owpack Reduction	N/A	N/A	N/A	N/A
Quality Degradation	N/A	N/A	N/A	N/A

sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest osure.
adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the atest ability to adapt.
overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

Health and Equity Details

3. Overall Health & Equity Scores

etric	Result for Project Census Tract
lEnviroScreen 4.0 Score for Project Location (a)	49.0

althy Places Index Score for Project Location (b)	48.0
oject Located in a Designated Disadvantaged Community (Senate Bill 535)	No
oject Located in a Low-Income Community (Assembly Bill 1550)	No
oject Located in a Community Air Protection Program Community (Assembly Bill 617)	No

he maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
he maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

5. Evaluation Scorecard

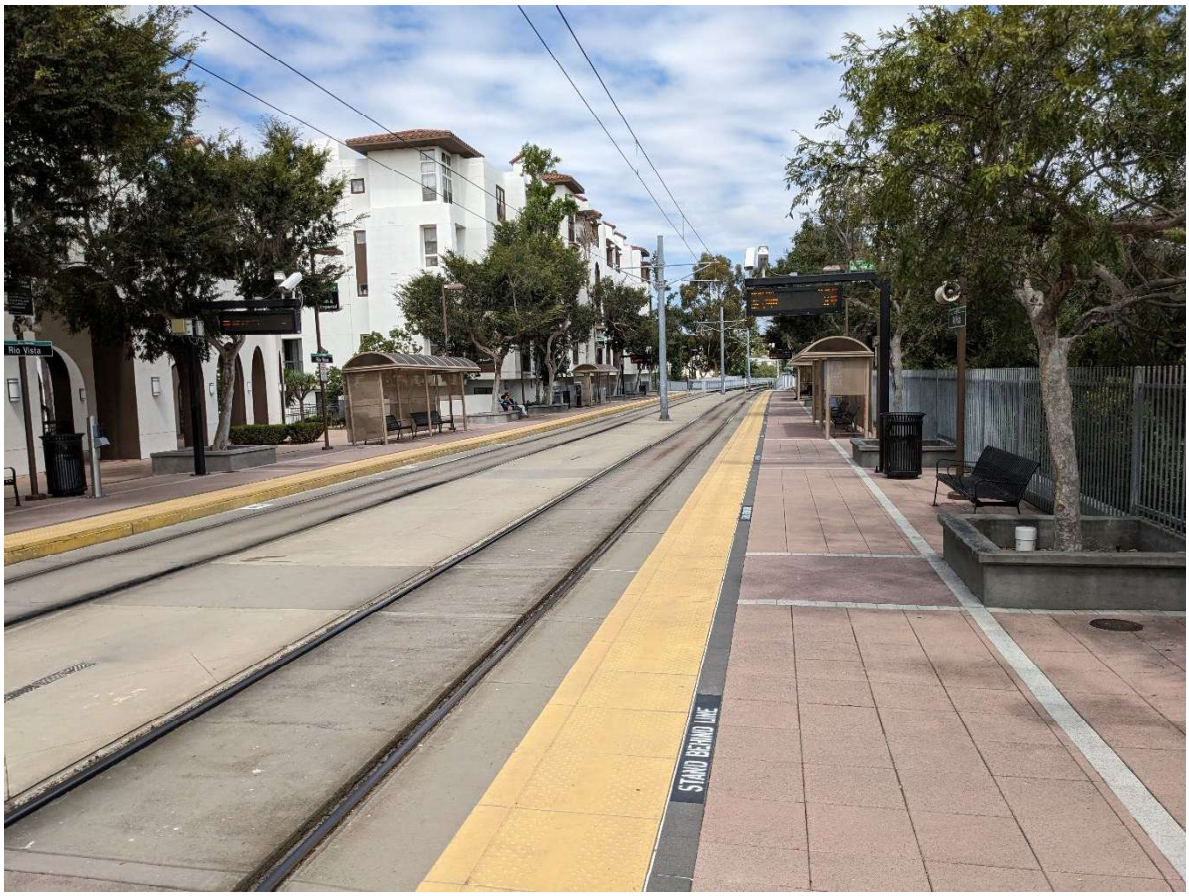
lth & Equity Evaluation Scorecard not completed.

Appendix C

Biological Resources Technical Report

Rio Vista Platform Design – Phase II Project

San Diego County, California



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August 2025

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List of Abbreviations

°F	Fahrenheit
BMPs	Best Management Practices
BSA	Biological Study Area
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFG	California Fish and Game
CFR	Code of Federal Regulations
CIP	Cast-in-Place
City	City of San Diego
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CWA	Clean Water Act
EFH	Essential Fish Habitat
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
FESA	Federal Endangered Species Act
FSDRIP	First San Diego River Improvement Project
IPaC	Information for Planning and Consultation
ITP	Incidental Take Permit
MBTA	Migratory Bird Treaty Act
MHPA	Multi-Habitat Planning Area
MSCP	Multiple Species Conservation Program
MSE	Mechanically Stabilized Embankment
MTS	Metropolitan Transit System
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NRCS	Natural Resource Conservation Service
NRMP	Natural Resource Management Plan
Project	Rio Vista Platform Design – Phase II Project
RWQCB	Regional Water Quality Control Board
SSC	Species of Special Concern
U.S.	United States
U.S.C.	United States Code
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

Summary

The San Diego Metropolitan Transit System (MTS) proposes to retrofit the existing walls and platform of the Rio Vista Station in San Diego County, California to prevent additional settling and/or movement of the station's infrastructure as part of the Rio Vista Platform Design – Phase II Project (Project).

This Biological Resources Technical Report provides a review and evaluation of the potential impacts to threatened, endangered, listed, or special status species and protected habitat resources as a result of the proposed Project. Field surveys were conducted within the Biological Study Area (BSA), which encompasses the Project area with an approximate 150-foot buffer along the Project's southern margin to evaluate adjacent sensitive habitat communities. Literature research, habitat assessments, and biological surveys were conducted to determine the potential for special status species to occur within the BSA. Special status species include any plant or animal species listed by a state or federal agency or by one or more special interest groups, such as the California Native Plant Society (CNPS). Based on literature review, biological surveys, and habitat assessments, eight special status species have the potential to occur within the BSA.

Coastal California gnatcatcher (*Polioptila californica californica*) is federally listed under the Federal Endangered Species Act (FESA) and Least Bell's vireo (*Vireo bellii pusillus*) and Southwestern willow flycatcher (*Empidonax traillii extimus*) are both federally listed under FESA and state listed the California Endangered Species Act (CESA). As such, incidental take of this species is not permitted without prior authorization under Section 7 or Section 10 Consultation with the (U.S.) Fish and Wildlife Service (USFWS). No further consultation with the California Department of Fish and Wildlife (CDFW) and United States (U.S.) Fish and Wildlife Service (USFWS) is required regarding impacts to coastal California gnatcatcher or least Bell's vireo.

There is a low potential for this species to occur within the BSA; however, the implementation of species-specific avoidance and minimization measures will ensure there are no impacts to coastal California gnatcatcher, least Bell's vireo and southwestern willow flycatcher. As such, consultation with CDFW and USFWS regarding this species is not required.

Under Section 404 and Section 401 of the Clean Water Act (CWA), certain surface waters are regulated by the U.S. Army Corps of Engineers (USACE) and the Regional Water Quality Control Board (RWQCB). CDFW also claims jurisdiction over the bed, bank and channel of waters and associated riparian vegetation. Approximately 1.39 acres of upland riparian habitat and approximately 0.68 acres of willow riparian habitat falls within the BSA south of the Rio Vista Station platform. The Project would have approximately 0.27 acres of temporary impacts to upland riparian habitat to allow for construction access to the proposed work area. No permanent impacts to sensitive habitat communities will result from the construction of this Project.

The Project will obtain a Section 1602 Streambed Alteration Agreement from CDFW. The proposed Project is subject to compliance with CEQA, and the MTS is the CEQA lead agency. The Project is expected to be fully constructed by the Spring of 2025.

1. Introduction

The MTS proposes to retrofit the existing walls and platform of the Rio Vista Station in San Diego County, California to prevent additional settling and/or movement of the station's infrastructure. The Project is located on the MTS Green Line at the MTS Rio Vista Station, directly north of the San Diego River and west of Qualcomm Way in San Diego, California (Figure 1. Project Vicinity; Figure 2. Project Location). The Project is located within the La Jolla 7.5-Minute United States Geological Survey (USGS) Quadrangle (3211772).

1.1 Project Description

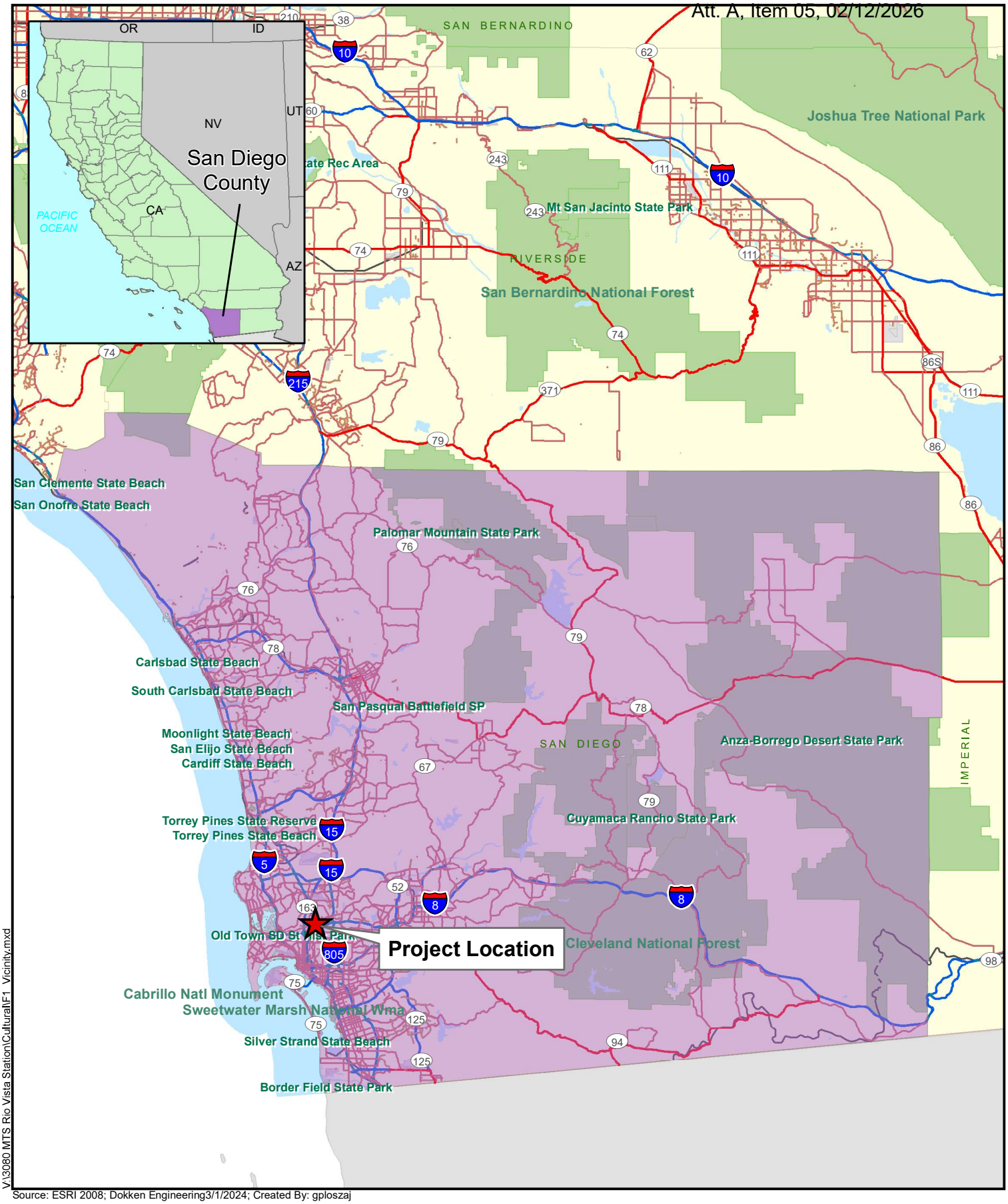
The Rio Vista Platform Design Project is a retrofit of infrastructure at the Rio Vista Station on the San Diego Metropolitan Transit System. The Rio Vista Station is on the MTS Green Line in the City of San Diego, located north of the I-8/Texas Street/Qualcomm way interchange in an urbanized area primarily dominated by residential users.

The MTS Rio Vista Station and apartment complex to the north were constructed in 1999 and 2003, respectively. There are various retaining wall configurations used to support the tracks between the grade separation structures at the Rio Vista Transit Station. A combination of precast concrete panel faced and welded wire (gabion basket) faced Mechanically Stabilized Embankment (MSE) with soil reinforcement are utilized as the main earth retaining system supporting the North County Transit District tracks. A supplemental cast-in-place (CIP) concrete curb wall is in place above the welded wire faced MSE wall along the left (north) side of the transit station platform.

MTS recently installed a series of monitor points to observe movement of the station's infrastructure. Several factors were determined to contribute to the movement of the walls and platform including:

- Presence of loose/soft materials in the upper five feet below the platform
- Unsuitable and potentially expansive materials used for the MSE walls
- Slackening of the MSE reinforcement behind the walls
- Settlement of the fill materials

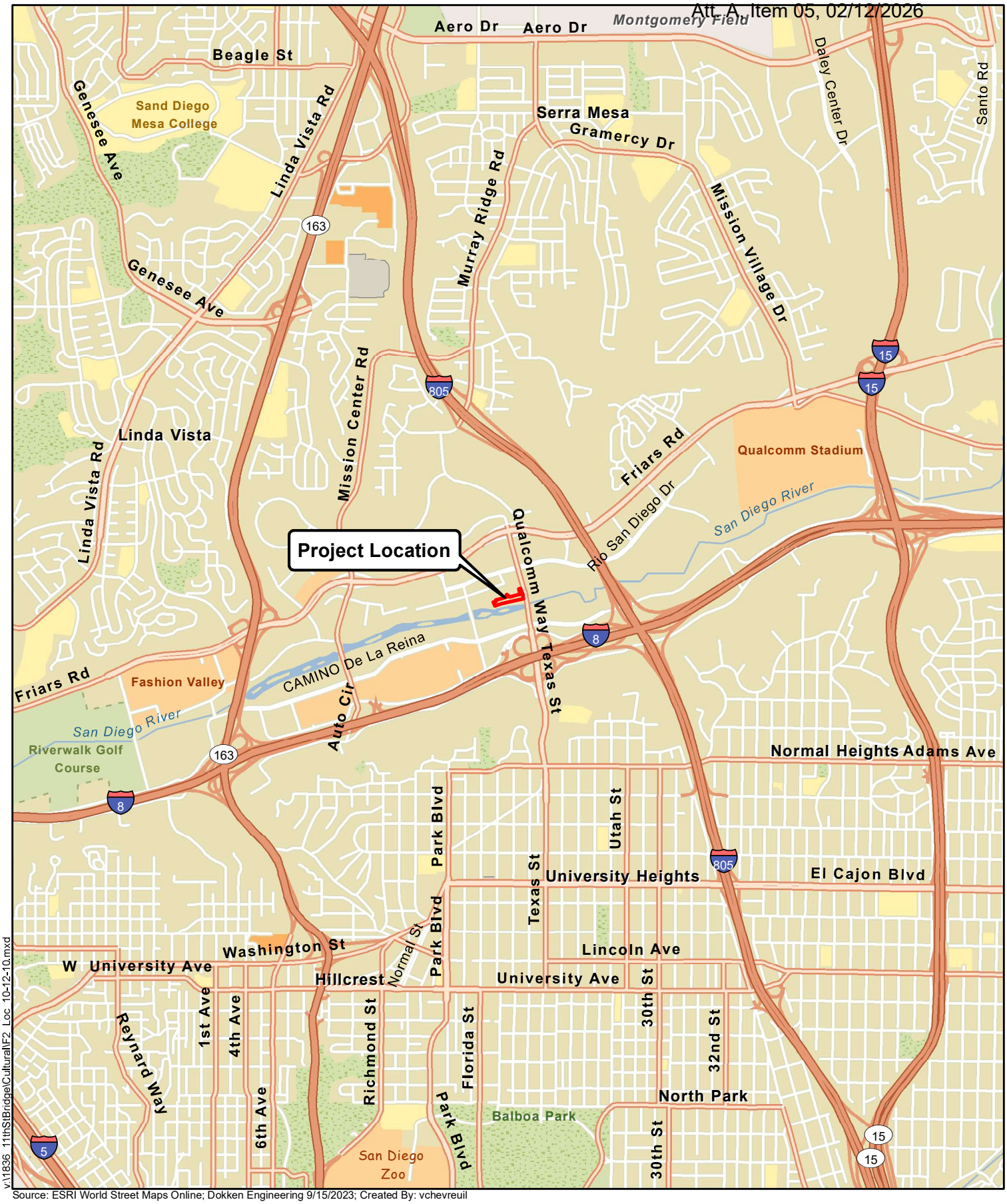
The proposed Project is subject to compliance with CEQA, and the MTS is the CEQA lead agency. Construction of the Project is estimated to begin in Fall 2026 and take approximately 30 weeks to complete, for a projected opening year of 2027.



Source: ESRI 2008; Dokken Engineering3/1/2024; Created By: gploszaj

0 10 20 30 Miles

FIGURE 1
Project Vicinity
Rio Vista Platform Design - Phase II
San Diego County, California



v:\1836_11thStBridge\Cultural\F2_Loc_10-12-10.mxd

Source: ESRI World Street Maps Online; Dokken Engineering 9/15/2023; Created By: vchevreuil

0 0.5 1 1.5 2 Miles

FIGURE 2
Project Location

Rio Vista Platform Design - Phase II
San Diego County, California

2. Study Methods

2.1 Regulatory Requirements

This section describes the general federal, state, and local plans, policies, and laws that are relevant to biological resources within the BSA. Applicable approvals that could be required before construction of the Project are provided in Chapter 5.

2.1.1 Federal Regulations

Federal Endangered Species Act

The FESA of 1973 [16 United States Code (U.S.C.) section 1531 et seq.] provides for the conservation of endangered and threatened species listed pursuant to Section 4 of the Act (16 U.S.C. section 1533) and the ecosystems upon which they depend. These species and resources have been identified by the USFWS.

Executive Order 13112: Prevention and Control of Invasive Species

Executive Order (EO) 13112 (signed February 3, 1999) directs all federal agencies to prevent and control introductions of invasive species in a cost-effective and environmentally sound manner. The EO requires consideration of invasive species in the NEPA analyses, including their identification and distribution, their potential impacts, and measures to prevent or eradicate them.

Executive Order 13186: Migratory Bird Treaty Act

EO 13186 (signed January 10, 2001) directs each federal agency taking actions that could adversely affect migratory bird populations, to work with USFWS to develop a Memorandum of Understanding that will promote the conservation of migratory bird populations. Protocols developed under the Memorandum of Understanding will include the following agency responsibilities:

- Avoid and minimize, to the maximum extent practicable, adverse impacts on migratory bird resources when conducting agency actions;
- Restore and enhance habitat of migratory birds, as practicable; and
- Prevent or abate the pollution or detrimental alteration of the environment for the benefit of migratory birds, as practicable.

The EO is designed to assist federal agencies in their efforts to comply with the Migratory Bird Treaty Act (MBTA) [50 Code of Federal Regulations (CFR) 10 and 21] and does not constitute any legal authorization to take migratory birds. Take is defined under the MBTA as “the action of or attempt to pursue, hunt, shoot, capture, collect, or kill” (50 CFR 10.12) and includes intentional take (i.e., take that is the purpose of the activity in question) and unintentional take (i.e., take that results from, but is not the purpose of, the activity in question).

2.1.2 State Regulations

California Environmental Quality Act

The CEQA is a state law created to inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities and to work to reduce these negative environmental impacts. The MTS is the CEQA lead agency for this Project.

California Endangered Species Act

The CESA [California Fish and Game (CFG) Code Section 2050 et seq.] requires CDFW to establish a list of endangered and threatened species (Section 2070) and to prohibit the incidental taking of any such listed species except as allowed by the Act (Sections 2080-2089). In addition, CESA prohibits take of candidate species (under consideration for listing).

CESA also requires CDFW to comply with CEQA (Pub. Resources Code Section 21000 et seq.) when evaluating Incidental Take Permit (ITP) applications [CFG Code Section 2081(b) and California Code Regulations, Title 14, section 783.0 et seq.], and the potential impacts the project or activity, for which the application was submitted, may have on the environment. CDFW's CEQA obligations include consultation with other public agencies which have jurisdiction over the project or activity [California Code Regulations, Title 14, Section 783.5(d)(3)]. CDFW cannot issue an ITP if issuance would jeopardize the continued existence of the species [CFG Code Section 2081(c); California Code Regulations, Title 14, Section 783.4(b)].

Section 3503 and 3503.5: Bird and Raptors

CFG Code Section 3503 prohibits the destruction of bird nests and Section 3503.5 prohibits the killing of raptor species and destruction of raptor nests.

Section 3513: Migratory Birds

CFG Code Section 3513 prohibits the take or possession of any migratory non-game bird as designated in the MBTA or any part of such migratory non-game bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

2.1.3 Local Regulations

City of San Diego Municipal Code

The City Municipal Code outlines specific regulations to ensure that development within properties containing sensitive biological resources occurs in a manner that protects the resource and minimizes cumulative impacts to the region. The Project is subject to the Development Regulations for Sensitive Biological Resources specified in Section 143.0141 of the City's Municipal Code.

First San Diego River Improvement Project Natural Resource Management Plan

The Project falls within the jurisdiction of the First San Diego River Improvement Project (FSDRIP), which is the segment of the San Diego River located between Qualcomm Way and Highway 163. Development within this region is subject to the FSDRIP Natural Resource Management Plan (NRMP), which outlines specific Development and Mitigation Guidelines to ensure the continuing protection of the natural resources created under the FSDRIP Revegetation Plan.

City of San Diego Tree Removal Permit

Any tree removal required by the Project will be subject to the City's Public Tree Protection policy (Council Policy 900-19) and the Project will acquire the appropriate tree removal permits prior to vegetation clearing.

2.2 Studies Required

2.2.1 Literature Search

Prior to field work, literature research was conducted through the USFWS Information for Planning and Consultation (IPaC) official species list generator (Appendix A. USFWS Species List), the CDFW California Natural Diversity Database (CNDDB) (Appendix B. CNDDB Species List), the CNPS Electronic Inventory of Rare and Endangered Plants (Appendix C. CNPS Species List), and the National Marine Fisheries Service (NMFS) West Coast Region Species List (Appendix D. NMFS Species List) to identify habitats and special status species having the potential to occur within the BSA. Section 3.2 of this report provides a comprehensive list of the species generated from the online database searches and presents specific characteristics, habitat requirements, and potential for occurrence for each species.

2.2.2 Survey Methods

Prior to field surveys, the BSA was defined as the Project impact area to facilitate construction access and capture potential biological resources adjacent to Project limits. Habitat assessment and analysis of historic occurrences were conducted to determine the potential for each of these species to occur within the BSA. Biological surveys and habitat assessment methods included walking meandering transects through the entire BSA, observing vegetation communities, compiling notes on observed flora and fauna, and assessing the potential for existing habitat to support sensitive plants and wildlife. All plant and wildlife observations were recorded and are discussed in Chapter 3.

2.2.3 Personnel and Survey Dates

A biological field survey was conducted on August 10, 2023, by Dokken Engineering biologist Scott Salembier. Habitat assessments were conducted within the BSA to assess the vegetative communities present, identify biological resources which may be impacted by the Project, and evaluate the potential for special status species to occur on-site.

2.3 Agency Coordination and Professional Contacts

2.3.1 United States Fish and Wildlife Service

On September 18, 2023, an official species list was obtained from USFWS of federally listed species that could occur in the vicinity of the Project (Appendix A).

2.3.2 California Department of Fish and Wildlife

On September 18, 2023, a two-quadrangle list of species with potential to occur in the Project vicinity was obtained from CDFW's CNDDB (Appendix B).

2.3.3 California Native Plant Society

On September 18, 2023, a two-quadrangle list of plant species with potential to occur in the Project vicinity was obtained from the CNPS Inventory of Rare and Endangered Plants of California (Appendix C).

2.3.4 National Marine Fisheries Service

On September 18, 2023, a one-quadrangle list of Federally listed fish species with the potential to occur in the Project vicinity was obtained from the NMFS West Coast Region Species List

2.4 Limitations That May Influence Results

Sensitive wildlife species with the potential to occur in the BSA may be cryptic (difficult to detect) or transient, migratory species. The population size and locations of sensitive species may fluctuate through time. Because of this, the data collected for this biological resource technical report represents a “snapshot” in time and may not reflect actual future conditions.

The collection of biological field data is normally subject to environmental factors that cannot be controlled or reliably predicted. Consequently, the interpretation of field data must be conservative and consider the uncertainties and limitations imposed by the environment. Biological surveys were conducted in August, which is past the typical season when plant species are blooming; however, rare plants with potential to occur within the BSA have an extended booming season and this limitation is not expected to severely influence the results or substantially alter the findings. No additional limitations were present that could influence the results of this document. All surveys were conducted during appropriate weather and temperature conditions.

3. Results: Environmental Setting

3.1 Description of the Existing Biological and Physical Conditions Study Area

3.1.1 Study Area

Prior to field surveys, the BSA was defined as the area required for the staging, access, and construction of the Project with an approximate 150-foot buffer along the Project's southern margin in order to evaluate potential visual, noise, vibratory and other indirect impacts to sensitive biological resources along the San Diego River. The BSA measures approximately 730 feet wide and measures approximately 390 feet from north to south at its widest point. The total acreage of the BSA is approximately 3.75 acres (Figure 3. Project Features).

3.1.2 Physical Conditions

Regionally, the BSA is located along the northern bank of the San Diego River, directly west of Qualcomm Way in San Diego, California. This Project is located within the South Coast Floristic Province (Jepson 2023). San Diego experiences Mediterranean conditions including warm, dry summers and cool, wet winters. The average annual high temperature is approximately 70 degrees Fahrenheit (°F), and the average annual lows reach approximately 58°F, with an average of 10.34 inches of precipitation annually (U.S. Climate Data 2023). The elevation of the BSA is approximately 70 feet above mean sea level. The soil types within the BSA include gravel pits (95% of BSA) and Riverwash (Natural Resource Conservation Service [NRCS] 2023; Appendix E. NRCS Soil Report).

3.1.3 Biological Conditions in the Study Area

Plant and wildlife species observed within the BSA during the August 2023 biological survey efforts were used to define land cover types based on composition, abundance, and cover (Table 1. Species Observed). Land cover communities within the BSA include coastal sage scrub, upland riparian, willow riparian, and developed land. In addition, the San Diego River provides aquatic habitat within the BSA (Figure 4. Vegetation Communities; Appendix F. Representative Photographs). Each land cover type is described below.

<u>Upland Riparian</u>

The BSA occurs along the northern bank of the San Diego River and encompasses a portion of the river's riparian corridor. In contrast to the willow riparian habitat found downslope of the San Diego River Parkway Trail, the riparian vegetation located directly downslope of the Rio Vista platform is much drier, which is reflected in its vegetative composition. Upland riparian vegetation consists of a riparian overstory of coast live oak (*Quercus agrifolia*) and Fremont cottonwood (*Populus fremontii*) trees and an understory of chaparral species such as lemonade berry (*Rhus integrifolia*), California buckwheat (*Eriogonum fasciculatum*), laurel sumac (*Malosma laurina*), and toyon (*Heteromeles arbutifolia*). Upland riparian habitat comprises approximately 1.39 acres (37%) of the BSA.

<u>Willow Riparian</u>

Downslope of the San Diego Parkway Trail, the riparian habitat community adjacent to the San Diego River becomes willow-dominated and is primarily comprised of Goodding's willow (*Salix goodingi*), coast live oak, and Fremont cottonwood trees. The understory within this vegetation

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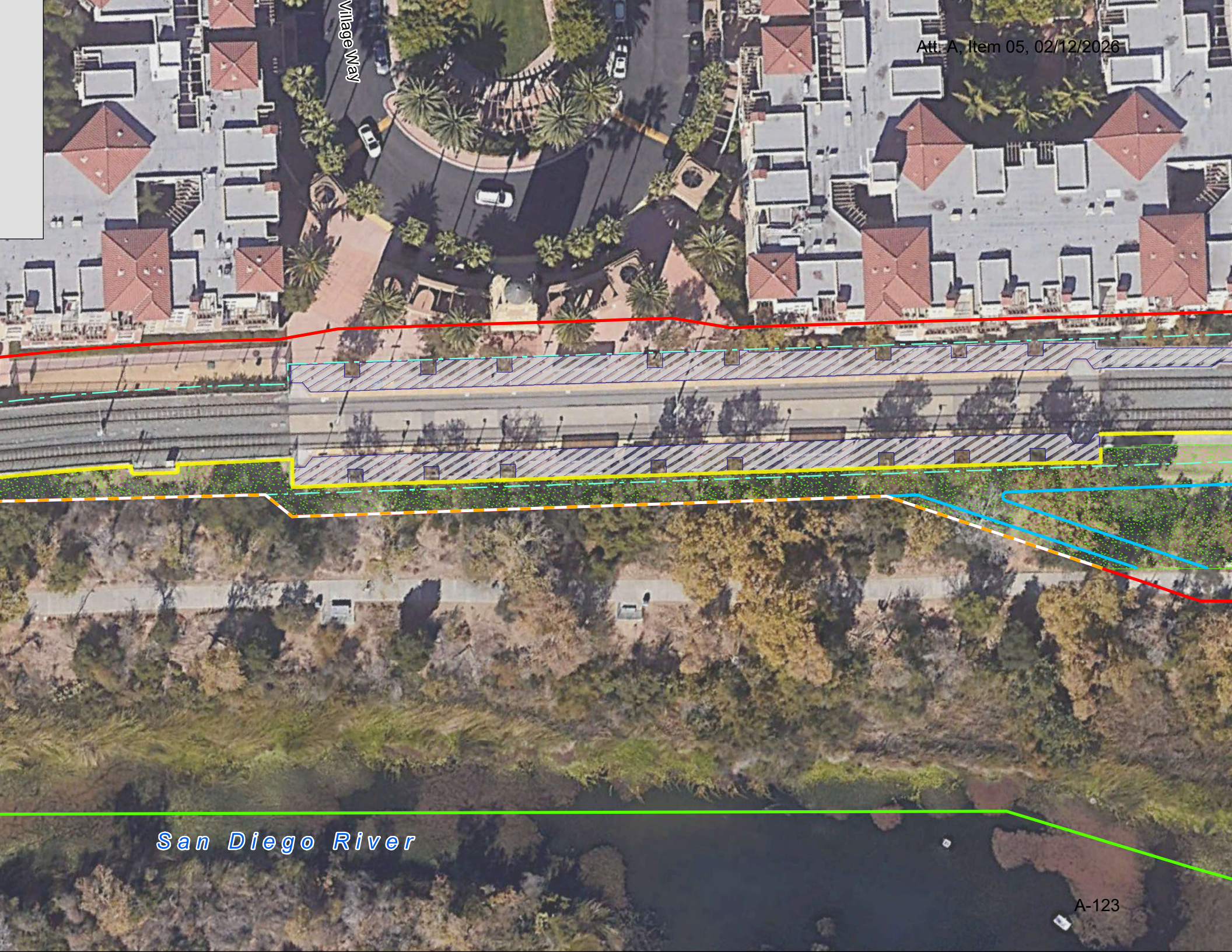
Village Way
San Diego River

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community consists of riparian species such as coyote brush (*Baccharus pilularis*), California grape (*Vitis californica*), California mugwort (*Artemisia douglasiana*), and ripgut brome (*Bromus diandris*). Willow riparian habitat comprises approximately 0.68 acres (18%) of the BSA.

Coastal Sage Scrub

A small patch of coastal sage scrub is present along the eastern extent of the BSA south of the Rio Vista station platform. This area is highly disturbed due to the placement of rock slope protection and invasion by non-native species; however, marginal habitat is present along the border of Qualcomm Way, southeast of the platform station. This habitat community is comprised of shrubs such as coyote brush, California sagebrush (*Artemisia californica*), and desert broom (*Baccharis sarothroides*). Coastal sage scrub habitat comprises approximately 0.09 acres (2%) of the BSA.

Table 1. Species Observed

Common Name	Scientific Name	Native (N)/ Non-Native (X)[1]
Plant Species		
Black mustard	*Brassica nigra*	X [Moderate]
California buckwheat	*Eriogonum fasciculatum*	N
California grape	*Vitis californica*	N
California mugwort	*Artemisia douglasiana*	N
California rose	*Rosa californica*	N
California sagebrush	*Artemisia californica*	N
California sycamore	*Platanus racemosa*	N
Canada horseweed	*Erigeron canadensis*	N
Castor bean	*Ricinus communis*	X [Limited]
Chinese elm	*Ulmus parviflora*	X
Coast live oak	*Quercus agrifolia*	N
Common verbena	*Verbena lasiostachys*	N
Coyote brush	*Baccharus pilularis*	N
Crimson fountain grass	*Pennisetum setaceum*	X [Moderate]
Crown daisy	*Glebionis coronaria*	X [Moderate]
Deerweed	*Acmispon glaber*	N
Desert broom	*Baccharis sarothroides*	N
Fremont cottonwood	*Populus fremontii*	N
Goodding's willow	*Salix gooddingii*	N
Herb sophia	*Descurainia sophia*	X [Limited]
Italian thistle	*Carduus pycnocephalus*	X [Moderate]
Jimsonweed	*Datura wrightii*	N
Laurel sumac	*Malosma laurina*	
Lemonade berry	*Rhus integrifolia*	N
Maltese star thistle	*Centaurea melitensis*	X [Moderate]
Mulefat	*Baccharis salicifolia*	N
Pacific panic grass	*Panicum acuminatum var. fasciculatum*	N
Ripgut brome	*Bromus diandris*	X [Moderate]
San Diego milk aster	*Stephanomeria diegensis*	N
Spotted spurge	*Euphorbia maculate*	X
Toyon	*Heteromeles arbutifolia*	N
Western ragweed	*Ambrosia psilostachya*	N
Wildlife Species		
Anna's hummingbird	*Calypte anna*	N

[1]California Invasive Plant Council (Cal-IPC) Rating

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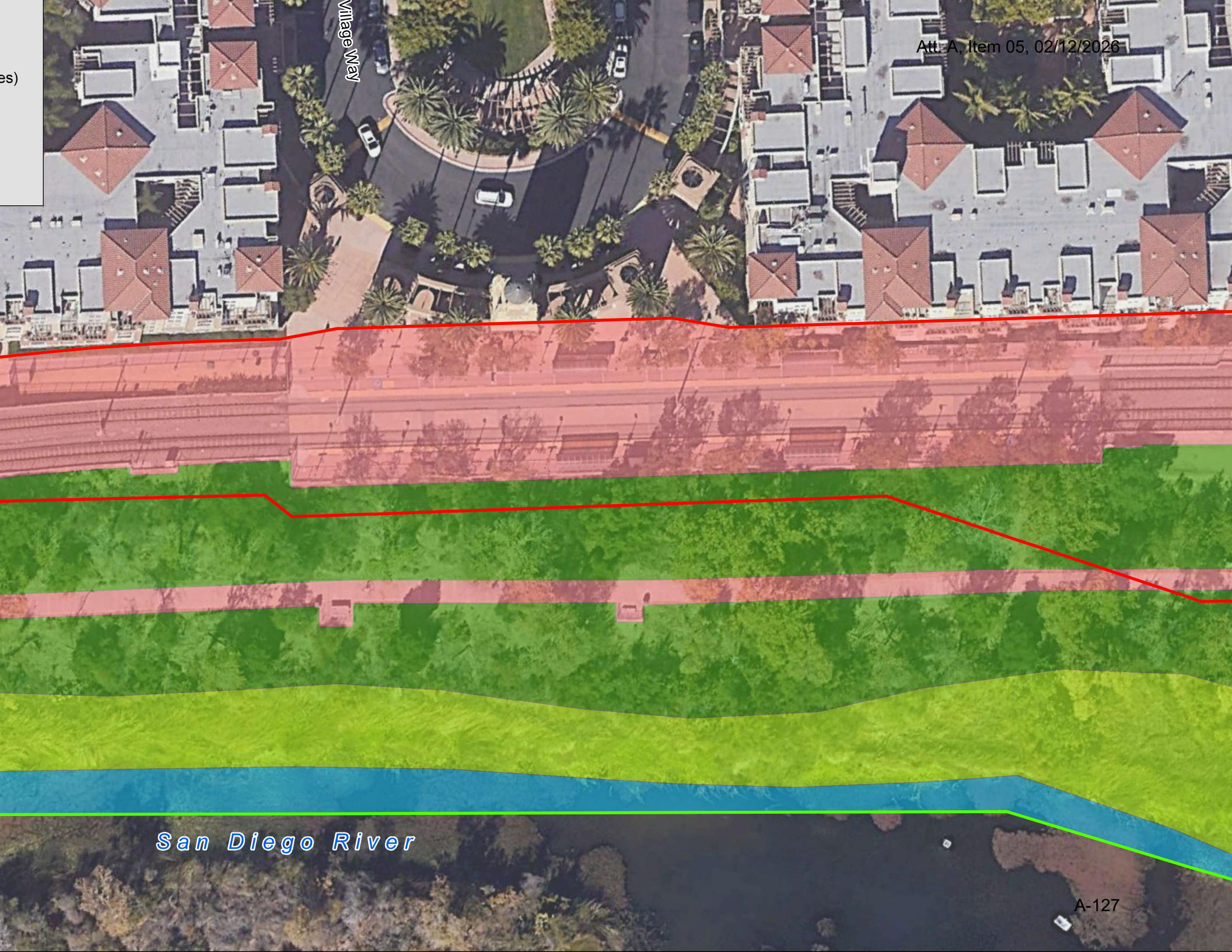
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Village Way
San Diego River

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San Diego River

The San Diego River originates in the Cuyamaca Mountains near the town of Julian, east of San Diego County. After passing through the El Capitan Reservoir, the river continues west through the cities of Santee and San Diego and eventually discharges into the Pacific Ocean near the entrance to Mission Bay, forming an estuary. Within the City limits, the San Diego River corridor provides contiguous aquatic and riparian habitat that may be suitable for a variety of special status plant and wildlife species. The BSA encompasses approximately 0.25 acres of the San Diego River (7% of the BSA).

Developed

Developed land within the BSA includes the existing MTS railway and station, as well as the Promenade Rio Vista Apartments located north of the proposed retrofit project. The San Diego River Parkway trail is a paved walkway that delineates the southern extent of the proposed Project area. No natural communities exist within this land cover type. Developed land comprises approximately 1.34 acres (36%) of the BSA.

Wildlife

Wildlife observed within the BSA consisted of locally common bird species such as the Anna's hummingbird (*Calypte anna*). No additional wildlife species were observed during the biological survey conducted on August 10, 2023.

Habitat Connectivity

The CDFW Biogeographic Information & Observation System (CDFW 2023a) was reviewed to determine if the BSA is located within an Essential Connectivity Area. The BSA is within an area of Terrestrial Connectivity Rank 4 – Conservation Planning Linkages. This ranking indicates that there are habitat connectivity linkages between core natural areas in the vicinity of the BSA. These linkages have more flexibility compared to irreplaceable and essential corridors. Although the Project is mapped within a conservation linkage area, the Project itself would not permanently impact natural habitats in a way that would impair terrestrial movement by wildlife; therefore, the Project would not impact habitat connectivity.

3.2 Regional Species and Habitats and Natural Communities of Concern

Plant and animal species have special status if they have been listed as such by federal or state agencies or by one or more special interest groups, such as CNPS. Prior to the field survey, literature searches were conducted using USFWS IPaC, CDFW CNDDB, CNPS, and NMFS databases to identify regionally sensitive species with potential to occur within the BSA. Table 2. Special Status Species with Potential to Occur in the Project Vicinity provides an updated list of regional special status species returned by the database searches, describes the habitat requirements for each species, and states if the species has potential to occur within the BSA.

There are 59 plant species and 42 wildlife species with the potential to occur within the Project vicinity returned by the database searches. Eight special status species have the potential to occur within the BSA, and are listed below:

- Southwestern willow flycatcher (*Empidonax traillii extimus*)
- Coastal California gnatcatcher (*Polioptila californica californica*)
- Least Bell's vireo (*Vireo bellii pusillus*)
- Least bittern (*Ixobrychus exilis*)
- Yellow warbler (*Setophaga petechia*)
- Western red bat (*Lasiurus frantzii*)
- Western yellow bat (Lasiurus xanthinus)
- Two-striped gartersnake (*Thamnophis hammondii*)

Table 2. Special Status Species with Potential to Occur in the Project Vicinity

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Amphibian Species						
Western spadefoot	*Spea hammondii*	Fed: State: CDFW:	-- -- SSC	Inhabits open areas with sandy or gravelly soils within mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Burrows underground for most of the year and is active above ground during rainfall. Requires vernal, shallow, temporary pools formed by heavy winter rains for reproduction. These pools must be free of bullfrogs, fish, and crayfish. Breeds from late winter to March.	A	**Presumed Absent:** There is a recent (2004) CNDDB occurrence of this species located 1.15 miles northeast of the Project. However, the BSA does not include any shallow, temporary pools that would be suitable for this species. Furthermore, the BSA does not encompass suitable open, sandy habitat. The species is presumed absent due to a lack of locally suitable habitat.
Bird Species						
Belding's savannah sparrow	*Passerculus sandwichensis beldingi*	Fed: State: CDFW:	-- E --	A southern California endemic, the species inhabits southern California coastal salt marshes year-round. It is a tidal-dependent species. Strongly associated with dense pickleweed vegetation, especially Pacific swampfire (*Salicornia virginica*). Most nests occur within the preferred pickleweed communities.	A	**Presumed Absent:** The BSA does not encompass coastal salt marsh habitat or dense pickleweed vegetation that would be suitable for this species. The species is presumed absent due to a lack of locally suitable habitat.
Burrowing owl	*Athene cunicularia*	Fed: State: CDFW:	-- -- SSC	The species inhabits arid, open areas with sparse vegetation cover such as deserts, abandoned agricultural areas, grasslands, and disturbed open habitats. Can be associated with open shrub stages of pinyon-juniper and ponderosa pine habitats. Nests in old small mammal burrows but may dig own burrow in soft soil. Nests are lined with excrement, pellets, debris, grass, and feathers. The species may use	A	**Presumed Absent:** The BSA does not encompass disturbed, shrubby, or open habitat that would be suitable for this species. In addition, no nests were observed during the biological survey conducted on August 10, 2023. The species is presumed absent due to a lack of locally suitable habitat.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				pipes, culverts, and nest boxes, and even buildings where burrows are scarce. Breeding occurs March through August (below 5,300 feet).		
California black rail	*Laterallus jamaicensis coturniculus*	Fed: State: CDFW:	-- T FP	A rare, yearlong California resident of brackish and freshwater emergent wetlands in delta and coastal locations including the San Francisco Bay area, Sacramento-San Joaquin Delta, Morro Bay, the Salton Sea, and lower Colorado River. More than 90% of the species are found in the tidal salt marshes of the northern San Francisco Bay region, predominantly in San Pablo and Suisun Bays. Smaller populations occur in the San Francisco Bay, the Outer Coast of Marin County, and freshwater marshes in the foothills of the Sierra Nevada. The species is extirpated from San Diego County and the majority of coastal southern California. Occurs in tidal emergent wetlands dominated by pickleweed, in brackish marshes dominated by bulrushes with pickleweed, and in freshwater wetlands dominated by bulrushes, cattails, and salt grass. Species prefers high wetland areas, away from areas experiencing fluctuating water levels. Requires vegetation providing adequate overhead cover for nesting. Eggs are laid from March through June.	A	**Presumed Absent:** The species has been extirpated from San Diego County and a majority of coastal southern California. In addition, the BSA does not encompass suitable emergent wetland habitat. The species is presumed absent due to a lack of locally suitable habitat as well as its pattern of occurrence.
California least tern	*Sternula antillarum browni*	Fed: State: CDFW:	E E FP	A Californian nesting migrant from April through September. Forages in near-shore ocean water and shallow estuaries and lagoons. Species nests in colonies on sandy soils with sparse	A	**Presumed Absent:** The BSA does not encompass any margins of oceans, lagoons, or bays that would be suitable for nesting individuals of this species.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				vegetation along the ocean, lagoons, and bays. Breeds beginning in April.		The species is presumed absent due to a lack of locally suitable habitat.
Coastal cactus wren	*Campylorhynchus brunneicapillus sandiegensis*	Fed: State: CDFW:	-- -- SSC	The species is found from northwestern Baja California, north through the coastal lowlands of San Diego County into Orange County. Inhabits coastal sage scrub communities. Species requires thickets of tall *Opuntia sp.* cacti (specifically prickly pear and coastal cholla) for nesting and roosting. Found in arid parts of westward-draining slopes. Breeds from March through June; frequently produces two broods per season (below 1,500 feet elevation).	A	**Presumed Absent:** The BSA does not encompass coastal sage scrub with thickets of prickly pear or coastal cholla cacti that would be suitable for this species.
Coastal California gnatcatcher	*Polioptila californica californica*	Fed: State: CDFW:	T -- SSC	Inhabits arid washes, mesas, and slopes of coastal hills dominated by dense, low-growing, drought-deciduous shrubs and subshrubs of coastal sage scrub. May also use chaparral, grassland, and riparian communities when adjacent to or intermixed with sage scrub vegetation. Breeds February through August (sea level-2,500 feet).	HP	**Low Potential:** The BSA encompasses a marginal patch of arid coastal sage scrub habitat. In addition, the San Diego River riparian corridor may provide marginally suitable habitat for this species. There are numerous local CNDDB occurrences in the vicinity of the BSA, including a 2003 occurrence located 0.42 miles northeast of the BSA. Due to the presence of marginally suitable habitat as well as the recent local occurrences, the species may have a low potential to occur within the BSA.
Least Bell's vireo	*Vireo bellii pusillus*	Fed: State: CDFW:	E E --	Summer resident of southern California inhabiting low elevation riparian habitats in the vicinity of water and dry river bottoms. Prefers willows, baccharis, mesquite and other low, dense vegetation as nesting site. Forages in dense brush and occasionally treetops. The species is known to occur in all four southern California national forests, with the	HP	**High Potential:** The BSA includes low elevation riparian habitat adjacent to the San Diego River. In addition, there are numerous recent CNDDB occurrences of this species within the San Diego River corridor, including a recent (2011) occurrence located directly upstream of the Project. Due to the presence of locally suitable habitat as well as the recent local occurrences, the species

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				largest population in the Los Padres National Forest (below 2,000 feet).		may have a high potential to occur within the BSA.
Least bittern	*Ixobrychus exilis*	Fed: State: CDFW:	-- -- SSC	Inhabits freshwater and brackish marshes with tall stands of cattails or other vegetation. Prefers places interspersed with patches of open water and small stands of woody vegetation. Usually nests about 6-30 inches above water that is 3-38 inches deep. Nests are rarely more than 10 yards from the edge of the reed bed.	HP	**High Potential:** The BSA encompasses a portion of the San Diego River and its associated emergent wetland vegetation, which may provide suitable nesting habitat for this species. In addition, there are numerous recent eBird occurrences of this species within approximately 2.5 miles of the BSA, including a recent (2016) occurrence confirmed with photo identification. Due to the presence of locally suitable nesting habitat as well as the recent local occurrences, the species may have a high potential to occur within the BSA.
Light-footed Ridgway's rail	*Rallus obsoletus levipes*	Fed: State: CDFW:	E E FP	Inhabits southern California coastal salt marshes, lagoons, and their maritime environments. Nests in the lower littoral zone of coastal salt marshes where dense strands of cordgrass are present. Requires shallow water and mudflats for foraging, with adjacent higher vegetation for cover.	A	**Presumed Absent:** The BSA does not encompass coastal salt marsh, lagoon, or adjacent maritime habitat. In addition, there is no suitable nesting or foraging habitat in the vicinity of the Project. The species is presumed absent due to a lack of locally suitable habitat.
Southwestern willow flycatcher	*Empidonax traillii extimus*	Fed: State: CDFW:	E E --	Breeds in riparian habitats characterized by dense vegetation in proximity to open water or saturated soil. Species is associated with dense willow-covered islands and riparian habitats at elevations up to 8,000 feet. Often in proximity to rivers, swamps, lakes, reservoirs, and other wetlands. Historically, the species nested in native vegetation, but will also use thickets of non-native tamarisk and Russian olive. Breeds in April through August.	HP	**High Potential:** Within 10 miles of the BSA, there are numerous recent eBird occurrences of this species confirmed with photo identification. The BSA includes suitable dense riparian habitat adjacent to the San Diego River. In addition, the Project occurs within the anticipated range of this species. Due to the presence of locally suitable habitat, the species may have a high potential to occur within the BSA.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Tricolored blackbird	*Agelaius tricolor*	Fed: State: CDFW:	-- T SSC	Inhabits freshwater marsh, swamp, and wetland communities, but may utilize agricultural or upland habitats that can support large colonies, often in the Central Valley area. Requires dense nesting habitat that is protected from predators, is within 3-5 miles from a suitable foraging area containing insect prey and is within 0.3 miles of open water. Suitable foraging includes wetland, pastureland, rangeland, at dairy farms, and some irrigated croplands (silage, alfalfa, etc.). Nests in dense cattails, tules, willow, blackberry, wild rose, or tall herbs. Nests mid-March to early August but may extend until October or November in the Sacramento Valley region.	A	**Presumed Absent:** The BSA encompasses dense riparian vegetation that may provide suitable nesting habitat for this species. However, the BSA is surrounded by urban development and there is no suitable foraging habitat within approximately 4 miles of the BSA. Furthermore, there are no recent CNDDB occurrences within 9 miles of the BSA, and local eBird occurrences are either historic or remain unverified. Due to the lack of proximal foraging habitat as well as the recent pattern of occurrence of this species, the species is presumed absent from the BSA.
Western snowy plover	*Charadrius nivosus nivosus*	Fed: State: CDFW:	T -- SSC	Inhabits sandy or gravelly beaches along the coast, on estuarine salt ponds, and the shores of large alkali lakes. Species requires sandy, gravelly, or friable soil substrate for nesting. Nests are often in proximity to driftwood, rocks, or defoliated bushes. Breeding occurs above the high tide line on coastal beaches, sand spits, dune-backed beaches, sparsely vegetated dunes, and salt pans. Breeds April to August.	A	**Presumed Absent:** The BSA does not encompass suitable coast, estuarine salt pond, or alkali lake habitat and does not include suitable substrate for the species. The species is presumed absent due to a lack locally suitable habitat.
Yellow warbler	*Setophaga petechia*	Fed: State: CDFW:	-- -- SSC	Breeds in several southern California mountain ranges and throughout most of San Diego County. Species prefers to nest in areas with trees and shrubs typical of low, open-canopy riparian woodland. Species has been known to breed in riparian woodlands from coastal and desert lowlands and	HP	**High Potential:** There are numerous recent eBird occurrences within the San Diego River corridor, including 2023 occurrences of the species directly south of the Project. In addition, the BSA encompasses riparian habitat suitable for nesting. Due to the presence of potentially suitable habitat as well as the

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				montane shrubbery in open conifer forests. Occurs up to 8,000 feet in the Sierra Nevada. Breeds April-August.		recent local occurrences, the species has a high potential to occur within the BSA.
Fish Species						
Steelhead – Southern California Distinct Population Segment	*Oncorhynchus mykiss irideus pop. 10*	Fed: State: CDFW:	E CE --	Southern California steelhead utilize rivers and creeks the Santa Maria River south to the U.S./Mexico border. Spawning occurs in coastal watersheds while rearing occurs in freshwater or estuary habitats prior to emigrating to the ocean in the winter and spring. Preferred spawning sites contain gravel substrate with sufficient water flow and riverine cover. Rearing habitat contains sufficient feeding with associated riparian forest containing willow and cottonwoods. Migration upstream for reproduction occurs from October to May with spawning occurring January to April.	A	**Presumed Absent:** The BSA does not encompass any jurisdictional water features that would provide suitable habitat for this species. Project activities will occur north of the San Diego River Parkway Trail, approximately 100 feet away from the San Diego River. The species is presumed absent due to the lack of necessary habitat features.
Invertebrate Species						
Crotch bumble bee	*Bombus crotchii*	Fed: State: CDFW:	-- CE --	This species is known to occur in central California, Nevada south to Baja California and into Mexico. Inhabits coastal areas, deserts, and the Central Valley. The species nests underground in grassland, shrubland and chaparral habitats. The species has a short tongue and primarily feeds on the following plants: *Asclepias, Chaenactis, Lupinus, Medicago, Phacelia* and *Salvia*.	A	**Presumed Absent:** There is a recent (2019) CNDDB occurrence of this species within the San Diego River corridor, approximately 3 miles west of the Project. However, the BSA does not include grassland, shrubland, or chaparral habitat suitable for underground nesting. In addition, none of the typical plants used by this species were observed within the BSA during the biological survey conducted on August 10, 2023. The species is presumed absent due to the lack of locally suitable habitat.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Hermes copper butterfly	*Lycaena hermes*	Fed: State: CDFW:	T -- --	The species is dependent on its spiny redberry (*Rhamnus crocea*) host plant, common in cismontane California coastal sage scrub and chaparral vegetation communities. Restricted to redberry stands growing in deeper, well-drained soils of canyon bottoms and north-facing hillsides, with host and nectar plants intermixed or in close proximity. Eggs are laid on stems of the host plant. Ranges over 150 miles, from the vicinity of Fallbrook in northern San Diego County south to near Santo Tomás in Baja California, Mexico. Only 15 populations are known to remain in existence in the United States following the large San Diego County fires of 2003. Three other populations in Baja California are presumed extant, but their actual status is unknown.	A	**Presumed Absent:** Spiny redberry, the host plant for this species, was not observed within the BSA during the biological survey conducted on August 10, 2023. In addition, the BSA does not occur within a canyon bottom and does not occur within one of the 15 remaining populations of the species. Due to the lack of locally suitable habitat as well as the species' pattern of occurrence, the species is presumed absent from the BSA.
Monarch – California overwintering population	*Danaus plexippus plexippus pop. 1*	Fed: State: CDFW:	C -- --	Winter roosts along the coast from northern Mendocino to Baja California. Utilizes wind protected tree groves in proximity to nectar and water sources. Host plants include milkweed species such as *Asclepias syriaca*, *A. incarnara*, and *A. speciosa*. Suitable habitat includes fields, meadows, weedy areas, marshes, and roadsides. Mass adult migrations occur from August to October.	A	**Presumed Absent:** The BSA does not include field, meadow, marsh, or roadside habitat suitable for this species. In addition, none of the host plants used by this species were observed within the BSA during the biological survey conducted on August 10, 2023. The species is presumed absent due to a lack of locally suitable habitat.
Quino checkerspot butterfly	*Euphydryas editha quino*	Fed: State: CDFW:	E -- --	Historically inhabited coastal sage scrub habitat in southern California and northern Baja California historically. Current distribution is limited to southwestern Riverside and San Diego Counties. Larvae associated with *Plantago erecta* or *Castilleja exserta*	A	**Presumed Absent:** The BSA does not include sufficient coastal sage scrub habitat to support this species. Furthermore, none of the typical plants used by this species were observed within the BSA during the biological survey conducted on August 10, 2023.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				plants. Adult emerge in early to mid-spring.		The species is presumed absent due to a lack of locally suitable habitat.
Riverside fairy shrimp	*Streptocephalus woottoni*	Fed: State: CDFW:	E -- --	A Ventura, Los Angeles, Orange, Riverside, and San Diego County vernal pool endemic species. Inhabits deep ephemeral vernal pools greater than 12 inches within chaparral, coastal sage scrub, and grassland communities. Species requires pools filled with sufficient rainfall; emerges late in the season within warm waters.	A	**Presumed Absent:** The BSA does not encompass any vernal pool habitat. The species is presumed absent due to a lack of necessary habitat features.
San Diego fairy shrimp	*Branchinecta sandiegonensis*	Fed: State: CDFW:	E -- --	Restricted to vernal pools and other ephemeral (lasting a short time) basins in coastal Orange and San Diego Counties in southern California and in northwestern Baja California. A habitat specialist found in shallower pools that range in depth from 2 to 12 inches. Prefers vernal pool complexes, which typically include between 5 and 50 vernal pools. Vernal pools within a complex are generally hydrologically connected.	A	**Presumed Absent:** The BSA does not encompass any vernal pool habitat. The species is presumed absent due to a lack of necessary habitat features.
Mammal Species						
American badger	*Taxidea taxis*	Fed: State: CDFW:	-- -- SSC	Prefers treeless, dry, open stages of most shrub and herbaceous habitats with friable soils and a supply of rodent prey. Species also inhabits forest glades, meadows, marshes, brushy areas, hot deserts, and mountain meadows. Species maintains burrows within home ranges estimated between 338-1,700 acres, dependent on seasonal activity. Burrows are frequently re-used, but new burrows may be created nightly. Young are born in March and April within burrows dug in relatively dry, often sandy, soil, usually	A	**Presumed Absent:** This species requires large swaths of open land with friable soils and is sensitive to human activity. The BSA includes dense riparian habitat that is geographically isolated within a developed urban center; as such, the BSA does not provide suitable conditions for the burrowing or foraging of this species and the species is presumed absent.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				in areas with sparse overstory cover. Species is somewhat tolerant of human activity, but is sensitive to automobile mortality, trapping, and persistent poisons (up to 12,000 feet).		
Big free-tailed bat	*Nyctinomops macrotis*	Fed: State: CDFW:	-- -- SSC	The species is rare in California, but has been found in San Diego County, Alameda County, and other scattered southern California locations. Associated with arid communities, such as arroyo, shrub desert, woodland, and moist Chisos woodland. Prefers rugged, rocky canyons and roosts in buildings, caves, crevices of high cliffs or rock outcrops, and occasionally within tree holes. Often forages over water sources. Young born June through July, and the species is not believed to breed within California (0-8,000 feet).	A	**Presumed Absent:** There is a recent (2003) CNDDB occurrence of this species located within Mission Gorge, approximately 4.8 miles northeast of the Project. The BSA does not include suitable arid habitat and lacks cliffs and crevices for nesting. Due to the lack of locally suitable habitat, the species is presumed absent from the BSA.
Mexican long-tongued bat	*Choeronycteris mexicana*	Fed: State: CDFW:	-- -- SSC	A summer resident of San Diego County. Inhabits desert and montane riparian, desert succulent scrub, desert scrub and pinyon juniper communities. Species is primarily a nectar feeder and migrates to acquire flowering food sources, with a strong preference to agave and yucca. Day roosts in caves, mines, and buildings, particularly dimly lit sites. Births in June and early July, with lactation extending to August.	A	**Presumed Absent:** There are historic (1946) CNDDB occurrences of this species located approximately 2 miles west of the Project. The BSA may provide marginally suitable riparian habitat but does not include the flowering food sources preferred by this species. In addition, the BSA lacks suitable day roosting sites. Due to the absence of locally suitable habitat and with no recent local occurrences, the species is presumed absent from the BSA.
Pacific pocket mouse	*Perognathus longimembris pacificus*	Fed: State: CDFW:	E -- SSC	Inhabits sandy soils of coastal strand, coastal dunes, river alluvium, and coastal sage scrub habitats on marine terraces. Occurs within close proximity (usually 2.5 miles) to the Pacific Ocean. Species hibernates from November to	A	**Presumed Absent:** There are no recent occurrences of the species within 10 miles of the BSA. In addition, the BSA does not encompass sandy soils with open vegetation that this species is known to occupy. Due to the lack of

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				February and birth April to June (0-600 feet).		locally suitable habitat features and with no recent local occurrences, the species is presumed absent from the BSA.
Pocketed free-tailed bat	*Nyctinomops femorosaccus*	Fed: State: CDFW:	-- -- SSC	Inhabits pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis communities. Prefers rocky desert areas with high cliffs or rock outcrops and frequently selects roosts in cliff rock crevices. Species must have an adequate drop from the roost to gain flight. Maternity sites are located in rock crevices, caverns, and buildings. Young are born June-July.	A	**Presumed Absent:** There is a historic (1946) CNDDB occurrence of this species located approximately 0.7 miles northwest of the Project. The BSA may provide marginally suitable riparian habitat; however, the BSA lacks high, rocky outcrops or cliffs that are used by this species. In addition, there are no suitable maternity sites in the vicinity of the Project. The species is presumed absent due to a lack of locally suitable roosting or foraging habitat.
San Diego desert woodrat	*Neotoma lepida intermedia*	Fed: State: CDFW:	-- -- SSC	The species inhabits coastal scrub of southern California, from San Diego County to San Luis Obispo County. Prefers moderate to dense canopies, rocky outcrops, rocky cliffs, and slopes. Inhabits most desert habitats, particularly Joshua tree, pinyon-juniper, mixed and chamise-redshank chaparral, and sagebrush communities. The species is active yearlong and usually nocturnal. Breeds from October to May.	A	**Presumed Absent:** Local CNDDB occurrences of this species are limited to open, contiguous chaparral and coastal sage scrub habitat in the Mission Trails Open Space, approximately 6.5 miles northeast of the Project. The BSA does not encompass suitable rocky outcrops or desert habitats that are preferred by this species. Evidence of the species (e.g. scat, middens, chewed branches) was not observed during biological field surveys. Due to the lack of locally suitable habitat and with no recent local occurrences, the species is presumed absent from the BSA.
Spotted bat	*Euderma maculatum*	Fed: State: CDFW:	-- -- SSC	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. Foraging habitat includes marshes, meadows, riparian zones, shrub-steppe, and open ponderosa pine forest. Prefers rock crevices in cliffs or caves for roosting. Species is solitary but may roost with	A	**Presumed Absent:** There is a historic (1955) CNDDB occurrence of this species located approximately 8.6 miles northwest of the Project. The BSA lacks suitable cliffs or rocky crevices that would be used by roosting individuals of this species. The species is presumed

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				other species. Mates in autumn and births before June (sea level-10,000 feet).		absent due to a lack of local roosting habitat.
Western mastiff bat	*Eumops perotis californicus*	Fed: State: CDFW:	-- -- SSC	Inhabits many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Prefers open, rugged, rocky areas where suitable crevices are available for day roosts. Roots in cliff face crevices (usually granite or consolidated sandstone), high buildings, trees, and tunnels. Roosting sites must have a minimum 10-foot vertical drop. Births early April through August or September (sea level-8,475 feet).	A	**Presumed Absent:** There is a historic (1995) CNDDB occurrence of this species located approximately 0.9 miles upstream (east) of the Project. The BSA lacks suitable cliffs or rocky crevices that would be used by roosting individuals of this species. The species is presumed absent due to a lack of local roosting habitat.
Western red bat	*Lasiurus frantzii*	Fed: State: CDFW:	-- -- SSC	The species is found around North America, ranging from southern Canada, through the western United States, down to Central America and to the northern part of South America. The species often relies on riparian trees for roosting and foraging, and has been associated with mature stands of cottonwood, sycamore, and willows adjacent to streams. They can often be seen feeding in rural and suburban areas, around streetlights and other light sources. Mating occurs August-September and delayed fertilization to the following year and births are May-July.	HP	**Low Potential:** There is a recent (2003) CNDDB occurrence of this species within the San Diego River corridor, approximately 5.7 miles northeast of the Project. The BSA includes dense riparian habitat with stands of cottonwood and willow that may be suitable for nesting. Due to the presence of locally suitable habitat, the species may have a low potential to occur within the BSA.
Western yellow bat	Lasiurus xanthinus	Fed: State: CDFW:	-- -- SSC	Species known in California only in Los Angeles and San Bernardino Counties south to the Mexican border. Inhabits valley foothill riparian, desert riparian, desert wash, and palm oasis habitats in proximity to water. Species utilizes	HP	**Low Potential:** There is a historic (1985) CNDDB occurrence of this species located approximately 2 miles south of the Project. The BSA includes dense riparian habitat that may be suitable for nesting. Due to the presence of locally

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				trees and palms for roosting and maternity colonies. Births in June and July (below 2,000 feet).		suitable habitat as well as the local historic occurrence, the species may have a low potential to occur within the BSA.
Reptile Species						
California glossy snake	*Arizona elegans occidentalis*	Fed: State: CDFW:	-- -- SSC	Inhabits arid scrub, rocky washes, grasslands, and chaparral. Prefers microhabitats of open areas and loose soils. A nocturnal species that hides underground in rocks and burrows during the day. The species can dig its own burrows or use existing ones. Lays from 3 to 23 eggs (more often 5 to 12) in June and July. Eggs hatch late summer and early fall. The species is found from below sea level to around 7,200 feet.	HP	**Low Potential:** There are historic occurrences of this species within the San Diego River corridor, including a historic (1942) CNDDB occurrence located approximately 0.9 miles downstream (west) of the Project. The BSA includes microhabitats of rocks and scrub that may be marginally suitable for this species. Due to the presence of marginally suitable habitat and with local historic occurrences, the species may have a low potential to occur within the BSA.
Coast horned lizard	*Phrynosoma blainvillii*	Fed: State: CDFW:	-- -- SSC	Inhabits valley-foothill hardwood, conifer forest, and riparian habitats, as well as pine-cypress, juniper woodland, and annual grasslands with sandy areas, washes, or flood plains. Frequently found near ant hills. Egg laying occurs from May to June, and some females may lay two clutches per year (sea level-8,000 feet).	HP	**Low Potential:** There is a historic (1980) CNDDB occurrence of this species located approximately 2.4 miles northeast of the Project. The BSA includes riparian habitat that may be suitable for this species. Due to the presence of potentially suitable habitat and with local historic occurrences, the species may have a low potential to occur within the BSA.
Coast patch-nosed snake	*Salvadora hexalepis virgultea*	Fed: State: CDFW:	-- -- SSC	Inhabits semi-arid brushy or shrubby areas and chaparral in canyons, rocky hillsides, and plains. Species is an active forager and is susceptible to high levels of vehicle mortality. Requires small mammal burrows for refuge and overwintering sites. Egg laying probably occurs between May and August (below sea level-7,000 feet).	A	**Presumed Absent:** There is a recent (2004) CNDDB occurrence of this species located near Cowles Mountain, approximately 6.6 miles northeast of the Project. The BSA does not occur within a canyon, rocky hillside, or open plain. Due to the lack of locally suitable habitat and with no local occurrences, the species is presumed absent from the BSA.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Red-diamond rattlesnake	*Crotalus ruber*	Fed: State: CDFW:	-- -- SSC	Inhabits coastal chaparral, oak, and pine woodland, cultivated areas, and arid desert scrub communities. Requires rocky areas or areas of dense vegetation. Utilizes rodent burrows, cracks in rocks and surface cover objects for cover. Species is seasonally active, with the greatest activity occurring from March to June. Young are live-born from mid-August to October in quiet, safe locations (0-3,000 feet).	A	**Presumed Absent:** The BSA encompasses a narrow riparian corridor as well as developed land that would not be suitable for this species. In addition, local CNDDB occurrences of this species are limited to open, contiguous chaparral and coastal sage scrub habitat in the Mission Trails Open Space, approximately 6.5 miles northeast of the Project. Due to a lack of locally suitable habitat and with no local occurrences, the species is presumed absent from the BSA.
Southern California legless lizard	*Anniella stebbinsi*	Fed: State: CDFW:	-- -- SSC	Occurs in moist, warm, loose soil with plant cover. Moisture is essential. Occurs in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. Leaf litter under trees and bushes in sunny areas and dunes stabilized with bush lupine and mock heather often indicate suitable habitat. Often can be found under surface objects such as rocks, boards, driftwood, and logs. Can also be found by gently raking leaf litter under bushes and trees. Sometimes found in suburban gardens in Southern California.	HP	**Low Potential:** There are numerous historic CNDDB occurrences in the vicinity of the Project, as well as a recent (2016) occurrence located 2.8 miles southwest of the BSA. The BSA encompasses suitable stream terrace habitat that consists of a riparian corridor adjacent to the San Diego River; however, this area is densely vegetated and fairly dry. Due to the presence of marginally suitable habitat features as well as recent and historic local occurrences, the species may have a low potential to occur within the BSA.
Two-striped gartersnake	*Thamnophis hammondii*	Fed: State: CDFW:	-- -- SSC	Species is diurnal, highly aquatic, and inhabits locations in proximity to permanent or semi-permanent bodies of water bordered by dense vegetation. Can be found around pools, creeks, cattle tanks, and other water sources. Associated with oak woodland, chaparral, brushland, and coniferous	HP	**Low Potential:** There is a recent (2001) CNDDB occurrence of this species located approximately 4.1 miles southeast of the Project Area. The BSA encompasses a dense riparian corridor adjacent to the San Diego River and may provide suitable upland habitat for the

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				forest. Seasonally alters habitats: in summer, occupies streamside sites, and in winter, occupies nearby uplands. Thought to utilize holes, mammal burrows, crevices, and surface objects as night cover. Life young are born in late July and August, usually in secluded sites, such as under the loose bark of rotting logs or in dense vegetation near pond or stream margins (0-7,000 feet).		species. As such, there is a low potential for the species to occur within the BSA.
Plant Species						
Aphanisma	*Aphanisma blitoides*	Fed: State: CNPS:	-- -- 1B.2	An annual herb native to California and Baja California, inhabiting saline sandy or gravelly soils in coastal sage scrub, coastal dunes, and coastal bluff scrub communities. Blooms February-June (0-1,000 feet).	A	**Presumed Absent:** The BSA encompasses marginal patches of suitable coastal sage scrub habitat; however, the BSA does not include saline soils that is preferred by this species. Furthermore, recent Calflora occurrences of this species are strictly limited to along the coastline. The species is presumed absent due to a lack of locally suitable habitat features as well as its pattern of occurrence.
Beach goldenaster	*Heterotheca sessiliflora ssp. sessiliflora*	Fed: State: CNPS:	-- -- 1B.1	A perennial herb native to California, inhabiting coastal chaparral, dunes, and scrub. Flowers March-December (0-4,020 feet).	HP	**Presumed Absent:** The BSA encompasses marginal patches of coastal sage scrub habitat. However, there are no recent CNDDB occurrences within 10 miles of the BSA. In addition, no individuals of this species were observed during the biological survey conducted on August 10, 2023. As such, the species is presumed absent from the BSA.
Blochman's dudleya	*Dudleya blochmaniae ssp. blochmaniae*	Fed: State: CNPS:	-- -- 1B.1	A perennial herb inhabiting rocky, clay, or serpentine soils of coastal bluff scrub, valley and foothill grassland, chaparral, and coastal scrub	HP	**Presumed Absent:** The BSA does not include rocky, clay, or serpentinite soils. There are no recent CNDDB occurrences within 10 miles of the BSA. In addition, no individuals of this species

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				communities. Flowers April-June (15-1,475 feet).		were observed during the biological survey conducted on August 10, 2023. Due to the lack of locally suitable habitat and with no recent local occurrences, the species is presumed absent from the BSA.
Bottle liverwort	*Sphaerocarpos drewiae*	Fed: State: CNPS:	-- -- 1B.1	An ephemeral liverwort native to California, inhabiting openings in chaparral and coastal scrub habitats (300-2,000 feet).	A	**Presumed Absent:** There is a recent (2001) Calflora occurrence of this species located approximately 0.6 miles south of the BSA. The BSA encompasses marginal patches of coastal scrub habitat; however, these regions fall on a slope and do not retain the moisture required to support this species. The species is presumed absent due to a lack of locally suitable habitat.
Brand's star phacelia	*Phacelia stellaris*	Fed: State: CNPS:	-- -- 1B.1	An annual herb inhabiting open areas of coastal sage scrub, coastal dunes, and coastal scrub communities. Flowers March-June (0-1,300 feet).	A	**Presumed Absent:** There is a historic (1882) CNDDB occurrence of this species located approximately 2.5 miles downstream (west) of the BSA. The BSA encompasses marginal patches of coastal scrub habitat; however, these patches are marginal, highly disturbed, and are not likely to support this species. Furthermore, Calflora occurrences of this species are strictly limited to along the coastline. The species is presumed absent due to a lack of locally suitable habitat features as well as its pattern of occurrence.
California adolphia	*Adolphia californica*	Fed: State: CNPS:	-- -- 2B.1	A perennial shrub inhabiting clay soils in chaparral, valley grassland, foothill grassland, and coastal scrub communities. Flowers December-May (30-2,500 feet).	A	**Presumed Absent:** The BSA does not encompass suitable clay soils that would support this species. Furthermore, this species was not observed within the BSA during the biological survey conducted on August 10, 2023. The

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
						species is presumed absent due to a lack of locally suitable habitat features.
California Orcutt grass	*Orcuttia californica*	Fed: State: CNPS:	E E 1B.1	An annual herb inhabiting vernal pool communities. Flowers April-August (50-2,200 feet).	A	**Presumed Absent:** The BSA does not encompass any vernal pool habitat. The species is presumed absent due to a lack of necessary habitat features.
Campbell's liverwort	*Geothallus tuberosus*	Fed: State: CNPS:	-- -- 1B.1	An ephemeral liverwort native to California, inhabiting mesic soils in coastal scrub and vernal pool habitats (30-2,000 feet).	A	**Presumed Absent:** This species requires mesic soils within coastal scrub and vernal pool habitats. The BSA has a marginal patch of coastal scrub habitat on a steep rocky slope that does not retain the moisture required to support this species. The species is presumed absent due to a lack of locally suitable habitat.
Chaparral ragwort	*Senecio aphanactis*	Fed: State: CNPS:	-- -- 2B.2	An annual herb native to California and Baja California, inhabiting alkaline soils in cismontane woodland, coastal scrub, and chaparral communities. Blooms January-May (50-2,600 feet).	A	**Presumed Absent:** The BSA does not consist of alkaline soils that would support this species. Furthermore, there are no recent occurrences of this species within 10 miles of the BSA. Due to the lack of locally suitable habitat and with no recent local occurrences, the species is presumed absent from the BSA.
Cliff spurge	*Euphorbia misera*	Fed: State: CNPS:	-- -- 2B.2	A perennial shrub inhabiting rocky soils of coastal bluffs, coastal bluff scrub, coastal scrub, and Mojavean desert scrub communities. Flowers January-August (30-1,640 feet).	A	**Presumed Absent:** The BSA does not occur along the coast or near cliffs, which is where this species is known to occur. The species is presumed absent due to its pattern of occurrence.
Coast woolly-heads	*Nemacaulis denudata var. denudata*	Fed: State: CNPS:	-- -- 1B.2	An annual herb inhabiting coastal dunes and coastal beach communities. Flowers April-September (0-330 feet).	A	**Presumed Absent:** The BSA does not encompass suitable coastal dune or coastal beach habitat. The species is presumed absent due to a lack of necessary habitat features.
Coulter's goldfields	*Lasthenia glabrata ssp. coulteri*	Fed: State: CNPS:	-- -- 1B.1	An annual herb that inhabits playas, coastal salt marshes, swamps, and vernal pool communities. Flowers from February-June (0-4,000 feet).	A	**Presumed Absent:** The BSA does not encompass any playa, marsh, swamp, or vernal pool habitat. The species is presumed absent due to a lack of necessary habitat features.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Coulter's saltbush	*Atriplex coulteri*	Fed: State: CNPS:	-- -- 1B.2	A perennial herb native to California and Baja California, inhabiting coastal dunes, coastal strand, valley grassland, coastal sage scrub, and occasionally wetland communities. Blooms March-October (0-1,640 feet).	HP	**Presumed Absent:** There is a recent (2012) CNDDB occurrence of this species located approximately 1.3 miles north of the BSA. The BSA encompasses marginal patches of coastal scrub habitat that may support this species; however, no individuals of this species were observed during the biological survey conducted on August 10, 2023. As such, the species is presumed absent from the BSA.
Decumbent goldenbush	*Isocoma menziesii var. decumbens*	Fed: State: CNPS:	-- -- 1B.2	A shrub native to California and Baja California, inhabiting disturbed habitats, coastal sage scrub, and wetland-riparian communities. Blooms April-November (0-650 feet).	HP	**Presumed Absent:** There is a recent (2011) Calflora occurrence of this species located approximately 0.2 miles upstream (east) of the BSA. In addition, the BSA encompasses disturbed riparian and coastal sage scrub habitats that may be suitable for this species; however, the species was not observed within the BSA during biological surveys which were conducted during the blooming period for the species. The species is presumed absent from the BSA.
Del Mar manzanita	*Arctostaphylos glandulosa ssp. crassifolia*	Fed: State: CNPS:	E -- 1B.1	A perennial evergreen shrub inhabiting maritime sandy chaparral communities. Flowers December-June (0-1,200 feet).	A	**Presumed Absent:** There are no recent CNDDB occurrences within 10 miles of the BSA. In addition, the BSA does not encompass sandy chaparral habitat. The species is presumed absent due to a lack of locally suitable habitat features.
Delicate clarkia	*Clarkia delicata*	Fed: State: CNPS:	-- -- 1B.2	An annual herb native to California and Baja California, inhabiting gabbroic soils in chaparral, cismontane woodland, and foothill woodland communities. Blooms April-June (770-3,330 feet).	A	**Presumed Absent:** The BSA does not encompass gabbroic soils suitable for this species. Furthermore, the Project falls below the elevation range of the species. Due to the lack of locally suitable habitat as well as the species' pattern of occurrence, the species is presumed absent from the BSA.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Estuary seablite	*Suaeda esteroa*	Fed: State: CNPS:	-- -- 1B.2	A perennial herb native to California and Baja California, inhabiting coastal salt marsh and wetland-riparian communities. Blooms May-October (0-20 feet).	A	**Presumed Absent:** The BSA does not encompass suitable coastal salt marsh habitat that would serve to support this species. Furthermore, the Project falls outside of the elevation range of this species. The species is presumed absent due to a lack of locally suitable habitat.
Golden-spined cereus	*Bergerocactus emoryi*	Fed: State: CNPS:	-- -- 2B.2	A perennial stem succulent native to California and Baja California, inhabiting sandy soils in chaparral, coastal sage scrub, and closed-cone pine forest. Blooms May-June (10-1,300 feet).	A	**Presumed Absent:** The BSA does not encompass sandy soils suitable for this species. The species is presumed absent due to a lack of locally suitable habitat features.
Heart-leaved pitcher sage	*Lepechinia cardiophylla*	Fed: State: CNPS:	-- -- 1B.2	A shrub inhabiting chaparral, foothill woodlands and close-cone pine forest. Flowers April-July (2,000-3,940 feet).	A	**Presumed Absent:** The BSA does not encompass chaparral, foothill woodland, or close-cone pine forest habitat. Furthermore, the Project falls below the elevation range of the species. Due to the lack of locally suitable habitat as well as the species' pattern of occurrence, the species is presumed absent from the BSA.
Lewis' evening-primrose	*Camissoniopsis lewisii*	Fed: State: CNPS:	-- -- 3	An annual herb inhabiting sandy or clay soils of coastal grassland, coastal bluff scrub, cismontane woodland, coastal dunes, valley and foothill grassland, and coastal scrub communities. Flowers March- June (0-990 feet).	A	**Presumed Absent:** The BSA does not encompass sandy or clay soils that would support this species. The species is presumed absent due to a lack of locally suitable habitat features.
Light gray lichen	*Mobergia calculiformis*	Fed: State: CNPS:	-- -- 3	A crustose lichen native to California, inhabiting rocks in coastal scrub habitat.	A	**Presumed Absent:** There are no recent CNDDB occurrences within 10 miles of the BSA. Furthermore, the BSA does not encompass suitable rocky coastal scrub habitat. The species is presumed absent due to a lack of locally suitable habitat features.
Little mousetail	*Myosurus minimus ssp. apus*	Fed: State:	-- --	An annual herb inhabiting alkaline soils in valley and foothill grassland vernal	A	**Presumed Absent:** The BSA does not encompass any vernal pool habitat. The

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
		CNPS:	3.1	pool communities. Flowers March-June (65-2,100 feet).		species is presumed absent due to a lack of necessary habitat features.
Long-spined spineflower	*Chorizanthe polygonoides var. longispina*	Fed: State: CNPS:	-- -- 1B.2	An annual herb inhabiting meadows within chaparral, valley grasslands, and coastal sage scrub habitats. Flowers April-July (100-4,920 feet).	A	**Presumed Absent:** The BSA does not encompass any meadow habitat. The species is presumed absent due to a lack of locally suitable habitat features.
Mission Canyon bluecup	*Githopsis diffusa ssp. filicaulis*	Fed: State: CNPS:	-- -- 3.1	An annual herb native to California and Baja California, inhabiting disturbed areas in chaparral and wetlands. Blooms April-June (1,500-2,300 feet).	A	**Presumed Absent:** The Project falls below the elevation range of the species. Due to the species' pattern of occurrence, the species is presumed absent from the BSA.
Munz's sage	*Salvia munzii*	Fed: State: CNPS:	-- -- 2B.2	A shrub native to California and Baja California, inhabiting chaparral, and coastal sage scrub communities. Flowers February-April (380-3,500 feet).	A	**Presumed Absent:** There is a recent (2012) Calflora occurrence of this species located approximately 2 miles northeast of the Project. The BSA encompasses marginal patches of suitable coastal sage scrub habitat and is comprised of gravelly soils. However, no individuals of this species were observed during the biological survey conducted on August 10, 2023. As such, the species is presumed absent from the BSA.
Nuttall's acmispon	*Acmispon prostratus*	Fed: State: CNPS:	-- -- 1B.1	An annual herb native to California and Baja California, inhabiting dunes in coastal strand and coastal sage scrub communities. Blooms March-June (0-30 feet).	A	**Presumed Absent:** The BSA does not encompass dune habitat that this species is known to occupy. Furthermore, Calflora occurrences of this species are strictly limited to along the coastline. The species is presumed absent due to a lack of locally suitable habitat features as well as its pattern of occurrence.
Nuttall's scrub oak	*Quercus dumosa*	Fed: State: CNPS:	-- -- 1B.1	A perennial tree inhabiting sandy or clay loam soils within closed cone coniferous forest, chaparral, and coastal sage scrub communities. Flowers February- August (50-1,300 feet).	A	**Presumed Absent:** The BSA does not encompass any clay or sandy soils or the vegetation communities suitable for this species. The species is presumed absent due to a lack of necessary habitat features.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Oil neststraw	*Stylocline citroleum*	Fed: State: CNPS:	-- -- 1B.1	An annual herb inhabiting clay or open, stable, often crusted sand soils of chenopod scrub, coastal scrub, and valley and foothill grassland communities. Flowers March-April (160-1,300 feet).	A	**Presumed Absent:** The BSA does not encompass any clay or sandy soils suitable for this species. The species is presumed absent due to a lack of necessary habitat features.
Orcutt's brodiaea	*Brodiaea orcuttii*	Fed: State: CNPS:	-- -- 1B.1	A perennial herb native to California and Baja California, inhabiting meadows and vernal pools and associated with creosote bush scrub and wetland-riparian communities. Blooms May-July (0-5,300 feet).	A	**Presumed Absent:** The BSA does not encompass any meadow or vernal pool habitat. The species is presumed absent due to a lack of necessary habitat features.
Orcutt's pincushion	*Chaenactis glabriuscula var. orcuttiana*	Fed: State: CNPS:	-- -- 1B.1	An annual herb inhabiting coastal dunes and sandy coastal bluff scrub communities. Flowers January-August (0-330 feet).	A	**Presumed Absent:** The BSA does not encompass coastal dunes or sandy coastal bluff scrub habitat. The species is presumed absent due to a lack of locally suitable habitat features.
Orcutt's spineflower	*Chorizanthe orcuttiana*	Fed: State: CNPS:	E E 1B.1	An annual herb endemic to California, inhabiting openings in chaparral, coastal sage scrub, and closed-cone pine forest communities. Flowers March-May (200-650 feet).	A	**Presumed Absent:** There are no known occurrences of this species throughout the San Diego River corridor. In addition, the Project falls below the elevation range for this species. Marginal patches of coastal sage scrub are interspersed within the riparian corridor encompassed by the BSA; however, these patches are marginal, highly disturbed, and are not likely to support this species. The species is presumed absent due to a lack of locally suitable habitat features.
Otay Mesa mint	*Pogogyne nudiuscula*	Fed: State: CNPS:	E E 1B.1	An annual herb native to California and Baja California, inhabiting vernal pools in chaparral, coastal sage scrub, freshwater wetlands, and wetland-riparian habitats. Flowers May-July (300-820 feet).	A	**Presumed Absent:** The BSA does not encompass any vernal pool habitat. The species is presumed absent due to a lack of necessary habitat features.
Otay Mountain ceanothus	*Ceanothus otayensis*	Fed: State: CNPS:	-- -- 1B.2	A perennial evergreen shrub native to California, inhabiting metavolcanic or gabbroic soils in chaparral	A	**Presumed Absent:** The BSA does not encompass metavolcanic or gabbroic soils. In addition, the Project falls below

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				communities. Blooms January-April (2,000-3,600 feet).		the elevation range of the species. Due to the lack of locally suitable habitat as well as the species' pattern of occurrence, the species is presumed absent from the BSA.
Palmer's goldenbush	*Ericameria palmeri var. palmeri*	Fed: State: CNPS:	-- -- 1B.1	A shrub native to California and Baja California, inhabiting mesic soils in chaparral and coastal sage scrub communities. Flowers September-November (0-2,000 feet).	A	**Presumed Absent:** There is a historic (1883) Calflora occurrence of this species located 0.6 miles upstream (east) of the Project. The BSA encompasses marginal patches of sage scrub habitat that may be suitable for this species; however, no individuals of this species were observed during the biological survey conducted on August 10, 2023. As such, the species is presumed absent from the BSA.
Prostrate vernal pool navarretia	*Navarretia prostrata*	Fed: State: CNPS:	-- -- 1B.2	An annual herb inhabiting vernal pool, coastal scrub, meadows and seeps, and alkaline valley and foothill grassland communities. Flowers April-July (50-2,300 feet).	A	**Presumed Absent:** The BSA does not encompass any vernal pool, meadow, seep, or alkaline valley/foothill grassland habitat. The species is presumed absent due to a lack of necessary habitat features.
Purple stemodia	*Stemodia durantifolia*	Fed: State: CNPS:	-- -- 2B.1	A small perennial herb found on wet sand or rocks within riparian habitats in the foothills surrounding Palm Springs and San Diego. Blooms year round (0-1,300 feet).	A	**Presumed Absent:** The BSA does not encompass wet sand that this species typically occupies. In addition, no individuals of this species were observed during the biological survey conducted on August 10, 2023. As such, the species is presumed absent from the BSA.
Salt marsh bird's-beak	*Chloropyron maritimum ssp. maritimum*	Fed: State: CNPS:	E E 1B.2	An annual herb inhabiting coastal dunes, marshes, and swamp communities. Flowers March-May (0-100 feet).	A	**Presumed Absent:** The BSA does not encompass any coastal dune, marsh, or swamp habitat. The species is presumed absent due to a lack of necessary habitat features.
Salt spring checkerbloom	*Sidalcea neomexicana*	Fed: State: CNPS:	-- -- 2B.2	A perennial herb inhabiting alkaline, mesic soils within alkaline springs, marshes, chaparral, coastal scrub,	A	**Presumed Absent:** The BSA does not encompass suitable alkaline soils that this species is known to occupy. The

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				lower montane coniferous forest, Mojavean desert scrub, and playas. Blooms March-June (50-5,020 feet).		species is presumed absent due to a lack of necessary habitat features.
San Diego ambrosia	*Ambrosia pumila*	Fed: State: CNPS:	E -- 1B.1	A perennial rhizomatous herb inhabiting sandy loams, clay, and occasionally alkaline soils within chaparral, coastal scrub, valley and foothill grassland, and vernal pool communities. Flowers April-October (65-1,360 feet).	A	**Presumed Absent:** There is a historic (1897) Calflora occurrence of this species located approximately 0.6 miles upstream (east) of the BSA. The BSA does not encompass sandy loam, clay, or alkaline soils that may support this species. Furthermore, no individuals of this species were observed during the biological survey conducted on August 10, 2023. As such, the species is presumed absent from the BSA. Due to the lack of locally suitable habitat and with no recent local occurrences, the species is presumed absent from the BSA.
San Diego barrel cactus	*Ferocactus viridescens*	Fed: State: CNPS:	-- -- 2B.1	A shrub (stem succulent) native to California and Baja California, inhabiting sandy to rocky areas and vernal pools in chaparral, valley grassland, coastal sage scrub, and freshwater wetland communities. Flowers May-June (30-500 feet).	A	**Presumed Absent:** The BSA does not encompass any vernal pool habitat. The species is presumed absent due to a lack of necessary habitat features.
San Diego button-celery	*Eryngium aristulatum var. parishii*	Fed: State: CNPS:	E E 1B.1	An annual or perennial herb inhabiting vernal pools and marshes, or mesically in coastal scrub, and valley and foothill grassland communities. Flowers April-June (65-2,030 feet).	A	**Presumed Absent:** The BSA does not encompass any vernal pool or marsh habitat. The species is presumed absent due to a lack of necessary habitat features.
San Diego goldenstar	*Bloomeria clevelandii*	Fed: State: CNPS:	-- -- 1B.1	A perennial herb native to California, inhabiting vernal pools in coastal sage scrub, chaparral, valley grassland, and freshwater wetlands. Flowers April-May (0-330 feet).	A	**Presumed Absent:** The BSA does not encompass any vernal pool habitat. The species is presumed absent due to a lack of necessary habitat features.
San Diego gumplant	*Grindelia hallii*	Fed: State: CNPS:	-- -- 1B.2	A perennial herb endemic to California, inhabiting meadows in chaparral, valley grassland, foothill grassland, and	A	**Presumed Absent:** The Project falls below the elevation range of the species and occurrences of this species are

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				yellow pine forest communities. Flowers July-October (600-5,700 feet).		concentrated in the foothills of the Cuyamaca Rancho State Park, 30 miles east of the BSA. Due to the species' pattern of occurrence, the species is presumed absent from the BSA.
San Diego marsh-elder	*Iva hayesiana*	Fed: State: CNPS:	-- -- 2B.2	A perennial herb native to California and Baja California, inhabiting depressions and streambanks in alkali sink and wetland-riparian communities. Flowers April-October (0-3,000 feet).	A	**Presumed Absent:** The BSA does not encompass any alkali streambanks or local depressions that could host this species. In addition, no individuals of this species were observed during the biological survey conducted on August 10, 2023. The species is presumed absent due to a lack of locally suitable habitat features.
San Diego mesa-mint	*Pogogyne abramsii*	Fed: State: CNPS:	E E 1B.1	An annual herb endemic to California, inhabiting vernal pools in chaparral, coastal sage scrub, freshwater wetland, and wetland-riparian communities. Flowers March-July (300-660 feet).	A	**Presumed Absent:** The BSA does not encompass any vernal pool habitat. The species is presumed absent due to a lack of necessary habitat features.
San Diego sand aster	*Corethrogyne filaginifolia var. incana*	Fed: State: CNPS:	-- -- 1B.1	A perennial herb native to California and Baja California, inhabiting coastal sage scrub, coastal bluff scrub, and chaparral communities. Flowers June-September (10-380 feet).	A	**Presumed Absent:** The BSA encompasses marginal patches of coastal sage scrub habitat. However, documented occurrences of this species are limited to directly along the coastline. In addition, no individuals of this species were observed during the biological survey conducted on August 10, 2023. As such, the species is presumed absent from the BSA.
San Diego thornmint	*Acanthomintha ilicifolia*	Fed: State: CNPS:	T E 1B.1	An annual herb inhabiting vernal pools, and clay soils and openings within chaparral, valley and foothill grassland, and coastal-sage scrub communities. Flowers April-June (30-3,150 feet).	A	**Presumed Absent:** The BSA does not encompass any vernal pool habitat. The species is presumed absent due to a lack of necessary habitat features.
Sand-loving wallflower	*Erysimum ammophilum*	Fed: State: CNPS:	-- -- 1B.2	A perennial herb inhabiting sandy openings of maritime chaparral, coastal dunes, and coastal scrub communities. Flowers February-June (0-200 feet).	A	**Presumed Absent:** The BSA does not include sandy soils that would support this species. The species is presumed

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
						absent due to a lack of necessary habitat features.
Sea dahlia	*Leptosyne maritima*	Fed: State: CNPS:	-- -- 2B.2	A perennial herb inhabiting coastal bluff scrub and coastal scrub communities. Flowers March-May (15-500 feet).	A	**Presumed Absent:** The BSA encompasses marginal patches of coastal sage scrub habitat. However, no individuals of this species were observed during the biological survey conducted on August 10, 2023. As such, the species is presumed absent from the BSA.
Short-leaved dudleya	*Dudleya brevifolia*	Fed: State: CNPS:	-- E 1B.1	A perennial herb endemic to California, inhabiting bare sandstone terraces and openings in chaparral and coastal sage scrub communities. Flowers April-May (0-820 feet).	A	**Presumed Absent:** The BSA does not encompass bare sandstone terraces that would support this species. The species is presumed absent due to a lack of locally suitable habitat.
Singlewhorl burrobrush	*Ambrosia monogyra*	Fed: State: CNPS:	-- -- 2B.2	A perennial shrub inhabiting sandy soils within chaparral and Sonoran desert scrub communities. Blooms August-November (30-1,640 feet).	A	**Presumed Absent:** The BSA does not occur within the Sonoran Desert and does not encompass sandy soils or chaparral habitat. The species is presumed absent due to a lack of locally suitable habitat.
South coast saltscale	*Atriplex pacifica*	Fed: State: CNPS:	-- -- 1B.2	An annual herb inhabiting coastal bluff scrub, coastal dunes, coastal scrub, and playa communities. Flowers March-October (0-460 feet).	A	**Presumed Absent:** Marginal patches of coastal sage scrub are interspersed within the riparian corridor encompassed by the BSA; however, these patches are marginal, highly disturbed, and are not likely to support this species. Furthermore, this species is known to occur in playas and along the coast, which does not include the BSA. The species is presumed absent due to a lack of locally suitable habitat.
Spreading navarretia	*Navarretia fossalis*	Fed: State: CNPS:	T -- 1B.1	An annual herb inhabiting vernal pools, chenopod scrub, playas, and shallow freshwater marsh and swamp communities. Flowers April-June (100-4,300 feet).	A	**Presumed Absent:** The nearest recent (2011) CNDDB occurrence of this species is located approximately 4.7 miles north of the BSA. The BSA does not encompass vernal pool, chenopod scrub, playa, marsh, or swamp habitat;

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
						as such, the species is presumed absent due to a lack of locally suitable habitat.
Sticky dudleya	*Dudleya viscida*	Fed: State: CNPS:	-- -- 1B.2	A perennial herb inhabiting rocky soils on bluffs and cliffs within coastal bluff scrub, chaparral, cismontane woodland, and coastal scrub communities. Flowers May-June (30-1,800 feet).	A	**Presumed Absent:** There are no recent CNDDB occurrences of this species within 10 miles of the BSA. Furthermore, the BSA does not encompass rocky soils, cliffs, or bluffs that this species is known to occupy. Due to the lack of locally suitable habitat and with no local occurrences, the species is presumed absent from the BSA.
Summer holly	*Comarostaphylis diversifolia ssp. diversifolia*	Fed: State: CNPS:	-- -- 1B.2	A perennial evergreen shrub inhabiting coastal chaparral communities. Flowers April-June (100-2,600 feet).	A	**Presumed Absent:** There is a recent (2006) CNDDB occurrence located approximately 2.25 miles east of the BSA. The BSA does not encompass coastal chaparral habitat that this species is known to occupy. Furthermore, this species was not observed within the BSA during the biological survey conducted on August 10, 2023. The species is presumed absent from the BSA.
Variegated dudleya	*Dudleya variegata*	Fed: State: CNPS:	-- -- 1B.2	A perennial herb native to California and Baja California, inhabiting clay soils and vernal pools in freshwater wetland, chaparral, valley grassland, foothill woodland, and coastal sage scrub habitats. Flowers April-June (10-1,900 feet).	A	**Presumed Absent:** The BSA does not encompass clay soils or vernal pool habitat. The species is presumed absent due to a lack of locally suitable habitat.
Wart-stemmed ceanothus	*Ceanothus verrucosus*	Fed: State: CNPS:	-- -- 2B.2	A perennial evergreen shrub inhabiting rocky slopes in chaparral communities. Flowers December-May (0-1,200 feet).	A	**Presumed Absent:** There is a historic (1932) Calflora occurrence of this species located 0.5 miles upstream (east) of the BSA. The BSA does not encompass any rocky slopes within a chaparral habitat community, which this species is known to occupy. Furthermore, this species was not observed within the BSA during the

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
						biological survey conducted on August 10, 2023. The species is presumed absent due to a lack of locally suitable habitat.
Willowy monardella	*Monardella viminea*	Fed: State: CNPS:	E E 1B.1	A perennial herb native to California, inhabiting alluvial ephemeral washes in chaparral, coastal scrub, riparian forest, riparian scrub, and riparian woodland habitats. Blooms June-August (160-740 feet).	A	**Presumed Absent:** There are numerous recent CNDDB occurrences of this species in the drainages approximately 5 miles north of the BSA. However, the BSA does not encompass alluvial ephemeral wash habitat that this species occupies. In addition, this species was not observed within the BSA during the biological survey conducted on August 10, 2023. Due to the lack of locally suitable habitat, the species is presumed absent from the BSA.
Woven-spored lichen	*Texosporium sancti-jacobi*	Fed: State: CNPS:	-- -- 3	A crustose lichen native to California, inhabiting basalt, granite, and mixed non-calcareous alluvium substrates in chaparral openings, arid to semi-arid grasslands, shrublands, and savannas. The species is associated with *Poa sandbergii*, *Agropyron spicatum*, *Sitanion hystrix*, and *Stipa sp*. in northern California, and *Adenostoma fasciculatum*, *Festuca octoflora*, *Bromus rubens*, *Eriogonum fasciculatum*, and *Pinus sabiniana* in southern California (200-2,200 feet).	A	**Presumed Absent:** The BSA does not include basalt, granite, or alluvium substrate that this species is known to occupy. In addition, none of the associated species were observed within the BSA during the biological survey conducted on August 10, 2023. The species is presumed absent due to a lack of locally suitable habitat features.

Federal Designations (Fed): (FESA, USFWS) **E:** Federally listed, endangered **T:** Federally listed, threatened **DL**: Federally listed, delisted	**State Designations (CA):** (CESA, CDFW) **E:** State-listed, endangered **T:** State-listed, threatened
Other Designations CDFW_SSC: CDFW Species of Special Concern CDFW_FP: CDFW Fully Protected **California Native Plant Society (CNPS) Designations:** ***Note: according to CNPS (Skinner and Pavlik 1994), plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10 of the California Fish and Game Code. This interpretation is inconsistent with other definitions.*** **1A:** Plants presumed extinct in California. **1B:** Plants rare and endangered in California and throughout their range. **2:** Plants rare, threatened, or endangered in California but more common elsewhere in their range. **3:** Plants about which need more information; a review list. **Plants 1B, 2, and 4 extension meanings:** **_.1 Seriously** endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat) **_.2 Fairly** endangered in California (20-80% occurrences threatened) **_.3** Not very endangered in California (<20% of occurrences threatened or no current threats known)	
Habitat Potential Absent [A] – No habitat present and no further work needed. Habitat Present [HP] – Habitat is or may be present. The species may be present. Critical Habitat [CH] – Project is within designated Critical Habitat.	
Potential for Occurrence Criteria: **Present**: Species was observed on site during a site visit or focused survey. **High**: Habitat (including soils and elevation factors) for the species occurs on site and a known occurrence has been recorded within 5 miles of the site. **Low**: Low quality habitat (may include soils and elevation factors) for the species occurs on site and a known occurrence exists within 5 miles of the site **Moderate**: Suitable habitat strongly associated with the species occurs on site, but no records were found within the database search. **Presumed Absent**: Focused surveys were conducted, and the species was not found, or species was found within the database search but habitat (including soils and elevation factors) do not exist on site, or the known geographic range of the species does not include the survey area.	
Source: (CDFW 2023b), (CNPS 2023), (Calflora 2023), (Jepson 2023), (USFWS 2023).	

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4. Results: Biological Resources, Discussion of Impacts, and Mitigation

4.1 Habitats and Natural Communities of Special Concern

Habitats are considered to be of special concern based on federal, state, or local laws regulating their development; limited distributions; and/or the habitat requirements of special status plants or animals occurring on site. Within the BSA, the willow riparian habitat and upland riparian habitat associated with the San Diego River have been identified as natural communities of special concern by CDFW. In addition, the coastal sage scrub habitat located directly east of the Project limits may provide suitable habitat for a variety of special status wildlife species. Table 3. Impacts to Sensitive Natural Habitats and Figure 5. Project Impacts outline the impacts to sensitive habitat communities within the BSA. Project impacts and the associated avoidance, minimization, and mitigation measures for the riparian corridor and coastal sage scrub habitat are discussed in their respective sections below.

Table 3. Impacts to Sensitive Natural Habitats

Impact Type (acres)	Sensitive Natural Habitat		
	Upland Riparian	**Willow Riparian**	**Coastal Sage Scrub**
Temporary	0.27 acres	0 acres	0 acres
Permanent	0 acres	0 acres	0 acres
Total	**0.27 acres**	**0 acres**	**0 acres**

4.1.1 Discussion of Upland Riparian

Riparian habitat is considered a natural community of special concern through CDFW. Riparian communities are associated with floodplains and occur as a transitional habitat between wetted areas and upland habitat types. Upland riparian habitat communities include mature woodland canopies of cottonwoods, sycamores, and oaks with an understory dominated by chaparral species such as buckwheat, sumac, and ceanothus species. Upland riparian habitat is of ecological importance as it provides food, water, and shelter for wildlife, including a variety of sensitive species (CDFW 1988).

<u>Survey Results for Upland Riparian</u>

Within the BSA, upland riparian habitat occurs as a linear feature directly south of the MTS Rio Vista station and along the margins of the San Diego River Parkway Trail. This habitat community is largely comprised of coast live oak and Fremont cottonwood trees with an understory of chaparral species such as lemonade berry, California buckwheat, laurel sumac, and toyon. Upland riparian habitat comprises approximately 1.39 acres of the BSA.

<u>Project Impacts to Upland Riparian</u>

Approximately 0.27 acres of upland riparian habitat will be temporarily impacted during construction to allow for construction access to the proposed work area. Riparian vegetation directly south of the Rio Vista Station platform will be removed and a temporary access road will be graded from the San Diego River Parkway to allow construction access to the platform. Following the conclusion of the Project, temporary impacts to upland riparian habitat will be restored to pre-construction conditions in accordance with the FSDRIP. No permanent impacts to upland riparian habitat will result from the proposed platform improvements.

Avoidance and Minimization Efforts for Upland Riparian

The Project will be consistent with the Development and Mitigation Guidelines outlined in the NRMP of the FSDRIP (see Appendix G). In addition, the implementation of avoidance and minimization measures BIO-1 through BIO-6 will reduce impacts to the riparian corridor.

BIO-1: Every individual working on the Project must attend a biological awareness training session delivered by a biologist. This training program shall include information regarding the sensitive habitats and special status species occurring or potentially occurring within the Project area, and the importance of avoiding impacts to these species and their habitat.

BIO-2: Prior to the start of construction activities, the Project limits within the San Diego River Parkway will be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking in accordance with the FSDRIP to ensure construction will not further encroach into sensitive resources.

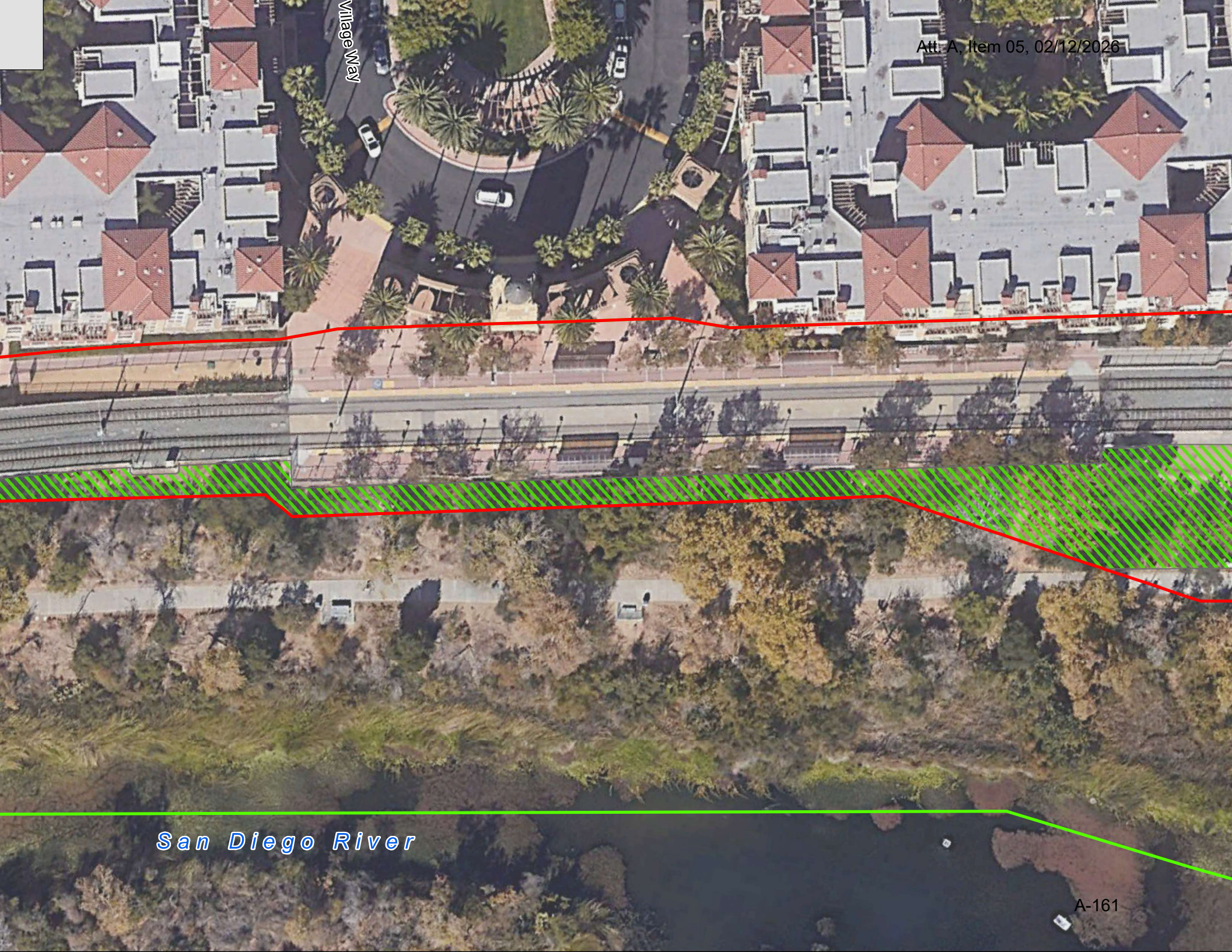
BIO-3: Best Management Practices (BMPs) will be incorporated into Project design and Project management to minimize impacts on the environment including erosion and the release of pollutants (e.g., oils, fuels):

- Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities;
- All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters;
- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters;
- All erosion control measures, and storm water control measures would be properly maintained until the site has returned to a pre-construction state;
- All construction materials would be hauled off-site after completion of construction.

BIO-4: Vegetation removal will be avoided to the greatest extent practicable. Where feasible, trees and shrubs will be trimmed rather than removed.

BIO-5: Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants must remain outside of sensitive habitat marked with high-visibility fencing. Any necessary equipment washing must occur where the water cannot flow into sensitive habitat communities.

BIO-6: A chemical spill kit must be kept onsite and available for use in the event of a spill.


Village Way
San Diego River

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Compensatory Mitigation for Upland Riparian

No permanent impacts to upland riparian habitat are anticipated. Temporary impacts will be returned to pre-construction conditions following the completion of construction activities and revegetated in accordance with avoidance and minimization measure BIO-7:

BIO-7: MTS will develop a post-construction revegetation and monitoring plan to restore the Project's temporary impacts to riparian vegetation. Revegetation of the temporarily impacted Project areas will be conducted in accordance with the Development and Mitigation Guidelines outlined in the NRMP of the FSDRIP. The revegetation plan, monitoring period, and associated success criteria will be determined in coordination with CDFW during the permitting phase of the Project.

4.1.2 Discussion of Willow Riparian

Similar to upland riparian habitat, willow riparian habitat is a transitional habitat feature that is considered a natural community of special concern through CDFW. This vegetation community is distinctly dominated by willows, but also includes other plant species typical to riparian corridors such as cottonwoods, sycamores, coyote brush, and oaks. Willow riparian habitat is of ecological importance as it provides food, water, and shelter for wildlife, including a variety of sensitive species (CDFW 1988).

Survey Results for Willow Riparian

Within the BSA, willow riparian habitat occurs as a linear feature between the San Diego River Parkway Trail and the river itself. This habitat community is dominated by Goodding's willow but is also composed of coast live oak and Fremont cottonwood trees with an understory of coyote brush, California grape, and a variety of other typical riparian species. Willow riparian habitat comprises approximately 0.68 acres of the BSA.

Project Impacts to Willow Riparian

With the implementation of avoidance and minimization measures BIO-1 through BIO-6, Project activities will be excluded from willow riparian habitat and no impacts to willow riparian habitat will result from this project.

Avoidance and Minimization Efforts for Willow Riparian

The Project will be consistent with the Development and Mitigation Guidelines outlined in the NRMP of the FSDRIP (see Appendix G). With the implementation of avoidance and minimization measures BIO-1 through BIO-6, no impacts to willow riparian habitat will result from this project.

Compensatory Mitigation for Willow Riparian

No temporary or permanent impacts to willow riparian habitat are anticipated to result from the Project. No compensatory mitigation for willow riparian habitat is proposed.

4.1.3 Discussion of Coastal Sage Scrub

Coastal sage scrub is predominantly comprised of low to moderate-sized shrubs that provide a dense canopy of cover where it occurs. This habitat community is tolerant to drier conditions and is typical of areas with slopes, sandier soils, and a low average rainfall (between 12-24 inches

annually). Near San Diego, coastal sage scrub may grow to seven feet in height and is dominated by species such as California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), and wooly sunflower (*Eriophyllum lanatum*) (CDFW 1988).

Survey Results for Coastal Sage Scrub

Within the BSA, coastal sage scrub habitat is limited to an isolated fragment south of the Green Line and directly adjacent to Qualcomm Way. Vegetation in this area is comprised largely of desert broom (*Genista monspessulana*), crown daisy (*Glebionis coronaria*), and California sagebrush. This habitat community is highly disturbed by rock slope protection that was incorporated in the slope during the construction of the Rio Vista Station in 1999 (Appendix F. Representative Photographs). Coastal sage scrub habitat comprises approximately 0.09 acres of the BSA.

Project Impacts to Coastal Sage Scrub

With the implementation of avoidance and minimization measures BIO-1 through BIO-6, Project activities will be excluded from coastal sage scrub habitat and no impacts to coastal sage scrub habitat will result from this project.

Avoidance and Minimization Efforts for Coastal Sage Scrub

The Project will be consistent with the Development and Mitigation Guidelines outlined in the NRMP of the FSDRIP (see Appendix G). With the implementation of avoidance and minimization measures BIO-1 through BIO-6, no impacts to coastal sage scrub habitat will result from this project.

Compensatory Mitigation for Coastal Sage Scrub

No temporary or permanent impacts to coastal sage scrub habitat are anticipated to result from the Project. No compensatory mitigation for coastal sage scrub habitat is proposed.

4.2 Special Status Plant Species

Prior to field surveys, a list of regional special status plant species with potential to occur within the Project vicinity was compiled from database searches. The potential for each species to occur within the BSA was determined by analyzing the habitat requirements of each species and comparing the habitat requirements to available habitat within the BSA. After a careful comparison between habitat requirements and the habitat available within the BSA, no special status plants are anticipated to occur within the BSA. As such, no impacts to special status plants species will result from the construction of this Project.

4.3 Special Status Wildlife Species

Prior to field surveys, a list of regional special status wildlife species with potential to occur within the Project vicinity was compiled from database searches. The potential for each species to occur within the BSA was determined by analyzing the habitat requirements of each species and comparing the habitat requirements to available habitat within the BSA. After a careful comparison between habitat requirements and the habitat available within the BSA, eight special status wildlife species may occur within the BSA. Discussion regarding each species is included below.

4.3.1 Discussion of Southwestern Willow Flycatcher

The southwestern willow flycatcher is a state and federally endangered species This species is a migratory passerine that breeds in the southwestern United States and winters in Mexico, Central America, and potentially in northern areas of South America (Sogge et al. 1997). The southwestern willow flycatcher is one of four subspecies found in North America and is difficult to distinguish from the other subspecies except for its distinct song. This subspecies of willow flycatcher is light gray in color with white wing bars and is generally paler in overall color than its counterparts. Subtle differences between the southwestern subspecies and other subspecies exist in bill length, wing to tail ratio, and other morphological features.

Southwestern willow flycatchers breed in riparian habitats characterized by dense vegetation within close proximity to open water or saturated soil. Vegetation structure and size of the riparian stand, rather than vegetation species, is more indicative of flycatcher breeding habitat. Flycatchers have not been known to breed in linear habitats less than 33 ft wide, however, this size and shape of habitat appears to be suitable for migratory use (Sogge et al 1997).

Southwestern willow flycatchers are threatened by breeding habitat loss, fragmentation, and modification due to recreational, urban, and agricultural development. Surface water diversion, grazing livestock, and invasion of exotic plant species within breeding habitats also contribute to habitat loss. Brood parasitism by brown headed cowbirds contributes to the widespread and significant loss of southwestern willow flycatchers throughout the breeding habitats.

<u>Survey Results for Southwestern Willow Flycatcher</u>

The Project occurs within the anticipated range of southwestern willow flycatcher. No designated critical habitat for this species is located within the proposed Project Area. Within 10 miles of the BSA, there are numerous recent eBird occurrences of this species confirmed with photo identification. Furthermore, the BSA includes suitable dense riparian habitat adjacent to the San Diego River. The species may have a low potential to occur within the BSA due to the presence of locally suitable habitat.

<u>Project Impacts to Southwestern Willow Flycatcher</u>

Incidental take of coastal southwestern willow flycatcher is not permitted without prior authorization under Section 7 or Section 10 Consultation with the USFWS, as well as consultation under Section 2081 ITP from CDFW. Riparian vegetation may serve as potentially suitable nesting and/or foraging habitat for this species. Approximately 0.27 acres of riparian habitat will be temporarily impacted during construction to allow for construction access to the proposed work area.

Riparian vegetation directly south of the Rio Vista Station platform will be removed and a temporary access road will be graded from the San Diego River Parkway to allow construction access to the platform. Following the conclusion of the Project, temporary impacts to the riparian corridor will be restored to pre-construction conditions in accordance with the FSDRIP. No permanent impacts to riparian habitat will result from the proposed platform improvements.

Avoidance and Minimization Efforts for Southwestern Willow Flycatcher

T The Project will be consistent with the Development and Mitigation Guidelines outlined in the NRMP of the FSDRIP (see Appendix G). In addition to avoidance and minimization measures BIO-1 through BIO-4, the implementation of the following measures will ensure there are no Project-related impacts to southwestern willow flycatcher. No permanent impacts to the species are anticipated; therefore, consultation with the USFWS and CDFW is not required.

BIO-8: Prior to vegetation removal or initial ground disturbance during the nesting bird season (February 1 – September 30) a pre-construction nesting bird survey must be conducted by a Project biologist prior to the start of work. The nesting bird survey must include the Project area plus a 250-foot buffer. Within 2 weeks of the nesting bird survey, all areas surveyed by the biologist must be cleared by the contractor or a supplemental nesting bird survey is required.

A minimum 100 foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 300 foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the buffer area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the Project biologist and in coordination with wildlife agencies) in the buffer area until a qualified biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by the Project biologist and approved by CDFW.

BIO-9: To avoid impacts to special status migratory birds, clearing, grubbing, grading, and other Project-related construction activities shall occur between September 15 and February 15, outside the southwestern willow flycatcher breeding season (April 15–August 31), the coastal California gnatcatcher breeding season (February 15–August 15), and the least Bell's vireo breeding season (March 15–September 15). No incidental take of the above species is permitted by this Project.

Compensatory Mitigation for Southwestern Willow Flycatcher

No permanent impacts to southwestern willow flycatcher habitat are anticipated. Temporary impacts will be returned to pre-construction conditions following the completion of construction activities and revegetated in accordance with avoidance and minimization measure BIO-7. No compensatory mitigation for southwestern willow flycatcher is proposed.

4.3.2 Discussion of Coastal California Gnatcatcher

Coastal California gnatcatcher is a federally threatened species under the FESA and listed as a Species of Special Concern (SSC) under CDFW. Coastal California gnatcatcher is a small, non-migratory songbird that occurs along the Pacific coastal regions of southern California and northern Baja California, Mexico (Zink et al. 2000). The range and distribution of the gnatcatcher is closely aligned with coastal scrub vegetation, but the species is known to use adjacent habitats for foraging and dispersal. The breeding season of the coastal California gnatcatcher extends from about February 15 through August 30, with the peak of nesting activity occurring from mid-March through mid-May. Among the threats contributing to the coastal California gnatcatcher's decline are habitat destruction due to housing development, shopping malls, and farmlands. In addition, nesting attempts often fail, partly because of brown-headed cowbird (*Molothurs ater*) nest parasitism, wildfire, and grazing.

Survey Results for Coastal California Gnatcatcher

The BSA encompasses a marginal patch of arid coastal sage scrub habitat. In addition, the San Diego River riparian corridor may provide marginally suitable foraging and dispersal habitat for this species. No designated critical habitat for this species is located within the proposed Project Area (Figure 3). There are numerous local CNDDB occurrences in the vicinity of the BSA, including a 2003 occurrence located 0.42 miles northeast of the BSA. Due to the presence of marginally suitable habitat as well as the recent local occurrences, the species may have a low potential to occur within the BSA.

Project Impacts to Coastal California Gnatcatcher

Incidental take of coastal California gnatcatcher is not permitted without prior authorization under Section 7 or Section 10 Consultation with the USFWS. Riparian vegetation may serve as potentially suitable nesting and/or foraging habitat for this species. Riparian vegetation directly south of the Rio Vista Station platform will be removed and a temporary access road will be graded from the San Diego River Parkway to allow construction access to the platform. Approximately 0.27 acres of riparian habitat will be temporarily impacted during construction to allow for construction access to the proposed work area; however, all clearing, grubbing, grading, and other Project-related construction activities shall occur outside the coastal California gnatcatcher breeding season (February 15 – August 15).

Following the conclusion of the Project, temporary impacts to the riparian corridor will be restored to pre-construction conditions in accordance with the FSDRIP. No permanent impacts to riparian habitat will result from the proposed platform improvements and therefore, no permanent impacts to the species are anticipated. Consultation with USFWS is not required.

Avoidance and Minimization Efforts for Coastal California Gnatcatcher

The Project will be consistent with the Development and Mitigation Guidelines outlined in the NRMP of the FSDRIP (see Appendix G). In addition to avoidance and minimization measures BIO-1 through BIO-4, the implementation of measures BIO-8 and BIO-9 will ensure that Project-related impacts to coastal California gnatcatcher are minimized to the greatest extent feasible. No permanent impacts to the species are anticipated; therefore, consultation with the USFWS is not required.

Compensatory Mitigation for Coastal California Gnatcatcher

No permanent impacts to coastal California gnatcatcher habitat are anticipated. Temporary impacts will be returned to pre-construction conditions following the completion of construction activities and revegetated in accordance with avoidance and minimization measure BIO-7. No compensatory mitigation for coastal California gnatcatcher is proposed.

4.3.3 Discussion of Least Bell's Vireo

The least Bell's vireo is a state and federally endangered species. . The least Bell's vireo can be found in Inyo, Santa Barbara, Ventura, Riverside, Orange, San Bernardino, and San Diego Counties. In San Diego County, the Santa Margarita River supports nearly half of the U.S. population. This species occurs in riparian habitats and typically breeds in willow riparian woodland habitat supporting a dense, shrubby understory of mulefat and other mesic species. The species breeds in a few scattered areas of riparian habitat in southern California, primarily along the coast and the western edge of the Mojave Desert. The species requires dense riparian shrubbery, such as willow and wild rose, for nest construction and prefers to nest where flowing water is present. The decline of the species is attributed to land development, water diversion, recreational activities, and excessive grazing continue to impact the remaining riparian systems that support least Bell's vireos. As a result, the birds are forced into marginal nesting areas, where they are more vulnerable to parasitism by the brown-headed cowbird, a brood parasite (Franzreb 1989).

Survey Results for Least Bell's Vireo

This species prefers a dense nesting substrate, such as willow and wild rose, near flowing water for nest construction. Within the BSA, the willow riparian habitat located adjacent to the San Diego River provides a dense nesting substrate that may be suitable for nesting least Bell's vireo. In addition, there are numerous recent CNDDB occurrences of this species within the San Diego River corridor, including a recent (2011) occurrence located directly upstream of the Project. Due to the presence of locally suitable habitat as well as the recent local occurrences, the species may have a high potential to nest within the willow riparian habitat located adjacent to the San Diego River. No designated critical habitat for this species is located within the proposed Project Area.

Project Impacts to Least Bell's Vireo

Due to the presence of locally suitable habitat as well as the recent local occurrence, the species may have a high potential to occur within the BSA. As such, incidental take of this species is not permitted without prior authorization under Section 7 or Section 10 Consultation with the USFWS. Approximately 0.27 acres of upland riparian habitat will be temporarily impacted during construction to allow for construction access to the proposed work area; however, all clearing, grubbing, grading, and other Project-related construction activities shall occur outside the least Bell's vireo breeding season (March 15–September 15). Following the conclusion of the Project, temporary impacts to upland riparian habitat will be restored to pre-construction conditions in accordance with the FSDRIP. No permanent impacts to the species are anticipated; therefore, consultation with the USFWS and an incidental take permit from CDFW is not required.

Avoidance and Minimization Efforts for Least Bell's Vireo

The Project will be consistent with the Development and Mitigation Guidelines outlined in the NRMP of the FSDRIP (see Appendix G). With the implementation of avoidance and minimization measures BIO-1 through BIO-4, Project activities will be excluded from willow riparian habitat and be restricted to north of the San Diego River Parkway Trail. No impacts to willow riparian habitat will result from this Project. Furthermore, Project activities will be limited to outside the least Bell's vireo breeding season in accordance with avoidance and minimization measure BIO-9, minimizing indirect construction impacts to the species.In addition to avoidance and minimization measures BIO-1 through BIO-4, the implementation of measures BIO-8 and BIO-9 will ensure that Project-related impacts occur outside the least Bell's vireo breeding season, minimizing impacts to the greatest extent feasible.

Compensatory Mitigation for Least Bell's Vireo

As previously discussed, Project-related impacts would occur outside the least Bell's vireo breeding season; therefore, no temporary or permanent impacts to least Bell's vireo habitat are anticipated. No compensatory mitigation for least Bell's vireo is proposed.

4.3.4 Discussion of Least Bittern

The least bittern is not a state or federally listed species but is considered a SSC under CDFW. This species is a small, uncommon heron that nests in emergent wetlands south of Ventura County and sporadically throughout the Sacramento and San Joaquin Valleys. During the summer, larger populations of least bitterns are known to occur along the Colorado River and near the Salton Sea. Individuals nest in dense emergent vegetation, such as tules and cattails, above or directly adjacent to open water greater than one foot deep. Foraging activities similarly occur along the aquatic margin of emergent vegetation, where least bitterns feed on small fish, aquatic/terrestrial insects, crayfish, and amphibians. Most of the known populations of this species migrate south to Mexico for the winter, where they reside from October to March. In California, breeding occurs between late March and early July. Populations of least bitterns have historically declined due to habitat elimination, human disturbance, and the use of pesticides (Zeiner et al. 1988-1990).

Survey Results for Least Bittern

This species prefers to nest in emergent vegetation above or along the margin of open water habitat. Within the BSA, the willow riparian habitat located adjacent to the San Diego River provides a suitable nesting location for least bittern. In addition, there are numerous recent eBird occurrences of this species within approximately 2.5 miles of the BSA, including a recent (2016) occurrence confirmed with photo identification. Due to the presence of locally suitable habitat as well as the recent local occurrences, the species may have a high potential to nest within the willow riparian habitat located adjacent to the San Diego River.

Project Impacts for Least Bittern

With the implementation of avoidance and minimization measures BIO-1 through BIO-4, Project activities will be excluded from willow riparian habitat and be restricted to north of the San Diego River Parkway Trail. No impacts to willow riparian habitat will result from this project. Furthermore,

Project activities will be limited to outside the least bittern breeding season in accordance with avoidance and minimization measure BIO-9, minimizing indirect construction impacts to the species.

Avoidance and Minimization Efforts for Least Bittern

The Project will be consistent with the Development and Mitigation Guidelines outlined in the NRMP of the FSDRIP (see Appendix G). In addition to avoidance and minimization measures BIO-1 through BIO-4, the implementation of measures BIO-8 and BIO-9 will ensure that Project-related impacts to least bittern are minimized to the greatest extent feasible.

Compensatory Mitigation for Least Bittern

No temporary or permanent impacts to least bittern habitat are anticipated. No compensatory mitigation for least bittern is proposed.

4.3.5 Discussion of Yellow Warbler

The yellow warbler is not a state or federally listed species but is considered a SSC under CDFW. Yellow warblers inhabit riparian vegetation with proximity to open water. Breeding grounds for this long-distance migrant occur throughout the U.S. and Canada, while wintering habitats are found in Central and South America. Breeding occurs in the spring with female laying and incubating 3 to 6 eggs per clutch. Both the male and female participate in raising the young. Fledging occurs 9 to 12 days after hatching (Heath 2008). Breeding locations were once widespread throughout California except in the Mojave Desert, where they are typically constrained to the Mojave River. Threats to the yellow warbler include habitat degradation due to urbanization and agricultural development, nest brood parasitism by brown-headed cowbirds, and nest predation by other natural predators.

Survey Results for Yellow Warbler

There are numerous recent eBird occurrences within the San Diego River corridor, including 2023 occurrences of the species directly south of the Project. In addition, the BSA encompasses riparian habitat suitable for nesting. Due to the presence of potentially suitable habitat as well as the recent local occurrences, yellow warbler has a high potential to occur within the BSA.

Project Impacts to Yellow Warbler

Approximately 0.27 acres of riparian habitat will be temporarily impacted during construction to allow for construction access to the proposed work area. Riparian vegetation may serve as potentially suitable nesting and/or foraging habitat for this species.

Riparian vegetation directly south of the Rio Vista Station platform will be removed and a temporary access road will be graded from the San Diego River Parkway to allow construction access to the platform. Following the conclusion of the Project, temporary impacts to the riparian corridor will be restored to pre-construction conditions in accordance with the FSDRIP. No permanent impacts to riparian habitat will result from the proposed platform improvements.

Avoidance and Minimization Efforts for Yellow Warbler

The Project will be consistent with the Development and Mitigation Guidelines outlined in the NRMP of the FSDRIP (see Appendix G). In addition to avoidance and minimization measures

BIO-1 through BIO-4, the implementation of measures BIO-8 and BIO-9 will ensure that Project-related impacts to western yellow bat are minimized to the greatest extent feasible.

Compensatory Mitigation for Yellow Warbler

No permanent impacts to yellow warbler habitat are anticipated. Temporary impacts will be returned to pre-construction conditions following the completion of construction activities and revegetated in accordance with avoidance and minimization measure BIO-7. No compensatory mitigation for yellow warbler is proposed.

4.3.6 Discussion of Western Red Bat

The western red bat is not a state or federally listed species but is considered a SSC under CDFW. The western red bat roost in forests and woodlands in proximity to foraging habitats which include grasslands, shrub lands, open woodlands, and croplands (Zeiner et al. 1988-1990). The species is primarily an insectivore, consuming moths, crickets, beetles, and cicadas. The western red bat is known to migrate between summer and winter to lowlands and coastal regions for breeding which typically occurs in low elevation cottonwood/sycamore and oak dominated riparian habitats (Pierson, E.D., W.E. Rainey and C. Corben 2006) (Zeiner et al. 1988-1990).

Survey Results for Western Red Bat

There is a recent (2003) CNDDB occurrence of this species within the San Diego River corridor, approximately 5.7 miles northeast of the Project. The BSA includes dense riparian habitat with stands of cottonwood and willow that may be suitable for nesting. Due to the presence of locally suitable habitat, the species may have a low potential to occur within the BSA.

Project Impacts to Western Red Bat

Approximately 0.27 acres of riparian habitat will be temporarily impacted during construction to allow for construction access to the proposed work area. Riparian vegetation may serve as potentially suitable nesting and/or foraging habitat for this species.

Riparian vegetation directly south of the Rio Vista Station platform will be removed and a temporary access road will be graded from the San Diego River Parkway to allow construction access to the platform. Following the conclusion of the Project, temporary impacts to the riparian corridor will be restored to pre-construction conditions in accordance with the FSDRIP. No permanent impacts to riparian habitat will result from the proposed platform improvements.

Avoidance and Minimization Efforts for Western Red Bat

The Project will be consistent with the Development and Mitigation Guidelines outlined in the NRMP of the FSDRIP (see Appendix G). In addition to avoidance and minimization measures BIO-1 through BIO-4, the implementation of measures BIO-8 through BIO-10 will ensure that Project-related impacts to western red bat are minimized to the greatest extent feasible.

BIO-10: To avoid impacts to roosting bats, trees that may contain roosting bats must be removed between September 1 and March 1, outside of the bat maternity season.

Compensatory Mitigation for Western Red Bat

No permanent impacts to western red bat habitat are anticipated. Temporary impacts will be returned to pre-construction conditions following the completion of construction activities and revegetated in accordance with avoidance and minimization measure BIO-7. No compensatory mitigation for western red bat is proposed.

4.3.7 Discussion of Western Yellow Bat

The western yellow bat is not a state or federally listed species but is considered a SSC under CDFW. Western yellow bats are a rare yearlong southern California resident from Los Angeles and San Bernardino Counties south to the Mexican border. This species occupies a range of habitats of extremely arid areas to dry areas. Western yellow bats inhabit savannas, secluded woodlands, regions dominated by pasture or croplands, and even tolerates residential areas. Typically, the species occurs close to water resource within riparian, desert riparian, desert wash and palm oasis habitats. Females usually give birth to two young in early June-July, and pregnant females have been found as early as late April. Breeding time is unknown; however, it is thought that females store sperm and both males and females probably can breed within their first year.

The species is insectivorous, feeding on a variety of insects; ants, wasps, bees, flies, mosquitoes, butterflies, moths, beetles, grasshoppers, crickets, and others. They are known to leave day roosts and begin foraging at dusk (Zeiner et al. 1988-1990). Populations of western yellow bats are threatened and eliminated from many areas in Riverside County due to cosmetic trimming of palm fronds. The use of pesticides in date palm and other orchards may also constitute a threat to both roosting bats and the insects upon which they forage. Domestic cats, whether pets or feral, may be a significant source of predation, as they are for many lizards, songbirds, and rodents (Cardoso 2020).

Survey Results for Western Yellow Bat

There is a historic (1985) CNDDB occurrence of this species located approximately 2 miles south of the Project. In addition, the BSA includes dense riparian habitat that may be suitable for maternal colonies of this species. Furthermore, the San Diego River provides a proximal open water source directly south of the BSA. Due to the presence of locally suitable habitat as well as the local historic occurrence, the species may have a low potential to occur within the BSA.

Project Impacts to Western Yellow Bat

Approximately 0.27 acres of riparian habitat will be temporarily impacted during construction to allow for construction access to the proposed work area. Riparian vegetation may serve as potentially suitable nesting and/or foraging habitat for this species.

Riparian vegetation directly south of the Rio Vista Station platform will be removed and a temporary access road will be graded from the San Diego River Parkway to allow construction access to the platform. Following the conclusion of the Project, temporary impacts to the riparian corridor will be restored to pre-construction conditions in accordance with the FSDRIP. No permanent impacts to riparian habitat will result from the proposed platform improvements.

Avoidance and Minimization Efforts for Western Yellow Bat

Tthe Project will be consistent with the Development and Mitigation Guidelines outlined in the NRMP of the FSDRIP (see Appendix G). In addition to avoidance and minimization measures BIO-1 through BIO-4, the implementation of measures BIO-8 through BIO-10 will ensure that Project-related impacts to western yellow bat are minimized to the greatest extent feasible.

Compensatory Mitigation for Western Yellow Bat

No permanent impacts to western yellow bat habitat are anticipated. Temporary impacts will be returned to pre-construction conditions following the completion of construction activities and revegetated in accordance with avoidance and minimization measure BIO-7. No compensatory mitigation for western yellow bat is proposed.

4.3.8 Discussion of Two-Striped Gartersnake

The two-striped gartersnake (*Thamnophis hammondii*) is not a state or federally listed species but is a SSC under CDFW. It is distributed from the southeastern slope of the Diablo Range and the Salinas Valley south along the South Coast and Transverse ranges to the Mexican border, and on Santa Catalina Island. The species is highly aquatic, foraging primarily in and along streams. The species is diurnal, using mammal burrows, crevices, and surface objects for nocturnal retreats. Mating typically occurs soon after spring emergence and young are live born in late summer in secluded sites. The species elevation range occurs from sea level to approximately 8,000 ft. (Zeiner et al. 1988-1990).

Survey Results for Two-Striped Gartersnake

There is a recent (2001) CNDDB occurrence of this species located approximately 4.1 miles southeast of the Project Area. The BSA encompasses a dense riparian corridor adjacent to the San Diego River and may provide suitable upland habitat for the species. As such, there is a low potential for the species to occur within the BSA.

Project Impacts to Two-Striped Gartersnake

Approximately 0.27 acres of riparian habitat will be temporarily impacted during construction to allow for construction access to the proposed work area. Riparian vegetation may serve as potentially suitable upland dispersal and estivation habitat for this species.

Riparian vegetation directly south of the Rio Vista Station platform will be removed and a temporary access road will be graded from the San Diego River Parkway to allow construction access to the platform. Following the conclusion of the Project, temporary impacts to the riparian corridor will be restored to pre-construction conditions in accordance with the FSDRIP. No permanent impacts to riparian habitat will result from the proposed platform improvements.

Avoidance and Minimization Efforts for Two-Striped Gartersnake

The Project will be consistent with the Development and Mitigation Guidelines outlined in the NRMP of the FSDRIP (see Appendix G). In addition to avoidance and minimization measures BIO-1 through BIO-4, the implementation of measures BIO-9 and BIO-11 through BIO-14 will ensure that Project-related impacts to two-striped gartersnake are minimized to the greatest extent feasible.

BIO-11: Prior to vegetation removal or initial ground disturbance, a pre-construction clearance survey must be conducted by a Project biologist within two-striped gartersnake habitat (riparian corridor). Within 2 weeks of the pre-construction survey, all areas surveyed by the biologist must be cleared by the contractor or a supplemental clearance survey is required.

BIO-12: All excavated steep-walled holes and trenches within two-striped gartersnake habitat that are more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps at an angle of no more than 30 degrees constructed of earth fill or wooden planks at the end of each workday or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within two-striped gartersnake habitat will be inspected for two-striped gartersnake prior to being moved.

BIO-13: If erosion control is implemented within two-striped gartersnake habitat (riparian corridor), nonentangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure snakes are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.

BIO-14: If a two-striped gartersnake is encountered during construction activities, the Project biologist will be notified and construction activities will be suspended in a 50-foot radius of the animal until it leaves the project site on its own volition. A qualified biologist may relocate a two-striped gartersnake to outside the project area.

Compensatory Mitigation for Two-Striped Gartersnake

No permanent impacts to two-striped gartersnake habitat are anticipated. Temporary impacts will be returned to pre-construction conditions following the completion of construction activities and revegetated in accordance with avoidance and minimization measure BIO-7. No compensatory mitigation for two-striped gartersnake is proposed.

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5. Conclusions and Regulatory Determinations

5.1 Federal Endangered Species Act Consultation Summary

Prior to field survey, a list of 19 federally threatened or endangered species were returned via database searches. The potential for each species to occur within the BSA was determined by analyzing the habitat requirements of each species and comparing the habitat requirements to available habitat within the BSA.

Table 4. Federally Listed Species Determinations

Species Name	Federal Status	Potential	Determination
California least tern *Sterna antillarum browni*	Endangered	Absent	No Effect
California Orcutt grass *Orcuttia californica*	Endangered	Absent	No Effect
Coastal California gnatcatcher *Polioptila californica californica*	Threatened	Low Potential	No Effect
Least Bell's vireo *Vireo bellii pusillus*	Endangered	Low Potential	No Effect
Light-footed clapper rail *Rallus longirostris levipes*	Endangered	Absent	No Effect
Monarch butterfly *Danaus plexippus*	Candidate	Absent	No Effect
Orcutt's spineflower *Chorizanthe orcuttiana*	Endangered	Absent	No Effect
Pacific pocket mouse *Perognathus longimembris pacificus*	Endangered	Absent	No Effect
Riverside fairy shrimp *Streptocephalus woottoni*	Endangered	Absent	No Effect
Salt marsh bird's-beak *Cordylanthus maritimus ssp. maritimus*	Endangered	Absent	No Effect
San Diego ambrosia *Ambrosia pumila*	Endangered	Absent	No Effect
San Diego button-celery *Eryngium aristulatum var. parishii*	Endangered	Absent	No Effect
San Diego fairy shrimp *Branchinecta sandiegonensis*	Endangered	Absent	No Effect
San Diego Mesa-mint *Pogogyne abramsii*	Endangered	Absent	No Effect
San Diego thornmint *Acanthomintha ilicifolia*	Threatened	Absent	No Effect
Southwestern willow flycatcher *Empidonax traillii extimus*	Endangered	Low Potential	No Effect
Spreading navarretia *Navarretia fossalis*	Endangered	Absent	No Effect
Western snowy plover *Charadrius nivosus nivosus*	Threatened	Absent	No Effect
Willowy monardella *Monardella viminea*	Endangered	Absent	No Effect

Three federally listed species have the potential to occur within the BSA due to the presence of locally suitable habitat as well as recent, local occurrences. Two federally listed species, coastal California gnatcatcher and least Bell's vireo, are considered protected species under the FSDRIP NRMP. No permanent impacts to riparian habitat will result from the proposed platform improvements and therefore, no permanent impacts to the species are anticipated. No further consultation with USFWS is required regarding impacts to coastal California gnatcatcher or least Bell's vireo.

Southwestern willow flycatcher is a federally listed species. There is a low potential for this species to occur within the BSA; however, the implementation of species-specific avoidance and minimization measures will ensure there are no impacts to southwestern willow flycatcher. As such, consultation with USFWS regarding this species is not required.

5.2 Essential Fish Habitat Consultation Summary

According to the NOAA habitat conservation Essential Fish Habitat View Tool, the BSA does not fall within Essential Fish Habitat (EFH) for any of the identified species (NOAA 2023). Furthermore, the BSA does not include any aquatic habitat features. No impacts to EFH are anticipated and consultation for EFH is not required.

5.3 California Endangered Species Act Consultation Summary

Prior to field surveys, a list of regional special status wildlife species with potential to occur within the Project vicinity was compiled from database searches. The potential for each species to occur within the BSA was determined by analyzing the habitat requirements of each species and comparing the habitat requirements to available habitat within the BSA. After a careful comparison between habitat requirements and the habitat available within the BSA, two state listed species have the potential to occur within the BSA: Least Bell's vireo and southwestern willow flycatcher.

The FSDRIP NRMP contains explicit provisions to protect wildlife which includes Least Bell's vireo. No permanent impacts to riparian habitat will result from the proposed platform improvements and therefore, no permanent impacts to the species are anticipated. No further consultation with CDFW is required regarding impacts to least Bell's vireo.

The FSDRIP NRMP contains explicit provisions to protect wildlife, which would include southwestern willow flycatcher. There is a low potential for this species to occur within the BSA; however, the implementation of appropriate avoidance and minimization measures will ensure there are no impacts to southwestern willow flycatcher. As such, consultation with CDFW regarding this species is not required.

5.4 Wetlands and Other Waters Coordination Summary

The Project is anticipated to have approximately 0.27 acres of temporary impacts to the riparian corridor identified within the BSA (Figure 5. Project Impacts). Temporary impacts will be returned to pre-construction conditions following the completion of construction activities and revegetated in accordance with measure BIO-7. No permanent impacts to riparian habitat are anticipated and compensatory mitigation is not proposed for this Project. The MTS would obtain a Streambed Alteration Agreement under Section 1602 from CDFW.

5.5 Invasive Species

In February 1999, EO 13112 was signed, requiring federal agencies to work on preventing and controlling the introduction and spread of invasive species. Measure BIO-15 will be incorporated into the Project plans to ensure that invasive species are not introduced or spread.

BIO-15: Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.

5.6 Other

5.6.1 General Wildlife

To minimize and avoid potential effects to local wildlife, the following measures BIO-16 through BIO-18 have been incorporated into the Project design.

BIO-16: All food-related trash must be disposed into closed containers and must be removed from the Project area daily. Construction personnel must not feed or otherwise attract wildlife to the Project area.

BIO-17: The contractor must not apply rodenticide or herbicide within the Project area during construction.

BIO-18: If any wildlife is encountered during the course of construction, said wildlife shall be allowed to leave the construction area unharmed.

5.6.2 Migratory Birds

Native birds are protected by the MBTA and CFG Code Section 3513. The implementation of measures BIO-8 and BIO-9 would avoid all potential impacts to migratory birds.

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Appendix A: USFWS Species List

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
Phone: (760) 431-9440 Fax: (760) 431-5901

In Reply Refer To: September 18, 2023
Project Code: 2023-0130185
Project Name: Rio Vista Platform Design Project - Phase II

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A biological assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a biological assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a biological assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found at the Fish and Wildlife Service's Endangered Species Consultation website at:

https://www.fws.gov/service/esa-section-7-consultation

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
(760) 431-9440

PROJECT SUMMARY

Project Code: 2023-0130185
Project Name: Rio Vista Platform Design Project - Phase II
Project Type: Railroad - Maintenance/Modification
Project Description: Retrofit of the Rio Vista Platform for the San Diego Metropolitan Transit System in San Diego County, California.
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@32.7735366,-117.14199560067456,14z

Counties: San Diego County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 19 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Pacific Pocket Mouse *Perognathus longimembris pacificus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8080	Endangered

BIRDS

NAME	STATUS
California Least Tern *Sterna antillarum browni* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	Endangered
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Light-footed Clapper Rail *Rallus longirostris levipes* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6035	Endangered
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered
Western Snowy Plover *Charadrius nivosus nivosus* Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8035	Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRUSTACEANS

NAME	STATUS
Riverside Fairy Shrimp *Streptocephalus woottoni* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8148	Endangered
San Diego Fairy Shrimp *Branchinecta sandiegonensis* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6945	Endangered

FLOWERING PLANTS

NAME	STATUS
California Orcutt Grass *Orcuttia californica* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4923	Endangered
Orcutt's Spineflower *Chorizanthe orcuttiana* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7573	Endangered
Salt Marsh Bird's-beak *Cordylanthus maritimus ssp. maritimus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6447	Endangered
San Diego Ambrosia *Ambrosia pumila* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8287	Endangered
San Diego Button-celery *Eryngium aristulatum var. parishii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5937	Endangered
San Diego Mesa-mint *Pogogyne abramsii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5971	Endangered
San Diego Thornmint *Acanthomintha ilicifolia* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/351	Threatened
Spreading Navarretia *Navarretia fossalis* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1334	Threatened
Willowy Monardella *Monardella viminea* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/250	Endangered

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Dokken Engineering
Name: Vincent Chevreuil
Address: 110 Blue Ravine Road #200
City: Folsom
State: CA
Zip: 95630
Email vchevreuil@dokkenengineering.com
Phone: 9168580642

Appendix B: CNDDB Species List

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (La Jolla (3211772) OR La Mesa (3211771))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
American badger *Taxidea taxus*	AMAJF04010	None	None	G5	S3	SSC
aphanisma *Aphanisma blitoides*	PDCHE02010	None	None	G3G4	S2	1B.2
beach goldenaster *Heterotheca sessiliflora ssp. sessiliflora*	PDAST4V0K2	None	None	G4T2T3	S1	1B.1
Belding's savannah sparrow *Passerculus sandwichensis beldingi*	ABPBX99015	None	Endangered	G5T3	S3	
big free-tailed bat *Nyctinomops macrotis*	AMACD04020	None	None	G5	S3	SSC
Blochman's dudleya *Dudleya blochmaniae ssp. blochmaniae*	PDCRA04051	None	None	G3T2	S2	1B.1
bottle liverwort *Sphaerocarpos drewiae*	NBHEP35030	None	None	G1	S1	1B.1
Brand's star phacelia *Phacelia stellaris*	PDHYD0C510	None	None	G1	S1	1B.1
burrowing owl *Athene cunicularia*	ABNSB10010	None	None	G4	S2	SSC
Busck's gallmoth *Eugnosta busckana*	IILEM2X090	None	None	G1G3	S2S3	
California adolphia *Adolphia californica*	PDRHA01010	None	None	G3	S2	2B.1
California black rail *Laterallus jamaicensis coturniculus*	ABNME03041	None	Threatened	G3T1	S2	FP
California glossy snake *Arizona elegans occidentalis*	ARADB01017	None	None	G5T2	S2	SSC
California least tern *Sternula antillarum browni*	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2	FP
California Orcutt grass *Orcuttia californica*	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1
Campbell's liverwort *Geothallus tuberosus*	NBHEP1C010	None	None	G2	S2	1B.1
chaparral ragwort *Senecio aphanactis*	PDAST8H060	None	None	G3	S2	2B.2
cliff spurge *Euphorbia misera*	PDEUP0Q1B0	None	None	G5	S2	2B.2
coast horned lizard *Phrynosoma blainvillii*	ARACF12100	None	None	G4	S4	SSC
coast patch-nosed snake *Salvadora hexalepis virgultea*	ARADB30033	None	None	G5T4	S3	SSC

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
coast woolly-heads *Nemacaulis denudata var. denudata*	PDPGN0G011	None	None	G3G4T2	S2	1B.2
coastal cactus wren *Campylorhynchus brunneicapillus sandiegensis*	ABPBG02095	None	None	G5T3Q	S2	SSC
coastal California gnatcatcher *Polioptila californica californica*	ABPBJ08081	Threatened	None	G4G5T3Q	S2	SSC
Cooper's hawk *Accipiter cooperii*	ABNKC12040	None	None	G5	S4	WL
Coronado skink *Plestiodon skiltonianus interparietalis*	ARACH01114	None	None	G5T5	S2S3	WL
Coulter's goldfields *Lasthenia glabrata ssp. coulteri*	PDAST5L0A1	None	None	G4T2	S2	1B.1
Coulter's saltbush *Atriplex coulteri*	PDCHE040E0	None	None	G3	S1S2	1B.2
Crotch bumble bee *Bombus crotchii*	IIHYM24480	None	Candidate Endangered	G2	S2	
decumbent goldenbush *Isocoma menziesii var. decumbens*	PDAST57091	None	None	G3G5T2T3	S2	1B.2
Del Mar manzanita *Arctostaphylos glandulosa ssp. crassifolia*	PDERI040E8	Endangered	None	G5T2	S2	1B.1
delicate clarkia *Clarkia delicata*	PDONA050D0	None	None	G3	S3	1B.2
Dulzura pocket mouse *Chaetodipus californicus femoralis*	AMAFD05021	None	None	G5T3	S3	
estuary seablite *Suaeda esteroa*	PDCHE0P0D0	None	None	G3	S2	1B.2
golden-spined cereus *Bergerocactus emoryi*	PDCAC11010	None	None	G2G3	S2	2B.2
heart-leaved pitcher sage *Lepechinia cardiophylla*	PDLAM0V020	None	None	G3	S2S3	1B.2
Hermes copper butterfly *Lycaena hermes*	IILEPC1160	Threatened	None	G1	S1	
hoary bat *Lasiurus cinereus*	AMACC05032	None	None	G3G4	S4	
least Bell's vireo *Vireo bellii pusillus*	ABPBW01114	Endangered	Endangered	G5T2	S3	
least bittern *Ixobrychus exilis*	ABNGA02010	None	None	G4G5	S2	SSC
light gray lichen *Mobergia calculiformis*	NLT0018660	None	None	G3	S1	3
light-footed Ridgway's rail *Rallus obsoletus levipes*	ABNME05014	Endangered	Endangered	G3T1T2	S1	FP

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
little mousetail *Myosurus minimus ssp. apus*	PDRAN0H031	None	None	G5T2Q	S2	3.1
long-spined spineflower *Chorizanthe polygonoides var. longispina*	PDPGN040K1	None	None	G5T3	S3	1B.2
mesa shoulderband *Helminthoglypta coelata*	IMGASC2530	None	None	G1	S1	
Mexican long-tongued bat *Choeronycteris mexicana*	AMACB02010	None	None	G3G4	S1	SSC
mimic tryonia (=California brackishwater snail) *Tryonia imitator*	IMGASJ7040	None	None	G2	S2	
monarch - California overwintering population *Danaus plexippus plexippus pop. 1*	IILEPP2012	Candidate	None	G4T1T2Q	S2	
Munz's sage *Salvia munzii*	PDLAM1S140	None	None	G2	S2	2B.2
northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	AMAFD05031	None	None	G5T3T4	S3S4	
Nuttall's acmispon *Acmispon prostratus*	PDFAB2A0V0	None	None	G1G2	S1	1B.1
Nuttall's scrub oak *Quercus dumosa*	PDFAG050D0	None	None	G3	S3	1B.1
obscure bumble bee *Bombus caliginosus*	IIHYM24380	None	None	G2G3	S1S2	
oil neststraw *Stylocline citroleum*	PDAST8Y070	None	None	G3	S3	1B.1
orange-throated whiptail *Aspidoscelis hyperythra*	ARACJ02060	None	None	G5	S2S3	WL
Orcutt's brodiaea *Brodiaea orcuttii*	PMLIL0C0B0	None	None	G2	S2	1B.1
Orcutt's pincushion *Chaenactis glabriuscula var. orcuttiana*	PDAST20095	None	None	G5T1	S1	1B.1
Orcutt's spineflower *Chorizanthe orcuttiana*	PDPGN040G0	Endangered	Endangered	G1	S1	1B.1
Otay Mesa mint *Pogogyne nudiuscula*	PDLAM1K040	Endangered	Endangered	G1	S1	1B.1
Otay Mountain ceanothus *Ceanothus otayensis*	PDRHA04430	None	None	G1G2	S1	1B.2
Palmer's goldenbush *Ericameria palmeri var. palmeri*	PDAST3L0C1	None	None	G4T2?	S2	1B.1
Palmer's grapplinghook *Harpagonella palmeri*	PDBOR0H010	None	None	G4	S3	4.2
pocketed free-tailed bat *Nyctinomops femorosaccus*	AMACD04010	None	None	G5	S3	SSC

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
prairie falcon *Falco mexicanus*	ABNKD06090	None	None	G5	S4	WL
prostrate vernal pool navarretia *Navarretia prostrata*	PDPLM0C0Q0	None	None	G2	S2	1B.2
purple stemodia *Stemodia durantifolia*	PDSCR1U010	None	None	G5	S2	2B.1
quino checkerspot butterfly *Euphydryas editha quino*	IILEPK405L	Endangered	None	G5T1T2	S1S2	
red-diamond rattlesnake *Crotalus ruber*	ARADE02090	None	None	G4	S3	SSC
Robinson's pepper-grass *Lepidium virginicum var. robinsonii*	PDBRA1M114	None	None	G5T3	S3	4.3
salt marsh bird's-beak *Chloropyron maritimum ssp. maritimum*	PDSCR0J0C2	Endangered	Endangered	G4?T1	S1	1B.2
salt spring checkerbloom *Sidalcea neomexicana*	PDMAL110J0	None	None	G4	S2	2B.2
San Diego ambrosia *Ambrosia pumila*	PDAST0C0M0	Endangered	None	G1	S1	1B.1
San Diego barrel cactus *Ferocactus viridescens*	PDCAC08060	None	None	G3?	S2S3	2B.1
San Diego black-tailed jackrabbit *Lepus californicus bennettii*	AMAEB03051	None	None	G5T3T4	S3S4	
San Diego button-celery *Eryngium aristulatum var. parishii*	PDAPI0Z042	Endangered	Endangered	G5T1	S1	1B.1
San Diego desert woodrat *Neotoma lepida intermedia*	AMAFF08041	None	None	G5T3T4	S3S4	SSC
San Diego fairy shrimp *Branchinecta sandiegonensis*	ICBRA03060	Endangered	None	G2	S1	
San Diego goldenstar *Bloomeria clevelandii*	PMLIL1H010	None	None	G2G3	S3	1B.1
San Diego gumplant *Grindelia hallii*	PDAST470D4	None	None	G2	S2	1B.2
San Diego marsh-elder *Iva hayesiana*	PDAST580A0	None	None	G3	S2	2B.2
San Diego Mesa Hardpan Vernal Pool *San Diego Mesa Hardpan Vernal Pool*	CTT44321CA	None	None	G2	S2.1	
San Diego mesa mint *Pogogyne abramsii*	PDLAM1K010	Endangered	Endangered	G1	S1	1B.1
San Diego sagewort *Artemisia palmeri*	PDAST0S160	None	None	G3?	S3?	4.2
San Diego sand aster *Corethrogyne filaginifolia var. incana*	PDAST2M025	None	None	G4T1Q	S1	1B.1

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
San Diego thorn-mint *Acanthomintha ilicifolia*	PDLAM01010	Threatened	Endangered	G1	S1	1B.1
sand-loving wallflower *Erysimum ammophilum*	PDBRA16010	None	None	G2	S2	1B.2
sandy beach tiger beetle *Cicindela hirticollis gravida*	IICOL02101	None	None	G5T2	S2	
sea dahlia *Leptosyne maritima*	PDAST2L0L0	None	None	G2	S1S2	2B.2
short-leaved dudleya *Dudleya brevifolia*	PDCRA04053	None	Endangered	G1	S1	1B.1
silver-haired bat *Lasionycteris noctivagans*	AMACC02010	None	None	G3G4	S3S4	
singlewhorl burrobrush *Ambrosia monogyra*	PDAST50010	None	None	G5	S2	2B.2
south coast saltscale *Atriplex pacifica*	PDCHE041C0	None	None	G4	S2	1B.2
Southern California legless lizard *Anniella stebbinsi*	ARACC01060	None	None	G3	S3	SSC
southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	ABPBX91091	None	None	G5T3	S4	WL
Southern Coastal Salt Marsh *Southern Coastal Salt Marsh*	CTT52120CA	None	None	G2	S2.1	
Southern Cottonwood Willow Riparian Forest *Southern Cottonwood Willow Riparian Forest*	CTT61330CA	None	None	G3	S3.2	
Southern Maritime Chaparral *Southern Maritime Chaparral*	CTT37C30CA	None	None	G1	S1.1	
Southern Riparian Forest *Southern Riparian Forest*	CTT61300CA	None	None	G4	S4	
Southern Riparian Scrub *Southern Riparian Scrub*	CTT63300CA	None	None	G3	S3.2	
Southern Sycamore Alder Riparian Woodland *Southern Sycamore Alder Riparian Woodland*	CTT62400CA	None	None	G4	S4	
spotted bat *Euderma maculatum*	AMACC07010	None	None	G4	S3	SSC
spreading navarretia *Navarretia fossalis*	PDPLM0C080	Threatened	None	G2	S2	1B.1
sticky dudleya *Dudleya viscida*	PDCRA040T0	None	None	G2	S2	1B.2
summer holly *Comarostaphylis diversifolia ssp. diversifolia*	PDERI0B011	None	None	G3T2	S2	1B.2
tricolored blackbird *Agelaius tricolor*	ABPBXB0020	None	Threatened	G1G2	S2	SSC

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
two-striped gartersnake *Thamnophis hammondii*	ARADB36160	None	None	G4	S3S4	SSC
Valley Needlegrass Grassland *Valley Needlegrass Grassland*	CTT42110CA	None	None	G3	S3.1	
variegated dudleya *Dudleya variegata*	PDCRA040R0	None	None	G2	S2	1B.2
wandering (=saltmarsh) skipper *Panoquina errans*	IILEP84030	None	None	G4G5	S2	
wart-stemmed ceanothus *Ceanothus verrucosus*	PDRHA041J0	None	None	G2	S2?	2B.2
western beach tiger beetle *Cicindela latesignata*	IICOL02110	None	None	G2G3	S1	
western mastiff bat *Eumops perotis californicus*	AMACD02011	None	None	G4G5T4	S3S4	SSC
western red bat *Lasiurus frantzii*	AMACC05080	None	None	G4	S3	SSC
western spadefoot *Spea hammondii*	AAABF02020	None	None	G2G3	S3S4	SSC
western yellow bat *Lasiurus xanthinus*	AMACC05070	None	None	G4G5	S3	SSC
willowy monardella *Monardella viminea*	PDLAM18140	Endangered	Endangered	G1	S1	1B.1
woven-spored lichen *Texosporium sancti-jacobi*	NLTEST7980	None	None	G3	S2	3
yellow warbler *Setophaga petechia*	ABPBX03010	None	None	G5	S3	SSC
Yuma myotis *Myotis yumanensis*	AMACC01020	None	None	G5	S4	

Record Count: 118

Appendix C: CNPS Species List

SCIENTIFIC NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA PLANT RANK	CA ENDEMIC	D A
Aphanisma blitoides	Chenopodiaceae	annual herb	Feb-Jun	None	None	G3G4	S2	1B.2		19 0
Selaginella cinerascens	Selaginellaceae	perennial rhizomatous herb		None	None	G3G4	S3	4.1		19 0
Heterotheca sessiliflora ssp. *sessiliflora*	Asteraceae	perennial herb	Mar-Dec	None	None	G4T2T3	S1	1B.1		20 06
Dudleya blochmaniae ssp. *blochmaniae*	Crassulaceae	perennial herb	Apr-Jun	None	None	G3T2	S2	1B.1		19 0
Sphaerocarpos drewiae	Sphaerocarpaceae	ephemeral liverwort		None	None	G1	S1	1B.1	Yes	20 0
Phacelia stellaris	Hydrophyllaceae	annual herb	Mar-Jun	None	None	G1	S1	1B.1		19 0
Ophioglossum californicum	Ophioglossaceae	perennial rhizomatous herb	Jan-Jun(Dec)	None	None	G4	S4	4.2		19 0
Adolphia californica	Rhamnaceae	perennial deciduous shrub	Dec-May	None	None	G3	S2	2B.1		19 0
Lycium californicum	Solanaceae	perennial shrub	Mar-Aug(Dec)	None	None	G4	S4	4.2		20 0

Euphorbia misera	Euphorbiaceae	perennial shrub	(Oct)Dec-Aug	None	None	G5	S2	2B.2		19 0
Nemacaulis denudata var. *denudata*	Polygonaceae	annual herb	Apr-Sep	None	None	G3G4T2	S2	1B.2		19 0
Lasthenia glabrata ssp. *coulteri*	Asteraceae	annual herb	Feb-Jun	None	None	G4T2	S2	1B.1		19 0
Atriplex coulteri	Chenopodiaceae	perennial herb	Mar-Oct	None	None	G3	S1S2	1B.2		19 0
Isocoma menziesii var. *decumbens*	Asteraceae	perennial shrub	Apr-Nov	None	None	G3G5T2T3	S2	1B.2		19 0
Arctostaphylos glandulosa ssp. *crassifolia*	Ericaceae	perennial evergreen shrub	Jun-Apr	FE	None	G5T2	S2	1B.1		19 0
Clarkia delicata	Onagraceae	annual herb	Apr-Jun	None	None	G3	S3	1B.2		19 0
Suaeda esteroa	Chenopodiaceae	perennial herb	(Jan-May)Jul-Oct	None	None	G3	S2	1B.2		19 0
Pentachaeta aurea ssp. *aurea*	Asteraceae	annual herb	Mar-Jul	None	None	G4T3	S3	4.2		20 0
Bergerocactus emoryi	Cactaceae	perennial stem	May-Jun	None	None	G2G3	S2	2B.2		19 0
Holocarpha	Asteraceae	annual herb	May-Nov	None	None	G5T3	S3	4.2	Yes	19

Mobergia calculiformis	Physciaceae	crustose lichen (saxicolous)		None	None	G2	S1	3		2 0
Myosurus minimus ssp. *apus*	Ranunculaceae	annual herb	Mar-Jun	None	None	G5T2Q	S2	3.1		1 0
Chorizanthe polygonoides var. *longispina*	Polygonaceae	annual herb	Apr-Jul	None	None	G5T3	S3	1B.2		1 0
Diplacus aridus	Phrymaceae	perennial evergreen shrub	Apr-Jul	None	None	G4	S3	4.3		1 0
Githopsis diffusa ssp. *filicaulis*	Campanulaceae	annual herb	Apr-Jun	None	None	G5T1Q	S1	3.1	Yes	1 0
Salvia munzii	Lamiaceae	perennial evergreen shrub	Feb-Apr	None	None	G2	S2	2B.2		1 0
Acmispon prostratus	Fabaceae	annual herb	Mar-Jun(Jul)	None	None	G1G2	S1	1B.1		1 0
Quercus dumosa	Fagaceae	perennial evergreen shrub	Feb-Apr(May-Aug)	None	None	G3	S3	1B.1		1 0
Stylocline citroleum	Asteraceae	annual herb	Mar-Apr	None	None	G3	S3	1B.1	Yes	1 0
Brodiaea orcuttii	Themidaceae	perennial bulbiferous herb	May-Jul	None	None	G2	S2	1B.1	Yes	1 0

palmeri var. palmeri		evergreen shrub	Nov							0
Harpagonella palmeri	Boraginaceae	annual herb	Mar-May	None	None	G4	S3	4.2		1 0
Lathyrus splendens	Fabaceae	perennial herb	Mar-Jun	None	None	G4	S4	4.3		1 0
Navarretia prostrata	Polemoniaceae	annual herb	Apr-Jul	None	None	G2	S2	1B.2	Yes	2 0
Stemodia durantifolia	Plantaginaceae	perennial herb	(Jan)Apr-Dec	None	None	G5	S2	2B.1		2 0
Abronia maritima	Nyctaginaceae	perennial herb	Feb-Nov	None	None	G4	S3?	4.2		1 0
Lepidium virginicum var. robinsonii	Brassicaceae	annual herb	Jan-Jul	None	None	G5T3	S3	4.3		1 0
Chloropyron maritimum ssp. maritimum	Orobanchaceae	annual herb (hemiparasitic)	May-Oct(Nov)	FE	CE	G4?T1	S1	1B.2		1 0
Sidalcea neomexicana	Malvaceae	perennial herb	Mar-Jun	None	None	G4	S2	2B.2		1 0
Ambrosia pumila	Asteraceae	perennial rhizomatous herb	Apr-Oct	FE	None	G1	S1	1B.1		1 0

lacinata			Jun(Aug)							0
Bloomeria clevelandii	Themidaceae	perennial bulbiferous herb	Apr-May	None	None	G2G3	S3	1B.1		1 0
Grindelia hallii	Asteraceae	perennial herb	May-Oct	None	None	G2	S2	1B.2	Yes	1 0
Iva hayesiana	Asteraceae	perennial herb	Apr-Oct	None	None	G3	S2	2B.2		1 0
Pogogyne abramsii	Lamiaceae	annual herb	Mar-Jul	FE	CE	G1	S1	1B.1	Yes	1 0
Artemisia palmeri	Asteraceae	perennial deciduous shrub	(Feb)May-Sep	None	None	G3?	S3?	4.2		1 0
Corethrogyne filaginifolia var. *incana*	Asteraceae	perennial herb	Jun-Sep	None	None	G4T1Q	S1	1B.1		1 0
Acanthomintha ilicifolia	Lamiaceae	annual herb	Apr-Jun	FT	CE	G1	S1	1B.1		1 0
Erysimum ammophilum	Brassicaceae	perennial herb	Feb-Jun(Jul-Aug)	None	None	G2	S2	1B.2	Yes	1 0
Leptosyne maritima	Asteraceae	perennial herb	Mar-May	None	None	G2	S1S2	2B.2		1 0
Cistanthe maritima	Montiaceae	annual herb	(Feb)Mar-Jun(Aug)	None	None	G3G4	S3	4.2		1 0
Dudleya brevifolia	Crassulaceae	perennial herb	Apr-May	None	CE	G1	S1	1B.1	Yes	1 0

Atriplex pacifica	Chenopodiaceae	annual herb	Mar-Oct	None	None	G4	S2	1B.2		19 0
Juncus acutus ssp. *leopoldii*	Juncaceae	perennial rhizomatous herb	(Mar)May-Jun	None	None	G5T5	S4	4.2		19 0
Navarretia fossalis	Polemoniaceae	annual herb	Apr-Jun	FT	None	G2	S2	1B.1		19 0
Dudleya viscida	Crassulaceae	perennial herb	May-Jun	None	None	G2	S2	1B.2	Yes	19 0
Comarostaphylis diversifolia ssp. *diversifolia*	Ericaceae	perennial evergreen shrub	Apr-Jun	None	None	G3T2	S2	1B.2		19 0
Dudleya variegata	Crassulaceae	perennial herb	Apr-Jun	None	None	G2	S2	1B.2		19 0
Hordeum intercedens	Poaceae	annual herb	Mar-Jun	None	None	G3G4	S3S4	3.2		19 0
Ceanothus verrucosus	Rhamnaceae	perennial evergreen shrub	Dec-May	None	None	G2	S2?	2B.2		19 0
Dichondra occidentalis	Convolvulaceae	perennial rhizomatous herb	(Jan)Mar-Jul	None	None	G3G4	S3S4	4.2		19 0
Asplenium vespertinum	Aspleniaceae	perennial rhizomatous herb	Feb-Jun	None	None	G3?	S4	4.2		19 0
Monardella viminea	Lamiaceae	perennial herb	Jun-Aug	FE	CE	G1	S1	1B.1	Yes	19 0

Appendix D: NMFS Species List

From: Vincent Chevreuil
To: nmfswcrca.specieslist@noaa.gov
Subject: MTS Rio Vista Project - NMFS Species List
Date: Monday, September 18, 2023 12:43:00 PM
Attachments: image001.png

Quad Name **La Jolla**

Quad Number **32117-G2**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) - **X**
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -
Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) - **X**

Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -
Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH -
Groundfish EFH - **X**
Coastal Pelagics EFH - **X**
Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long Beach office 562-980-4000

MMPA Cetaceans -
MMPA Pinnipeds - **X**

Thank you,

Vincent Chevreuil
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Appendix E: NRCS Soil Report List

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for San Diego County Area, California

September 18, 2023

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:1,260 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 15 30 60 90

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Diego County Area, California
Survey Area Data: Version 18, Sep 14, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 24, 2022—Apr 29, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
GP	Gravel pits	2.6	85.3%
Rm	Riverwash	0.4	14.7%
Totals for Area of Interest		**3.0**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

San Diego County Area, California

GP—Gravel pits

Map Unit Composition

Gravel pits: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Gravel Pits

Setting

Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy and gravelly alluvium

Rm—Riverwash

Map Unit Setting

National map unit symbol: 2zwsk
Elevation: 700 to 2,900 feet
Mean annual precipitation: 8 to 15 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 110 to 180 days
Farmland classification: Not prime farmland

Map Unit Composition

Riverwash: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Riverwash

Setting

Landform: Drainageways
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Sandy, gravelly, or cobbly alluvium derived from mixed sources

Typical profile

A - 0 to 6 inches: gravelly coarse sand
C - 6 to 60 inches: stratified very gravelly coarse sand to gravelly sand

Properties and qualities

Slope: 0 to 4 percent
Drainage class: Excessively drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 60 to 72 inches
Frequency of flooding: OccasionalNone

Available water supply, 0 to 60 inches: Very low (about 1.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Ecological site: R019XG905CA - Riparian

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Appendix F: Representative Photographs

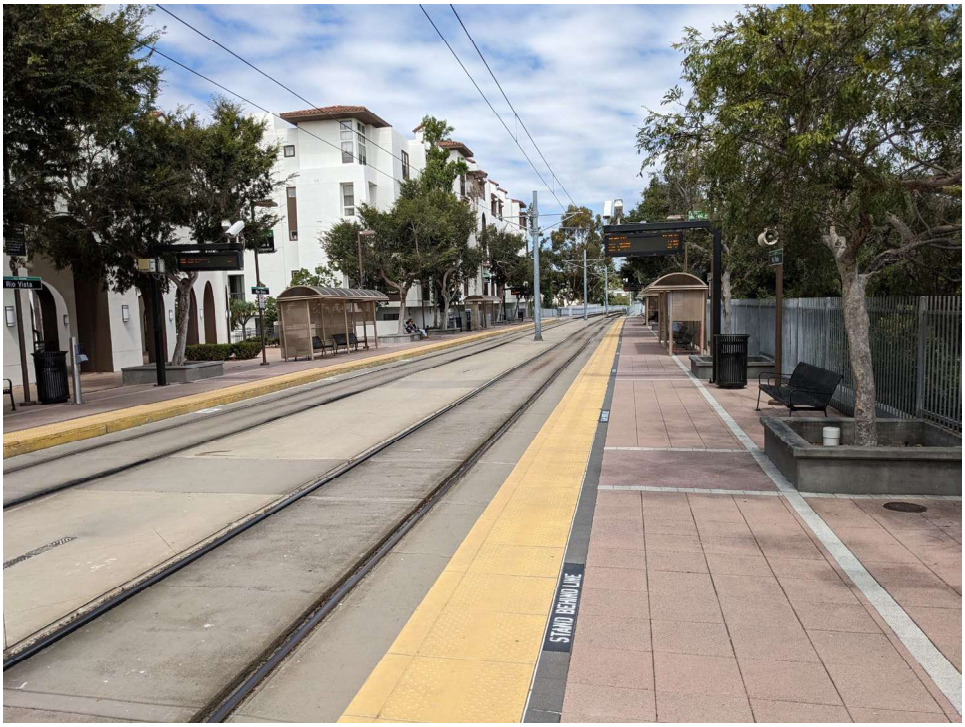

Photo 1. Representative photograph of the MTS Rio Vista station platform, facing east. The Project will retrofit the infrastructure to prevent further settlement of the platform (August 2023).

Photo 2. Representative photograph of the upland riparian habitat surrounding the San Diego River Parkway Trail south of the MTS station. Taken facing west (August 2023).

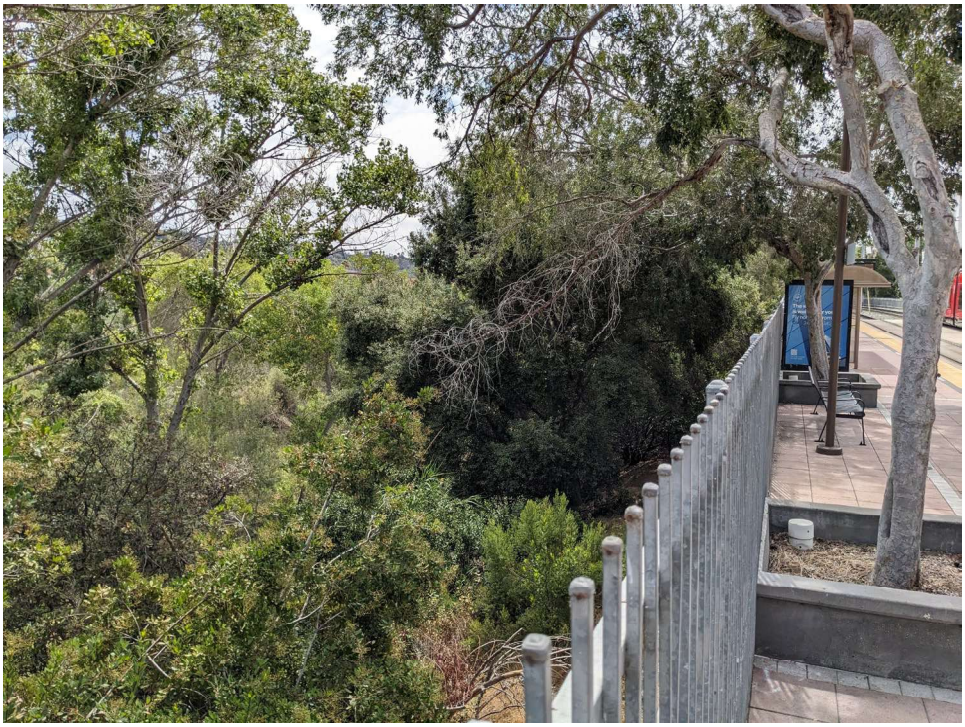

Photo 3. Riparian vegetation directly south of the platform will be removed to provide construction access and restored following the completion of construction (August 2023).

Photo 4. Photo representative of the willow riparian habitat that borders the San Diego River south of the parkway trail. No impacts to this habitat community are anticipated (August 2023).

Photo 5. Representative photograph of the marginal coastal sage scrub habitat located southeast of the platform. No impacts to this habitat community are anticipated (August 2023).

Appendix G: FSDRIP Development and Mitigation Guidelines

Appendix D

DOKKEN ENGINEERING
www.dokkenengineering.com

MEMORANDUM

Company:	**San Diego Metropolitan Transit System**
From:	**Gabrielle Ploszaj, Archaeologist**
Subject:	**Rio Vista Platform Design, Phase II Project Cultural Resources Inventory**
Date:	**January 19, 2024**

The San Diego Metropolitan Transit System (MTS) proposes to retrofit the existing walls and platform of the Rio Vista Station in San Diego County, California to prevent additional settling and/or movement of the station's infrastructure as part of the Rio Vista Platform Design – Phase II Project (Project). The proposed Project is subject to compliance with CEQA, and the MTS is the CEQA lead agency.

The MTS Rio Vista Station (Station) platform and apartment complex to the north were constructed in 1999 and 2005, respectively. In 2018, MTS observed settlement/movement at this station and engaged Jacobs and Atlas (formerly SCST inc.) for retrofit recommendations. Proposed retrofit work may include tie rods, tie-back anchors, CIP wall replacement, and surface drainage improvements. The Project is expected to be fully constructed by the Spring of 2025.

Location

The Project is in the City of San Diego in San Diego County at the MTS Rio Vista Station located on the La Jolla, California U.S. Geological Survey 7.5-minute quadrangle within Township 16S Range 3W (**Appendix A Figures 1&2**). The Project Area Limits (PAL) are defined as the location of repair work including areas that will be used for construction activities like staging equipment, which totals 1.45 acres. The structural improvements require a maximum of 14 feet of excavation below the platform surface, and maximum of 3 feet below the existing grade in the remaining areas. The Project location and PAL is shown in **Appendix A: Figure 3**.

Background Research

To determine the necessary level of resource identification efforts for the proposed undertaking and to better understand the types of cultural resources likely to be encountered in the PAL during the subsequent survey, a variety of resources were consulted. Sources included a records search at the South Coastal Information Center (SCIC) as well as historical map, literature, and aerial imagery review.

Records Search

A record search for the PAL was conducted on December 4, 2023. Additional research included searches of the National Register of Historic Places, the California Register of Historical Resources (California Register), the Directory of Properties in the Historic Property Data File,

the *California Historic Landmarks* (1996), the *California Inventory of Historic Resources* (1976), and the *California Points of Historical Interest* listing (May 1992 and updates). Using this data, previously recorded sites, and previous surveys within a half-mile radius of the PAL were reviewed.

The SCIC identified five (5) previously recorded cultural resources within the half-mile search radius of the PAL and no cultural resources within the PAL (**Table 1**). Additionally, five (5) cultural resource investigations previously conducted within the half-mile search radius of the PAL, and four (4) previous investigations within the PAL were identified (**Table 2**). The results from the SCIC can be found in **Appendix B**.

Table 1. Previously recorded resources within the half-mile search radius

Primary Number	Trinomial	Resource Type	Description	Age
P-37-011055	CA-SDI-011055	Site	Extensive areas of burnt and broken rock (FCR?), hearths and associated stone cores and tools.	Prehistoric
P-37-011056	CA-SDI-011056	Site	Fagerheim Ranch; midden is noted with low shell content.	Prehistoric
P-37-037007	-	Building	A contemporary style department store at the Mission Valley Shopping Center.	Historic
P-37-039141	-	Building	The Bowlero/Scottish Rite Event Center	Historic
P-37-040377	CA-SDI-023382	Site	A single Indigenous flake and a steel cross with an associated historic trash scatter.	Multicomponent

Table 2. Previous reports/surveys within the half-mile search radius

Report ID	Citation Year	Author(s)	Report Title	Inside or Outside of PAL
SD-00368	1979	Carrico, Richard	Archaeological Survey of the Conrock Mission Valley Cup Extension and Reclamation Plant Area	Inside
SD-00546	1975	Cupples, Sue Ann	An Archaeological Survey of the San Diego River Valley	Inside
SD-12200	2009	-	Draft Environmental Impact Report For The Master Storm Water System Maintenance Program (MSWSMP)	Inside
SD-13918	2012	ICF International	San Diego River Park Master Plan Project Draft Program Environmental Impact Report	Inside
SD-00368	1979	Carrico, Richard	Archaeological Survey of the Conrock Mission Valley Cup Extension and Reclamation Plant Area	Outside
SD-00469	1977	Corum, Joyce M.	An Archaeological Survey Report for Portions of a Proposed Ramp	Outside

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Report ID	Citation Year	Author(s)	Report Title	Inside or Outside of PAL
			Metering Project (11-SD-8, P.M. R 0.0- R 18.7) 11355-146531	
SD-00546	1975	Cupples, Sue Ann	An Archaeological Survey of the San Diego River Valley	Outside
SD-00789	1988	Cheever, Dayle and Dennis Gallegos	Archaeological Survey of the North Mission Valley Interceptor Sewer, Stadium Way to Fairmont Avenue	Outside
SD-00970	1988	Timothy Gross and Mary Robins-Wade	Texas Street Widening	Outside

Map Review
A review of historic aerial photography, historic USGS topographic maps, and an attempt to review GLO plat maps of Township 16 South Range 3 West was conducted. No GLO plat survey maps were available for Township 16 South Range 3 West. Historic topographic maps from 1903 to 1929 depict the project area as a largely undeveloped landscape, a single road is shown south of the PAL, which is most likely a historic alignment of Friars Road. Aerial imagery dating from 1953 to 1964 shows large parcels of undeveloped land north of the San Diego River whereas the southern edge of the river had already been largely developed. By 1966, the Mission Valley Freeway was completed, and interchanges were constructed along the northern edge of the San Diego River. By 1984 the PAL and the surrounding plots of land were developed and only slivers of native land remain. The MTS Rio Vista Platform was first opened in November 1997 and was rebuilt in 2005. The Station remains largely unchanged to the current day.

Archaeological Sensitivity
Based on a review of historic literature, geographic features, a lack of previously recorded archaeological resources within the PAL, negative past survey reports within the PAL, and negative pedestrian survey results, overall archaeological site sensitivity in the Project area is considered *low.*

Soils within the PAL are designated as gravel pits and river wash (Department of Agriculture 2024) and may indicate that native soils have been disturbed within the PAL. Geological formations within the PAL and the surrounding vicinity consists of Pleistocene-Holocene deposits (Department of Conservation 2015). The San Diego River and adjacent high ground north and south of the San Diego River would have been a targeted location of Indigenous peoples' activity. although no previous recordation of Indigenous resources is documented in the records search area. The degree of disturbance and development throughout the Project vicinity suggests that the probability to locate intact subsurface archaeological deposits is *low*.

Native American Consultation
On November 7, 2023, a letter and a map depicting the Project vicinity was sent to the NAHC, asking the NAHC commission to review the Sacred Lands File (SLF) for any Native American cultural resources that might be affected by the Project (**Appendix C**). The request to the NAHC seeks to identify any Native American cultural resources within the Project vicinity. A list of Native American individuals who might have information or concerns about the Project was also

requested. On November 30, 2023, Pracilla Torres-Fuentes, Cultural Resources Analyst, informed via email that a review of the sacred lands file returned positive results (**Appendix C**).

On May 10, 2024 initial consultation letters were mail to the Native American individuals on the list provided by the NAHC. The letters provided a summary of the Project and requested information regarding comments or concerns the Native American community might have about the Project (**Appendix C**).

Survey Results
On January 11, 2024, Dokken Engineering Archaeologist Michelle Campbell, M.A., conducted a ground surface inventory of the PAL. Linear pedestrian transects no more than 10 meters apart, where possible, were used to inspect the ground surface. All cut banks, burrow holes, and other exposed sub-surface areas were visually inspected for the presence of archaeological resources, soil color change, and/or staining that could indicate past human activity or buried deposits. The majority of the PAL is covered in concrete and the remaining portions of the PAL had a visibility ranging from 0 to 20 percent due to dense vegetation.

During this survey, no Indigenous-era or historic-era cultural resources were identified. The PAL consists of the Station, the upland riparian corridor south of the Station, and areas for construction or material staging. Photographs documenting the PAL were taken throughout the pedestrian inspection and are documented in this report (**Appendix D**).

Summary
In summary, no Indigenous-era or historic-era cultural resources were identified during the January 11, 2024, pedestrian inspection. Due to the construction of the Station, the active recreational trail to the south of the Station, and the surrounding apartment complexes, the PAL and surrounding area has been heavily disturbed. In consideration of these factors, the overall potential for encountering intact archaeological resources within the PAL is considered *low.*

While no Indigenous or historic-era resources are noted within the PAL, and the potential of encountering intact cultural resources is *low*, the following practices should be implemented in case cultural material is encountered:

CR-1: If previously unidentified cultural materials are unearthed during construction, work shall be halted in that area until a qualified archaeologist can assess the significance of the find and develop a plan for documentation and removal of resources if necessary. Additional archaeological survey will be needed if project limits are extended beyond the present survey limits.

CR-2: Section 5097.94 of the PRC and Section 7050.5 of the California Health and Safety Code protect Native American burials, skeletal remains and grave goods, regardless of age and provide method and means for the appropriate handling of such remains. If human remains are encountered, work should halt in that vicinity and the county coroner should be notified immediately. At the same time, an archaeologist should be contacted to evaluate the situation. If the human remains are of Native American origin, the coroner must notify the NAHC within twenty-four hours of such identification. CEQA details steps to be taken if human burials are of Native American origin.

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Qualifications

Michelle Campbell (M.A. Archaeology, California State University, Sacramento) was the archaeological surveyor and acted as Principal Investigator on this report. Ms. Campbell has been practicing archaeology in California and the Great Basin region since 1999 and meets the Secretary of the Interior's Professional Qualification Standards in Archaeology.

Gabrielle Ploszaj (B.A. Anthropology, California State University, Long Beach) prepared this report. Ms. Ploszaj has been performing archaeology in California and since 2019 and meets the Secretary of the Interior's Professional Qualification Standards in Archaeology as a Lead Surveyor.

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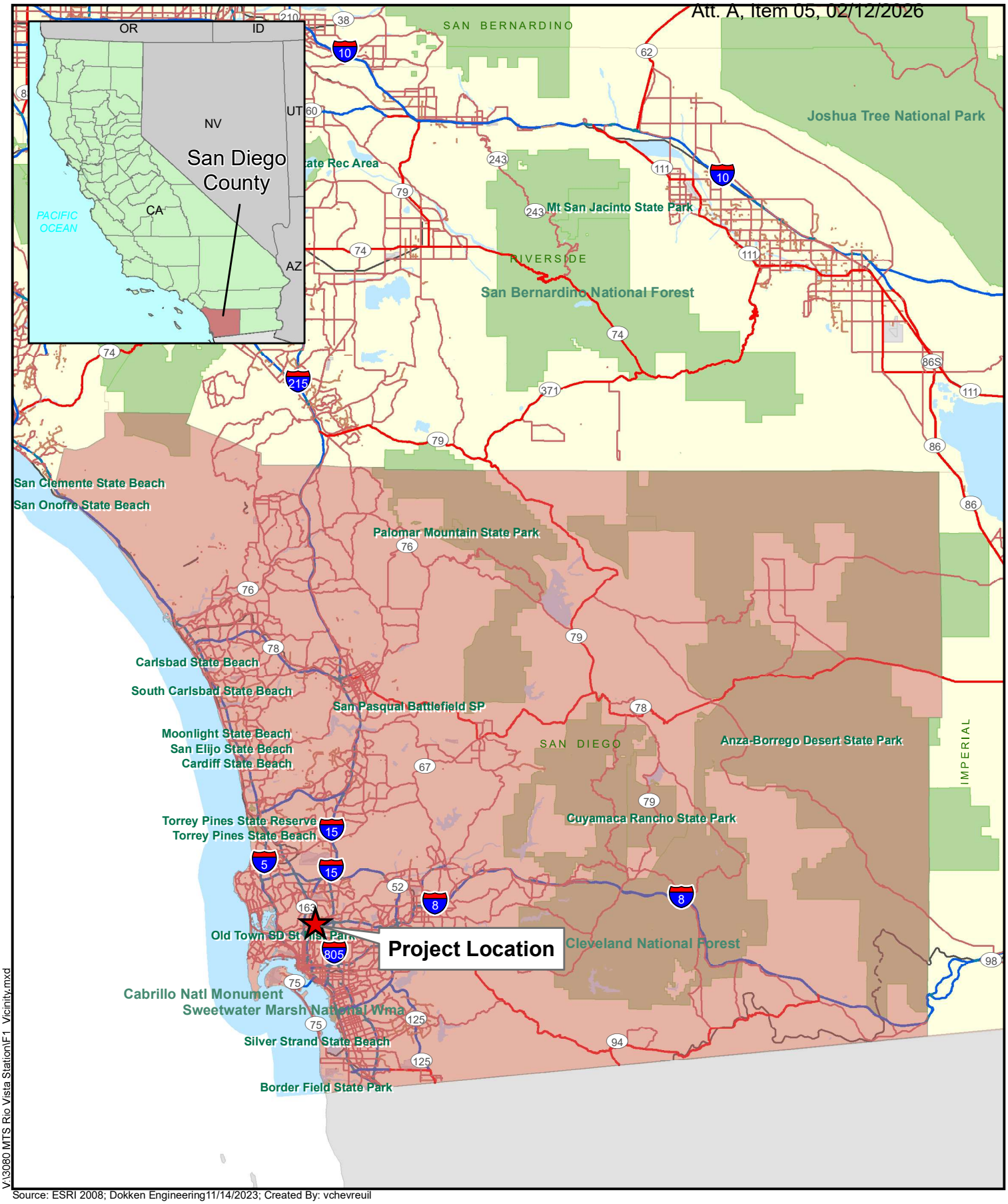
APPENDIX A: Maps



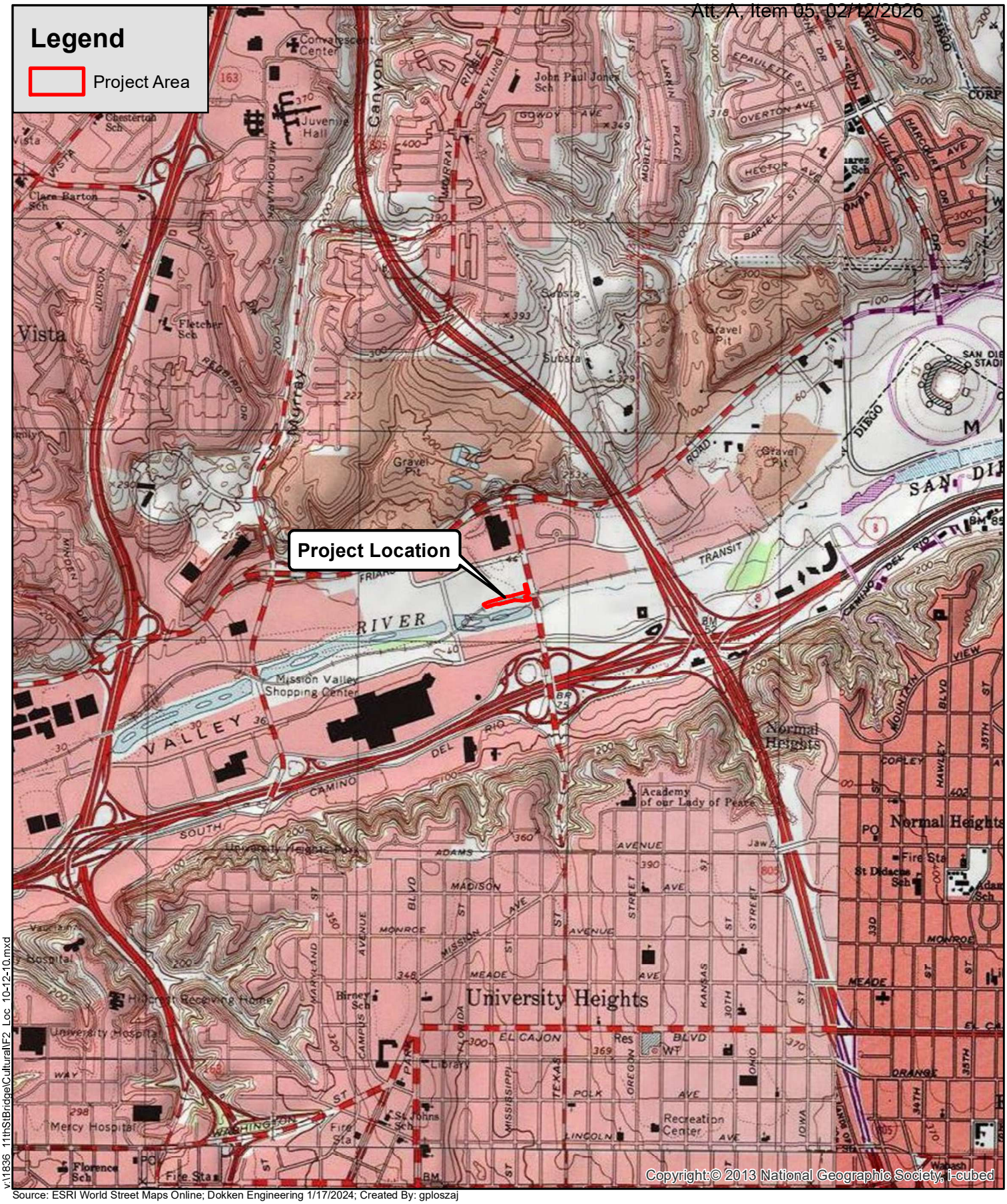
V:\3080 MTS Rio Vista Station\F1 Vicinity.mxd

Source: ESRI 2008; Dokken Engineering11/14/2023; Created By: vchevreuil

0 10 20 30 Miles

FIGURE 1
Project Vicinity

Rio Vista Platform Design - Phase II
San Diego County, California



Source: ESRI World Street Maps Online; Dokken Engineering 1/17/2024; Created By: gploszaj

v:\1836_11thStBridge\Cultural\F2_Loc_10-12-10.mxd

0 0.5 1 1.5 2 Miles

FIGURE 2
Project Location
USGS 7.5-minute Quad: La Jolla, CA
Rio Vista Platform Design - Phase II
San Diego County, California

Village Way
San Diego River

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Appendix B: Record Search Results

South Coastal Information Center
San Diego State University
5500 Campanile Drive
San Diego, CA 92182-5320
Office: (619) 594-5682
www.scic.org
nick@scic.org

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM RECORDS SEARCH

Company: Dokken Engineering

Company Representative: Amy Bakker

Date Processed: 12/4/2023

Project Identification: MTS Rio Vista Platform Design - Phase II (Project #3080)

Search Radius: 1/2 mile

Historical Resources: JL

Trinomial and Primary site maps have been reviewed. All sites within the project boundaries and the specified radius of the project area have been plotted. Copies of the site record forms have been included for all recorded sites.

Previous Survey Report Boundaries: JL

Project boundary maps have been reviewed. National Archaeological Database (NADB) citations for reports within the project boundaries and within the specified radius of the project area have been included.

Historic Addresses: JL

A map and database of historic properties (formerly Geofinder) has been included.

Historic Maps: N/A

The historic maps on file at the South Coastal Information Center have been reviewed, and copies have been included.

Summary of SHRC Approved CHRIS IC Records Search Elements	
RSID:	3523
RUSH:	no
Hours:	1
Spatial Features:	38
Address-Mapped Shapes:	no
Digital Database Records:	41
Quads:	1
Aerial Photos:	0
PDFs:	Yes
PDF Pages:	100

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PrimaryString	TrinomialString	OtherIDs	ResType	Age	Attribs	RecordingEvents	Reports	Address
P-37-011055	CA-SDI-011055						SD-02916, SD-08175, SD-09625	
P-37-011056	CA-SDI-011056						SD-07830, SD-09748, SD-10419, SD-11977, SD-13465	
P-37-037007		Other - 1702 Camino Del Rio North, San Diego, CA 92108; Other - Macy's; Other - May Company; Other - AT&T Mobility LLc SD0357/Texas Street	Building	Historic	HP07 (3+ story commercial building)	2015 (K.A. Crawford, Crawford Historic Services); 2015 (K.A. Crawford, Office of Marie Burke Lia)	SD-16526, SD-17917	1702 Camino Del Rio North San Diego 92108 (APN 438-030-06)
P-37-039141		Resource Name - Bowlero/Scottish Rite Event Center, 1895 Camino del Rio South					SD-18505	
P-37-040377	CA-SDI-023382	IC Informal - RNID-5291						

ReportNum	IDs	Authors	CitYear	CitTitle	CitPublisher	ReportType	InventoryNotes	Resources
SD-00368	NADB-R - 1120368; Voided - CARRICO111	Carrico, Richard	1979	Archaeological Survey of the Conrock Mission Valley Cup Extension and Reclaimation Plant Area	WESTEC Services, Inc.	Archaeological, Field study	[NADB Keywords: COASTAL AREAS, CONROCK MISSION VALLEY PROJECT, DIGITAL REPORT, NO RESOURCES, SOUTHERN PENINSULAR RANGES]	
SD-00546	NADB-R - 1120546; Voided - CUPPLES 43	Cupples, Sue Ann	1975	An Archaeological Survey of the San Diego River Valley	San Diego State University Foundation	Archaeological, Field study	[NADB Keywords: CULTURAL RESOURCE ASSESMENT, DIGITAL COPY, SAN DIEGO RIVER]	37-000004, 37-000035, 37-000038, 37-000041, 37-000120, 37-000125, 37-000202, 37-000203, 37-000239
SD-12200	NADB-R - 1132200; Other - Project No. 42891 SCH No. 200101032; Voided - CITYSD1081		2009	DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE MASTER STORM WATER SYSTEM MAINTENANCE PROGRAM (MSWSMP)	CITY OF SAN DIEGO DEVELOPMENT SERVICES DEPARTMENT	Archaeological, Evaluation, Other research	[NADB Keywords: DIGITAL REPORT, UNKNOWN FINDINGS]	
SD-13918	NADB-R - 1133918; Other - PROJECT NO. 121886 SCH NO. 2009041036; Voided - CITYSD1110	ICF INTERNATIONAL	2012	SAN DIEGO RIVER PARK MASTER PLAN PROJECT DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT	ICF INTERNATIONAL	Archaeological, Evaluation, Other research	[NADB Keywords: DIGITAL REPORT, MISSION FLUME, MISSION TRAILS REGIONAL PARK, MISSION VALLEY, PADRE DAM, SAN DIEGO MISSION, SAN DIEGO RIVER, UNKNOWN FINDINGS]	

ReportNum	IDs	Authors	CitYear	CitTitle	CitPublisher	ReportType	InventoryNotes	Resources
SD-00368	NADB-R - 1120368; Voided - CARRICO111	Carrico, Richard	1979	Archaeological Survey of the Conrock Mission Valley Cup Extension and Reclaimation Plant Area	WESTEC Services, Inc.	Archaeological, Field study	[NADB Keywords: COASTAL AREAS, CONROCK MISSION VALLEY PROJECT, DIGITAL REPORT, NO RESOURCES, SOUTHERN PENINSULAR RANGES]	
SD-00469	NADB-R - 1120469; Other - 11355-146531; Voided - CORUM 06	Corum, Joyce M.	1977	An Archaeological Survey Report for Portions of a Proposed Ramp Metering Project (11-SD-8, P.M. R 0.0- R 18.7) 11355-146531	Caltrans	Archaeological, Field study	[NADB Keywords: COASTAL AREAS, NO RESOURCES, SAN DIEGO RIVER VALLEY, SOUTHERN PENINSULAR RANGES]	
SD-00546	NADB-R - 1120546; Voided - CUPPLES 43	Cupples, Sue Ann	1975	An Archaeological Survey of the San Diego River Valley	San Diego State University Foundation	Archaeological, Field study	[NADB Keywords: CULTURAL RESOURCE ASSESMENT, DIGITAL COPY, SAN DIEGO RIVER]	37-000004, 37-000035, 37-000038, 37-000041, 37-000120, 37-000125, 37-000202, 37-000203, 37-000239
SD-00789	NADB-R - 1120789; Voided - CHEEVER21	Cheever, Dayle and Dennis Gallegos	1988	Archaeological Survey of the North Mission Valley Interceptor Sewer, Stadium Way to Fairmont Avenue	WESTEC Services, Inc.	Archaeological, Field study	[NADB Keywords: COASTAL AREAS, NO RESOURCES, SOUTHERN PENINSULAR RANGES]	
SD-00970	NADB-R - 1120970; Other - 764; Voided - GROSS 19	GROSS, TIMOTHY and MARY ROBBINS-WADE	1988	Texas Street Widening	Affinis	Archaeological, Field study	[NADB Keywords: COASTAL AREAS, NO RESOURCES, SOUTHERN PENINSULAR RANGES]	

SD-02916	NADB-R - 1122916; Other - 89-90; Voided - PEAK 01	PEAK & ASSOCIATES, INC	1990	CULTURAL RESOURCES ASSESSMENT OF AT&T'S PROPOSED SAN BERNARDINO TO SAN DIEGO FIBER OPTIC CABLE, SAN BERNARDINO, RIVERSIDE AND SAN DIEGO COUNTIES, CALIFORNIA	PEAK & ASSOCIATES, INC	Archaeological, Evaluation	[NADB Keywords: BEDROCK MILLING SITES, CA-RIV-2013,CA-RIV-1057, CA-RIV-2711,CA-RIV-2696,CA-RIV-2725, CA-SDI-5383A,CA-SDI-5383B,CA-SDI-5383C,CA-SDI-5383D,CA-SDI-5383F, CA-SDI-5382, COASTAL AREAS, FOOD PROCESSING/PROCUREMENT SITE, GROUNDSTONE, SDM-W-2059,SDM-W-3705,SDM-W-1322, SDM-W-259,SDM-W-271,SDM-W-2016,SDM-W-218, SOUTHERN PENINSULAR RANGES]	37-000239, 37-000564, 37-000565, 37-000572, 37-000573, 37-000584, 37-000648, 37-000649, 37-000650, 37-000651, 37-000652, 37-000653, 37-000655, 37-000656, 37-000657, 37-000673, 37-000674, 37-000676, 37-000679, 37-000680, 37-000749, 37-000782, 37-001090, 37-001250, 37-001251, 37-001281, 37-004960, 37-004961, 37-004962, 37-005380, 37-005381, 37-005382, 37-005383, 37-005387, 37-005426, 37-005427, 37-005428, 37-005429, 37-005490, 37-005583, 37-005584, 37-005632, 37-005633, 37-005641, 37-005642, 37-005647, 37-006001, 37-006002, 37-006003, 37-006079, 37-006080, 37-006081, 37-006722, 37-007121, 37-007245, 37-007310, 37-007311, 37-007312, 37-007313, 37-007314, 37-007315, 37-007316, 37-008084, 37-008085, 37-008099, 37-008100, 37-008663, 37-009129, 37-009593, 37-010116, 37-010549, 37-010674, 37-010675, 37-010676, 37-010677, 37-010678, 37-010679, 37-010680, 37-010681, 37-010682, 37-010745, 37-010785, 37-010879, 37-011033, 37-011055, 37-011236

SD-02960	NADB-R - 1122960; Other - 11290-050021/11290-050031; Voided - CALTRANS09	CALTRANS	1994	NEGATIVE ARCHAEOLOGICAL SURVEY REPORT, 11-SD-8, P.M. 3.9/4.9,11290-050021, 11-SD-805, P.M. 17.2/18/2, 11290-050031	CALTRANS	Archaeological, Field study	[NADB Keywords: CISMONTANE REGION, COASTAL AREAS, INTERSTATE 8, INTERSTATE 805, NO RESOURCES]	
SD-03683	NADB-R - 1123683; Other - AFFINIS JOB NO. 1417; Voided - ALTER40	ALTER, RUTH	1999	RESULTS OF THE HISTORIC BUILDING ASSESSMENT FOR 1128 OLIVER AVENUE, SAN DIEGO, CALIFORNIA	RANDALL DORRIS	Architectural/Historical	[NADB Keywords: COASTAL, HISTORIC BUILDING ASSESSMENT, NOT ELIGIBLE FOR NOMINATION TO THE CA REGISTR, OLIVER AVENUE, P-37-0177262, R4W, T16S, UNSECTIONED]	
SD-04598	NADB-R - 1124598; Voided - CITYSD52	CITY OF SAN DIEGO	1994	PUBLIC NOTICE OF PROPOSED MITIGATED NEGATIVE DECLARATION ACADEMY OF OUR LADY OF PEACE	CITY OF SAN DIEGO	Management/planning, Other research	[NADB Keywords: NEGATIVE DECLARATION]	
SD-04658	NADB-R - 1124658; Voided - CITYSD886	CITY OF SAN DIEGO	2002	PROPOSED MITIGATED NEGATIVE DECLARATION: FORMATION OF UNDERGROUND UTILITY DISTRICTS	CITY OF SAN DIEGO	Management/planning, Other research	[NADB Keywords: NEGATIVE]	
SD-05439	NADB-R - 1125439; Voided - OWENMA1	OWENS, M.A.	1978	Historic Property Survey Parcel 11-FLA-8052C(SD) (Airspace Lease)	M.A. Owen, Caltrans	Other research	[NADB Keywords: No Resources]	
SD-06644	NADB-R - 1126644; Voided - ROSEN 87	ROSEN, MARTIN	1994	NEGATIVE ARCHAEOLOGICAL SURVEY-INTERSTATE 8 & 805 MISSION VALLEY	MARTIN ROSEN	Management/planning	[NADB Keywords: RETROFITTING]	
SD-09145	NADB-R - 1129145; Voided - GALLEGOS97	GALLEGOS, DENNIS and CAROLYN KYLE	1991	CULTURAL RESOURCE SURVEY REPORT SAN DIEGO BIKEWAYS PROJECT SAN DIEGO, CALIFORNIA	GALLEGOS AND ASSOCIATES	Other research		

SD-09751	NADB-R - 1129751; Voided - MOSLAK 03	Moslak, Ken	2004	Cultural Resources Study for the Quarry Falls Project	ASM Affiliates	Archaeological, Evaluation, Other research	[NADB Keywords: DIGITAL COPY, Negative Survey]	
SD-10444	NADB-R - 1130444; Voided - MAYV17	May, Vonn Marie	2006	UPTOWN HISTORIC ARCHITECTURAL AND CULTURAL LANDSCAPE RECONNAISSANCE SURVEY	IS Architecture	Archaeological, Evaluation, Other research	[NADB Keywords: DIGITAL COPY, Unknown Findings, Uptown]	
SD-11360	NADB-R - 1131360; Voided - MOSLAK05	MOSLAK, KEN	2006	QUARRY FALLS PROGRAM EIR - CULTURAL RESOURCES STUDY	ASM AFFILIATES	Archaeological, Evaluation, Other research	[NADB Keywords: DIGITAL COPY, UNKNOWN FINDINGS]	
SD-11826	NADB-R - 1131826; Other - AFFINIS JOB NO. 2215; Voided - ROBBINS255	ROBBINS-WADE, MARY	2008	ARCHAEOLOGICAL RESOURCES ANALYSIS FOR THE MASTER STORMWATER SYSTEM MAINTENANCE PROGRAM, SAN DIEGO, CALIFORNIA PROJECT. NO. 42891	AFFINIS	Archaeological, Evaluation, Other research	[NADB Keywords: DIGITAL COPY, DIGITAL REPORT, MASTER STORMWATER MAINENANCE PROGRAM, COASTAL, ARCHAEOLOGICAL BACKGROUND STUDY, UNKNOWN FINDINGS]	
SD-12200	NADB-R - 1132200; Other - Project No. 42891 SCH No. 200101032; Voided - CITYSD1081		2009	DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE MASTER STORM WATER SYSTEM MAINTENANCE PROGRAM (MSWSMP)	CITY OF SAN DIEGO DEVELOPMENT SERVICES DEPARTMENT	Archaeological, Evaluation, Other research	[NADB Keywords: DIGITAL REPORT, UNKNOWN FINDINGS]	
SD-13006	NADB-R - 1133006; Other - SCH. NO. 2004101032 PROJECT NO. 42891; Voided - ROBBINS316		2011	MASTER STORM WATER SYSTEM MAINTENANCE PROGRAM - DRAFT RECIRCULATED PROGRAM ENVIRONMENTAL IMPACT REPORT	CITY OF SAN DIEGO	Archaeological, Evaluation, Other research	[NADB Keywords: DIGITAL REPORT, STORM WATER, UNKNOWN FINDINGS]	

SD-13202	NADB-R - 1133202; Voided - ROSENM150	ROSEN, MARTIN D.	2011	CULTURAL RESOURCES TECHNICAL ASSESSMENT FOR THE PROGRAM ENVIRONMENTAL IMPACT REPORT FOR THE SAN DIEGO RIVER PARK MASTER PLAN, CITY OF SAN DIEGO, CALIFORNIA	ICF INTERNATIONAL	Archaeological, Architectural/Historical, Evaluation, Other research	[NADB Keywords: DIGITAL REPORT, SAN DIEGO RIVER, UNKNOWN FINDINGS]	
SD-13465	NADB-R - 1133465; Voided - GROSS110	GROSS, G. TIMOTHY	2002	ARCHAEOLOGICAL RESOURCES SURVEY, SEMPRA MISSION CONTROL ACCESS ROAD, MISSION VALLEY, SAN DIEGO, CALIFORNIA	AFFINIS	Archaeological, Evaluation, Other research	[NADB Keywords: CAMP, DIGITAL REPORT, LITHIC SCATTER, MISSION VALLEY, NEGATIVE FINDINGS, SHELL SCATTER, SURVEY]	37-011056, 37-017136, 37-018407
SD-13918	NADB-R - 1133918; Other - PROJECT NO. 121886 SCH NO. 2009041036; Voided - CITYSD1110	ICF INTERNATIONAL	2012	SAN DIEGO RIVER PARK MASTER PLAN PROJECT DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT	ICF INTERNATIONAL	Archaeological, Evaluation, Other research	[NADB Keywords: DIGITAL REPORT, MISSION FLUME, MISSION TRAILS REGIONAL PARK, MISSION VALLEY, PADRE DAM, SAN DIEGO MISSION, SAN DIEGO RIVER, UNKNOWN FINDINGS]	
SD-15120	NADB-R - 1135120	SANDRA PENTNEY and MICHAEL M. DEGIOVINE	2014	HISTORICAL RESOURCE RESEARCH REPORT STADIUM WETLAND MITIGATION PROJECT (SAN DIEGO RIVER)	ATKINS	Archaeological, Architectural/Historical, Field study	KEYWORDS: 65 ACRES, NEGATIVE FINDINGS, PEDESTRIAN SURVEY, QUALCOMM STADIUM, WETLANDS	

SD-16526	NADB-R - 1136526	CRAWFORD, KATHLEEN A.	2015	MACY'S, 1702 CAMINO DEL RIO NORTH, SAN DIEGO, CA 92108	Office of Marie Burke Lia	Architectural/Historical		37-037007
SD-16802	NADB-R - 1136802		2016	UPTOWN COMMUNITY PLAN AREA DRAFT HISTORIC RESOURCES SURVEY REPORT	CITY OF SAN DIEGO PLANNING DEPARTMENT	Architectural/Historical		37-016203, 37-016204
SD-17232	NADB-R - 1137232; Submitter - BCR Project No. SYN1628	BRUNZELL, DAVID	2017	SAN DIEGO 55 FIBER PROJECT, SAN DIEGO COUNTY, CALIFORNIA (BCR CONSULTING PROJECT NO. SYN1628)	BCR Consulting LLC	Archaeological, Field study, Literature search		
SD-17234	NADB-R - 1137234; Submitter - BCR Project No. SYN1514	BRUNZELL, DAVID	2017	CULTURAL RESOURCES ASSESSMENT OF THE MISSION CONTROL, BLUE CYPRESS, LAKE MURRAY AND CASO SERRA PROJECT, SAN DIEGO COUNTY, CALIFORNIA (BCR CONSULTING PROJECT NO. SYN1514)	BCR Consulting LLC	Archaeological, Field study, Literature search		

SD-17916	NADB-R - 1137916	WILLS, CARRIE D., SARAH A. WILLIAMS, and KATHLEEN A. CRAWFORD	2015	CULTURAL RESOURCE RECORDS SEARCH AND SITE VISIT RESULTS FOR AT&T MOBILITY, LLC CANDIDATE SD0357 (TEXAS STREET), 1702 CAMINO DEL RIO NORTH, SAN DIEGO, SAN DIEGO COUNTY, CALIFORNIA, USID: 103943, FA LOCATION: 10085139	HELIX ENVIRONMENTAL PLANNING, INC.	Archaeological, Field study, Literature search		
SD-18505	NADB-R - 1138505	HERITAGE ARCHITECTURE & PLANNING	2019	HISTORICAL RESOURCES TECHNICAL REPORT BOWLERO / SCOTTISH RITE EVENT CENTER, 1895 CAMINO DEL ROI SOUTH SAN DIEGO, CA 92108	HERITAGE ARCHITECTURE & PLANNING	Architectural/Historical, Evaluation, Other research		37-039141
SD-19824	NADB-R - 1139824	FOGLIA, ALBERTO B.	2021	ETS 50213: CULTURAL RESOURCES SURVEY REPORT FOR THE MISSION SUBSTATION DRIVEWAY EROSION CONTROL PROJECT	PANGIS	Archaeological, Field study		
SD-19934	NADB-R - 1139934	WILSON, STACIE and THEODORE G. COOLEY	2021	ARCHAEOLOGICAL SENSITIVITY ASSESSMENT FOR THE ALVARADO 2ND PIPELINE EXTENSION PROJECT, CITY OF SAN DIEGO, CALIFORNIA	HELIX ENVIRONMENTAL PLANNING, INC.	Archaeological, Field study	KEYWORDS: CITY OF SAN DIEGO; MISSION VALLEY; FRIARS ROAD; PREHISTORIC HABITATION	37-011722, 37-011766, 37-011767, 37-012862, 37-014963
SD-19935	NADB-R - 1139935	WILSON, STACIE and THEODORE G. COOLEY	2021	CULTURAL RESOURCES TECHNICAL REPORT FOR THE ALVARADO 2ND PIPELINE EXTENSION PROJECT, CITY OF SAN DIEGO, CALIFORNIA	HELIX ENVIRONMENTAL PLANNING, INC.	Archaeological, Field study	KEYWORDS: CITY OF SAN DIEGO; MISSION VALLEY; PREHISTORIC HABITATION	37-011722, 37-011766, 37-011767, 37-012862, 37-014963, 37-023996, 37-036520, 37-036521

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Appendix C: Native American Consultation

STATE OF CALIFORNIA Gavin Newsom, *Governor*

NATIVE AMERICAN HERITAGE COMMISSION

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Reid Milanovich
Cahuilla

COMMISSIONER
Vacant

EXECUTIVE SECRETARY
Raymond C. Hitchcock
Miwok, Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710

November 30, 2023

Gabrielle Ploszaj
Dokken Engineering

Via Email to: gploszaj@dokkenengineering.com

Re: Rio Vista Platform Design - Phase II Project, San Diego County

Dear Ms. Ploszaj:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were positive. Please contact the tribes on the attached list for more information. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Pricilla.Torres-Fuentes@nahc.ca.gov.

Sincerely,

Pricilla Torres-Fuentes

Pricilla Torres-Fuentes
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
San Diego County
11/30/2023

County	Tribe Name	Fed (F) Non-Fed (N)	Contact Person	Contact Address	Phone #	Fax #	Email Address	Cultural Affiliation	Counties	Last Updated
San Diego	Barona Group of the Capitan Grande	F	Art Bunce, Attorney		(760) 489-0329		buncelaw@aol.com	Diegueno	Imperial,San Diego	7/25/2023
	Campo Band of Diegueno Mission Indians	F	Ralph Goff, Chairperson	36190 Church Road, Suite 1 Campo, CA, 91906	(619) 478-9046	(619) 478-5818	rgoff@campo-nsn.gov	Diegueno	Imperial,Orange,Riverside,San Diego	
	Ewiiaapaayp Band of Kumeyaay Indians	F	Michael Garcia, Vice Chairperson	4054 Willows Road Alpine, CA, 91901	(619) 933-2200	(619) 445-9126	michaelg@leaningrock.net	Diegueno	Imperial,Orange,Riverside,San Diego	
	Ewiiaapaayp Band of Kumeyaay Indians	F	Robert Pinto, Chairperson	4054 Willows Road Alpine, CA, 91901	(619) 368-4382	(619) 445-9126	ceo@ebki-nsn.gov	Diegueno	Imperial,Orange,Riverside,San Diego	
	Iipay Nation of Santa Ysabel	F	Clint Linton, Director of Cultural Resources	P.O. Box 507 Santa Ysabel, CA, 92070	(760) 803-5694		clinton@redtailenvironmental.com	Diegueno	Imperial,San Diego	11/30/2023
	Inaja-Cosmit Band of Indians	F	Rebecca Osuna, Chairperson	2005 S. Escondido Blvd. Escondido, CA, 92025	(760) 737-7628	(760) 747-8568		Diegueno	Imperial,San Diego	
	Jamul Indian Village	F	Erica Pinto, Chairperson	P.O. Box 612 Jamul, CA, 91935	(619) 669-4785	(619) 669-4817	epinto@jiv-nsn.gov	Diegueno	Imperial,San Diego	
	Jamul Indian Village	F	Lisa Cumper, Tribal Historic Preservation Officer	P.O. Box 612 Jamul, CA, 91935	(619) 669-4855		lcumper@jiv-nsn.gov	Diegueno	Imperial,San Diego	9/5/2018
	Kwaaymii Laguna Band of Mission Indians	N	Carmen Lucas,	P.O. Box 775 Pine Valley, CA, 91962	(619) 709-4207			Kwaaymii Diegueno	Imperial,San Diego	6/20/2023
	La Posta Band of Diegueno Mission Indians	F	Gwendolyn Parada, Chairperson	8 Crestwood Road Boulevard, CA, 91905	(619) 478-2113	(619) 478-2125	LP13boots@aol.com	Diegueno	Imperial,Orange,Riverside,San Diego	
	Manzanita Band of Kumeyaay Nation	F	Angela Elliott Santos, Chairperson	P.O. Box 1302 Boulevard, CA, 91905	(619) 766-4930	(619) 766-4957		Diegueno	Imperial,Orange,Riverside,San Diego	
	Mesa Grande Band of Diegueno Mission Indians	F	Michael Linton, Chairperson	P.O Box 270 Santa Ysabel, CA, 92070	(760) 782-3818	(760) 782-9092	mesagrandeband@msn.com	Diegueno	Imperial,Orange,Riverside,San Diego	
	San Pasqual Band of Diegueno Mission Indians	F	Allen Lawson, Chairperson	P.O. Box 365 Valley Center, CA, 92082	(760) 749-3200	(760) 749-3876	allenl@sanpasqualtribe.org	Diegueno	Imperial,San Diego	
	San Pasqual Band of Diegueno Mission Indians	F	John Flores, Environmental Coordinator	P. O. Box 365 Valley Center, CA, 92082	(760) 749-3200	(760) 749-3876	johnf@sanpasqualtribe.org	Diegueno	Imperial,San Diego	8/16/2016
	Sycuan Band of the Kumeyaay Nation	F	Cody Martinez, Chairman	Sycuan Tribal Office: 1 Kwaaypaay Court El Cajon, CA, 92019	(619) 445-2613		cmartinez@sycuan-nsn.gov	Kumeyaay	Imperial,San Diego	8/7/2023
	Sycuan Band of the Kumeyaay Nation	F	Bernice Paipa, Cultural Resource Specialist	Sycuan Cultural Center: 910 Willow Glen Drive El Cajon, CA, 92019	(619) 445-6917		bpaipa2@sycuan-nsn.gov	Kumeyaay	Imperial,San Diego	8/7/2023
	Viejas Band of Kumeyaay Indians	F	Ray Teran, Resource Management Director	1 Viejas Grade Road Alpine, CA, 91901	(619) 659-2312		rteran@viejas-nsn.gov	Kumeyaay	Imperial,San Diego	6/29/2023
	Viejas Band of Kumeyaay Indians	F	Ernest Pingleton, THPO	1 Viejas Grade Road Alpine, CA, 91901	(619) 445-3810		epingleton@viejas-nsn.gov	Kumeyaay	Imperial,San Diego	6/29/2023

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Rio Vista Platform Design - Phase II Project, San Diego County.

Record: PROJ-2023-005770
Report Type: List of Tribes
Counties: San Diego
NAHC Group: All

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Appendix D: Representative Field Photographs

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Photo 1: Overview of the MTS Rio Vista Platform and the northern edge of the PAL, photo facing west.

Photo 2: Overview of the Platform and the northern edge of the PAL, photo facing east.

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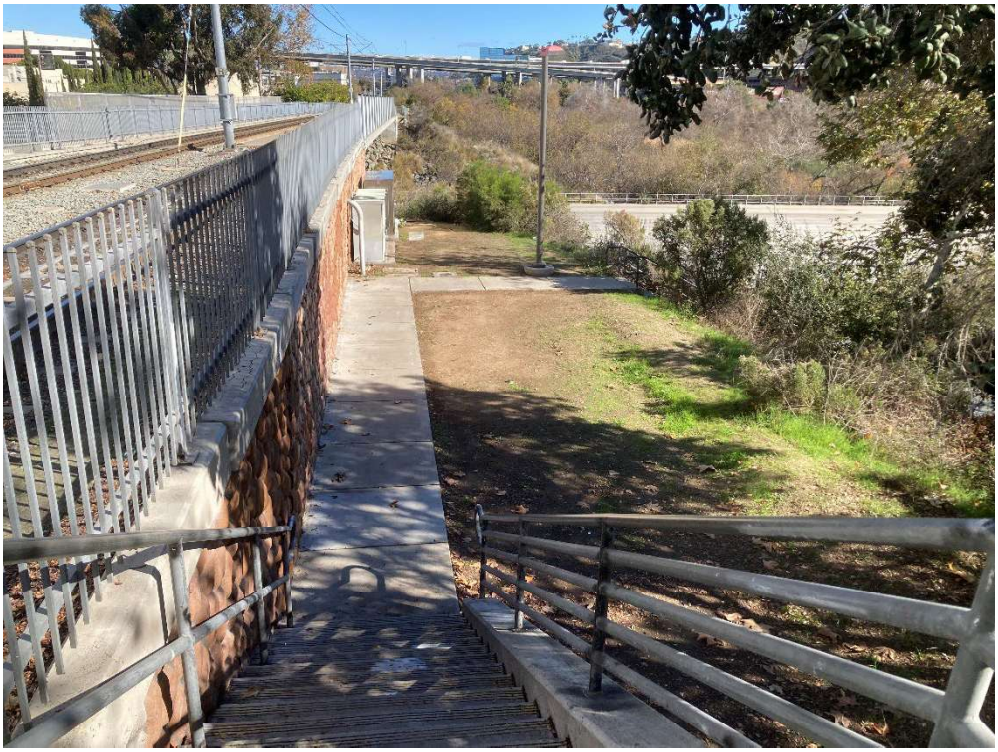

Photo 3: View of pathway south of the Platform and the southeastern section of the PAL, photo facing east.

Photo 4: Example of dense vegetation along the southern edge of the Platform and PAL (seen in the upper right corner of image), photo facing west.

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Photo 6: Example of dense vegetation along the pedestrian path, south of the Platform, photo facing west/northwest.

Photo 7. Overview of the southern edge of the PAL, photo facing west.

Appendix E

6280 Riverdale Street
San Diego, CA 92120
(877) 215-4321 | oneatlas.com

October 19, 2023

Atlas No. 10421
Report No. 1R

MS. KIMBERLY WENDER, PE
SENIOR PROJECT MANAGER
DOKKEN ENGINEERING
1450 FRAZEE ROAD, SUITE 100
SAN DIEGO, CALIFORNIA 92108

Subject: **Preliminary Geotechnical Memorandum**
SDMTS Green Line Trolley
Rio Vista Station Repair
San Diego, California

References:
1) SCST Inc., (2018), Geotechnical Investigation, SDMTS Green Line Trolley, Rio Vista Station Wall Investigation, San Diego, California, dated October 8, SCST Job No. 170383P4.1-01, prepared for Jacobs Engineering.
2) Leighton Consulting Inc., (2017), Draft Geotechnical Memorandum, Morena/ Linda Vista and Rio Vista Wall Evaluation, MTS Green Line, San Diego, California, Project No. 10147.013, dated March 31st.
3) San Diego Association of Governments, SANDAG, (2006), Rio Vista LRT Station MSE Wall Investigation, dated August 23.
4) MTDB, (1999), As Built Drawings, Mission Valley West LRT Extension, Stadium Segment, MTDB Contract No. LRT-416.2, dated February.

Dear Ms. Wender:

Atlas Technical Consultants (Atlas) is pleased to provide this preliminary geotechnical memorandum for the subject project. We understand that the project will consist of repairing the existing distressed Cast-in-Place (CIP) and Mechanically Stabilized Earth (MSE) walls on the north and south sides of the Rio Vista Station platform. Atlas was retained to join the project team and perform geotechnical assessment of the wall and site conditions and provide geotechnical recommendations for repair alternatives. This memorandum provides our opinion about the existing condition of the project site and walls based on our recent site visit and review of the project documents including available previous geotechnical reports and memorandums (References 1, 2, and 3) and as-built drawings (Reference 4). It should be noted that Atlas (formerly known as SCST) was retained in 2018 by others to perform a geotechnical investigation and provide a report for this project (see Reference 1).

REVIEW OF AS-BUILT DRAWINGS

Per project as-built drawings, we understand that the construction of Rio Vista Station was completed in 1999. The north and south walls of the platform are labeled as RW6LT and RW4RT, respectively. The North West Wall (RW6LT between Stations 221+14.89 and 223+29) consists of a 17 to 19-foot-high mechanically stabilized earth (MSE) wall with non-metallic reinforcement. A 13 to 16-foot-high MSE wall with welded wire reinforcement exists at North East Wall (RW6LT between Stations 223+29 and 228+00.93). The construction of the Promenade at Rio Vista (early 2000) raised the grades on the order of 8 to 12 feet resulting in the wall from Station 223+29 to 225+00 to be completely below grade. The North East Wall from approximately Station 225+00 to 228+00 consists of a 4-foot-high cast-in-place (CIP) concrete curb wall resting on top of the welded wire mesh reinforced wall. The South Wall (RW4RT) consists of a 17 to 19-foot-high MSE wall with non-metallic reinforcement.

PREVIOUS FIELD INVESTIGATIONS

In 1993 and as a part of Promenade at Rio Vista project, Leighton Consulting drilled three borings in the vicinity of the project area to depths ranging from 32 to 46.5 feet below the existing ground surface. In 1993, Group Delta Consultants drilled two borings to the depths of 61 and 80 feet and advanced one cone penetrometer test (CPT) to the depth of 54 feet below the existing ground surface. In 2018, SCST (now Atlas) drilled five borings to approximate depths of 16.5 to 36.5 feet below the existing ground surface. The location and log of the borings are available in Reference 1.

SUBSURFACE CONDITIONS

Per boring logs of previous investigations, the project site is underlain by fill and alluvium. Fill is expected to extend for about 25 to 30 feet below the bottom of the MSE walls and be mostly associated with the sand mining operations and infilling of settling ponds in 1970s and 1980s (Reference 2). Fill generally consists of loose to very dense, clayey sand and soft to hard, sandy, or silty clay with varying amounts of gravel. Alluvium was encountered to the bottom of the previous borings and consists of medium dense to very dense poorly graded sand with varying amounts of silt. Cobbles and boulders are noted on the boring logs of previous investigations.

Groundwater at elevations of about 27 feet above mean sea level (MSL) was encountered in the past. However, groundwater may be encountered at higher or lower elevations depending on frequency, duration, and timing of rainfall events.

RECENT SITE OBSERVATION AND MONITORING

On August 17, 2023, an Atlas geotechnical engineer visited the project site along with the other project team members to observe the condition of the project site and walls. The observed distresses of the walls were generally consistent with those reported by Leighton Consulting (see

Reference 2). The observed wall distresses and ground condition are listed below. The corresponding photos are provided in Figures 1 through 5.

- A gap between pavers and back of the North East Wall
- Displaced wall panels of North West Wall
- Exposed welded wire reinforcement of North East Wall beneath the CIP concrete wall
- Spalled concrete of CIP wall of North East Wall
- Spalling and cracking of the South Wall coping
- A gap between the pavers and back of the South Wall
- Outward rotation of South Wall at western end
- Misaligned panels of South Wall at some locations
- Tension cracks at top of the south embankment slope

We understand that surveying monuments have been installed on the platform at select locations in November 2021 and that these monuments have been surveyed on a quarterly basis since then. The exact location of these monuments and whether these were installed on wall copings, or platform pavers or slabs are not clear to us at this time. Atlas was provided with the monitoring results through August 23, 2023, as presented in Appendix I. The obtained monitoring results through February 2023 suggest displacement of monuments of up to about ½ inch. However, the results of the May and August 2023 surveys do not show recording of consistent displacements. At some locations, a displacement in the opposite direction has been recorded.

PRELIMINARY CONCLUSIONS

Based on our recent observations of the site and wall conditions, we generally agree with the findings and conclusions of the previous studies (see References 1, 2, and 3). In our opinion, various factors are contributing to the observed distresses of the walls. These factors consist of the presence of loose/soft materials in the upper 5 feet below the platform, settlement of the fill materials, unsuitable and potentially expansive materials used for the MSE walls, potential creep of the south slope embankment, and possible slipping and creep of non-metallic reinforcement behind the walls. It seems that some of the issues have occurred either during or right after completion of the construction of the walls as evidenced by the compromised installation of the pavers. The presence of asphalt patch at the platform suggests differential movement of the pavers after completion of the wall which required maintenance.

The presence of tension cracks at the top of the slope of the south embankment for soils that were previously tested to be expansive (see Reference 1) suggests the potential for displacement of the embankment, particularly when the moisture content of the soil varies seasonally.

The available recordings of surveying of the monuments suggest that the recordings should be considered to be within the range of surveying error as consecutive observations have not yielded consistent results. Therefore, we do not interpret the recorded displacements as indicative of wall movement at this time.

Based on the review of findings of previous studies, visual observation of the walls and project site conditions during our recent site visit, and review of the available surveying results, it does not appear that the RW6LT and RW4RT walls are experiencing concerning levels of continuous displacement. Since the walls appear to be generally in acceptable condition with observed distresses within the anticipated tolerances of MSE walls, the project team may plan for localized repairs with the consideration to limit the potential for compromising the structural integrity of the existing walls.

PRELIMINARY RECOMMENDATIONS

We recommend to continue monitoring of the installed surveying monuments on a quarterly basis to provide additional information for future assessments. We also recommend installing new monuments on the face of the walls at two levels to monitor the potential movement of the top and bottom panels separately. At a minimum, we recommend installing five equally spaced surveying monuments on top of the south embankment slope where tension cracks have been observed, i.e., between Stations 221+37.64 and 226+89. The monuments should be installed close to the South Wall (RW4RT), between the face of the wall and the existing tension cracks. The monuments should be properly protected in place. If the results of surveying of these monuments suggest displacement of the embankment, we may recommend installing inclinometers to assess the depth of the potential displacement.

The project team is evaluating the options of tie-back anchors or tie-rods with vertical walers, and Deadman anchors for localized repair of the walls. However, the CIP concrete wall of the North East Wall (RW6LT) is expected to be replaced. These repair options are not intended to address the observed settlement of the platform or potential creep of the south embankment slope. The recommendations provided in the 2018 SCST report (Reference 1) can be used for preliminary design purposes, unless as revised/supplemented in the following. Atlas should be contacted if additional information or recommendations are needed.

The standard of practice in accordance with the existing tie-back anchors design guidelines is to install these anchors with a minimum of 15 feet of overburden soil and at sub horizontal inclinations of 10 degrees or more. To reduce the potential for damaging the existing MSE wall reinforcements, the project team is evaluating horizontal or near horizontal tie-back anchors. Due to the presence of loose/soft soils at shallow depths of platform subgrade, we do not recommend the bond zone of tie-back anchors to be less than 8 feet below the platform surface. Potential conflicts with the existing underground utilities should be evaluated. A reduced ultimate unit bond stress of 400 pounds per square foot (psf) can be used for preliminary design when the depth of bond zone is between 8 to 15 feet below the platform surface. For depths of 15 feet or more, the unit ultimate bond stress can be assumed to be 700 psf. The tie-back anchors design bond stress should be verified in the field by load testing. Potential for caving of the drilled hole exists. The bond zone of adjacent anchors should be at a distance of at least 4 feet from each other. The grouting of anchors installed at angles less than 10 degrees generally requires special grouting

techniques. When the bond zone of the tie-back anchors (horizontal or subhorizontal) cannot have at least 15 feet of soil cover in all directions, the anchors should only be permitted to be gravity grouted (i.e., with low pressure). Pressure grouting should not be allowed due to the potential for grout leakage and ground movement.

We appreciate the opportunity to provide our services. Should you have any questions or if we may be of further service, please contact our office at 877.215.4321 at your convenience.

Respectfully submitted,
Atlas Technical Consultants LLC

Reza Saeedzadeh, PhD, PE, GE 3204
Principal Engineer

RS:ds

Attachments: Figures 1-5 – Site Photographss
Appendix I – Wall Monuments Monitoring Recordings

Distribution: KWender@DokkenEngineering.com

PHOTO 1

Displaced RW4RT Wall Panel and Coping

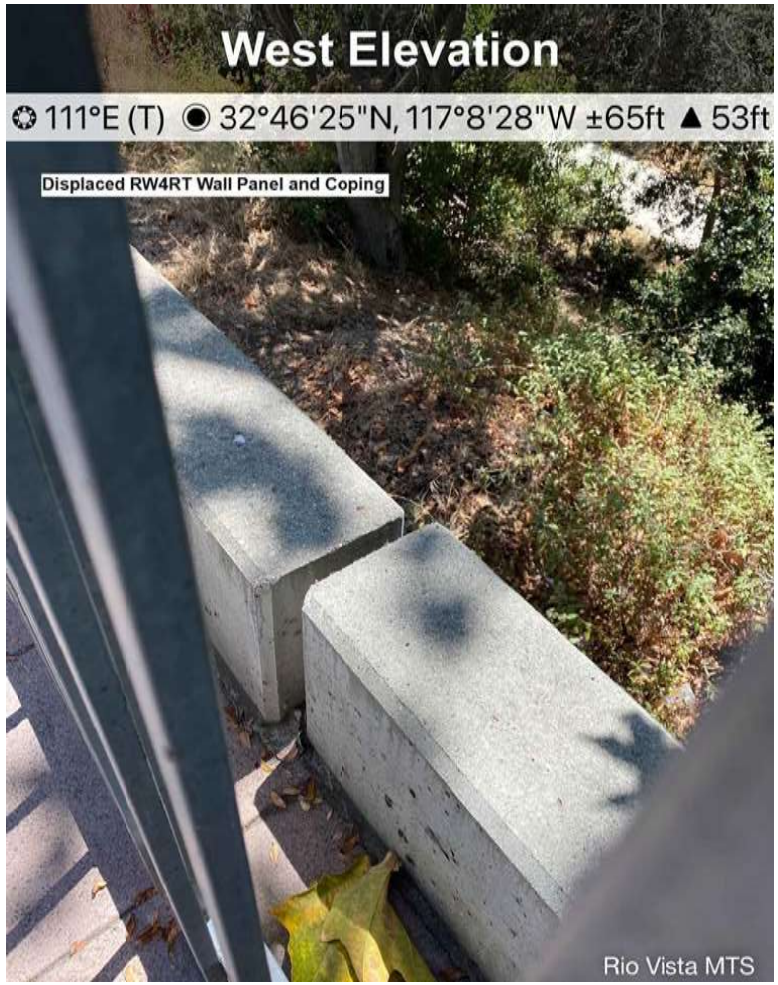
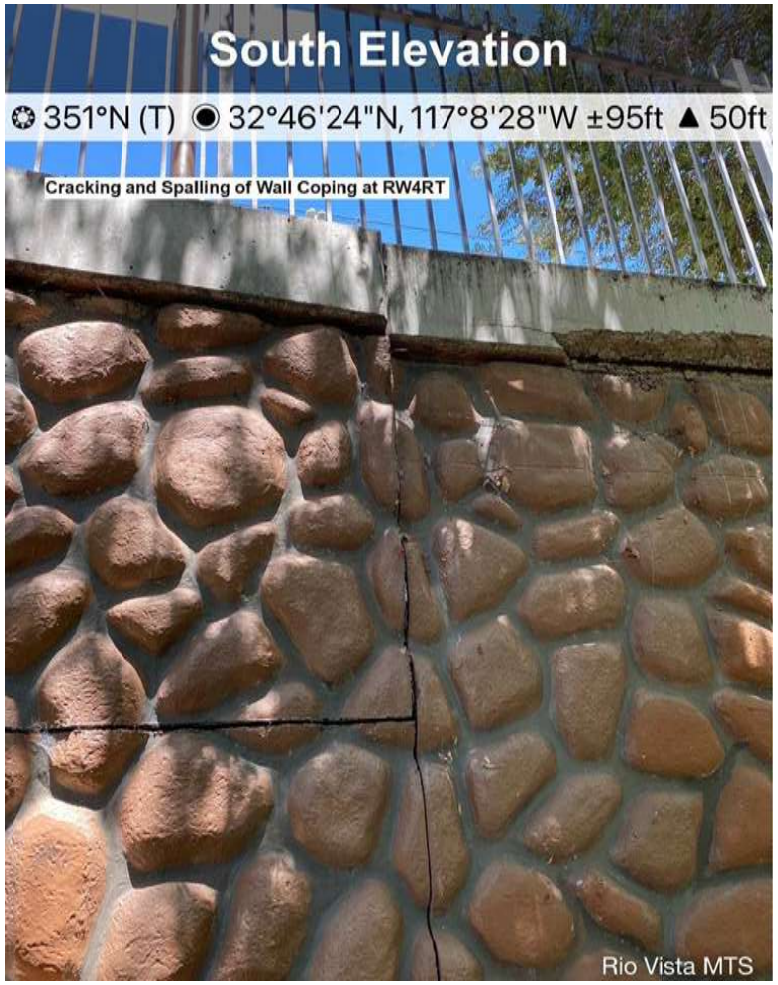


PHOTO 2

Cracking and Spalling of Wall Coping RW4RT



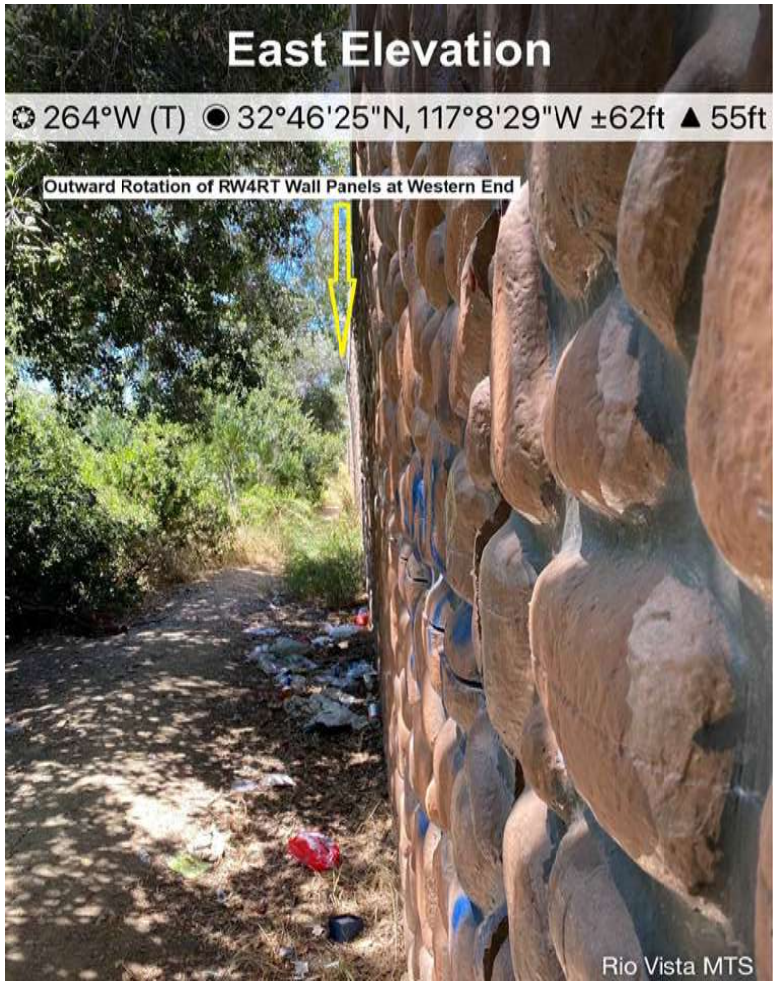
ATLAS	**SITE PHOTOGRAPHS** MTS Rio Vista Station Repairs San Diego, California	Date: October, 2023 By: CGI Job No.: 10421.000	Figure: 1

PHOTO 3

Displaced of RW4RT Wall Lower Panels

PHOTO 4

Outward Rotation of RW4RT Wall Panels at West End



ATLAS	**SITE PHOTOGRAPHS** MTS Rio Vista Station Repairs San Diego, California	Date: October, 2023 By: CGI Job No.: 10421.000	Figure: 2

PHOTO 5

Displaced RW4RT Wall Top Panels

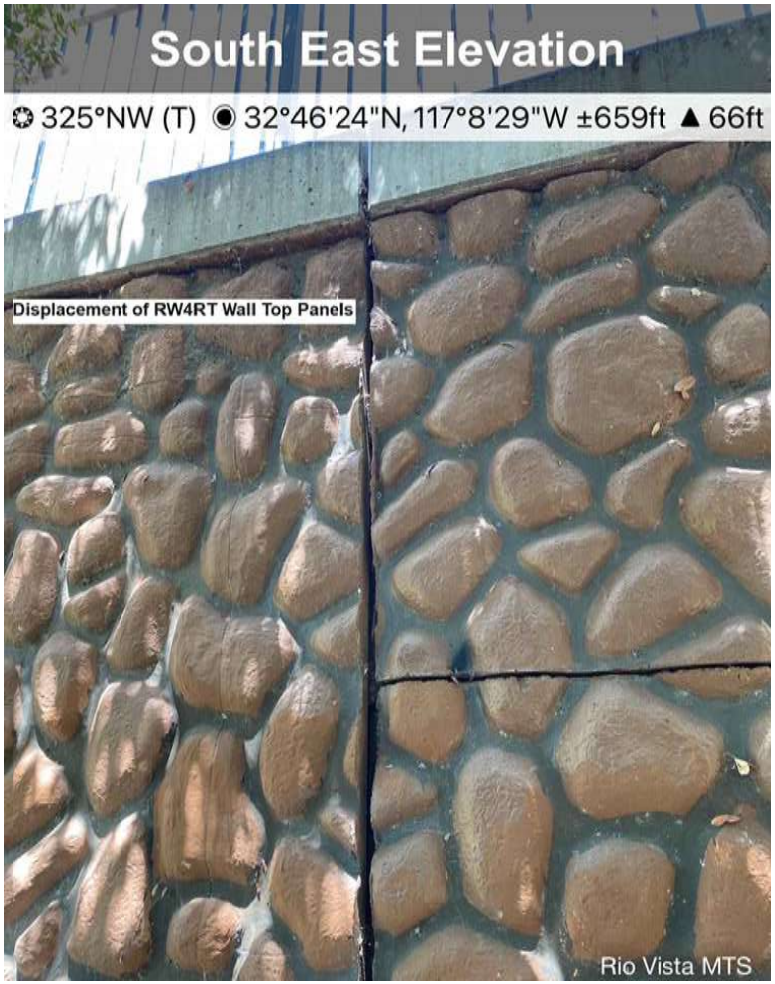
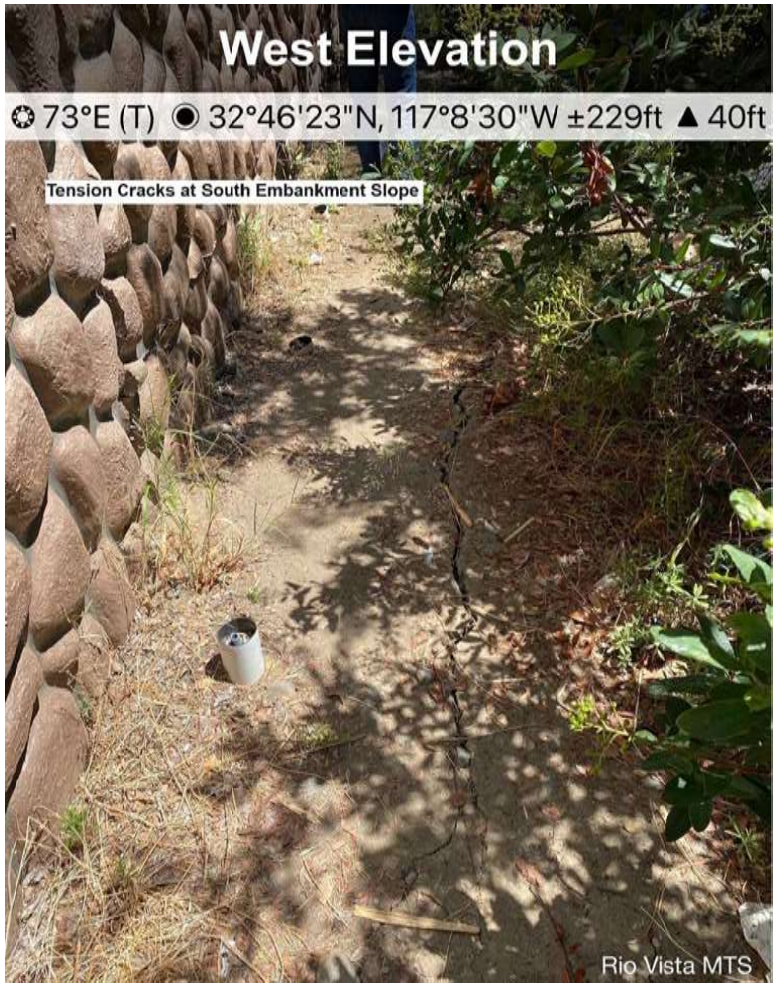


PHOTO 6

Tension Cracks at South Embankment Slope



ATLAS	**SITE PHOTOGRAPHS** MTS Rio Vista Station Repairs San Diego, California	Date: October, 2023 By: CGI Job No.: 10421.000	Figure: 3

PHOTO 7

Displacement of Lower Panels of RW4RT Wall
Tension Cracks at South Slope Embankments

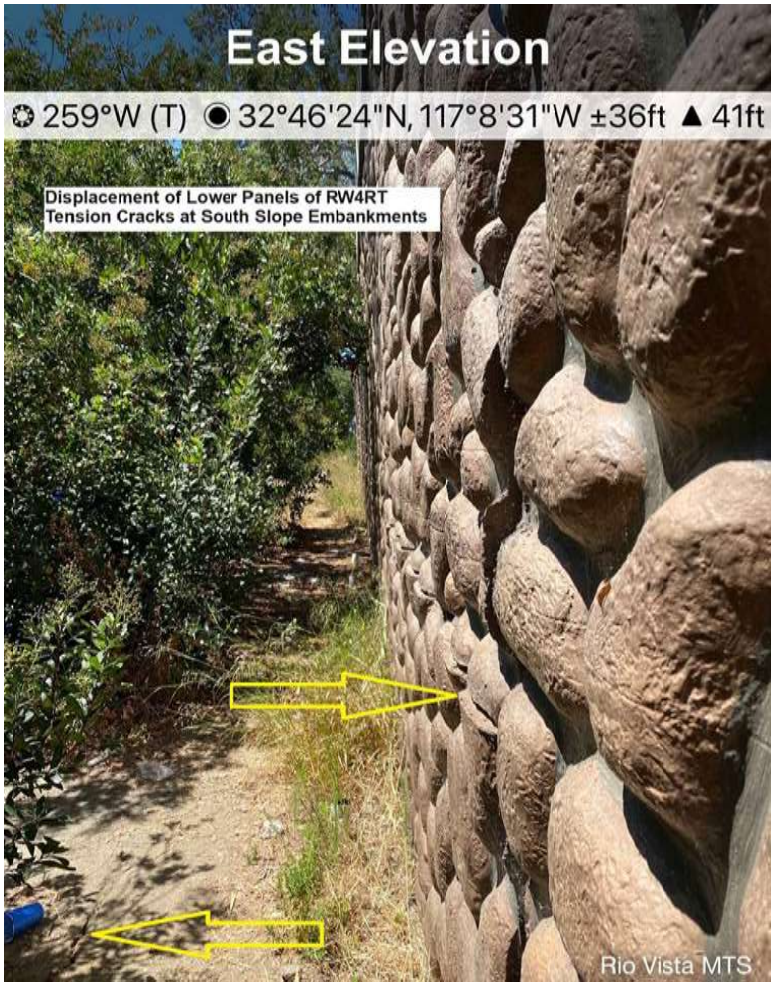


PHOTO 8

Misaligned Panels of RW6LT Wall

ATLAS	**SITE PHOTOGRAPHS** MTS Rio Vista Station Repairs San Diego, California	Date: October, 2023 By: CGI Job No.: 10421.000	Figure: 4

PHOTO 9

Observed Gap Between the Pavers and the RW6LT Wall

PHOTO 10

Exposed Welded Wire Reinforcement of RW6LT beneath the CIP Wall

ATLAS	**SITE PHOTOGRAPHS** MTS Rio Vista Station Repairs San Diego, California	Date: October, 2023 By: CGI Job No.: 10421.000	Figure: 5

APPENDIX I
WALL MONUMENTS MONITORING RECORDINGS

MTS Rio Vista Wall Monitoring

Initial observation 11-23-21

Pt #	Northing	Easting	Elevation	Description
304	1862517.24	6287502.39	65.75	cp scribed x (offsite)
305	1862948.82	6287376.57	58.10	cp scribed x (back sight point) (Elevation is per check shot #509)
308	1862453.98	6287520.67	68.59	cp scribed x (instrument occupation point)
310	1862538.79	6287377.44	64.70	cp scribed x (offsite)
311	1862462.48	6287558.14	69.47	set lead&tack 1.1
312	1862501.84	6287707.61	68.21	set lead&tack 2.1
313	1862449.42	6287719.84	68.19	found screw 3.1
314	1862405.19	6287548.44	69.51	found screw 4.1
315	1862358.74	6287374.96	70.87	found screw 5.1

Note: on 8-23-23 CP 308 was found to have been destroyed by construction. CP 362 was established in the same general area from CPs 304 & 310. All obeservation from 8-23-23 and later are form CP 362.

2nd observation 2-23-22

Pt #	Northing	Easting	Elevation	Notes
316	1862517.24	6287502.39	65.76	ck 304
317	1862462.48	6287558.15	69.48	lead&tack 1.2
318	1862501.84	6287707.62	68.21	lead&tack 2.2
319	1862449.42	6287719.84	68.20	screw 3.2
320	1862405.18	6287548.43	69.52	screw 4.2
321	1862358.73	6287374.96	70.87	screw 5.2

Difference from initial observation

Northing	Easting	Elevation
-0.01	0.00	0.01
0.00	0.01	0.00
-0.01	0.01	0.00
0.00	0.01	0.00
-0.01	-0.01	0.01
0.00	0.00	0.00

3rd observation 5-23-22

Pt #	Northing	Easting	Elevation	Notes
322	1862517.25	6287502.39	65.75	ck 304
323	1862538.78	6287377.43	64.71	ck 310
324	1862462.48	6287558.15	69.47	lead&tack 1.3
325	1862501.85	6287707.61	68.21	lead&tack 2.3
326	1862449.42	6287719.85	68.18	screw 3.3
327	1862405.19	6287548.44	69.52	screw 4.3
328	1862358.72	6287374.97	70.87	screw 5.3

Difference from initial observation

Northing	Easting	Elevation
0.01	0.00	0.01
0.00	-0.01	0.00
0.00	0.01	0.00
0.00	0.01	0.00
0.00	0.01	-0.01
0.00	0.00	0.01
-0.02	0.01	0.00

4th observation 8-23-22

Pt #	Northing	Easting	Elevation	Notes	Difference from initial observation Northing	Easting	Elevation
329	1862538.79	6287377.43	64.70	ck 310	0.00	-0.01	-0.01
330	1862517.24	6287502.39	65.75	ck 304	0.00	0.00	0.00
331	1862462.48	6287558.14	69.46	lead&tack 1.4	0.00	0.01	-0.01
332	1862501.84	6287707.60	68.20	lead&tack 2.4	0.00	0.00	0.00
333	1862449.42	6287719.85	68.17	screw 3.4	0.00	0.01	-0.03
334	1862405.18	6287548.44	69.50	screw 4.4	-0.01	0.00	-0.01
335	1862358.72	6287374.96	70.85	screw 5.4	-0.02	0.00	-0.02

5th observation 11-22-22

Pt #	Northing	Easting	Elevation	Notes	Difference from initial observation Northing	Easting	Elevation
336	1862948.82	6287376.56	58.11	ck 305	0.00	-0.01	0.01
337	1862538.79	6287377.43	64.69	ck 310	0.00	0.00	-0.02
338	1862517.24	6287502.39	65.75	ck 304	0.00	0.00	0.00
339	1862462.48	6287558.14	69.45	lead&tack 1.5	0.00	0.00	-0.02
340	1862501.84	6287707.61	68.18	lead&tack 2.5	0.00	0.01	-0.03
341	1862449.42	6287719.85	68.14	screw 3.5	0.00	0.01	-0.05
342	1862405.19	6287548.43	69.48	screw 4.5	-0.01	-0.01	-0.03
343	1862358.72	6287374.98	70.83	screw 5.5	-0.02	0.02	-0.04

6th observation 2-23-23

Pt #	Northing	Easting	Elevation	Notes	Difference from initial observation Northing	Easting	Elevation
344	1862948.82	6287376.57	58.10	ck 305	0.00	0.00	0.00
345	1862538.79	6287377.43	64.70	ck 310	0.00	0.00	-0.01
346	1862517.25	6287502.39	65.75	ck 304	0.01	0.00	0.00
347	1862462.48	6287558.14	69.45	lead&tack 1.6	0.00	0.00	-0.02
348	1862501.83	6287707.61	68.18	lead&tack 2.6	-0.02	0.00	-0.02
349	1862449.41	6287719.84	68.15	screw 3.6	-0.01	0.01	-0.04
350	1862405.18	6287548.42	69.49	screw 4.6	-0.02	-0.02	-0.02
351	1862358.72	6287374.98	70.83	screw 5.6	-0.02	0.02	-0.04

7th observation 5-23-23

Pt #	Northing	Easting	Elevation	Notes	Difference from initial observation Northing	Easting	Elevation
352	1862948.82	6287376.57	58.10	ck 305	0.00	0.00	0.00
353	1862538.79	6287377.42	64.68	ck 310	0.01	-0.01	-0.02
354	1862517.25	6287502.39	65.74	ck 304	0.01	0.00	-0.01
355	1862462.48	6287558.14	69.44	lead&tack 1.7	0.01	0.00	-0.03
356	1862501.83	6287707.61	68.18	lead&tack 2.7	-0.02	0.01	-0.02
357	1862449.42	6287719.84	68.19	screw 3.7	0.00	0.00	0.00
358	1862405.17	6287548.42	69.52	screw 4.7	-0.02	-0.02	0.02
359	1862358.74	6287374.96	70.88	screw 5.7	0.00	0.00	0.01

8th observation 8-23-23

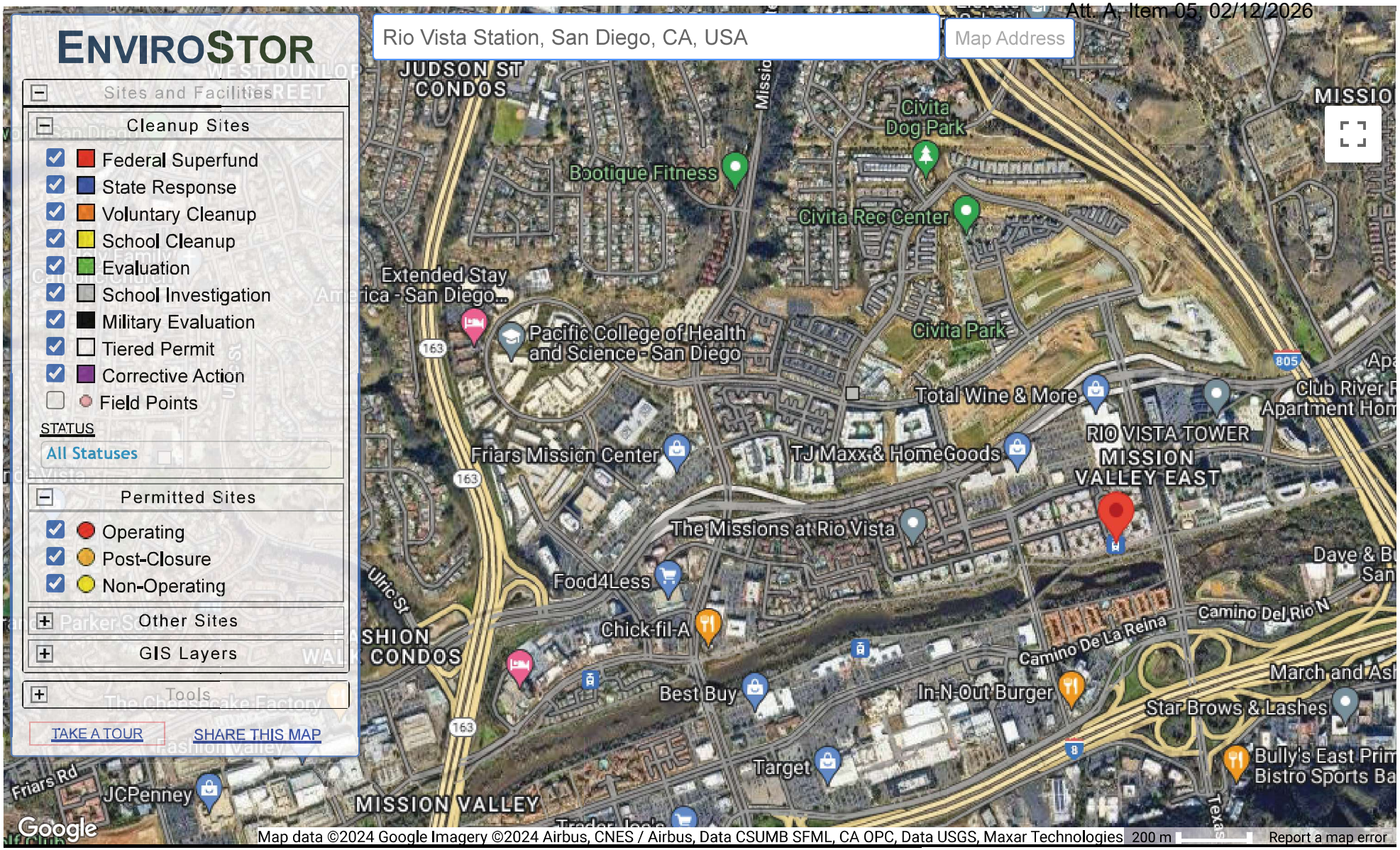
Pt #	Northing	Easting	Elevation	Notes	Difference from initial observation Northing	Easting	Elevation
363	1862948.81	6287376.57	58.10	ck 305	-0.01	0.00	-0.01
364	1862538.78	6287377.43	64.69	ck 310	0.00	-0.01	-0.02
365	1862517.25	6287502.39	65.75	ck 304	0.00	0.00	0.00
366	1862462.48	6287558.14	69.45	lead&tack 1.8	0.01	0.00	-0.02
367	1862501.83	6287707.62	68.19	lead&tack 2.8	-0.02	0.01	-0.02
368	1862449.40	6287719.86	68.18	screw 3.8	-0.02	0.02	-0.02
369	1862405.18	6287548.42	69.54	screw 4.8	-0.01	-0.02	0.03
370	1862358.74	6287374.96	70.88	screw 5.8	0.00	0.01	0.02

*See Control and Monitoring Point Locations exhibit on the following page for locations of observation points.

MTS Rio Vista Wall

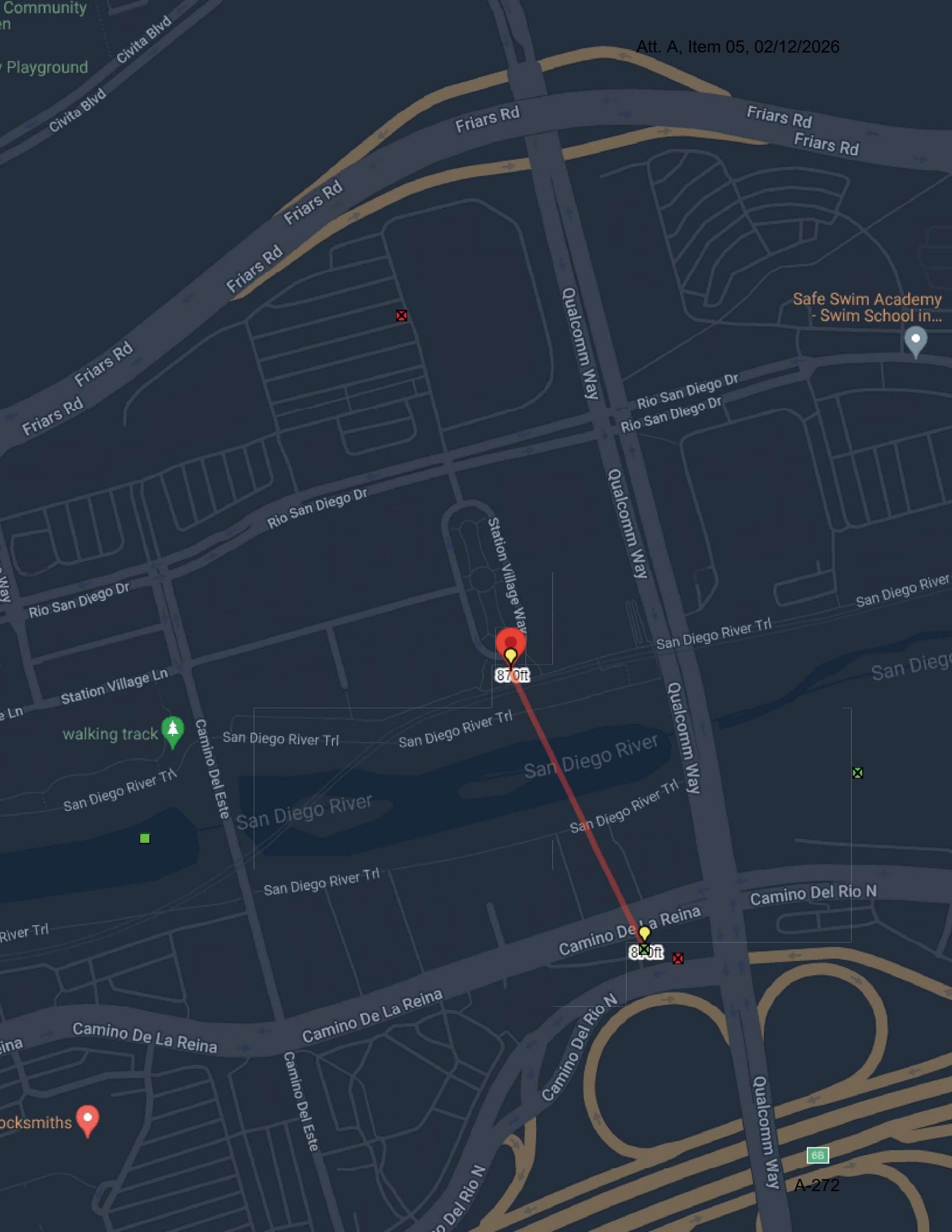
Control & Monitoring point locations.

Appendix F



SITES CURRENTLY VISIBLE ON MAP — 5 SITES LISTED — EXPORT THIS LIST TO EXCEL

PROJECT NAME	STATUS	PROJECT TYPE	ADDRESS	CITY
CAMP KEARNY MESA BURN ASH SITE	REFER: 1248 LOCAL AGENCY	EVALUATION	6501 LINDA VISTA ROAD	SAN DIEGO
CARSON ELEMENTARY SCHOOL	INACTIVE - NEEDS EVALUATION	SCHOOL INVESTIGATION	6905 KRAMER STREET	SAN DIEGO
DYTRON/FORMER GOLDEN STATE	REFER: 1248 LOCAL AGENCY	EVALUATION	6901 LINDA VISTA ROAD	SAN DIEGO
PROPOSED CIVITA ELEMENTARY SCHOOL	NO FURTHER ACTION	SCHOOL INVESTIGATION	NORTHEAST CORNER OF VIA ALTA AND CIVITA BOULEVARD	SAN DIEGO
SFPP/LP MISSION VALLEY TERMINAL	INACTIVE - NEEDS EVALUATION	TIERED PERMIT	9950 SAN DIEGO MISSION ROAD	SAN DIEGO


Community
Playground
Civita Blvd
Civita Blvd
Friars Rd
Friars Rd
Friars Rd
Friars Rd
Friars Rd
Friars Rd
Friars Rd
Safe Swim Academy
- Swim School in...
Qualcomm Way
Qualcomm Way
Qualcomm Way
Rio San Diego Dr
Rio San Diego Dr
Rio San Diego Dr
Rio San Diego Dr
Station Village Way
Station Village Ln
walking track
Camino Del Este
San Diego River Trl
San Diego River Trl
San Diego River Trl
San Diego River Trl
San Diego River Trl
San Diego River Trl
San Diego River Trl
San Diego River
San Diego River
San Diego River
San Diego
Camino Del Rio N
Camino De La Reina
Camino De La Reina
Camino De La Reina
Camino Del Rio N
Camino Del Rio N
Camino Del Este
Qualcomm Way
6B
ocksmiths
River Trl
ina
870ft
840ft

Appendix G

National Flood Hazard Layer FIRMette

FEMA

117°8'54"W 32°46'42"N

117°8'17"W 32°46'12"N

Feet

0 250 500 1,000 1,500 2,000

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- B 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- 8 Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 6/5/2024 at 2:00 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Appendix H

Eilar Associates, Inc.
Acoustical and Environmental Consulting Services

Construction Noise Control Plan for Rio Vista Platform Design – Phase II

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Job # S250209

April 18, 2025

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Appendices

A. Project Plans
B. Applicable Noise Regulations
C. CadnaA Analysis Data and Results

1.0 Executive Summary

The proposed project, Rio Vista Platform Design – Phase II, consists of the retrofitting of infrastructure at the Rio Vista Station on the Metropolitan Transit System (MTS) Green Line. The project site is located in the City of San Diego, California.

Mitigation Measure NOI-1 from the project Initial Study/Mitigated Negative Declaration (IS/MND) requires the preparation of a Construction Noise Control Plan to ensure compliance with the construction noise limits found within Section 59.5.0404 of the City of San Diego Municipal Code. The San Diego Municipal Code states that construction activity is prohibited between the hours of 7 p.m. and 7 a.m. and on Sundays or legal holidays, and that during permissible hours of operation, noise levels from construction activity must be limited to a 12-hour average of no greater than 75 dBA at any residential use. While NOI-1 also addresses the requirement for noise control at the Multi-Habitat Planning Area (MHPA) to ensure the protection of noise-sensitive species, it is the understanding of the undersigned that construction will not take place during the breeding season. As such, construction noise impacts have only been evaluated at residential receivers.

Calculations demonstrate that during the Preconstruction Phase, Phase 2, and Phase 5, noise impacts at residential receivers are not expected to exceed a 12-hour average noise level of 75 dBA during construction activity. During Phase 1, Phase 3, and Phase 4, temporary sound barriers will be required. During Phase 1, a sound barrier with a minimum height of 12 feet is required when the power-driven saw and/or jackhammer will be used within 50 feet of residential buildings. For Phases 3 and 4, a sound barrier with a minimum height of 8 feet is required when activities will take place within 30 feet of residential buildings. With these noise control measures in place, as well as the implementation of general good practice noise control measures listed herein, the project is expected to comply with the noise regulations of the City of San Diego and mitigation measure NOI-1.

2.0 Introduction

This Construction Noise Control Plan is submitted to satisfy the acoustical requirements of the City of San Diego as well as project-specific mitigation measure NOI-1. Its purpose is to assess noise impacts from temporary construction activities to identify project features or requirements necessary to remain in compliance with City of San Diego noise regulations for temporary construction noise.

All noise level or sound level values presented herein are expressed in terms of decibels (dB), with A-weighting, abbreviated "dBA," to approximate the hearing sensitivity of humans. Time-averaged noise levels are expressed by the symbol "L_{EQ}." Unless a different time period is specified, "L_{EQ}" is implied to mean a period of one hour. Some of the data may also be presented as octave-band-filtered and/or 1/3-octave-band-filtered data, which are a series of sound spectra centered about each stated frequency, with half of the bandwidth above and half of the bandwidth below each stated frequency. This data is typically used for machinery noise analysis and barrier calculations.

2.1 Project Description

The proposed project, Rio Vista Platform Design – Phase II, consists of the retrofitting of infrastructure at the Rio Vista Station on the Metropolitan Transit System (MTS) Green Line. To address observed settlement and movement at the station, the following retrofit activities will be performed: tie rods, tie-back anchors, cast-in-place wall replacement, and surface drainage improvements. According to project plans, work will be limited to normal business working hours of 7 a.m. to 3 p.m., Monday through Friday. According to the project plans and information provided by the project proponent, construction activities will consist of the tasks and equipment listed in Table 1. Please refer to Appendix A for project plans.

Table 1. Construction Task Details		
Phase	**Task**	**Anticipated Noise-Generating Equipment**
Preconstruction	Clearing and Grubbing, Access Road Grading	Mini-Excavator, Bulldozer
1	Demolition	Mini-Excavator, Power-Driven Saw, Jackhammer, Dump Truck, Air Compressor, Generator
2	Tie-Rod Installation	Drill Rig, Concrete Mixer, Concrete Pump, Hydraulic Jack
3	Anchor Block Installation	Excavator, Concrete Mixer, Concrete Pump, Dump Truck
4	Backfill	Excavator, Dump Truck, Compactor
5	Resurfacing Station, Installing Station Amenities	Concrete Mixer, Concrete Pump, Compact Crane

2.2 Project Location

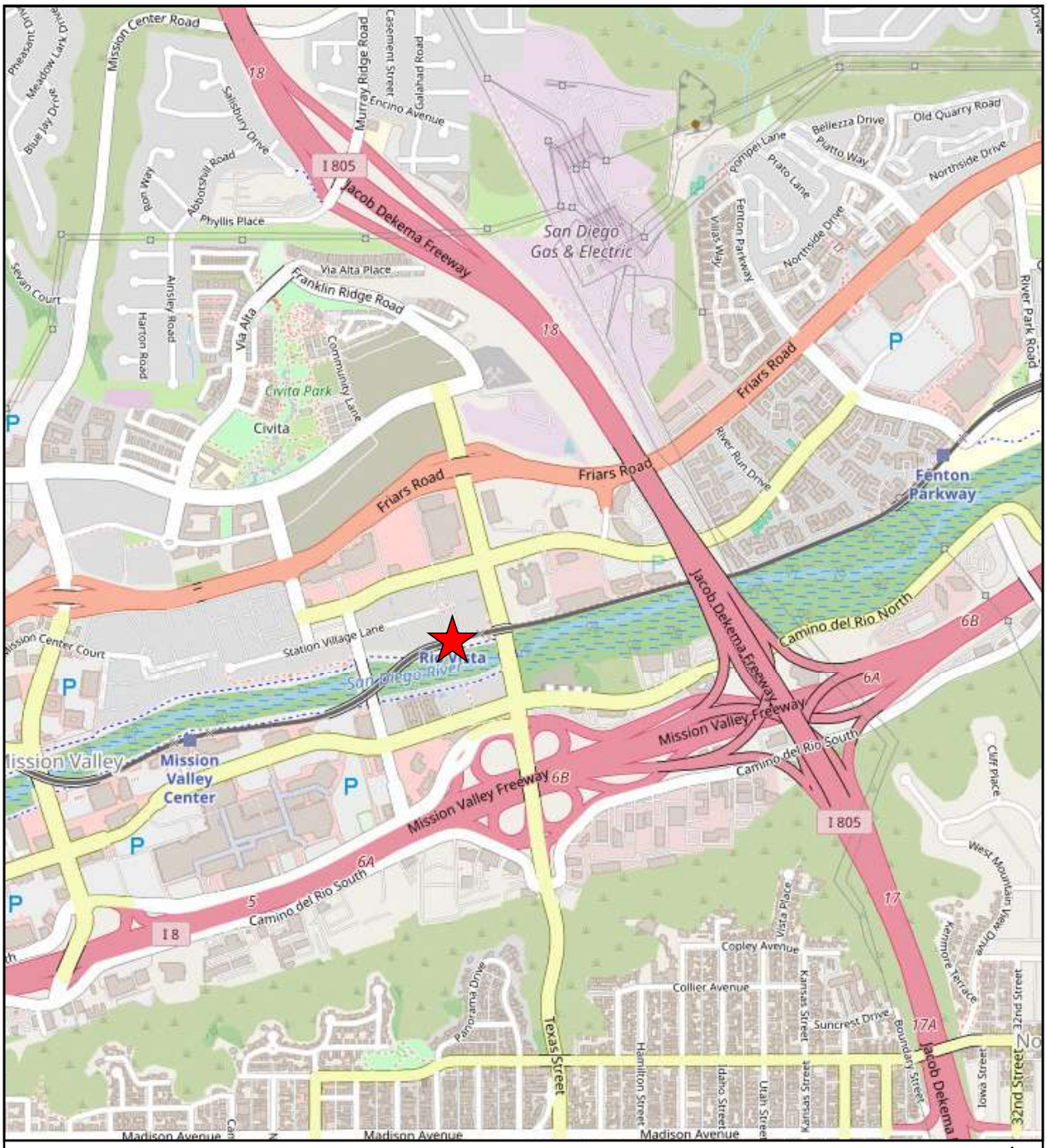
The project site is located at the existing Rio Vista Station on the MTS Green Line. The project is located in the City of San Diego, California. The site is surrounded by residential and commercial retail uses to the north, Qualcomm Way to the east, open space to the west, and the San Diego River to the south. For a graphical representation of the site, please refer to the Vicinity Map and Satellite Aerial Photograph, provided as Figures 1 and 2, respectively.

2.3 Applicable Noise Regulations

The project must follow Mitigation Measure NOI-1 from the project Initial Study/Mitigated Negative Declaration (IS/MND), which is as follows:

> ***NOI-1 Construction Noise Control Plan.*** *A project construction noise control plan shall be prepared when project construction details are available to provide plans for compliance with the MHPA maximum noise limit of 60 dBA L_{EQ} and the City of San Diego Noise Abatement and Control Ordinance. The construction noise control plan shall be approved by MTS and the City and implemented by the construction contractor.*
>
> *Temporary sound attenuation barriers consisting of a single, solid sound wall, with a height of 12 feet at the southern edge of the project site that borders the MHPA area and temporary access road would likely reduce noise levels to allowable limits at the MHPA boundary during construction activity. The sound attenuation barriers would need to be constructed of commercial noise control materials with a manufacturer's laboratory test rating to achieve the noise ordinance thresholds of 75 dBA such as noise control blankets or solid materials such as masonry, wood, plastic, fiberglass, steel, hay bales or a combination of those materials meeting Sound Transmission Class 22 specifications. To meet industry noise control standards, the noise control barrier would not contain cracks or gaps through or below the installation. Any seams or cracks must be filled, caulked or overlapped.*

Section 59.5.0404 of the City of San Diego Municipal Code is the basis for the residential noise limit shown in NOI-1. This section of the Municipal Code states that construction activity is prohibited between the hours of 7 p.m. and 7 a.m. and on Sundays or legal holidays. During permissible hours of operation, noise levels from construction activity must be limited to a 12-hour average of no greater than 75 dBA at any residential use. Please refer to Appendix B for pertinent sections of the City of San Diego Municipal Code.

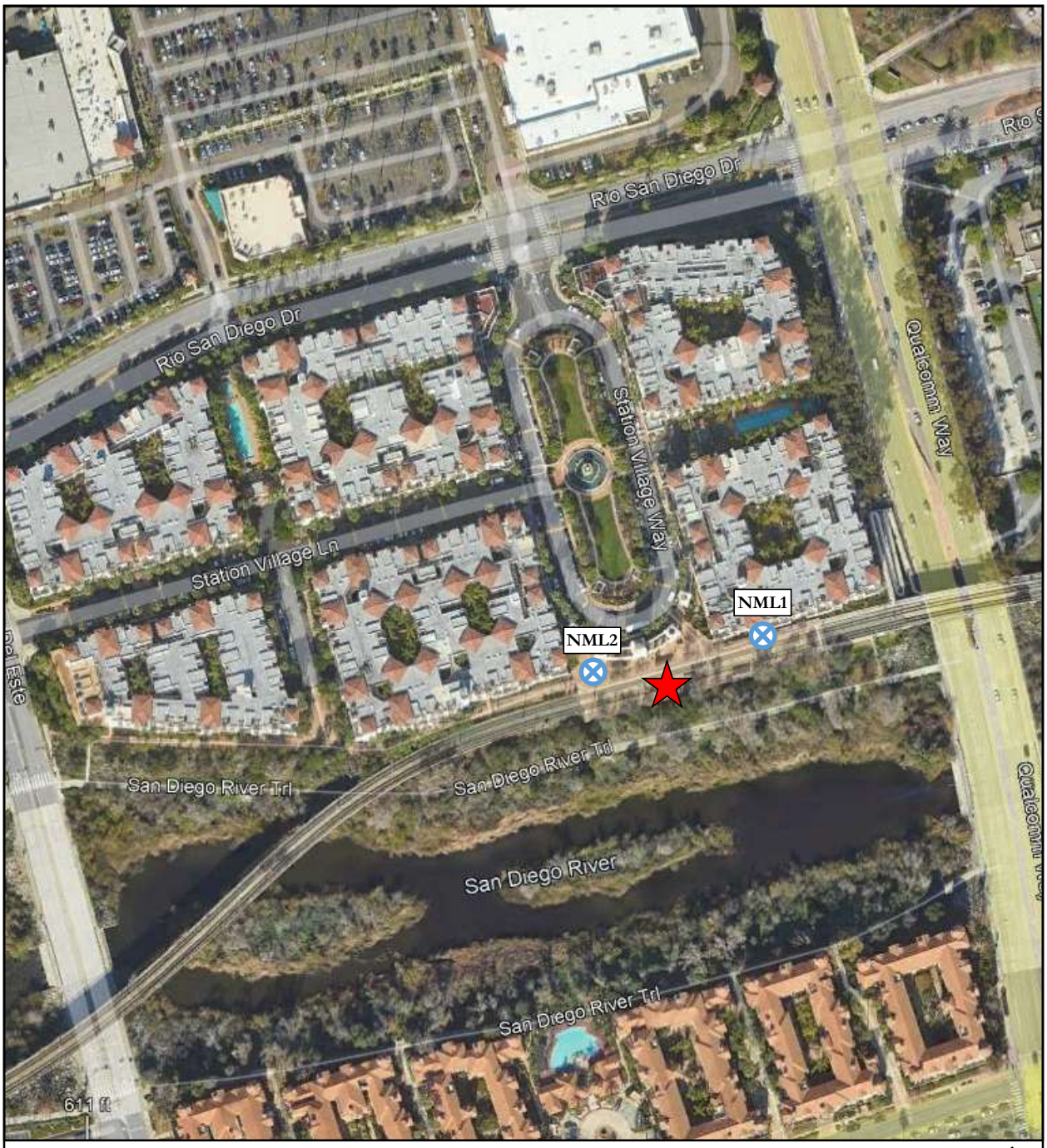


Source: Open Street Map, 2025

Project Location

Figure 1.

Vicinity Map



Source: Google Earth Pro, 2025

N

Noise Measurement Locations (NML)

Project Location

Figure 2.

Satellite Aerial Photograph

While NOI-1 also addresses the requirement for noise control at the Multi-Habitat Planning Area (MHPA) to ensure the protection of noise-sensitive species, it is the understanding of the undersigned that construction will not take place during the breeding season. As such, construction noise impacts have only been evaluated at residential receivers.

3.0 Environmental Setting

3.1 Existing Noise Environment

An on-site inspection and ambient noise measurements were performed on Wednesday, March 5, 2025. The purpose of these measurements was to obtain information regarding existing ambient noise levels on site. Noise measurements were performed at two Noise Measurement Locations (NML), designated as NML 1 and NML 2. Both NML were located on the north side of the track system, with NML 1 located adjacent to the east residential building and NML 2 located adjacent to the west residential building. For all noise measurements, the microphone was placed at a height of five feet above ground level. Noise data obtained on site is shown in Table 2, and the measurement locations are shown graphically in Figure 3.

Table 2. Ambient Noise Level Measurements

Location	Time	Noise Sources	Noise Level (dBA L_{EQ})
NML 1	12:10 p.m. – 12:13 p.m.	Traffic noise with passing trolley	68.2
NML 1	12:14 p.m. – 12:25 p.m.	Measurement paused for trolley to capture ambient traffic noise only	58.5
NML 2	12:27 p.m. – 12:28 p.m.	Westbound trolley approaching and departing	71.1
NML 2	12:30 p.m. – 12:35 p.m.	Measurement paused for trolley to capture ambient traffic noise only	58.2
NML 2	12:35 p.m. – 12:36 p.m.	Eastbound trolley approaching and departing	63.3

3.2 Construction Noise Sources

The equipment listed in Table 1 is typical of what is expected to be used on site based on the information provided by the project proponent and professional experience. Construction equipment noise levels were obtained from the Department for Environment, Food & Rural Affairs (DEFRA), which compare well with noise measurement results of construction equipment performed by Eilar Associates for other similar projects. Information on the anticipated equipment duty cycles was obtained from the Federal Highway Administration (see references). Noise levels of construction equipment anticipated to be used on site are shown in Table 3.

Table 3. Anticipated Construction Activity and Equipment Noise Levels			
Equipment	**Duty Cycle (%)[1]**	**Noise Level at 50 feet (dBA)[2]**	**Activity Stage(s)**
Excavator	40	74	3, 4
Mini-Excavator	40	64	Preconstruction, 1
Bulldozer	40	79	Preconstruction
Dump Truck	40	72	1, 3, 4
Concrete Mixer	40	71	2, 3, 5
Concrete Pump	20	71	2, 3, 5
Generator	50	61	1
Air Compressor	40	61	1
Jackhammer	20	82	1
Power-Driven Saw	20	87	1
Hydraulic Jack	20	73	2
Drill Rig	20	79	2
Compactor	20	74	4
Compact Crane	16	66	5

[1]Duty cycle information was provided by the Federal Highway Administration.
[2]Noise level information was provided by UK Department for Environment, Food and Rural Affairs. The noise level at 50 feet was calculated using simple distance attenuation based on the reference levels obtained from DEFRA which are given at a distance of 10 meters (approximately 32.8 feet).

4.0 Methodology and Equipment

4.1 Methodology

Modeling of the outdoor noise environment is accomplished using CadnaA Version 2024 MR 1, which is a model-based computer program developed by DataKustik for predicting noise impacts in a wide variety of conditions. CadnaA (Computer Aided Noise Abatement) assists in the calculation, presentation, assessment, and alleviation of noise exposure. It allows for the input of project information such as noise source data, barriers, structures, and topography to create a detailed model and uses the most up-to-date calculation standards to predict outdoor noise impacts. Noise standards used by CadnaA that are particularly relevant to this analysis include ISO 9613-2 (Attenuation of sound during propagation outdoors). CadnaA provides results that are in line with basic acoustical calculations for distance attenuation and barrier insertion loss.

CadnaA software is considered to be appropriate for use in calculations for this project and is preferred over the use of standard equations for calculations, as CadnaA also considers shielding provided by surrounding topography and barriers.

4.2 Measurement Equipment

The following equipment was used at the site to measure existing noise levels:

- Larson Davis Model LxT Type 1 Sound Level Meter, Serial # 4084
- Larson Davis Model CAL200 Type 1 Calibrator, Serial # 16454

The sound level meter was field-calibrated immediately prior to the noise measurement and checked afterward to ensure accuracy. All sound level measurements presented in this report, in accordance with the regulations, were conducted using a sound level meter that conforms to the American National Standards Institute specifications for sound level meters (ANSI S1.4). All instruments are maintained with National Institute of Standards and Technology (NIST) traceable calibration, per the manufacturers' standards.

5.0 Noise Impacts

Construction noise levels were calculated using the information presented in Section 3.2 at the nearest residential receivers to the north, designated herein as the east building and west building. As the noise-sensitive receptors would be within the building, noise levels have been calculated at the building facades at each story of the four-story buildings. Any other potentially noise-sensitive receivers are located at a greater distance from construction activity, and therefore, would be exposed to lesser noise impacts due to distance attenuation and shielding provided by intervening structures.

Noise calculations consider typical duty cycles of equipment, to account for periods of activity and inactivity on the site, and also consider that, according to project plans, work will be limited to the eight-hour period of 7 a.m. to 3 p.m. on Monday through Friday. As the City of San Diego enforces noise limits as a 12-hour average, calculations consider that each day will include eight hours of construction activity and four hours of inactivity at the project site. With the exception of Phase 1 (demolition), all calculations conducted herein are considered conservative in that they consider the operation of all pieces of equipment at multiple locations along the project site to demonstrate worst-case conditions at multiple receivers, while in actuality, the work will be broken into segments to allow for continuous services and operation during construction. Noise levels of demolition activity have been conducted for two scenarios—one worst-case location adjacent to the west building for Receivers R1, R2, and R3, and one worst-case location adjacent to the east building for Receivers R4, R5, and R6. Noise calculations consider the topography of the site and surrounding area.

Noise levels for each phase of construction are shown in Table 4. Detailed calculations are provided in Appendix C. Graphical representations of construction noise contours and receiver locations are provided as Figures 3 through 9.

Receiver Location

Construction Work Area

Construction Noise Contours

Receiver Location

Construction Work Area

Construction Equipment

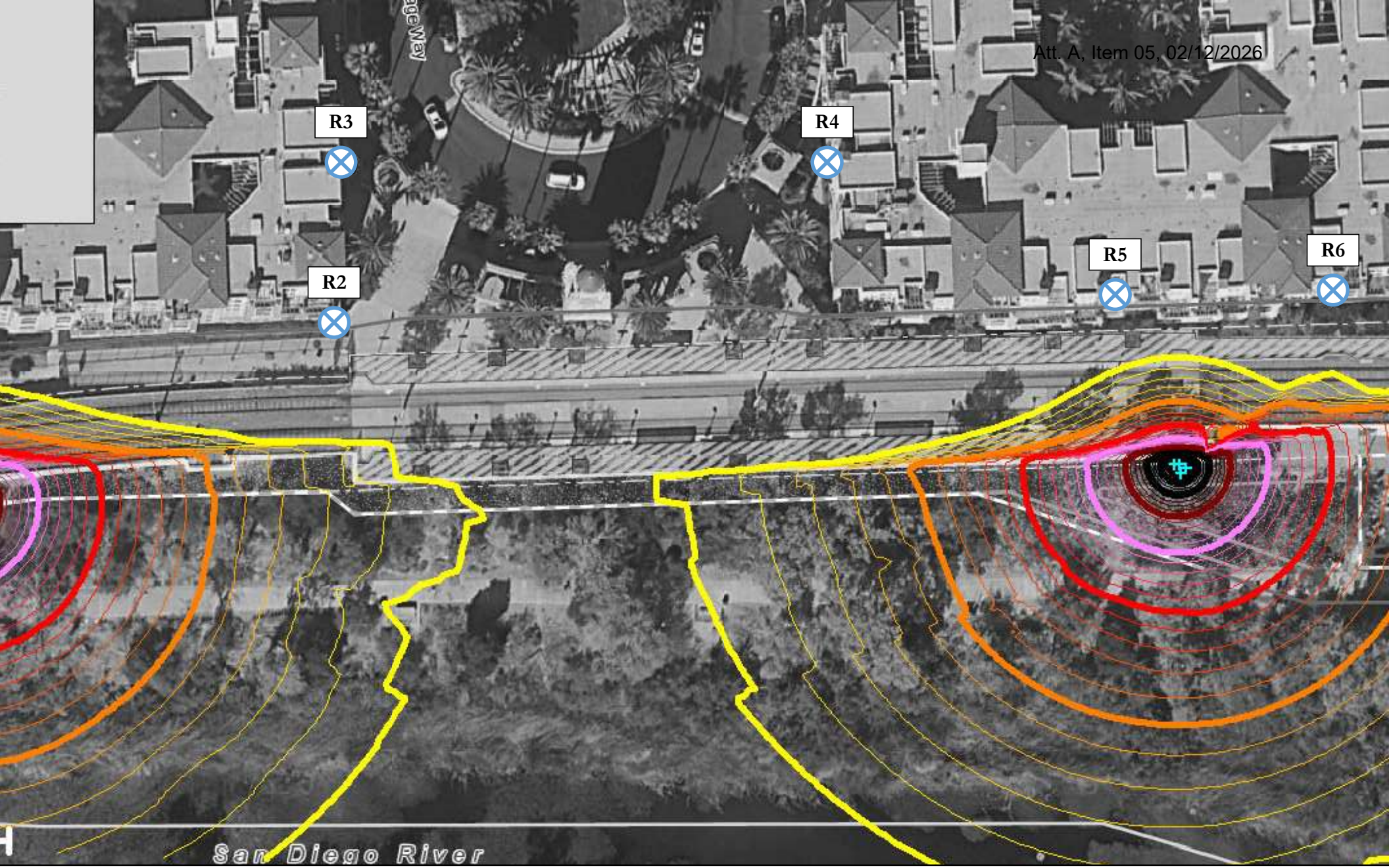
Construction Noise Contours—Phase 1 (N

Receiver Location

Construction Work Area

Construction Equipment

Construction Noise Contours—Phase 1 (N



Receiver Location

Construction Equipment

Construction Noise C

Receiver Location

Construction Equipment

Construction Noise C

Receiver Location

Construction Equipment

Construction Noise C

Receiver Location

Construction Equipment

Construction Noise C

Table 4. Temporary Construction Noise Levels at Surrounding Receivers						
Phase	**Receiver**	**Location**	**Construction Noise Level (dBA $L_{EQ-12hr}$)**			
			1st Floor	**2nd Floor**	**3rd Floor**	**4th Floor**
Preconstruction	R1	South Facade (West), West Building	54	57	58	60
	R2	South Facade (East), West Building	54	56	58	60
	R3	East Facade, West Building	45	46	47	48
	R4	West Facade, East Building	46	47	48	48
	R5	South Facade (West), East Building	53	56	58	60
	R6	South Facade (East), East Building	54	57	59	60
1*	R1	South Facade (West), West Building	64	64	64	64
	R2	South Facade (East), West Building	**81**	**80**	**79**	**78**
	R3	East Facade, West Building	74	73	73	73
	R4	West Facade, East Building	66	66	65	64
	R5	South Facade (West), East Building	**84**	**82**	**80**	**79**
	R6	South Facade (East), East Building	**78**	**77**	**76**	75
2	R1	South Facade (West), West Building	59	61	64	65
	R2	South Facade (East), West Building	53	55	56	57
	R3	East Facade, West Building	45	45	45	46
	R4	West Facade, East Building	46	47	48	48
	R5	South Facade (West), East Building	56	57	58	59
	R6	South Facade (East), East Building	55	55	56	57
3	R1	South Facade (West), West Building	**76**	74	72	71
	R2	South Facade (East), West Building	67	66	66	65
	R3	East Facade, West Building	71	70	70	69
	R4	West Facade, East Building	70	69	69	68
	R5	South Facade (West), East Building	**76**	74	72	70
	R6	South Facade (East), East Building	64	64	64	64

Table 4. Temporary Construction Noise Levels at Surrounding Receivers						
Phase	**Receiver**	**Location**	**Construction Noise Level (dBA $L_{EQ-12hr}$)**			
			1st Floor	**2nd Floor**	**3rd Floor**	**4th Floor**
4	R1	South Facade (West), West Building	**78**	**76**	74	72
	R2	South Facade (East), West Building	61	61	62	62
	R3	East Facade, West Building	67	67	66	65
	R4	West Facade, East Building	66	66	66	65
	R5	South Facade (West), East Building	**79**	**77**	74	72
	R6	South Facade (East), East Building	65	65	65	65
5	R1	South Facade (West), West Building	49	49	49	49
	R2	South Facade (East), West Building	70	69	68	67
	R3	East Facade, West Building	66	66	65	65
	R4	West Facade, East Building	66	66	66	65
	R5	South Facade (West), East Building	46	46	46	47
	R6	South Facade (East), East Building	42	42	42	42

*Calculations at R1, R2, and R3 consider demolition activities located at a worst-case location adjacent to the west building, while calculations at R4, R5, and R6 consider demolition at a worst-case location adjacent to the east building.

Calculations demonstrate that during the Preconstruction Phase, Phase 2, and Phase 5, noise impacts at residential receivers are not expected to exceed a 12-hour average noise level of 75 dBA during construction activity. Any other surrounding otherwise noise-sensitive receivers are located at a greater distance from proposed construction activity and therefore will be exposed to lesser noise impacts due to additional distance attenuation and shielding provided by intervening structures.

During Phase 1, Phase 3, and Phase 4, temporary sound barriers will be required. During Phase 1, a sound barrier with a minimum height of 12 feet is required when the power-driven saw and/or jackhammer will be used within 50 feet of residential buildings. For Phases 3 and 4, a sound barrier with a minimum height of 8 feet is required when activity will take place within 30 feet of residential buildings. Mitigated noise levels considering the presence of such barriers are shown in Table 5.

Table 5. Temporary Construction Noise Levels at Surrounding Receivers – With Barrier Walls						
Phase	**Receiver**	**Location**	**Construction Noise Level (dBA $L_{EQ\text{-}12hr}$)**			
			1st Floor	**2nd Floor**	**3rd Floor**	**4th Floor**
1*	R1	South Facade (West), West Building	59	59	59	59
	R2	South Facade (East), West Building	65	67	72	75
	R3	East Facade, West Building	66	66	65	65
	R4	West Facade, East Building	66	66	65	64
	R5	South Facade (West), East Building	66	68	71	74
	R6	South Facade (East), East Building	60	63	68	71
3	R1	South Facade (West), West Building	70	74	72	71
	R2	South Facade (East), West Building	66	66	66	65
	R3	East Facade, West Building	71	70	70	69
	R4	West Facade, East Building	70	69	69	68
	R5	South Facade (West), East Building	74	74	72	70
	R6	South Facade (East), East Building	64	64	64	64
4	R1	South Facade (West), West Building	70	74	74	72
	R2	South Facade (East), West Building	59	59	60	60
	R3	East Facade, West Building	67	67	66	65
	R4	West Facade, East Building	66	66	66	65
	R5	South Facade (West), East Building	70	75	73	72
	R6	South Facade (East), East Building	58	60	61	62

*Calculations at R1, R2, and R3 consider demolition activities located at a worst-case location adjacent to the west building, while calculations at R4, R5, and R6 consider demolition at a worst-case location adjacent to the east building.

As shown above, with the required sound barriers in place, noise levels are expected to be reduced to a 12-hour average noise level of 75 dBA at sensitive receivers. Sound barriers should be constructed in a U-configuration with the opening facing south to effectively block sound at residential receivers. In order to be effective, the wall should be solid and free of cracks or gaps through or below the wall. Wood may be used if it is at least 3/4-inch thick or has a surface density of at least 3.5 pounds per square foot. Sound attenuation blankets may be used if they have an STC rating of at least 22.

During all phases, the following "good practice" measures should still be practiced as a courtesy to off-site receivers.

1. Turn off equipment when not in use.

2. Limit the use of enunciators or public address systems, except for emergency notifications.

3. Equipment used in construction should be maintained in proper operating condition, and all loads should be properly secured to prevent rattling and banging.

4. Schedule work to avoid simultaneous construction activities where both are generating high noise levels.

5. Use equipment with effective mufflers.

6. Minimize the use of backup alarms.

With the above general good practice construction noise control techniques in place and appropriate sound barriers in place during specified phases, temporary construction noise impacts are expected to meet applicable noise limits of the City of San Diego at surrounding residential receivers.

6.0 Conclusion

Mitigation Measure NOI-1 from the project Initial Study/Mitigated Negative Declaration (IS/MND) requires the preparation of a Construction Noise Control Plan to ensure compliance with the construction noise limits found within Section 59.5.0404 of the City of San Diego Municipal Code. The San Diego Municipal Code states that construction activity is prohibited between the hours of 7 p.m. and 7 a.m. and on Sundays or legal holidays, and that during permissible hours of operation, noise levels from construction activity must be limited to a 12-hour average of no greater than 75 dBA at any residential use. While NOI-1 also addresses the requirement for noise control at the Multi-Habitat Planning Area (MHPA) to ensure the protection of noise-sensitive species, it is the understanding of the undersigned that construction will not take place during the breeding season. As such, construction noise impacts have only been evaluated at residential receivers.

Calculations demonstrate that during the Preconstruction Phase, Phase 2, and Phase 5, noise impacts at residential receivers are not expected to exceed a 12-hour average noise level of 75 dBA during construction activity. During Phase 1, Phase 3, and Phase 4, temporary sound barriers will be required. During Phase 1, a sound barrier with a minimum height of 12 feet is required when the power-driven saw and/or jackhammer will be used within 50 feet of residential buildings. For Phases 3 and 4, a sound barrier with a minimum height of 8 feet is required when activities will take place within 30 feet of residential buildings. With these noise control measures in place, as well as the implementation of general good practice noise control measures listed herein, the project is expected to comply with the noise regulations of the City of San Diego and mitigation measure NOI-1.

7.0 Certification

All recommendations for noise control are based on the best information available at the time our consulting services are provided. However, as there are many factors involved in sound transmission, and Eilar Associates has no control over the construction, workmanship, or materials, Eilar Associates is specifically not liable for final results of any recommendations or implementation of the recommendations.

This report is based on the related project information received and measured noise levels and represents a true and factual analysis of the acoustical impact issues associated with the Rio Vista Platform Design – Phase II project, located in the City of San Diego, California. This report was prepared by Amy Hool and Jonathan Brothers.

Amy Hool, INCE
President/CEO

Jonathan Brothers, INCE
Principal Acoustical Consultant

8.0 References

Department for Environment Food and Rural Affairs (DEFRA), Update of Noise Database for Prediction of Noise on Construction and Open Sites, 2005.

U.S. Department of Transportation Federal Highway Administration, Construction Noise Handbook, Construction Equipment Noise Levels and Ranges.

Dokken Engineering, Draft Initial Study/Mitigated Negative Declaration for the Rio Vista Platform Design – Phase II Project, June 2024.

City of San Diego Municipal Code, Section 59.5.0404, 2019.

DataKustik, CadnaA (Computer Aided Noise Abatement), Version 2024 MR 1.

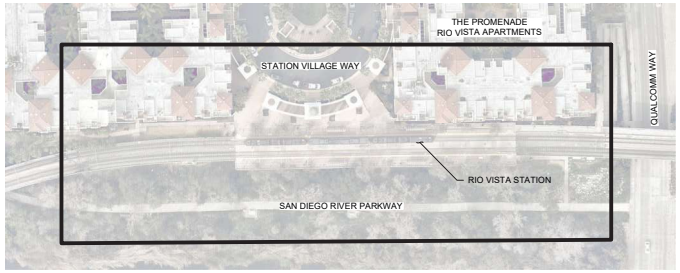
Eilar Associates, Inc.
Acoustical and Environmental Consulting Services

Appendix A

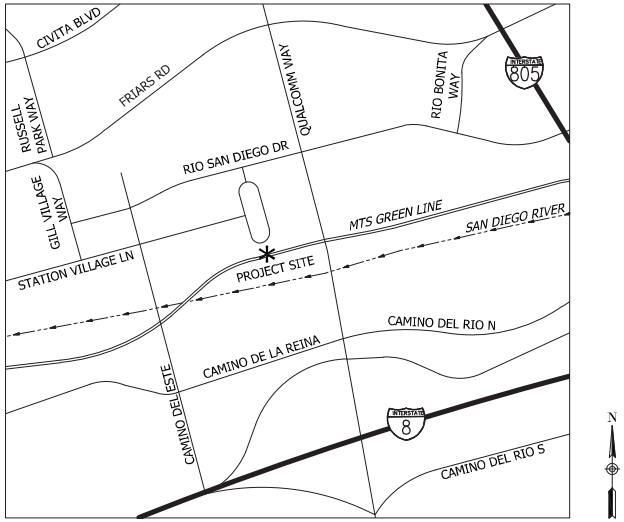
Project Plans

MTS RIO VISTA STATION
PLATFORM DESIGN - PHASE II

2020 QUALCOMM WAY
SAN DIEGO, CALIFORNIA



LOCATION MAP
NTS



VICINITY MAP
NTS

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C.2	CONSTRUCTION ACCESS PLAN
C.3	KEY MAP
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DOKKEN ENGINEERING
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1450 FRAZEE ROAD
SUITE 100
SAN DIEGO, CA 92108
TEL: (858) 514-8377

MTS

90% SUBMITTAL (NOT FOR CONSTRUCTION) - JUNE 7, 2024

REVISION LIST

NO.	DATE	REVISIONS

STAMPED:

PROJECT TITLE

MTS RIO VISTA PLATFORM DESIGN PHASE II

PROJECT NO.	PWL 353.0-22
DRAWN BY	AS
DATE	14 June, 2024
SCALE	

DRAWING TITLE

TITLE SHEET

G.1

WORK TO BE DONE:

WORK TO BE DONE INCLUDES RETROFIT OF THE RIO VISTA STATION PLATFORM WALLS, PAVEMENT REMOVAL AND REPLACEMENT, NEW INSTALLATION AND REINSTALLATION OF VARIOUS STATION AMENITIES, REMOVAL AND REPLACEMENT OF STATION LIGHTING WITH ASSOCIATED EQUIPMENT, VARIOUS UTILITY RELOCATIONS WITH ASSOCIATED EQUIPMENT, AND ALL WORK AS SHOWN ON THESE PLANS, PROJECT SPECIFICATIONS, AND THE FOLLOWING PRINTED DOCUMENTS:

1. STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS 2022 EDITION
2. SAN DIEGO COUNTY REGIONAL STANDARD DRAWINGS 2022
3. 2021 STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK)

WORK HOURS:

LIMIT WORK ON THE EXISTING SITE TO NORMAL BUSINESS WORKING HOURS OF 7:00 A.M. TO 3:00 P.M., MONDAY THROUGH FRIDAY, UNLESS OTHERWISE INDICATED.

GENERAL NOTES:

1. THE CONTRACTOR SHALL REVIEW EXISTING CONDITIONS ON THE SITE DURING THE BIDDING AND SHALL VERIFY ALL SITE CONDITIONS AND DIMENSIONS PRIOR TO STARTING WORK. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPENCIES OR INCONSISTENCIES PRIOR TO STARTING WORK.
2. THE CONTRACTOR'S WORK SHALL CONFORM TO ALL REQUIREMENTS SPECIFIED AS SHOWN HEREIN.
3. ALL DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE SHOWN ON PLANS, SECTIONS, AND DETAILS.
4. NOTES AND DETAILS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.
5. THE CONTRACT DOCUMENTS AND SPECIFICATIONS PRESENT THE FINISHED CONDITION. UNLESS OTHERWISE INDICATED, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION.
6. THE CONTRACTOR SHALL, AT THEIR OWN EXPENSE, DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, AND SHALL SOLELY BE RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS.
7. THE CONTRACTOR MUST OBTAIN AN EXCAVATION PERMIT FROM THE DIVISION OF OCCUPATION SAFETY AND HEALTH (D.O.S.H.) FOR CONSTRUCTION OF TRENCHES OR EXCAVATION WHICH ARE FIVE FEET OR DEEPER INTO WHICH A PERSON IS REQUIRED TO DESCEND.
8. DUST GENERATED BY CONSTRUCTION ACTIVITIES SHALL COMPLY WITH LOCAL DUST CONTROL, ALL REQUIREMENTS OF ALL MITIGATION MONITORING PROGRAMS AND UNIFORM BUILDING CODE (UBC) REQUIREMENTS WHICH INCLUDE DUST CONTROL MEASURES FOR CONSTRUCTION SITES. DUST REDUCING MEASURES SHALL INCLUDE, BUT ARE NOT LIMITED TO, REGULAR WATERING OF GRADED SURFACES AND RESTRICTION OF ALL CONSTRUCTION VEHICLES AND EQUIPMENT TO TRAVEL ALONG ESTABLISHED AND REGULARLY WATER ROADWAYS AT SPECIFIED SPEEDS.
9. WHERE NO CONSTRUCTION DETAILS ARE SHOWN OR NOTED FOR ANY PART OF THE WORK, THE DETAILS SHALL BE THE SAME AS FOR OTHER SIMILAR WORK.

UTILITY NOTES:

1. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS AND ARE NOT NECESSARILY IN THE LOCATION SHOWN ON THE PLANS PRIOR TO CONSTRUCTION.
2. PRIOR TO ANY DEMOLITION OR EXCAVATION FOR THIS CONTRACT, CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS HAS BEEN OBTAINED FROM AVAILABLE RECORDS ONLY AND MAY NOT REFLECT ALL EXISTING UTILITIES.
3. LOCATION OF ALL EXISTING UTILITIES SHALL BE CONFIRMED BY THE CONTRACTOR PRIOR TO CONSTRUCTION OF WORK. ACCURATE VERIFICATION AS TO SIZE, LOCATION AND DEPTH OF EXISTING UNDERGROUND SERVICES SHALL BE THE CONTRACTORS RESPONSIBILITY.
4. CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN HEREON AND ANY OTHER EXISTING LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
5. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITY AGENCIES PRIOR TO STARTING HIS WORK WITH UTILITY REPRESENTATIVES. FOR LOCATION OF UNDERGROUND UTILITIES AND APPURTENANCES, CONTACT "UNDERGROUND SERVICE ALERT": AT 1-800-422-4133.

FIRE NOTES:

1. PROJECT SHALL COMPLY WITH CALIFORNIA FIRE CODE CHAPTER 33, "FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION".
2. IMPAIRMENTS TO FIRE PROTECTION SYSTEMS WILL BE COORDINATED IN ACCORDANCE WITH CITY OF SAN DIEGO FIRE DEPARTMENT FIRE PREVENTION DIVISION FIRE WATCH POLICY.

CIVIL IMPROVEMENT NOTES:

1. CONTRACTOR SHALL USE SURVEY CONTROL POINTS, INCLUDING BENCH MARKS, WHERE AVAILABLE.
2. CONTRACTOR SHALL DEMOLISH AND DISPOSE OF EXISTING ASPHALT PAVEMENT, CONCRETE AND ANY OTHER MATERIAL NOT USED.
3. IN AREAS WHERE THE CONTRACTOR APPLIES AC CAP OR CONSTRUCTS A NEW STRUCTURAL SECTION, THE CONTRACTOR SHALL ADJUST TO GRADE ALL EXISTING VALVE BOXES, MANHOLES, AND ANY OTHER SIMILAR UTILITY SYSTEMS APPURTENANCES.

EROSION AND SEDIMENT CONTROL NOTES:

1. STORE, HANDLE, AND DISPOSE OF CONSTRUCTION MATERIALS AND WASTES PROPERLY, SO AS TO PREVENT THEIR CONTACT WITH STORMWATER.
2. CONTROL AND PREVENT THE DISCHARGE OF ALL POTENTIAL POLLUTANTS, INCLUDING PAVEMENT DEMOLITION WASTE, PAINTS, CONCRETE, CHEMICALS, WASH WATER, OR SEDIMENTS, AND OTHER DISCHARGES TO STORM DRAINS AND WATERCOURSES.
3. LIMIT AND TIME APPLICATIONS OF PESTICIDES AND FERTILIZERS TO PREVENT POLLUTED RUNOFF.
4. TREE PROTECTION SHALL BE IN PLACE PRIOR TO ANY DEMOLITION, GRADING, OR EXCAVATING OCCURRING.
5. FILTER FABRIC SHALL BE INSTALLED AT THE DRAINS AND CLEANED OUT AFTER EACH RAIN EVENT OR AS NEEDED TO PROPERLY FUNCTION.

IMPORTANT NOTICE

SECTION 4215/4217 OF THE GOVERNMENT CODE REQUIRES A DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIG ALERT I.D. NUMBER, CALL UNDERGROUND SERVICE ALERT TOLL FREE 1-800-422-4133 AT LEAST TWO WORKING DAYS BEFORE YOU DIG.

811 Know what's below. Call before you dig.

MTS GENERAL NOTES:

1. A RIGHT OF ENTRY (ROE) PERMIT IS NECESSARY WHEN ENTERING MTS /SAN DIEGO AND ARIZONA EASTERN (SD&AE) RIGHT-OF-WAY (MTS RW), INCLUDING AIRSPACE, FOR ANY PURPOSE. A ROE PERMIT IS ALSO REQUIRED WHEN WORKING IN PUBLIC RIGHT-OF-WAY OCCUPIED BY MTS /SD&AE FACILITIES. INFORMATION TO APPLY FOR ROE CAN BE OBTAINED FROM THE MTS WEBSITE AT: HTTP-/WWW.SDMTS.COM/BUSINESS PERMITS.ASP OR CONTACT MTS RIGHT OF WAY SERVICES AT TEL. (619) 557-4501. APPLICANT/CONTRACTOR IS REFERRED TO AS THE PERMITTEE.
2. CERTIFICATE OF INSURANCE FROM YOUR INSURANCE COMPANY FOR GENERAL LIABILITY. AUTOMOBILE LIABILITY, POLLUTION LIABILITY (IF APPLICABLE), PROFESSIONAL LIABILITY (IF APPLICABLE), AND WORKMAN'S COMPENSATION MUST BE SUBMITTED AND APPROVED BY MTS BEFORE THE PERMIT WILL BE PROCESSED. FULL INSURANCE REQUIREMENT GUIDELINES CAN BE ACCESSED FROM THE MTS WEBSITE NOTED ABOVE.
3. MOST GENERAL LIABILITY INSURANCE POLICIES DO NOT COVER RAILROADS. ANY EXCLUSIONS RELATING TO PERFORMANCE OF OPERATIONS WITHIN THE VICINITY OF ANY RAILROAD, BRIDGE, TRESTLE, TRACK, ROADBED, TUNNEL, UNDERPASS, OR CROSSING MUST BE DELETED FROM ALL POLICIES BY ENDORSEMENT. ADDITIONALLY, A SEPARATE RAILROAD PROTECTIVE LIABILITY POLICY WILL MOST LIKELY BE REQUIRED AFTER PROJECT REVIEW AS DEEMED NECESSARY BY MTS.
4. ALL PERSONNEL PERFORMING WORK ON MTS R/W, OR ENTERING MTS R/W SHALL REQUIRE PROPER MTS RAIL SAFETY TRAINING CERTIFICATION PRIOR TO ENTERING MTS R/W. ANY CONTRACTORS OR SUBCONTRACTORS PERFORMING WORK ON BEHALF OF PERMITTEE, SHALL BE DEEMED AS AGENTS OF PERMITTEE AND SHALL REQUIRE SAID TRAINING AS WELL. FOR TRAINING INFORMATION, EMAIL RWST@SDMTS.COM. TRAINING CERTIFICATION IS VALID FOR ONE YEAR AND IS CONFINED TO MTS/SD&AE FACILITIES ONLY.
5. PERMITTEE SHALL PROVIDE MTS WITH AN APPROVED SET OF TRAFFIC CONTROL PLANS THAT CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND COMPLY IN PARTICULAR WITH PART 8 TRAFFIC CONTROL FOR RAILROAD AND LIGHT RAIL TRANSIT GRADE CROSSINGS.
6. IF PROJECT INVOLVES CASING SLEEVES UNDER RAILROAD TRACKS AND ACROSS MTS R/W, PERMITTEE SHALL ADHERE TO MTS JACK AND BORE DESIGN CRITERIA AND CONSTRUCTION NOTES
7. A PRE-CONSTRUCTION MEETING WILL BE REQUIRED WITH MTS/SDTI PRIOR TO WORK COMMENCING WITHIN MTS R/W. A WRITTEN NOTICE OF PLANNED START OF WORK MUST BE SUBMITTED TO MTS A MINIMUM OF FIVE (5) BUSINESS DAYS PRIOR TO WORK STARTING IN MTS R/W. ALL WORK WILL BE STOPPED AND PERMITTEE WILL NOT BE ALLOWED IN MTS R/W WITHOUT PROPER NOTIFICATION,
8. PERMITTEE'S ON-SITE SUPERVISION SHALL RETAIN/MAINTAIN A FULLY EXECUTED COPY OF THE RIGHT OF ENTRY PERMIT AT ALL TIMES WHILE ON MTS R/W.
9. SDTI RAIL FLAGGING WILL BE REQUIRED ANYTIME WORK IS WITHIN FIFTEEN (15) FEET OF ANY OPERABLE TRACK INCLUDING AIRSPACE OR AS DEEMED NECESSARY BY MTS. A SDTI FLAGPERSON /RIGHT-OF-WAY WORK REQUEST FORM MUST BE SUBMITTED TO SDTIA MINIMUM OF THREE (3) BUSINESS DAYS PRIOR TO ANTICIPATED WORK. FORMS ARE ATTACHED TO THE ROE PERMIT OR CAN BE REQUESTED THROUGH MTS RIGHT OF WAY SERVICES.
10. A SDTI TRACTION POWER SHUTDOWN MAY BE NECESSARY FOR THE WORK ZONE TO PROTECT AND MAINTAIN THE REQUIRED TEN (10) FOOT CLEARANCE FROM TROLLEY OVERHEAD HIGH VOLTAGE CATENARY SYSTEM (OCS). PERMITTEE SHALL SUBMIT A SDTI RED TAG/TRACTION POWER REMOVAL REQUEST FORM TO SDTI AT LEAST THREE (3) BUSINESS DAYS PRIOR TO THE START OF WORK. POWER SHUTDOWNS SHALL ONLY BE ALLOWED DURING NON-OPERATING TROLLEY HOURS. FORMS ARE ATTACHED TO THE ROE PERMIT OR CAN BE REQUESTED THROUGH MTS RIGHT OF WAY SERVICES.
11. PERMITTEE SHALL CONTACT AND SCHEDULE DIG-ALERT AND CABLE PIPE AND LEAK (CPL) PRIOR TO ANY EXCAVATION IN MTS R/W. PERMITTEE SHALL NOTIFY MTS A MINIMUM OF THREE (3) BUSINESS DAYS PRIOR TO THE SCHEDULED UTILITY MARKOUT REQUEST AND SHALL SUBMIT A SDTI FLAGPERSON /RIGHT-OF-WAY WORK REQUEST FORM. SDTI PERSONNEL SHALL ACCOMPANY CPL FOR ANY MARKOUT OF TROLLEY FACILITIES.
12. PERMITTEE SHALL ADHERE TO CONSTRUCTION AND SAFETY STANDARDS REQUIRED BY MTS OF THEIR CONTRACTORS WHEN WORKING WITHIN MTS R/W.
13. PERMITTEE SHALL PERFORM ALL WORK IN ACCORDANCE WITH APPLICABLE CALIFORNIA PUBLIC UTILITIES COMMISSION (CPUC) AND CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (CAL-OSHA) REGULATIONS, MTS LRT DESIGN CRITERIA, AMERICAN RAILWAY ENGINEERING AND MAINTENANCE OF WAY ASSOCIATION (AREMA) STANDARD SPECIFICATIONS, MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) GUIDELINES AND MTS, SDTI AND SD&IV OPERATIONS AND SAFETY POLICIES.
14. PERMITTEE AGREES THAT NO WORK BY HIMSELF OR HIS AUTHORIZED AGENT WILL INTERFERE WITH RAILROAD/TROLLEY OPERATIONS.
15. PERMITTEE AGREES TO COORDINATE ON A DAILY BASIS A REASONABLE ACCESS TO ALL MTS/SD&AE FACILITIES WITH CONTRACT OPERATORS. SDTI, AND SD&IV. SDTI TROLLEY OPERATIONS ARE GENERALLY FROM THE HOURS OF 4:00 A.M. TO 2:00 A.M. THE FOLLOWING DAY. SD&IV FREIGHT TRAINS NORMAL OPERATIONS ARE DURING NON-TROLLEY HOURS.
16. PERMITTEE SHALL MAINTAIN SAFE PEDESTRIAN ACCESS TO ALL TROLLEY PLATFORMS AND BUS STOPS AT ALL TIMES. A MINIMUM FIVE (5) FOOT WIDE ACCESSIBLE PEDESTRIAN PATH THROUGH THE CONSTRUCTION SITE SHALL BE MAINTAINED AT ALL TIMES. THE CONSTRUCTION BOUNDARY SHALL CONSIST OF A TOP AND BOTTOM RAIL CONSTRUCTED OF PLASTIC PIPE, OSHA PLASTIC MESH, OR APPROVED EQUAL. YELLOW CAUTION TAPE IS NOT ACCEPTABLE.
17. PERMITTEE SHALL NOT STORE EQUIPMENT, TOOLS, AND MATERIALS WITHIN FIFTEEN (15) FEET FROM TROLLEY OPERABLE TRACK AND WITHIN TWENTY-FIVE (25) FEET FROM FREIGHT TRACK OPERATIONS.
18. PERMITTEE SHALL NOT USE OR STORE HAZARDOUS SUBSTANCES, AS DEFINED BY THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT, AS AMENDED ("CERCLA") OR PETROLEUM OR OIL AS DEFINED BY APPLICABLE ENVIRONMENTAL LAWS ON MTS R/W.
19. NO VEHICULAR CROSSING OVER TRACKS SHALL BE INSTALLED OR USED BY PERMITTEE WITHOUT PRIOR WRITTEN PERMISSION OF RAILROAD.
20. A WRITTEN NOTICE SHALL BE SUBMITTED TO MTS ONE (1) BUSINESS DAY AFTER WORK IS COMPLETED WITHIN MTS R/W. ANY ADDITIONAL WORK REQUIRED TO REPLACE OR REPAIR THE RAILROAD FACILITIES IN GOOD WORKING ORDER WILL BE THE PERMITTEE'S RESPONSIBILITY PRIOR TO RELIEF FROM MAINTENANCE WITHIN THE PERMIT AREA.
21. PERMITTEE SHALL REMOVE ALL OF PERMITTEE'S TOOLS, EQUIPMENT, AND MATERIALS FROM RAILROAD PREMISES PROMPTLY UPON COMPLETION OF WORK AND SHALL RESTORE ALL FACILITIES, IMPROVEMENTS, LANDSCAPING, ETC., TO THEIR ORIGINAL CONDITION OR AS SHOWN ON PROJECT WORK SITE PLANS.
22. PERMITTEE SHALL PERFORM ALL WORK IN ACCORDANCE WITH APPLICABLE CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (CAL-OSHA) REGULATIONS, MTS DESIGN CRITERIA, AND MTS OPERATIONS AND SAFETY POLICIES.
23. PERMITTEE TO OBTAIN APPROVAL OF PROJECT PHASING AND IMPACTS TO TROLLEY SERVICE OPERATIONS WITH MTS STAFF PRIOR TO COMMENCEMENT OF CONSTRUCTION.
24. PERMITTEE SHALL NOT USE OR STORE HAZARDOUS SUBSTANCES, AS DEFINED BY THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT, AS AMENDED ("CERCLA") OR PETROLEUM OR OIL AS DEFINED BY APPLICABLE ENVIRONMENTAL LAWS ON MTS PROPERTY.
25. PERMITTEE SHALL COORDINATE TO MITIGATE ANY IMPACTS THE PROJECT MAY HAVE UPON EXISTING IRRIGATION NETWORKS AND SPRINKLER SYSTEMS.

LANDSCAPE AND IRRIGATION:

1. CONTRACTOR SHALL CONFIRM OWNERSHIP OF IRRIGATION LINE ON NORTH AND SOUTH SIDE OF THE PROJECT. CONTRACTOR SHALL COORDINATE IRRIGATION LINE SHUT-OFF WITH 72-HOURS' NOTICE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REINSTALL IRRIGATION LINES AND SPRAY HEADS BACK TO EXISTING CONDITIONS.
2. CONTRACTOR SHALL RETAIN A BIOLOGIST FOR DEMOLITION OF SENSITIVE HABITAT. CONTRACTOR IS RESPONSIBLE FOR RESTORING SENSITIVE HABITAT TO MATCH EXISTING CONDITIONS IN CONFORMANCE WITH THE ENVIRONMENTAL DOCUMENTS AND TO THE SATISFACTION OF THE BIOLOGIST, PROPERTY OWNER, AND MTS.

LEGEND:

EXISTING: | NEW / RELOCATED:

FLOW LINE
RIGHT OF WAY PROPERTY BOUNDARY
EXISTING EASEMENT
STAMPED COLORED CONCRETE
CONCRETE SIDEWALK
CONCRETE PAVEMENT REMOVAL
CONCRETE PAVER REMOVAL
ENVIROMENTALLY SENSITIVE AREA (ESA)
DETECTABLE WARNING SURFACE
SAWCUT
COMMUNICATION LINE — COMM
WALL
STORM DRAIN CATCH BASIN
STORM DRAIN CLEANOUT — SD
SPRINKLER
TRASH CAN
CHAIN LINK FENCE
PICKET FENCE
WATER MAIN — W
FIRE HYDRANT
SEWER MAIN — S
SEWER MANHOLE — S
ELECTRICAL LINE — E
TREE REMOVAL
TREE
BENCH — B
BRAILLE WAYFINDING — B
PAYPHONE — P
TRASH BIN — T
TICKET VENDING MACHINE — TVM
WATER RISER — W
OCS POLE
WATER VALVE
LIGHT POLE
SURVEY BENCHMARK
LED SIGN
VENDING MACHINE — VDM
PULLBOX — PB
STREET LIGHT PULLBOX — LT
TREE WLL
ELECTRIC PULLBOX — E
GROUND ROD
COMMUNICATION VAULT — CV
ELECTRICAL VAULT — EV
ELECTRICAL HANDHOLE — E
STORM DRAIN — SD
IRRIGATION LINE — IRR

ABBREVIATIONS:

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS	ESA	ENVIRONMENTALLY SENSITIVE AREA	PB	PULL BOX
ABUT	ABUTMENT	EV	ELECTRICAL VAULT	PIP	PROTECT IN PLACE
AC	ASPHALT CONCRETE	EXIST	EXISTING	PL	PLATE
ADMIN	ADMINISTRATION	EXP	EXPANSION	R/W	RIGHT OF WAY
APPROX	APPPROXIMATE	FG	FINISH GROUND	REINF	REINFORCEMENT
BEG	BEGIN	FL	FLOWLINE	RT	RIGHT
BLDG	BUILDING	FT	FEET	S	SOUTH, SPACING
C-C	CENTER TO CENTER	GB	GRADE BREAK	S/C	SAWCUT
CL	CENTER LINE	H	HEIGHT	SDG&E	SAN DIEGO GAS AND ELECTRIC
CLR	CLEAR	ID	IDENTIFICATION	SD&IV	SAN DIEGO AND IMPERIAL VALLEY RAILROAD
CONC	CONCRETE	JT	JOINT	SDRSD	SAN DIEGO REGIONAL STANDARD DRAWINGS
CONT	CONTINUOUS	LF	LINEAR FEET	SDTI	SAN DIEGO TROLLEY, INC
CPB	COMMUNICATION PULL BOX	LRFD	LOAD AND RESISTANCE FACTOR DESIGN	SF	SQUARE FEET
CV	COMMUNICATION VAULT	LT	LEFT	SWPPP	STORM WATER POLLUTION PREVENTION PLAN
DWS	DETECTABLE WARNING SURFACE	MAX	MAXIMUM	TC	TOP OF CURB
E	EASTING	MIN	MINIMUM	TCE	TEMPORARY CONSTRUCTION EASEMENT
EA	EACH	MSE	MECHANICALLY STABILIZED EMBANKMENT	TOT	TOTAL
EB	EASTBOUND	MTS	METROPOLITAN TRANSIT SYSTEM	TYP	TYPICAL
EF	EACH FACE	N	NORTH, NORTHING	U.O.N	UNLESS OTHERWISE NOTED
ELEC	ELECTROLIER	NTS	NOT TO SCALE	VAR	VARIES
ELEV	ELEVATION	O.C.	ON CENTER	WB	WESTBOUND
EMBED	EMBEDMENT	OCS	OVERHEAD CONTACT SYSTEM	WPCP	WATER POLLUTION CONTROL PLAN
EPB	ELECTRICAL PULL BOX	OG	ORIGINAL GROUND		

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MTS RIO VISTA PLATFORM DESIGN PHASE II

PROJECT NO.	PWL 353.0-22
DRAWN BY	AS
DATE	14 June, 2024
SCALE	N/A

DRAWING TITLE

GENERAL NOTES

G.2

BASIS OF BEARINGS:

THE BASIS OF COORDINATES FOR THIS SURVEY IS THE NORTH AMERICAN DATUM OF 1983 (NAD 83) CALIFORNIA STATE PLANE COORDINATE SYSTEM OF 1983 (CCS83) ZONE 6 (EPOCH 1991.35) BASED LOCALLY UPON THE FOLLOWING CONTROL POINTS PER RECORD OF SURVEY 14492:

STATION	NORTHING	EASTING	SOURCE
159	1866922.04	6295949.17	ROS 14492
160	1862334.35	6287898.79	ROS 14492

GRID BEARING BETWEEN STA. NO. 159 AND STA. NO. 160 = N 60°19'21" E.

COMBINED SCALE FACTOR AT STATION NO. 159 = 1.0000053

MAPPING ANGLE AT STA. NO. 159 = -00°29'21.92"

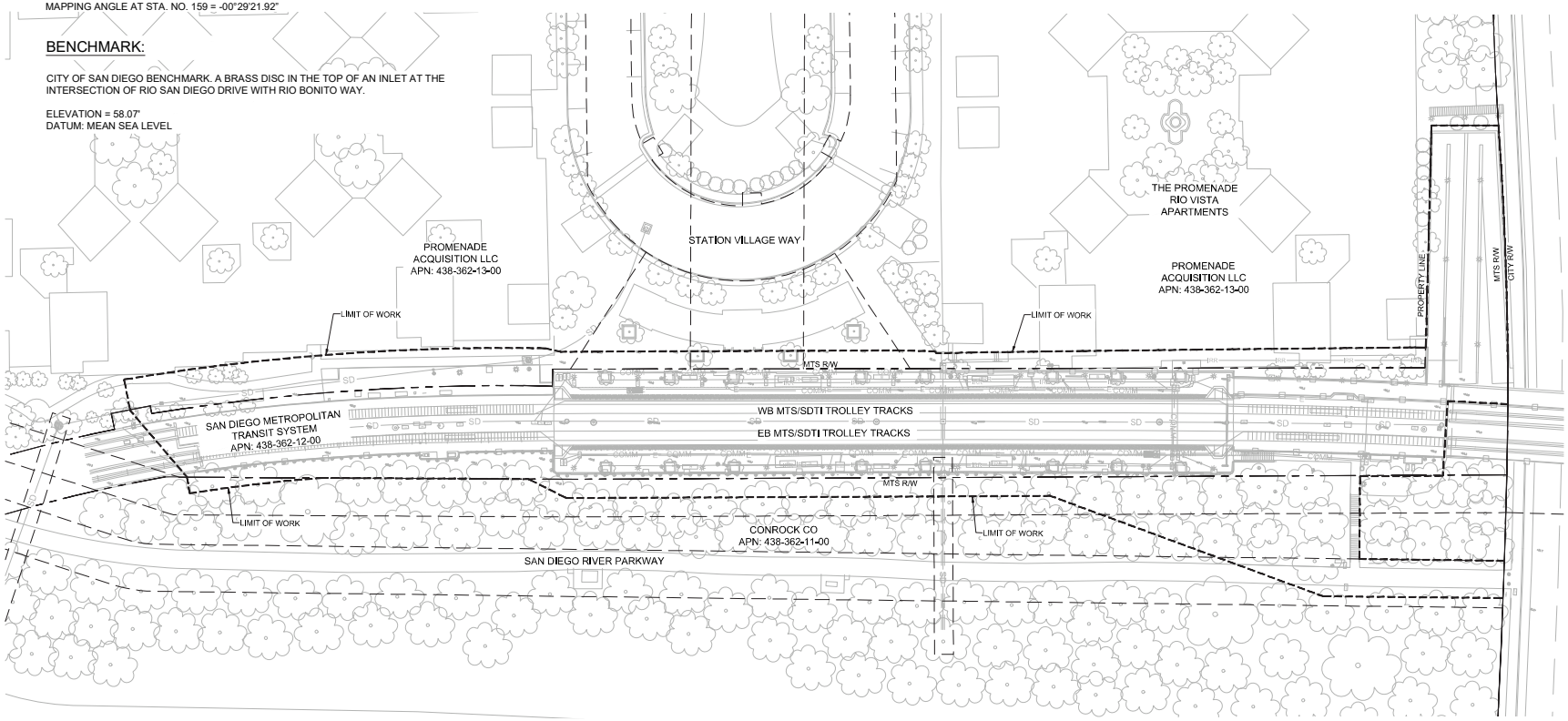
BENCHMARK:

CITY OF SAN DIEGO BENCHMARK. A BRASS DISC IN THE TOP OF AN INLET AT THE INTERSECTION OF RIO SAN DIEGO DRIVE WITH RIO BONITO WAY.

ELEVATION = 58.07'
DATUM: MEAN SEA LEVEL

LEGEND:

- LIMIT OF WORK
- EXISTING PROPERTY LINE / R/W
- EXISTING EASEMENT
- ENVIRONMENTALLY SENSITIVE HABITAT (ON SLOPE SOUTH OF STATION PLATFORM)



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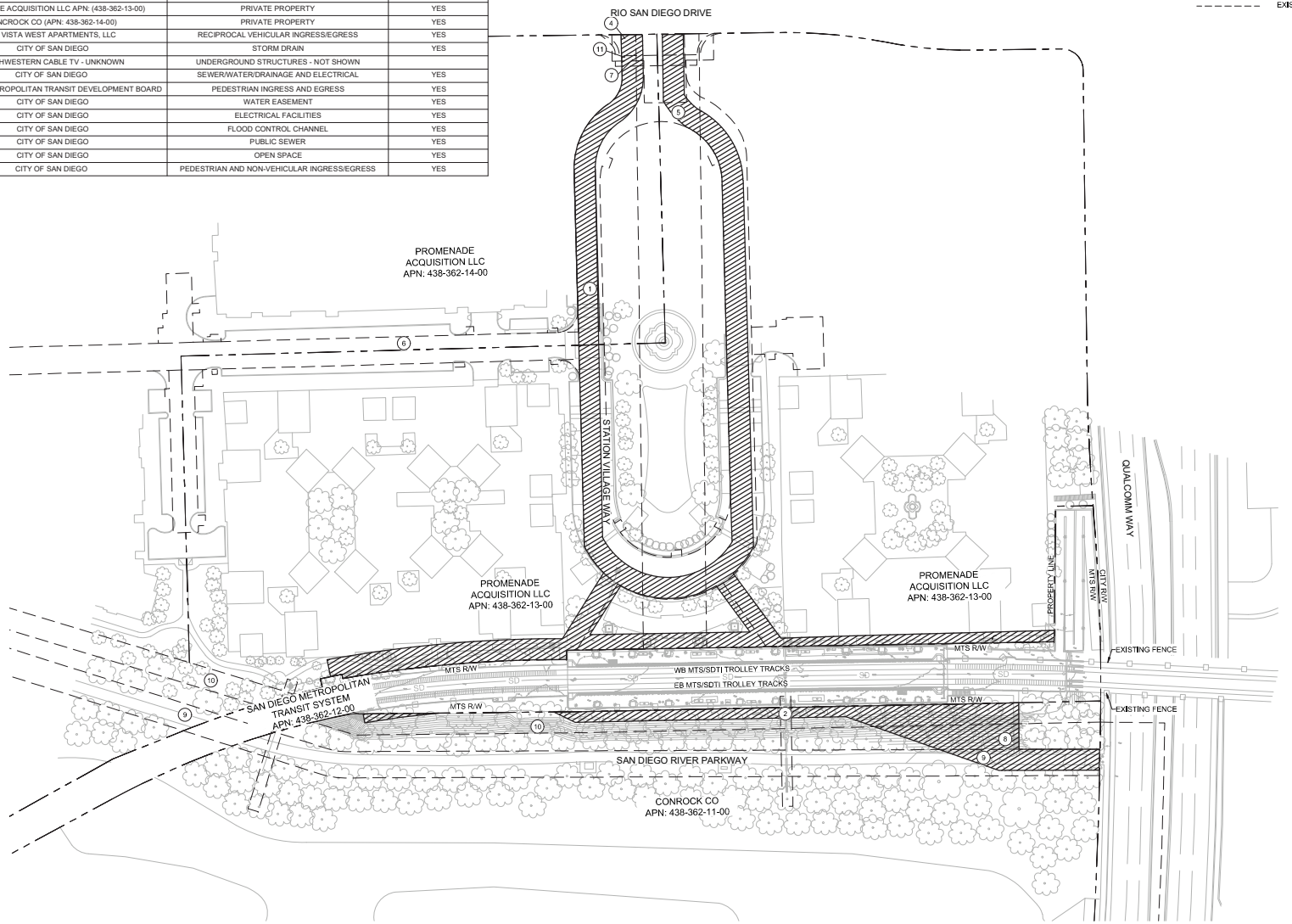
EXISTING CONDITIONS MAP

C.1

No.	OWNER	TYPE	TCE REQUIRED
	PROMENADE ACQUISITION LLC APN: (438-362-14-00)	PRIVATE PROPERTY	YES
	PROMENADE ACQUISITION LLC APN: (438-362-13-00)	PRIVATE PROPERTY	YES
	CONCROCK CO (APN: 438-362-14-00)	PRIVATE PROPERTY	YES
1	RIO VISTA WEST APARTMENTS, LLC	RECIPROCAL VEHICULAR INGRESS/EGRESS	YES
2	CITY OF SAN DIEGO	STORM DRAIN	YES
3	SOUTHWESTERN CABLE TV - UNKNOWN	UNDERGROUND STRUCTURES - NOT SHOWN	
4	CITY OF SAN DIEGO	SEWER/WATER/DRAINAGE AND ELECTRICAL	YES
5	SAN DIEGO METROPOLITAN TRANSIT DEVELOPMENT BOARD	PEDESTRIAN INGRESS AND EGRESS	YES
6	CITY OF SAN DIEGO	WATER EASEMENT	YES
7	CITY OF SAN DIEGO	ELECTRICAL FACILITIES	YES
8	CITY OF SAN DIEGO	FLOOD CONTROL CHANNEL	YES
9	CITY OF SAN DIEGO	PUBLIC SEWER	YES
10	CITY OF SAN DIEGO	OPEN SPACE	YES
11	CITY OF SAN DIEGO	PEDESTRIAN AND NON-VEHICULAR INGRESS/EGRESS	YES



LEGEND:

- TEMPORARY CONSTRUCTION EASEMENT (TCE)
- EXISTING PROPERTY LINE / R/W
- EXISTING EASEMENT

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CONSTRUCTION ACCESS PLAN

C.2

DEMOLITION PLANS:

A C.4 | B C.5 | C C.6 | D C.7

CIVIL IMPROVEMENT PLANS:

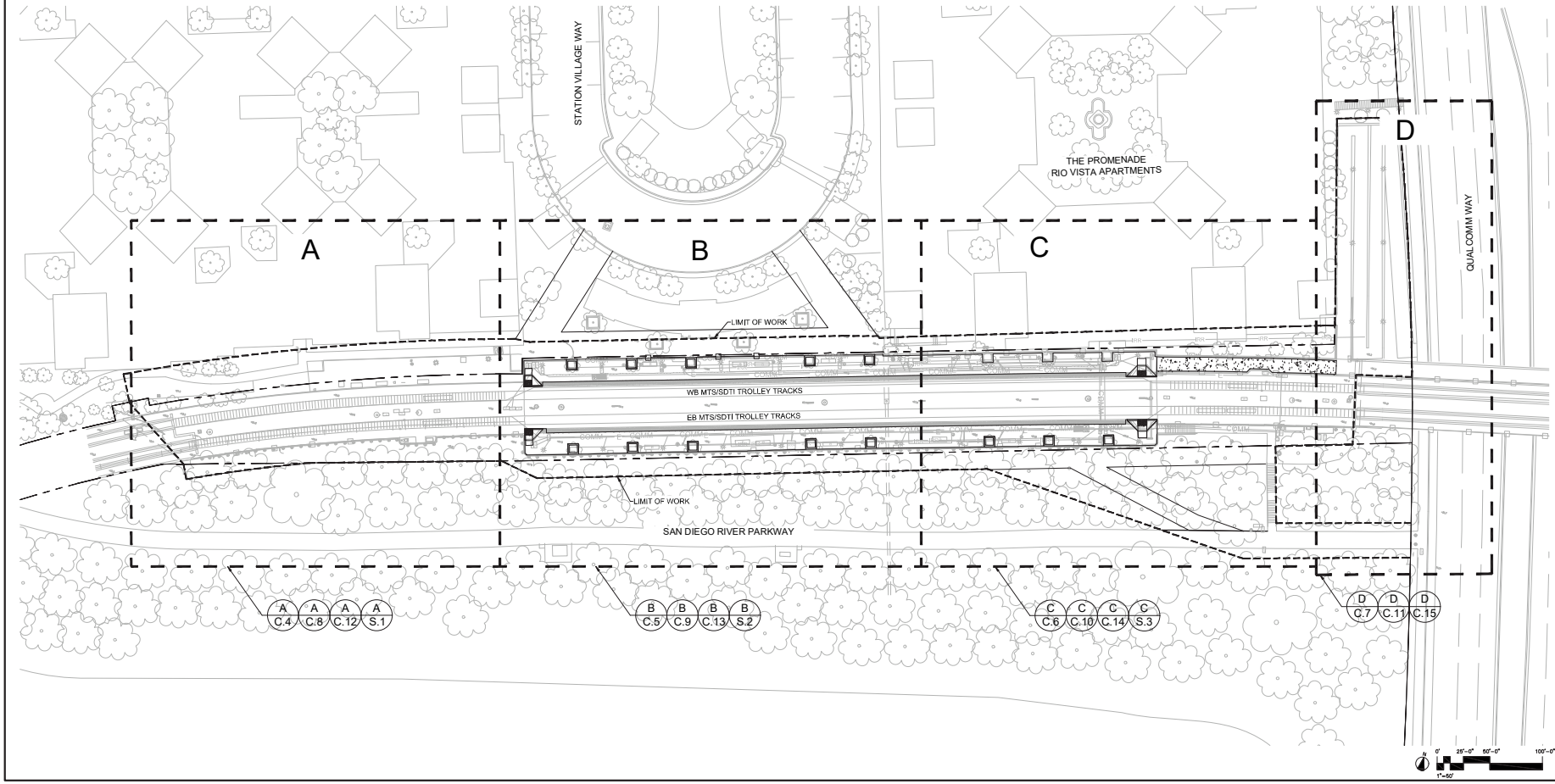
A C.8 | B C.9 | C C.10 | D C.11

GRADING AND DRAINAGE PLANS:

A C.12 | B C.13 | C C.14 | D C.15

STRUCTURAL PLANS:

A S.1 | B S.2 | C S.3



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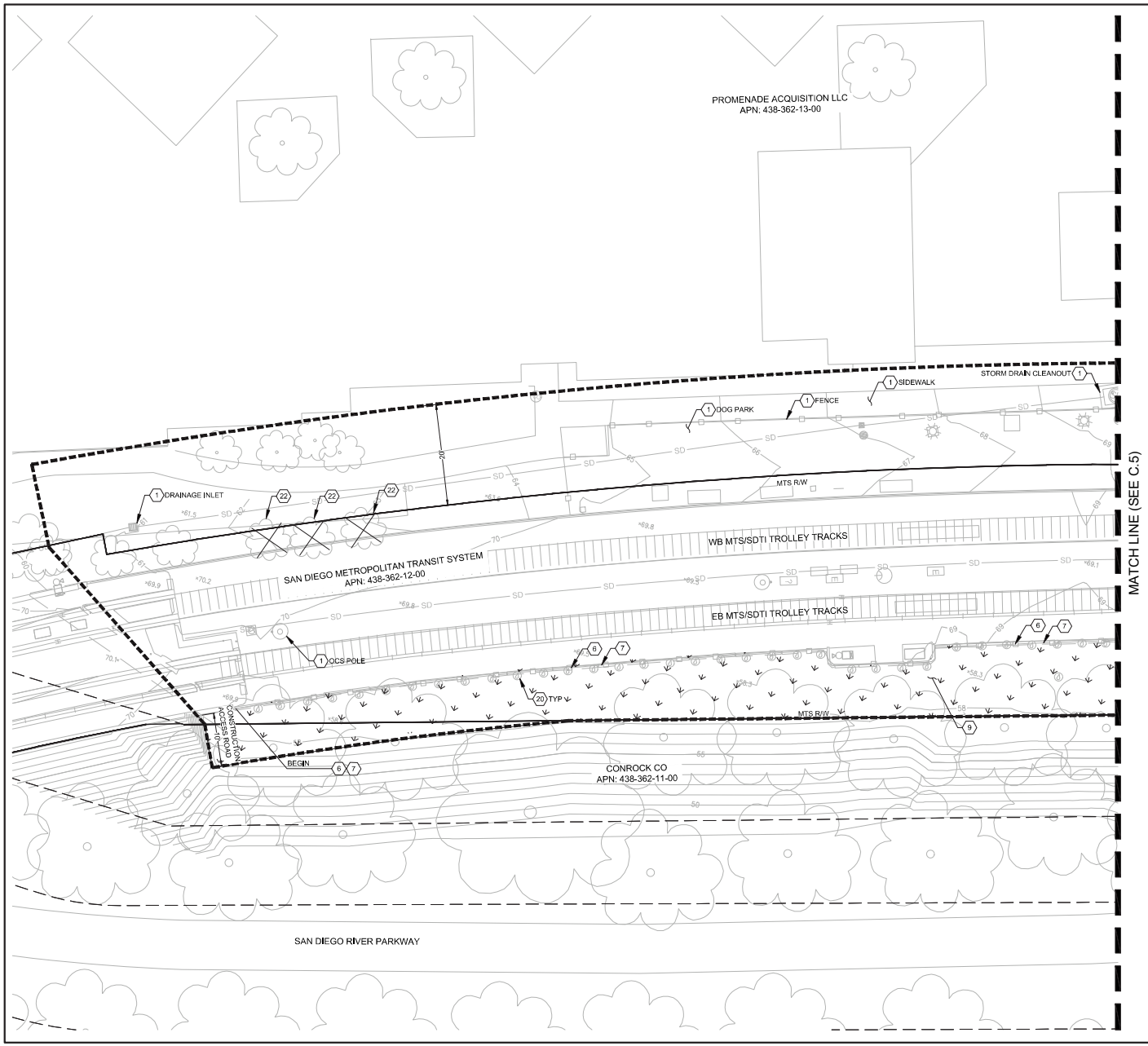
KEY MAP

C.3



LEGEND:

- CLEAR AND GRUB
- LIMIT OF WORK
- TREE REMOVAL

GENERAL NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING VEGETATED AREAS TO ORIGINAL CONDITION. CONTRACTOR SHALL TAKE PHOTOS OF EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
2. SEE GRADING AND DRAINAGE SHEETS FOR CONSTRUCTION ACCESS ROAD GRADING. SEE IMPROVEMENT PLANS FOR UTILITY AND SURFACE EQUIPMENT RELOCATIONS.

DEMOLITION NOTES:

1. PROTECT IN PLACE, AS NOTED ON PLAN.
6. REMOVE AND SALVAGE EXISTING STEEL CABLE RAILING
7. REMOVE EXISTING COPING
9. CLEAR AND GRUB
20. REMOVE EXISTING LANDSCAPE AND IRRIGATION, AS NEEDED.
22. REMOVE EXISTING TREE

NOTICE TO CONTRACTOR

EXISTING HIGH VOLTAGE CATENARY LINES. CONTRACTOR TO EXERCISE EXTREME CAUTION WHEN WORKING IN VICINITY OF OVERHEAD CONTACT SYSTEM.

0' 5'-0" 10'-0" 20'-0"
1"=10'

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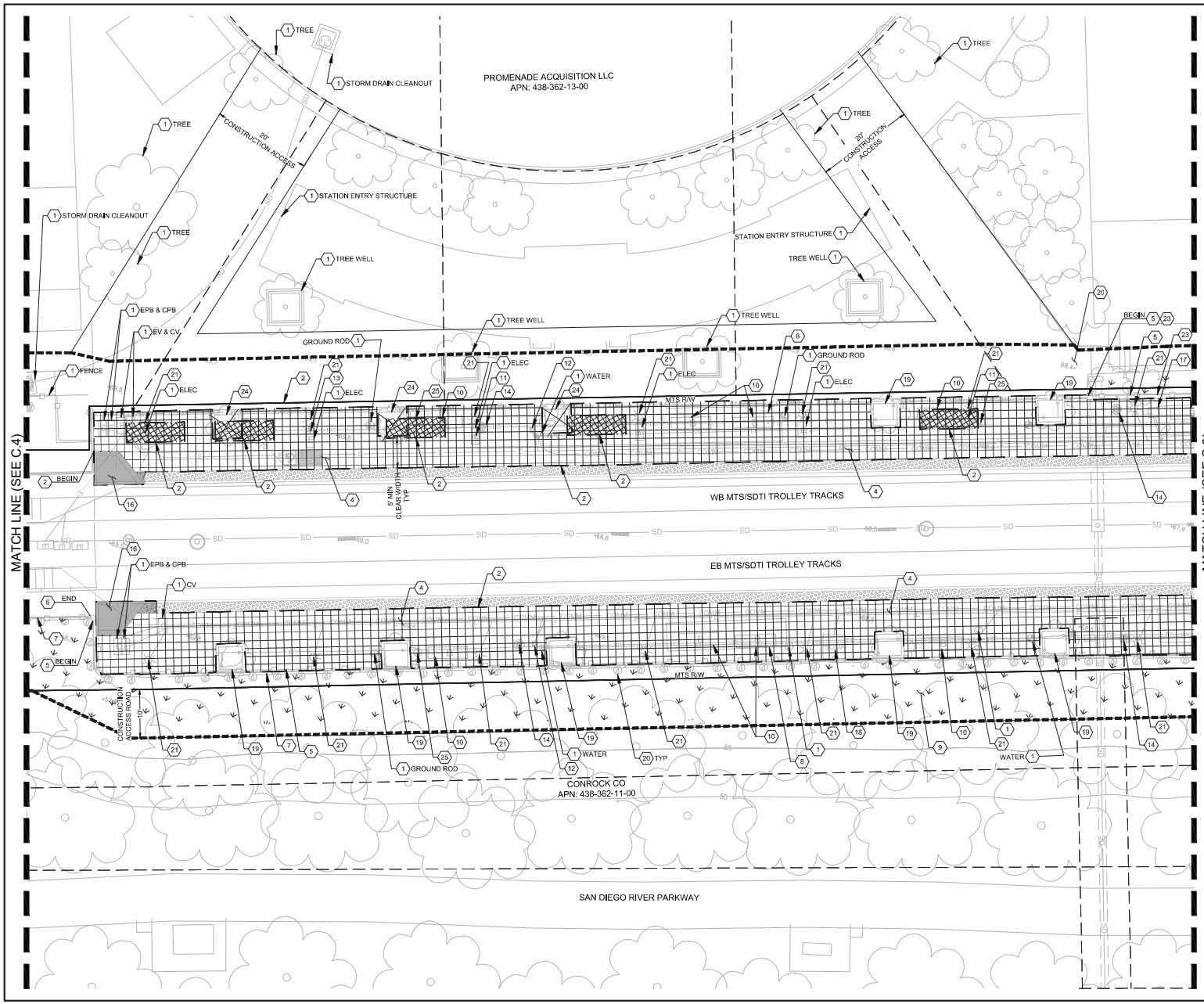
DEMOLITION PLAN - AREA A

C.4



LEGEND:

- REMOVE EXISTING CONCRETE
- REMOVE EXISTING CONCRETE PAVER AND BASE
- TRENCH EXCAVATION (12" x 4") SEE STRUCTURAL DETAILS
- CLEAR AND GRUB
- SAWCUT
- LIMIT OF WORK
- TREE REMOVAL

GENERAL NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING VEGETATED AREAS TO ORIGINAL CONDITION. CONTRACTOR SHALL TAKE PHOTOS OF EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
2. SEE GRADING AND DRAINAGE SHEETS FOR CONSTRUCTION ACCESS ROAD GRADING. SEE IMPROVEMENT PLANS FOR UTILITY AND SURFACE EQUIPMENT RELOCATIONS.

DEMOLITION NOTES:

1. PROTECT IN PLACE, AS NOTED ON PLAN.
2. SAWCUT
4. REMOVE EXISTING CONCRETE PAVER AND BASE
5. REMOVE AND SALVAGE EXISTING STEEL PICKET FENCE
6. REMOVE AND SALVAGE EXISTING STEEL CABLE RAILING
7. REMOVE EXISTING COPING
8. REMOVE EXISTING SHELTER AND RETURN TO MTS
9. CLEAR AND GRUB
10. REMOVE AND SALVAGE BENCH
11. OWNER TO REMOVE AND SALVAGE EXISTING TICKET MACHINE. CONTRACTOR SHALL COORDINATE WITH OWNER.
12. REMOVE AND SALVAGE EXISTING LED SIGN
13. REMOVE AND SALVAGE EXISTING BRAILLE SIGN
14. REMOVE AND SALVAGE EXISTING TRASH CAN
16. REMOVE EXISTING CURB RAMP
17. REMOVE AND SALVAGE EXISTING PAYPHONE
18. REMOVE AND SALVAGE EXISTING VENDING MACHINE
19. REMOVE EXISTING TREE-WELL AND PROTECT IN PLACE EXISTING TREE
20. REMOVE EXISTING LANDSCAPE AND IRRIGATION, AS NEEDED.
21. REMOVE EXISTING LIGHT POLE AND SALVAGE ALL ATTACHED FIXTURES
23. REMOVE EXISTING WALL
24. REMOVE EXISTING TREE-WELL AND EXISTING TREE
25. REMOVE AND SALVAGE EXISTING GROUND ROD

NOTICE TO CONTRACTOR

EXISTING HIGH VOLTAGE CATENARY LINES. CONTRACTOR TO EXERCISE EXTREME CAUTION WHEN WORKING IN VICINITY OF OVERHEAD CONTACT SYSTEM.

1"=10'

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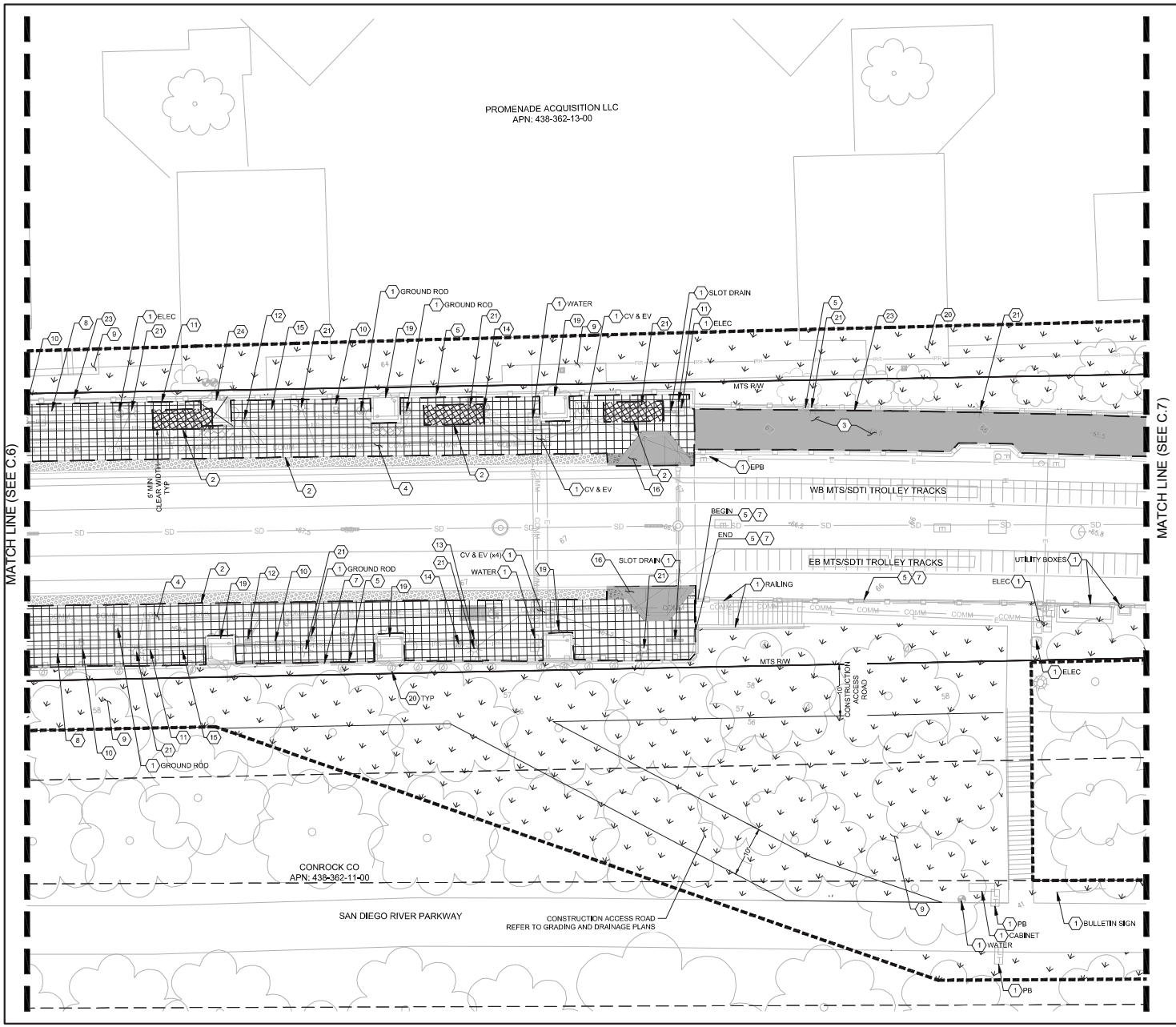
DEMOLITION PLAN - AREA B

C.5



LEGEND:

- REMOVE EXISTING CONCRETE
- REMOVE EXISTING CONCRETE PAVER AND BASE
- TRENCH EXCAVATION (12' x 4') SEE STRUCTURAL DETAILS
- CLEAR AND GRUB
- SAWCUT
- LIMIT OF WORK
- TREE REMOVAL

GENERAL NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING VEGETATED AREAS TO ORIGINAL CONDITION. CONTRACTOR SHALL TAKE PHOTOS OF EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
2. SEE GRADING AND DRAINAGE SHEETS FOR CONSTRUCTION ACCESS ROAD GRADING. SEE IMPROVEMENT PLANS FOR UTILITY AND SURFACE EQUIPMENT RELOCATIONS.

DEMOLITION NOTES:

1. PROTECT IN PLACE, AS NOTED ON PLAN.
2. SAWCUT
3. REMOVE EXISTING CONCRETE SECTION AND BASE
4. REMOVE EXISTING CONCRETE PAVER AND BASE
5. REMOVE EXISTING STEEL PICKET FENCE
6. REMOVE AND SALVAGE EXISTING STEEL CABLE RAILING
7. REMOVE EXISTING COPING
8. REMOVE EXISTING SHELTER AND RETURN TO MTS
9. CLEAR AND GRUB
10. REMOVE AND SALVAGE BENCH
11. OWNER TO REMOVE AND SALVAGE EXISTING TICKET MACHINE. CONTRACTOR SHALL COORDINATE WITH OWNER.
12. REMOVE AND SALVAGE EXISTING LED SIGN
13. REMOVE AND SALVAGE EXISTING BRAILLE SIGN
14. REMOVE AND SALVAGE EXISTING TRASH CAN
15. REMOVE AND SALVAGE EXISTING BULLETIN SIGN
16. REMOVE EXISTING CURB RAMP
18. REMOVE AND SALVAGE EXISTING TICKET VENDING MACHINE
19. REMOVE EXISTING TREE-WELL AND PROTECT IN PLACE EXISTING TREE
20. REMOVE EXISTING LANDSCAPE AND IRRIGATION, AS NEEDED.
21. REMOVE EXISTING LIGHT POLE AND SALVAGE ALL ATTACHED FIXTURES
23. REMOVE EXISTING WALL
24. REMOVE EXISTING TREE-WELL AND EXISTING TREE

NOTICE TO CONTRACTOR

EXISTING HIGH VOLTAGE CATENARY LINES. CONTRACTOR TO EXERCISE EXTREME CAUTION WHEN WORKING IN VICINITY OF OVERHEAD CONTACT SYSTEM.

1"=10'

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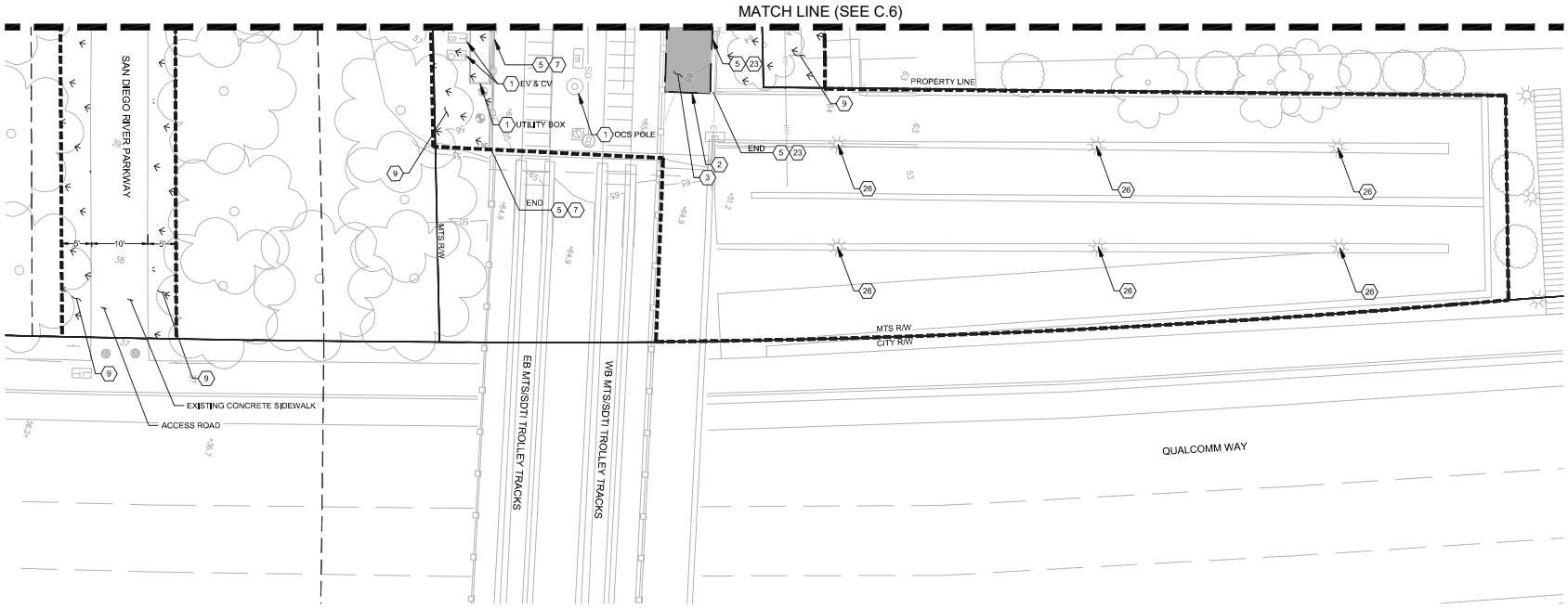
DEMOLITION PLAN - AREA C

C.6



LEGEND:

- REMOVE EXISTING CONCRETE
- CLEAR AND GRUB
- SAWCUT
- LIMIT OF WORK

DEMOLITION NOTES:

1. PROTECT IN PLACE, AS NOTED ON PLAN.
2. SAWCUT
3. REMOVE EXISTING CONCRETE SECTION AND BASE
5. REMOVE AND SALVAGE EXISTING STEEL PICKET FENCE
7. REMOVE EXISTING COPING
9. CLEAR AND GRUB
21. REMOVE EXISTING WALL
26. REMOVE EXISTING LIGHT POLE AND SALVAGE ALL ATTACHED FIXTURES. EXISTING FOUNDATION AND ANCHORAGE SHALL BE PROTECTED IN PLACE.

GENERAL NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING VEGETATED AREAS TO ORIGINAL CONDITION. CONTRACTOR SHALL TAKE PHOTOS OF EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
2. SEE GRADING AND DRAINAGE SHEETS FOR CONSTRUCTION ACCESS ROAD GRADING. SEE IMPROVEMENT PLANS FOR UTILITY AND SURFACE EQUIPMENT RELOCATIONS.

NOTICE TO CONTRACTOR

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0' 5'-0" 10'-0" 20'-0"
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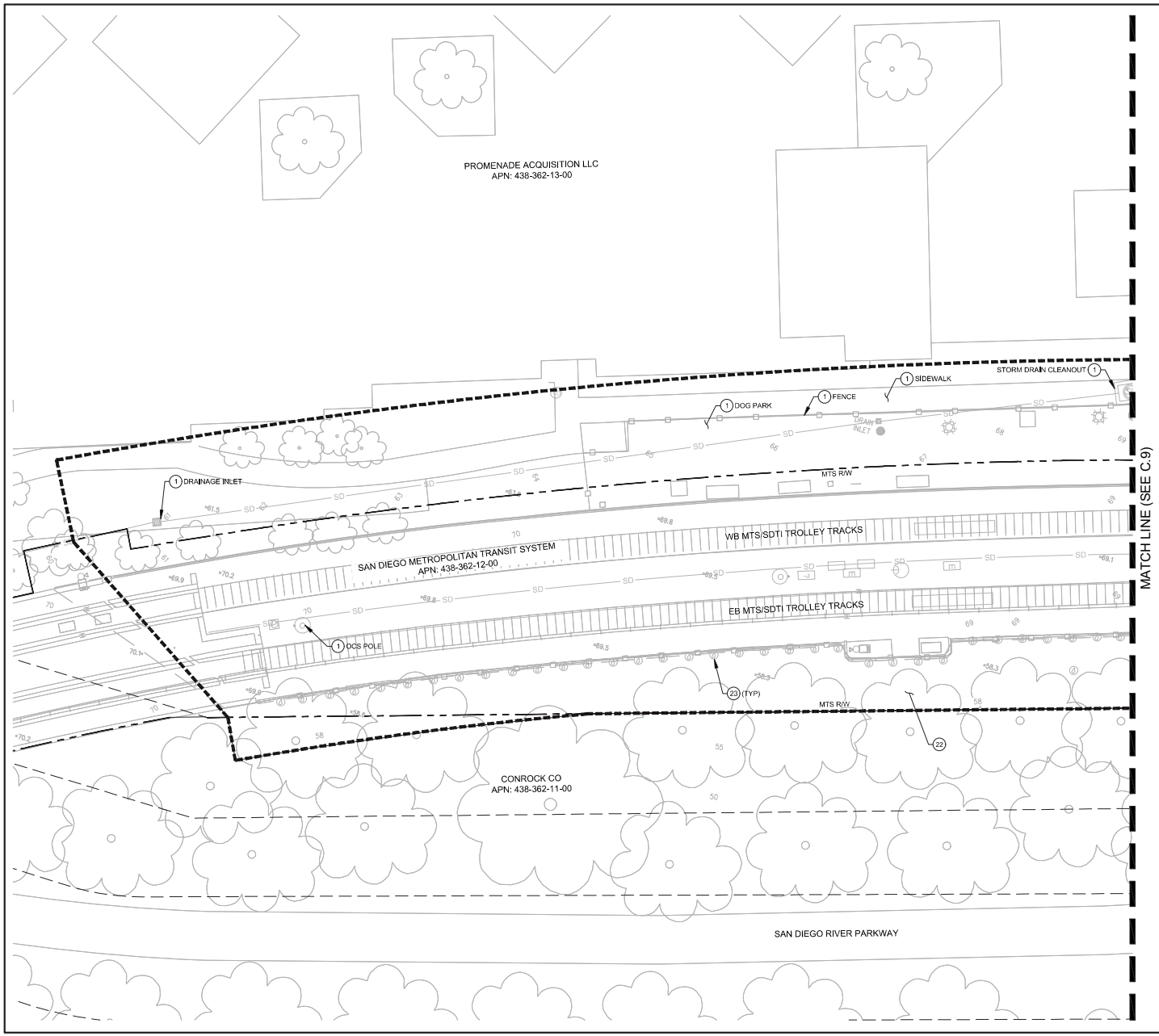
DEMOLITION PLAN - AREA D

C.7



LEGEND:

LIMIT OF WORK

GENERAL NOTES:

1. SEE STRUCTURAL PLANS FOR WALL RETROFIT.
2. CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR ANY UTILITIES IN CONFLICT WITH THE WORK.
3. SEE GRADING AND DRAINAGE SHEETS SHOWN ON SHEETS C.12 - C.15.
4. CONTRACTOR WILL MEET WITH MTS REPRESENTATIVE AND ENGINEER ON-SITE FOR PLACEMENT OF AMENITIES PRIOR TO FINAL INSTALLATION

CONSTRUCTION NOTES:

1. PROTECT IN PLACE, AS NOTED ON PLAN.
22. CONTRACTOR SHALL RESTORE AREA AND REGRADE SLOPE TO EXISTING CONDITIONS. NEW PLANTINGS SUCH AS TREES, BRUSH, ETC. SHALL BE PLANTED IN COMPLIANCE WITH THE REVEGETATION MEMO INCLUDED IN THE CONTRACT DOCUMENTS.
23. REINSTALL IRRIGATION SPRINKLER SYSTEM TO MATCH EXISTING CONDITIONS. CONTRACTOR SHALL INSTALL TEMPORARY IRRIGATION SYSTEM DURING CONSTRUCTION.

NOTICE TO CONTRACTOR

EXISTING HIGH VOLTAGE CATENARY LINES. CONTRACTOR TO EXERCISE EXTREME CAUTION WHEN WORKING IN VICINITY OF OVERHEAD CONTACT SYSTEM.

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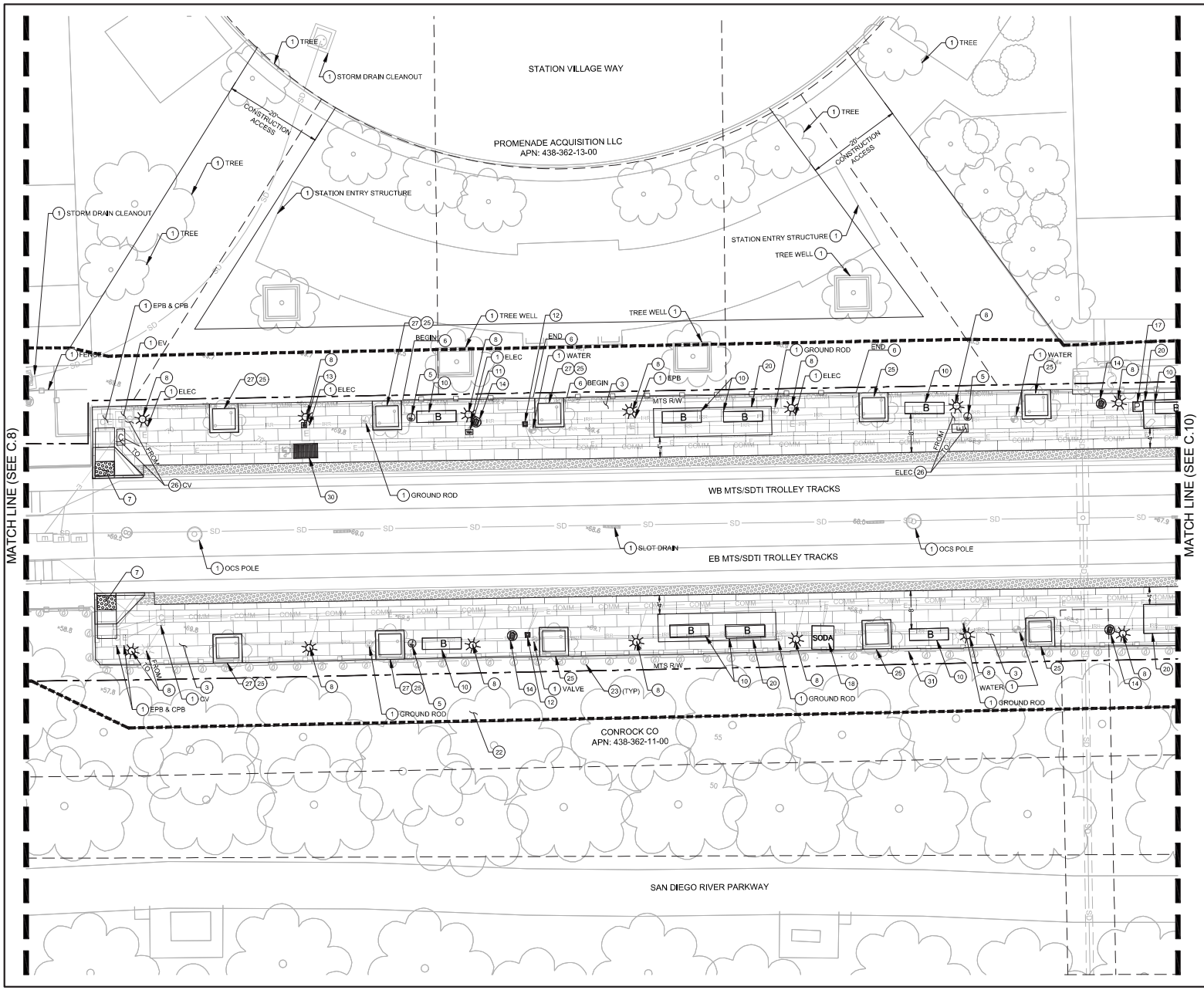
CIVIL IMPROVEMENT PLAN - AREA A

C.8



LEGEND:

STAMPED COLORED CONCRETE

LIMIT OF WORK

GENERAL NOTES:

1. SEE STRUCTURAL PLANS FOR WALL RETROFIT.
2. CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR ANY UTILITIES IN CONFLICT WITH THE WORK AS SHOWN IN THESE PLANS.
3. SEE GRADING AND DRAINAGE SHEETS SHOWN ON SHEETS C.12 - C.15.
4. CONTRACTOR WILL MEET WITH MTS REPRESENTATIVE AND ENGINEER ON-SITE FOR PLACEMENT OF AMENITIES PRIOR TO FINAL INSTALLATION.

CONSTRUCTION NOTES:

1. PROTECT IN PLACE, AS NOTED ON PLAN.
3. INSTALL STAMPED COLORED CONCRETE. SEE DETAILS ON SHEET C.16.
5. REINSTALL SALVAGED GROUND ROD
6. INSTALL 6' STEEL PICKET FENCE. SEE DETAIL ON SHEET C.16.
7. INSTALL CURB RAMP. SEE CURB RAMP DETAILS ON SHEET C.16.
8. INSTALL NEW LIGHT POLE, FOUNDATION, AND SALVAGED FIXTURES. SEE DETAIL ON SHEET C.17.
10. POWDER-COAT AND REINSTALL BENCH
11. OWNER TO REINSTALL TICKET MACHINE. CONTRACTOR SHALL COORDINATE WITH OWNER.
12. REINSTALL LED SIGN
13. REINSTALL BRAILLE SIGN
14. REINSTALL TRASH CAN
17. REINSTALL PAYPHONE
18. REINSTALL VENDING MACHINE
20. INSTALL OWNER FURNISHED SHELTER (TYPE B). CONTRACTOR TO INSTALL.
22. CONTRACTOR SHALL RESTORE AREA AND REGRADE SLOPE TO EXISTING CONDITIONS. NEW PLANTINGS SUCH AS TREES, BRUSH, ETC. SHALL BE PLANTED IN COMPLIANCE WITH THE REVEGETATION MEMO INCLUDED IN THE CONTRACT DOCUMENTS.
23. REINSTALL IRRIGATION SPRINKLER SYSTEM TO MATCH EXISTING CONDITIONS. CONTRACTOR SHALL INSTALL TEMPORARY IRRIGATION SYSTEM DURING CONSTRUCTION.
25. INSTALL TREE-WELL AND RESTORE IRRIGATION AS NEEDED. SEE STRUCTURAL DETAILS
26. RELOCATE, AS NOTED ON PLAN.
27. INSTALL NEW ULMUS PARVIFOLIA 'TRUE GREEN' (CHINESE EVERGREEN ELM).
30. INSTALL DETECTABLE DIRECTIONAL TEXTURE. SEE DETAIL ON SHEET C.17.
31. WEEP HOLES WITHIN COPING FOR DRAINAGE

NOTICE TO CONTRACTOR

EXISTING HIGH VOLTAGE CATENARY LINES. CONTRACTOR TO EXERCISE EXTREME CAUTION WHEN WORKING IN VICINITY OF OVERHEAD CONTACT SYSTEM.

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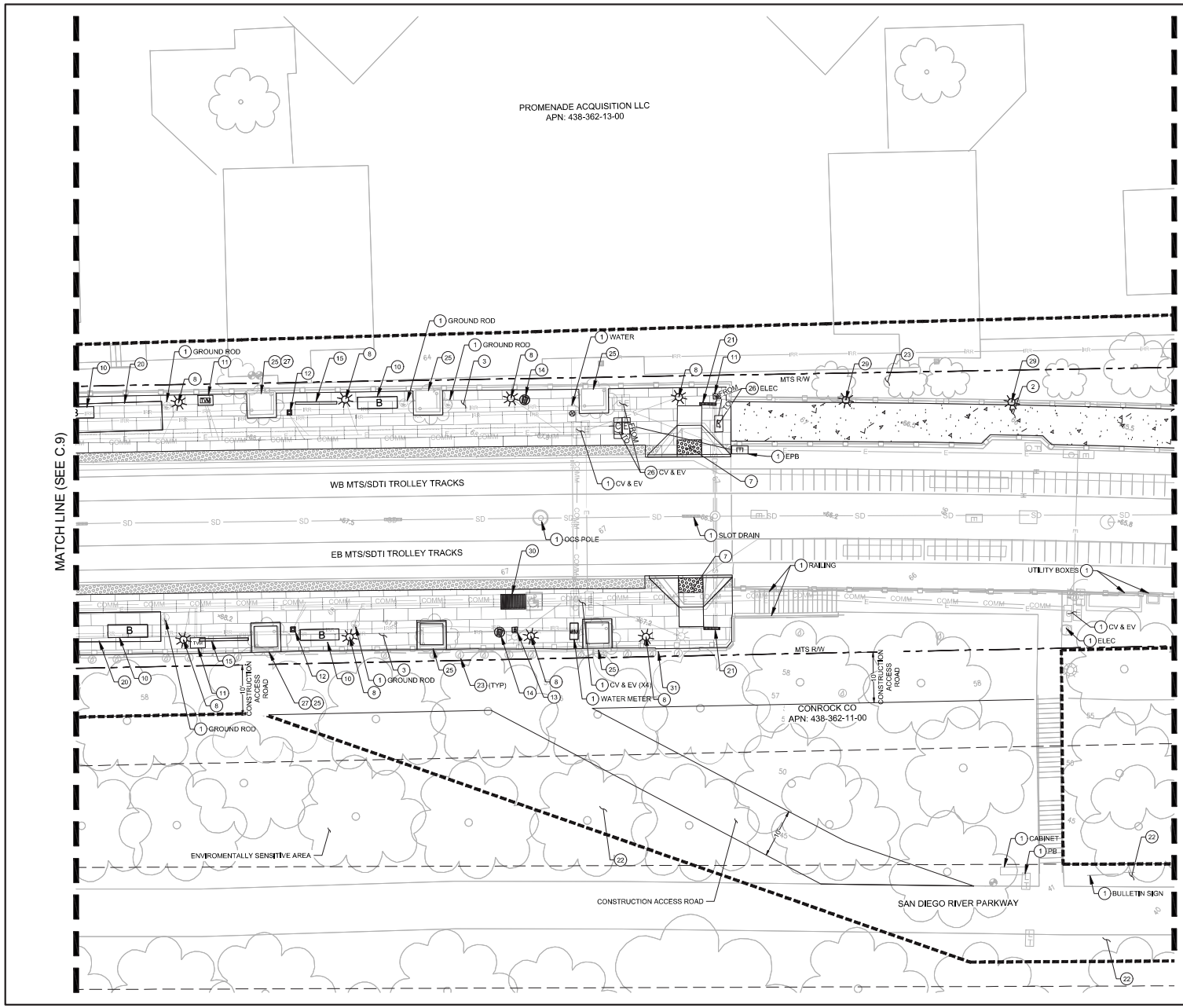
DATE	14 June, 2024
SCALE	AS NOTED

DRAWING TITLE

CIVIL IMPROVEMENT PLAN - AREA B

C.9



LEGEND:

- CONCRETE SIDEWALK
- STAMPED COLORED CONCRETE
- LIMIT OF WORK
- ENVIRONMENTALLY SENSITIVE HABITAT (ON SLOPE SOUTH OF STATION PLATFORM)

GENERAL NOTES:

1. SEE STRUCTURAL PLANS FOR WALL RETROFIT.
2. CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR ANY UTILITIES IN CONFLICT WITH THE WORK AS SHOWN IN THESE PLANS.
3. SEE GRADING AND DRAINAGE SHEETS SHOWN ON SHEETS C.12 - C.15.
4. CONTRACTOR WILL MEET WITH MTS REPRESENTATIVE AND ENGINEER ON-SITE FOR PLACEMENT OF AMENITIES PRIOR TO FINAL INSTALLATION

CONSTRUCTION NOTES:

1. PROTECT IN PLACE, AS NOTED ON PLAN.
2. INSTALL CONCRETE SIDEWALK. SEE DETAILS ON SHEET C.16.
3. INSTALL STAMPED COLORED CONCRETE. SEE DETAILS ON SHEET C.16.
7. INSTALL CURB RAMP. SEE CURB RAMP DETAILS ON SHEET C.16.
8. INSTALL NEW LIGHT POLE, FOUNDATION, AND SALVAGED FIXTURES. SEE DETAIL ON SHEET C.17.
10. POWDER-COAT AND REINSTALL BENCH
11. OWNER TO REINSTALL TICKET MACHINE. CONTRACTOR SHALL COORDINATE WITH OWNER.
12. REINSTALL LED SIGN
13. REINSTALL BRAILLE SIGN
14. REINSTALL TRASH CAN
15. REINSTALL BULLETIN SIGN
20. INSTALL OWNER FURNISHED SHELTER (TYPE B). CONTRACTOR TO INSTALL.
21. RESET SLOT DRAIN LID
22. CONTRACTOR SHALL RESTORE AREA AND REGRADE SLOPE TO EXISTING CONDITIONS. NEW PLANTINGS SUCH AS TREES, BRUSH, ETC. SHALL BE PLANTED IN COMPLIANCE WITH THE REVEGETATION MEMO INCLUDED IN THE CONTRACT DOCUMENTS.
23. REINSTALL IRRIGATION SPRINKLER SYSTEM TO MATCH EXISTING CONDITIONS. CONTRACTOR SHALL INSTALL TEMPORARY IRRIGATION SYSTEM DURING CONSTRUCTION.
25. INSTALL TREE-WELL AND RESTORE IRRIGATION AS NEEDED. SEE STRUCTURAL DETAILS
26. RELOCATE, AS NOTED ON PLAN.
27. INSTALL NEW ULMUS PARVIFOLIA 'TRUE GREEN' (CHINESE EVERGREEN ELM).
29. INSTALL NEW LIGHT POLE, FOUNDATION, AND SALVAGED FIXTURES. SEE STRUCTURAL DETAILS.
30. INSTALL DETECTABLE DIRECTIONAL TEXTURE. SEE DETAIL ON SHEET C.17.
31. WEEP HOLES WITHIN COPING FOR DRAINAGE

NOTICE TO CONTRACTOR

EXISTING HIGH VOLTAGE CATENARY LINES. CONTRACTOR TO EXERCISE EXTREME CAUTION WHEN WORKING IN VICINITY OF OVERHEAD CONTACT SYSTEM.

DOKKEN ENGINEERING
DOKKEN ENGINEERING
1450 FRAZEE ROAD
SUITE 100
SAN DIEGO, CA 92108
TEL: (858) 514-8377

MTS

90% SUBMITTAL (NOT FOR CONSTRUCTION) - JUNE 7, 2024

REVISION LIST

NO.	DATE	REVISIONS

STAMPED:

PROJECT TITLE

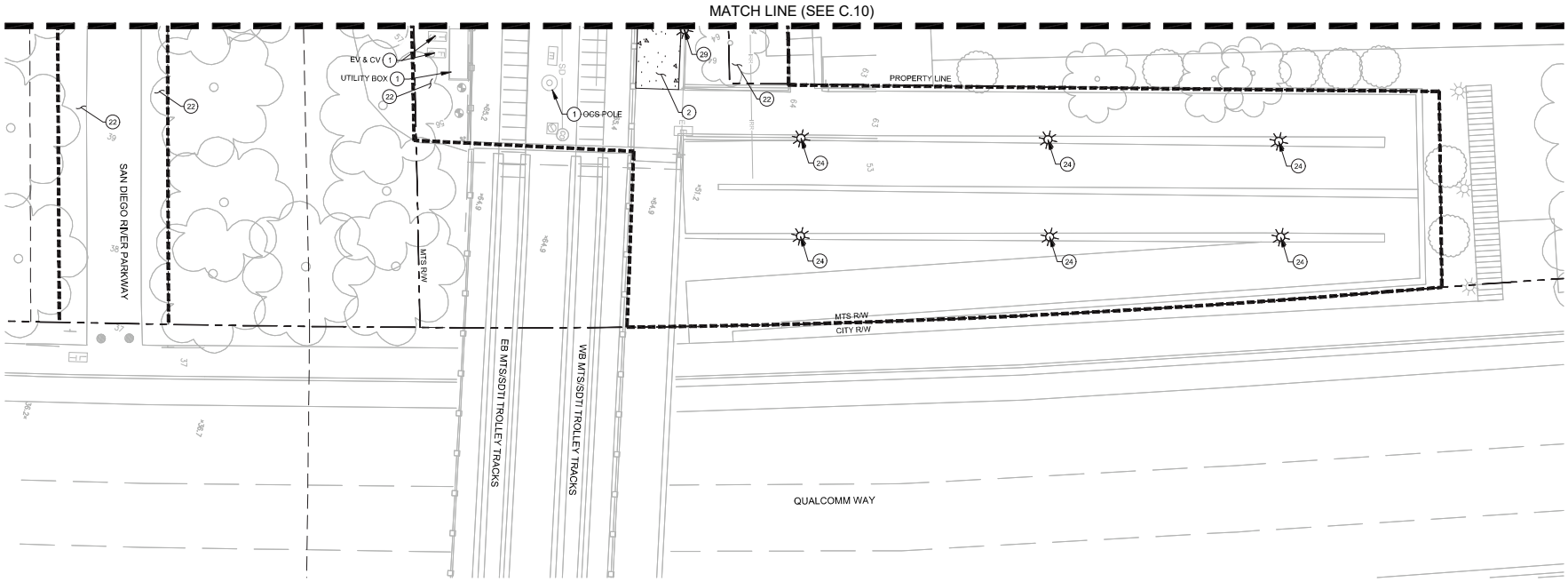
MTS RIO VISTA PLATFORM DESIGN PHASE II

PROJECT NO.	PWL 353.0-22
DRAWN BY	AS
DATE	14 June, 2024
SCALE	AS NOTED

DRAWING TITLE

CIVIL IMPROVEMENT PLAN - AREA C

C.10



CONSTRUCTION NOTES:

1. PROTECT IN PLACE, AS NOTED ON PLAN.
2. INSTALL CONCRETE SIDEWALK
22. CONTRACTOR SHALL RESTORE AREA AND REGRADE SLOPE TO EXISTING CONDITIONS. NEW PLANTINGS SUCH AS TREES, BRUSH, ETC. SHALL BE PLANTED IN COMPLIANCE WITH THE REVEGETATION MEMO INCLUDED IN THE CONTRACT DOCUMENTS.
24. INSTALL NEW LIGHT POLE INTO EXISTING FOUNDATION AND ANCHORAGE. SEE DETAIL ON SHEET C.17
29. INSTALL NEW LIGHT POLE, FOUNDATION, AND SALVAGED FIXTURES. SEE STRUCTURAL DETAILS.

GENERAL NOTES:

1. SEE STRUCTURAL PLANS FOR WALL RETROFIT.
2. CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR ANY UTILITIES IN CONFLICT WITH THE WORK AS SHOWN IN THESE PLANS.
3. SEE GRADING AND DRAINAGE SHEETS SHOWN ON SHEETS C.12 - C.15.

LEGEND:

CONCRETE SIDEWALK

LIMIT OF WORK

NOTICE TO CONTRACTOR

EXISTING HIGH VOLTAGE CATENARY LINES. CONTRACTOR TO EXERCISE EXTREME CAUTION WHEN WORKING IN VICINITY OF OVERHEAD CONTACT SYSTEM.

0' 5'-0" 10'-0" 20'-0"
1"=10'

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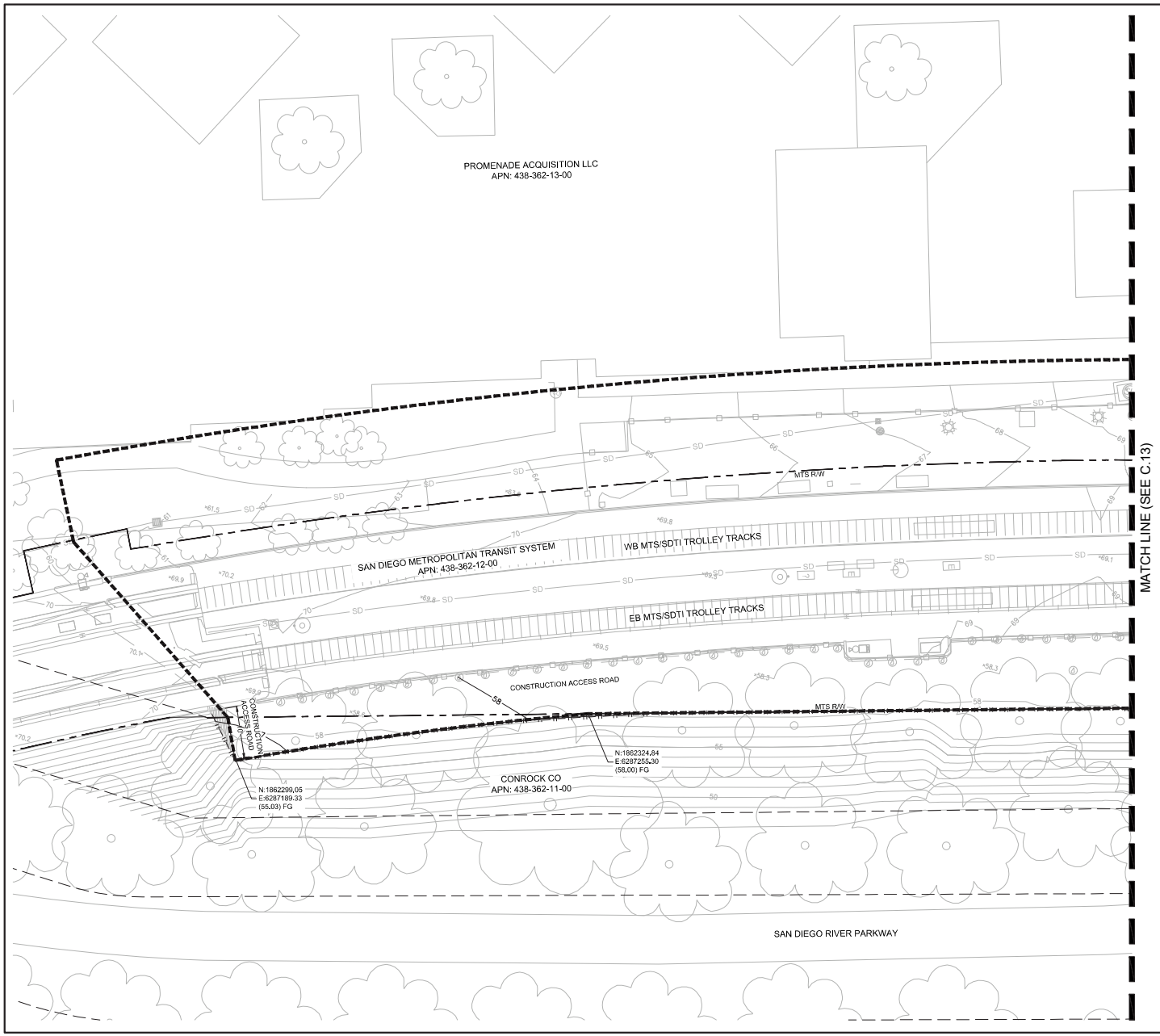
DRAWING TITLE

CIVIL IMPROVEMENT PLAN - AREA D

C.11



LEGEND:

- - - - - -	LIMIT OF WORK
(XX.XX)	MATCH EXISTING ELEVATION
FG	FINISHED GRADE ELEVATION

GENERAL NOTES:

1. SEE STRUCTURAL PLANS FOR WALL RETROFIT.
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NOTICE TO CONTRACTOR

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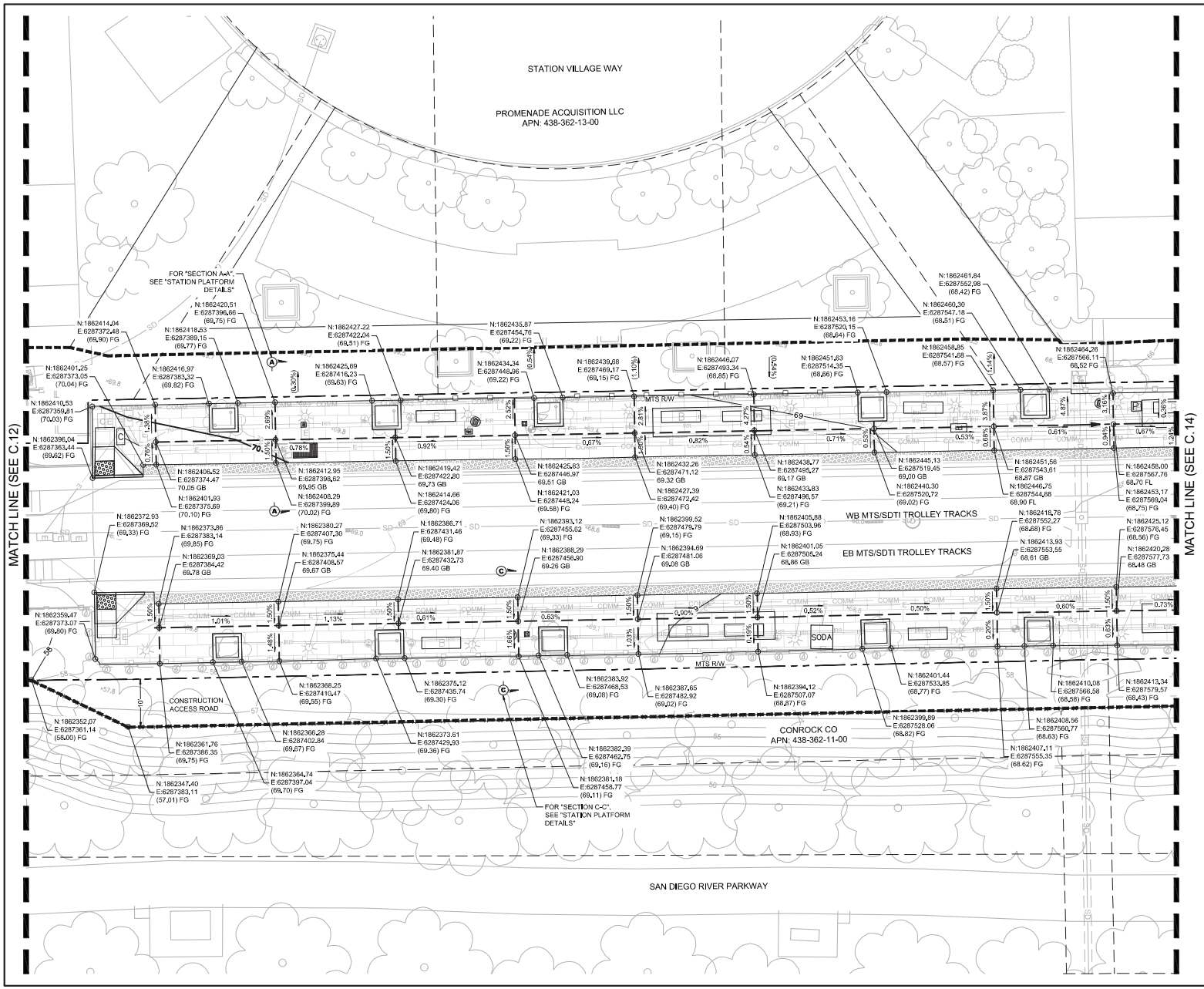
DRAWING TITLE

GRADING AND DRAINAGE - AREA A

C.12



LEGEND:

	FLOW LINE
	GRADE BREAK
	LIMIT OF WORK
	DAYLIGHT
(XX.XX)	MATCH EXISTING ELEVATION
FG	FINISHED GRADE ELEVATION
GB	GRADE BREAK ELEVATION
FL	FLOWLINE ELEVATION

GENERAL NOTES:

1. SEE STRUCTURAL PLANS FOR WALL RETROFIT.
2. CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR ANY UTILITIES IN CONFLICT WITH THE WORK AS SHOWN IN THESE PLANS.

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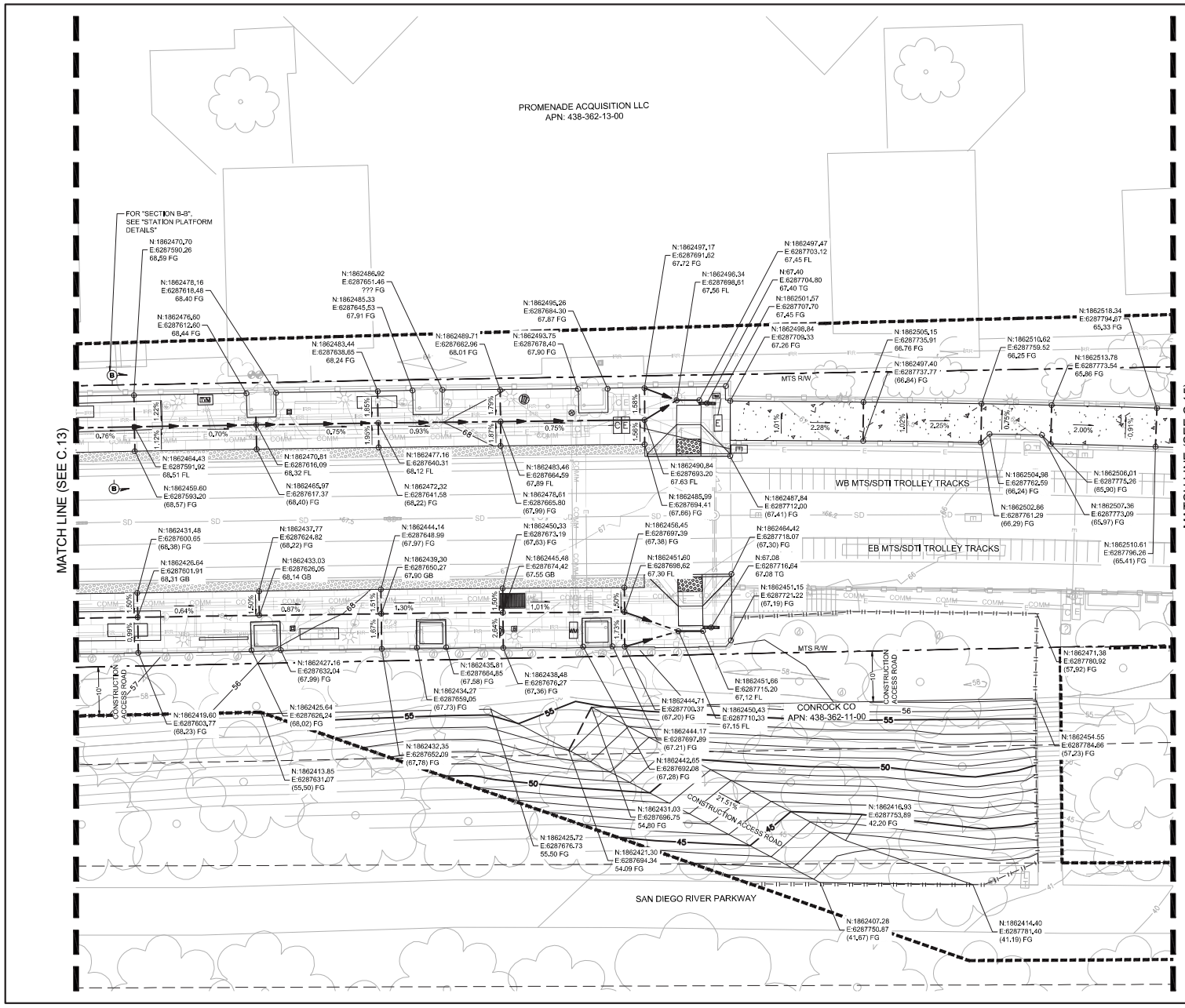
DRAWING TITLE

GRADING AND DRAINAGE - AREA B

C.13



LEGEND:

	FLOW LINE
	GRADE BREAK
	LIMIT OF WORK
	DAYLIGHT
(XX.XX)	MATCH EXISTING ELEVATION
FG	FINISHED GRADE ELEVATION
GB	GRADE BREAK ELEVATION
FL	FLOWLINE ELEVATION

GENERAL NOTES:

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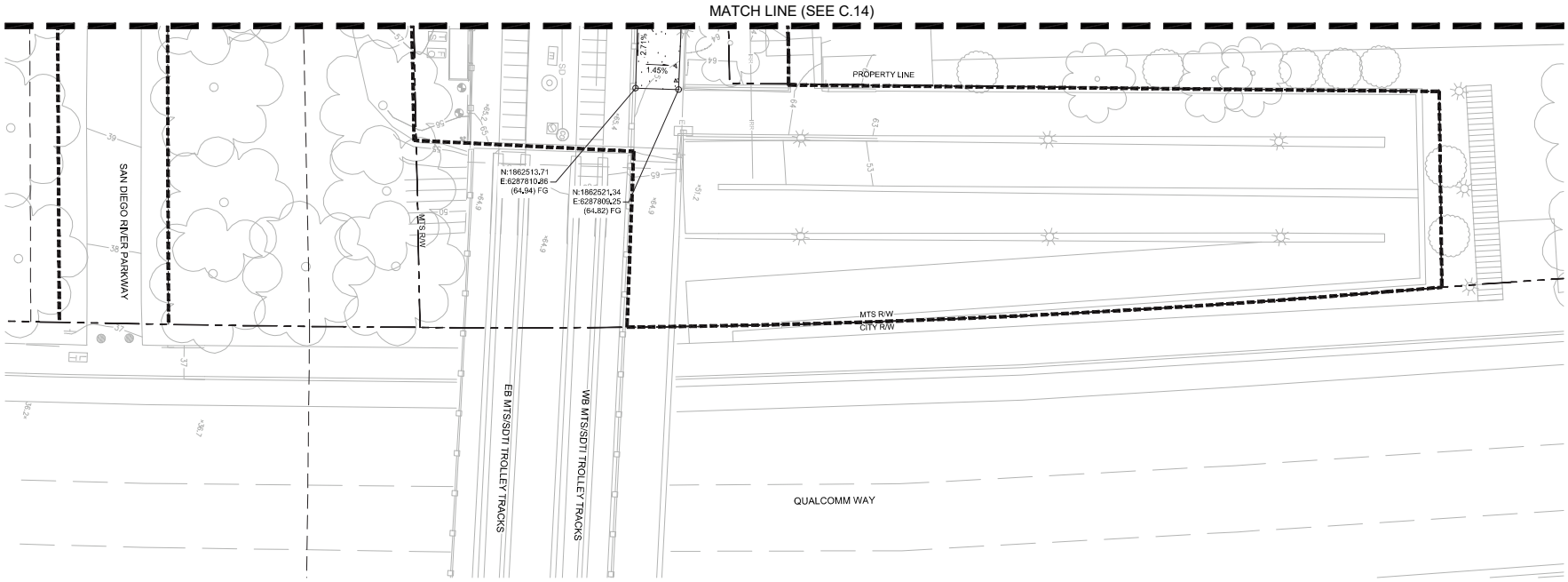
DRAWING TITLE

GRADING AND DRAINAGE - AREA C

C.14



GENERAL NOTES:

1. SEE STRUCTURAL PLANS FOR WALL RETROFIT.
2. CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR ANY UTILITIES IN CONFLICT WITH THE WORK AS SHOWN IN THESE PLANS.

LEGEND:

- - - - - -	LIMIT OF WORK
(XX.XX)	MATCH EXISTING ELEVATION
FG	FINISHED GRADE ELEVATION

NOTICE TO CONTRACTOR

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0' 5'-0" 10'-0" 20'-0"
1"=10'

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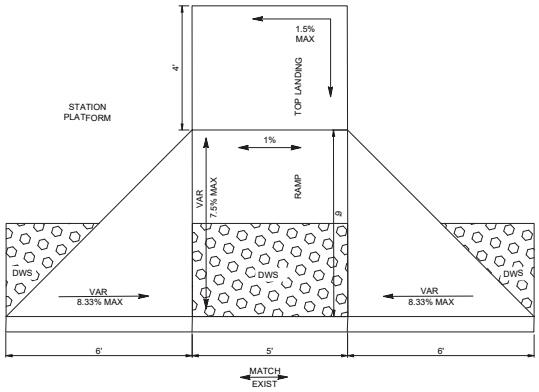
DRAWING TITLE

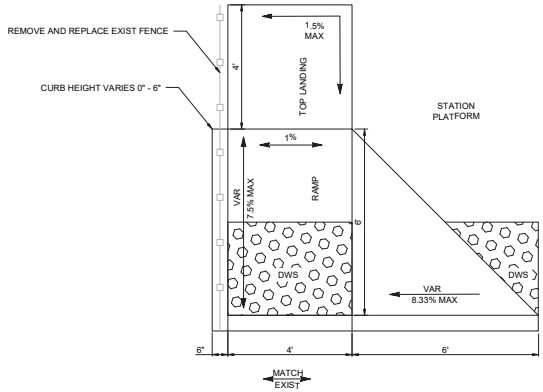
GRADING AND DRAINAGE - AREA D

C.15



STATION PLATFORM EAST CURB RAMP

SCALE: 1" = 2'-0"

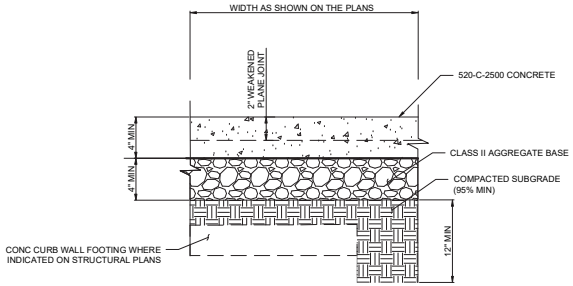


STATION PLATFORM WEST CURB RAMP

SCALE: 1" = 2'-0"

NOTES:

1. FINISH GRADE PER GRADING AND DRAINAGE PLANS.
2. ATOOL JOINTS MUST BE STRAIGHT AND MATCH THE DIMENSIONS OF THE EXISTING PAVERS. NO DIAGONAL JOINTS TO BE INSTALLED.
3. CONCRETE JOINTS SHALL BE PLACED AT EVERY 6', BETWEEN FACE OF WALLS, PLANTERS, AND CURBS PER SDRSD G-10.

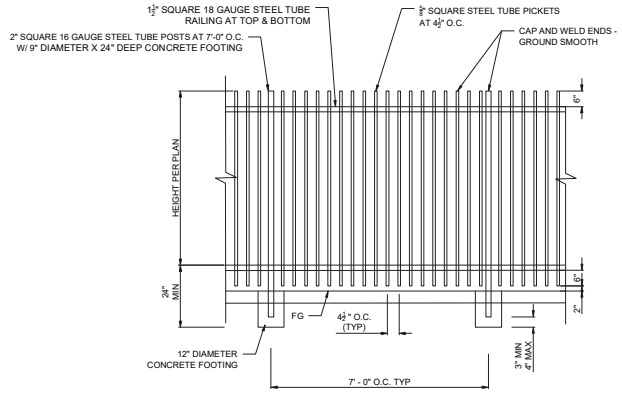


CONCRETE SIDEWALK

NO SCALE

NOTES:

1. FINISH TO MATCH EXISTING FENCES.
2. ALL METAL TO BE HOT DIPPED AFTER FABRICATION. TOUCH-UP GALVANIZING IN FIELD.

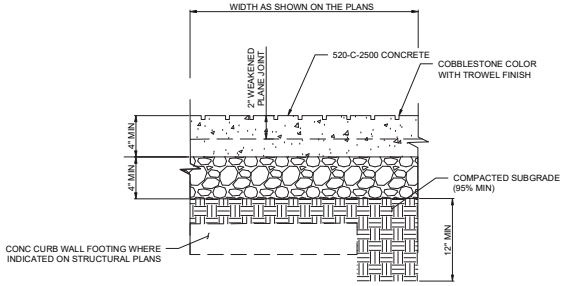


STEEL PICKET FENCE

SCALE: 1" = 2'-0"

NOTES:

1. FINISH GRADE PER GRADING AND DRAINAGE PLANS.
2. APPLY THE TOPICAL RELEASE AGENT TO THE CONCRETE FINISH, DAYTON SUPERIOR "TOP CAST 03", OR AN APPROVED EQUIVALENT.
3. TOOL JOINTS MUST BE STRAIGHT AND MATCH THE DIMENSIONS OF THE EXISTING PAVEMENT. NO DIAGONAL JOINTS TO BE INSTALLED.
4. CONCRETE JOINTS SHALL BE PLACED AT EVERY 6', BETWEEN FACE OF WALLS, PLANTERS, AND CURBS PER SDRSD G-10.



STAMPED COLORED CONCRETE

NO SCALE

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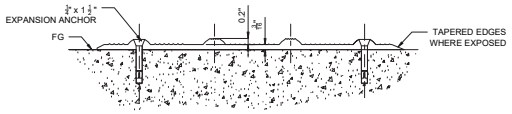
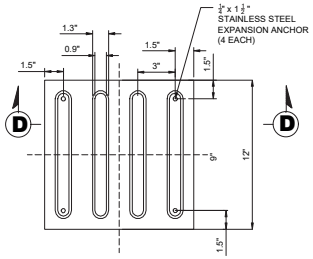
STATION PLATFORM DETAILS - SHEET 1 OF 2

C.16



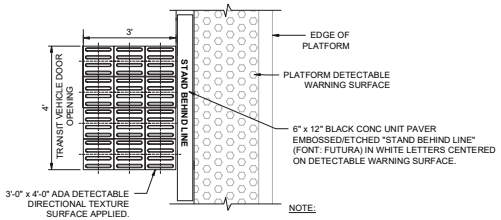
SECTION D-D: DETECTABLE DIRECTIONAL TEXTURE DETAIL
NTS



NOTE:

THIS SURFACE SHALL DIFFER FROM ADJOINING WALKING SURFACE IN RESILIENCY OR SOUND-ON-CANE CONTACT. THE COLOR SHALL BE YELLOW CONFORMING TO FEDERAL COLOR NO. 33538

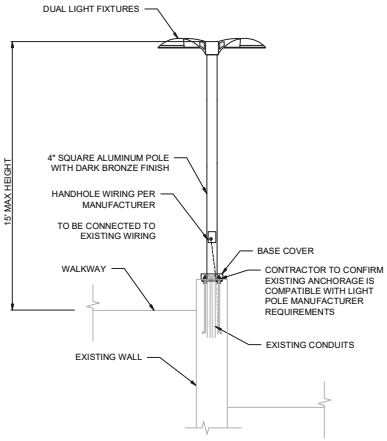
DETECTABLE DIRECTIONAL TEXTURE DETAIL
SCALE: 1" = 5'-0"



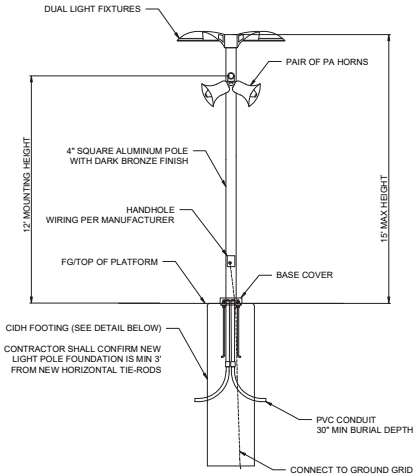
NOTE:

WIDTH OF DIRECTIONAL DETECTABLE TEXTURE SHALL BE EQUAL TO THE WIDTH OF THE TRANSIT VEHICLE'S DOOR OPENING

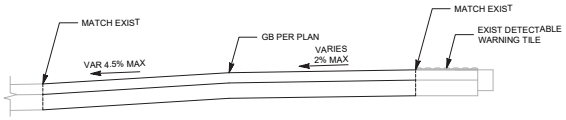
DETECTABLE DIRECTIONAL TEXTURE
SCALE: 1" = 2'-0"



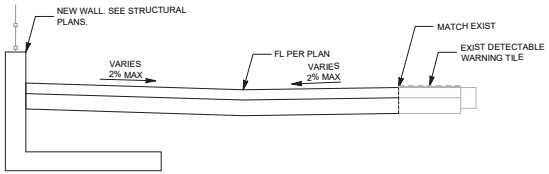
LIGHTPOLE ON EXISTING FOUNDATION
SCALE: 1" = 2'-0"



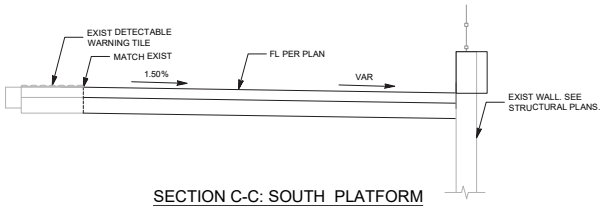
TYPICAL PLATFORM LIGHTPOLE
SCALE: 1" = 2'-0"



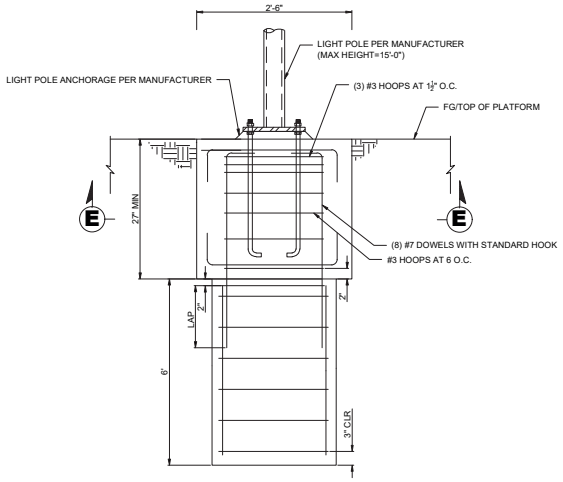
SECTION A-A: NORTH PLATFORM



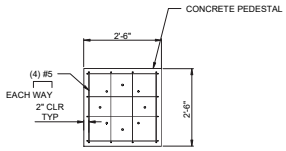
SECTION B-B: NORTH PLATFORM



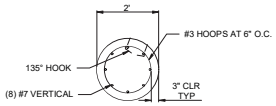
SECTION C-C: SOUTH PLATFORM



TYPICAL PLATFORM LIGHTPOLE POST CIDH FOOTING
SCALE: 1" = 1'-0"



SECTION E-E
SCALE: 1" = 2'-0"



CIDH FOOTING SECTION
SCALE: 1" = 2'-0"

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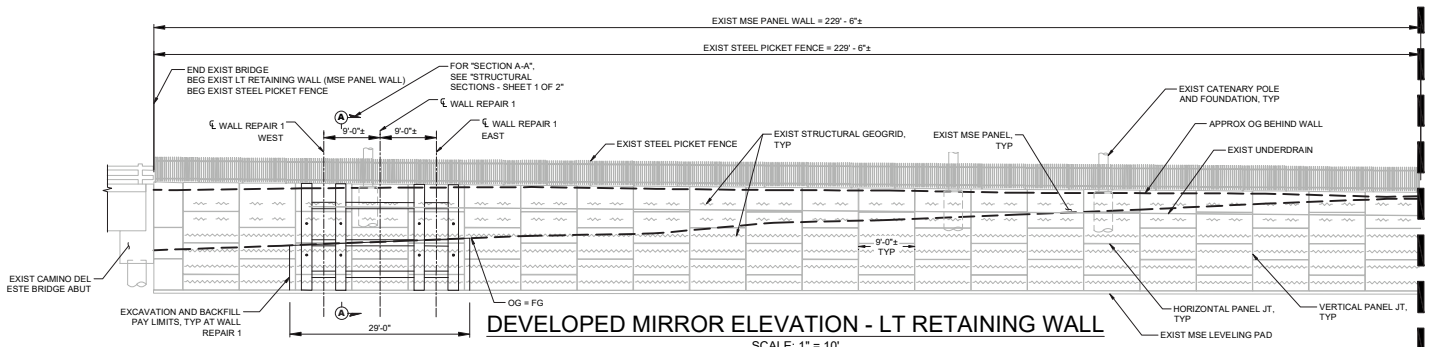
STATION PLATFORM DETAILS - SHEET 2 OF 2

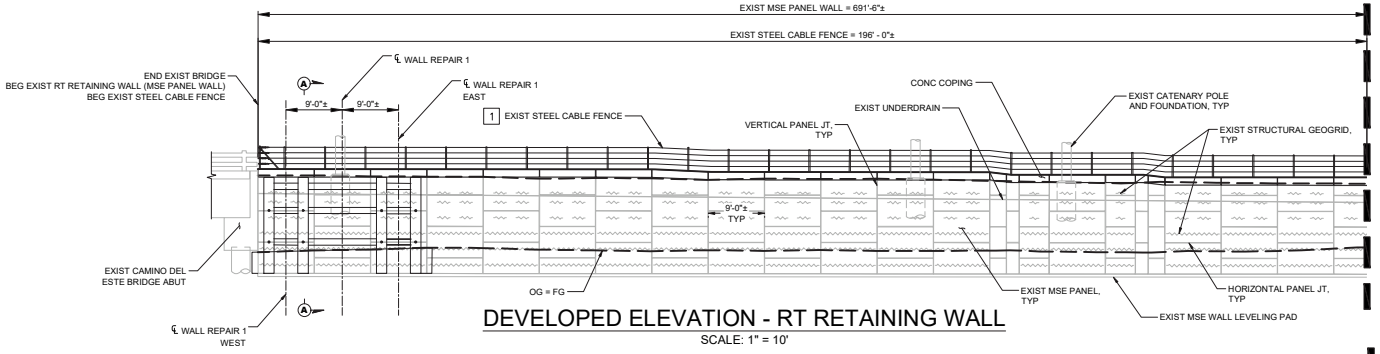
C.17



DEVELOPED MIRROR ELEVATION - LT RETAINING WALL

SCALE: 1" = 10'

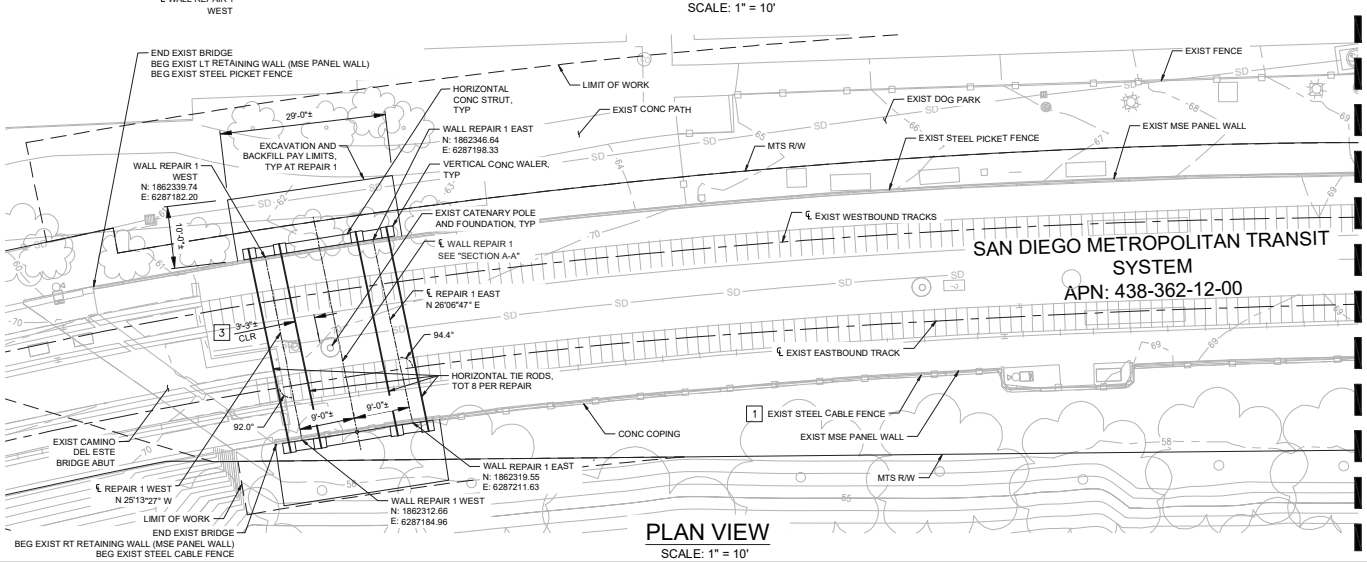
MATCH LINE (SEE S.2)



DEVELOPED ELEVATION - RT RETAINING WALL

SCALE: 1" = 10'

MATCH LINE (SEE S.2)



PLAN VIEW

SCALE: 1" = 10'

MATCH LINE (SEE S.2)

DESIGN NOTES:

DESIGN: AASHTO LRFD Bridge Design Specifications, 8th Edition with California Amendments, Preface dated April 2019

SEISMIC: kh = 0.24, kv = 0.00

SOIL BACKFILL: Ø = 34°, γ = 120pcf

SOIL FOR BASE FRICTION: Ø = 32°, γ = 120pcf

REINFORCED CONCRETE: f'_c = 3,600psi, f_y = 60,000psi

1 RECONSTRUCT ON CONCRETE COPING.

3 APPROXIMATE CLEARANCE. CONTRACTOR TO FIELD VERIFY.

NOTES:

1. CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR ANY UTILITIES IN CONFLICT WITH THE WORK AS SHOWN ON THESE PLANS
2. DEMOLITION AND CIVIL IMPROVEMENTS NOT SHOWN FOR CLARITY. FOR ADDITIONAL INFORMATION, SEE CIVIL PLANS.
3. NORTHINGS AND EASTINGS OF EXISTING MSE PANELS REPRESENT CENTERS OF PANELS AND ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY PANEL LOCATIONS.

N

0' 5'-0" 10'-0" 20'-0"
1"=10'

DOKKEN ENGINEERING
DOKKEN ENGINEERING
1450 FRAZEE ROAD
SUITE 100
SAN DIEGO, CA 92108
TEL: (858) 514-8377

MTS

90% SUBMITTAL (NOT FOR CONSTRUCTION) - JUNE 7, 2024

REVISION LIST

NO.	DATE	REVISIONS

STAMPED:

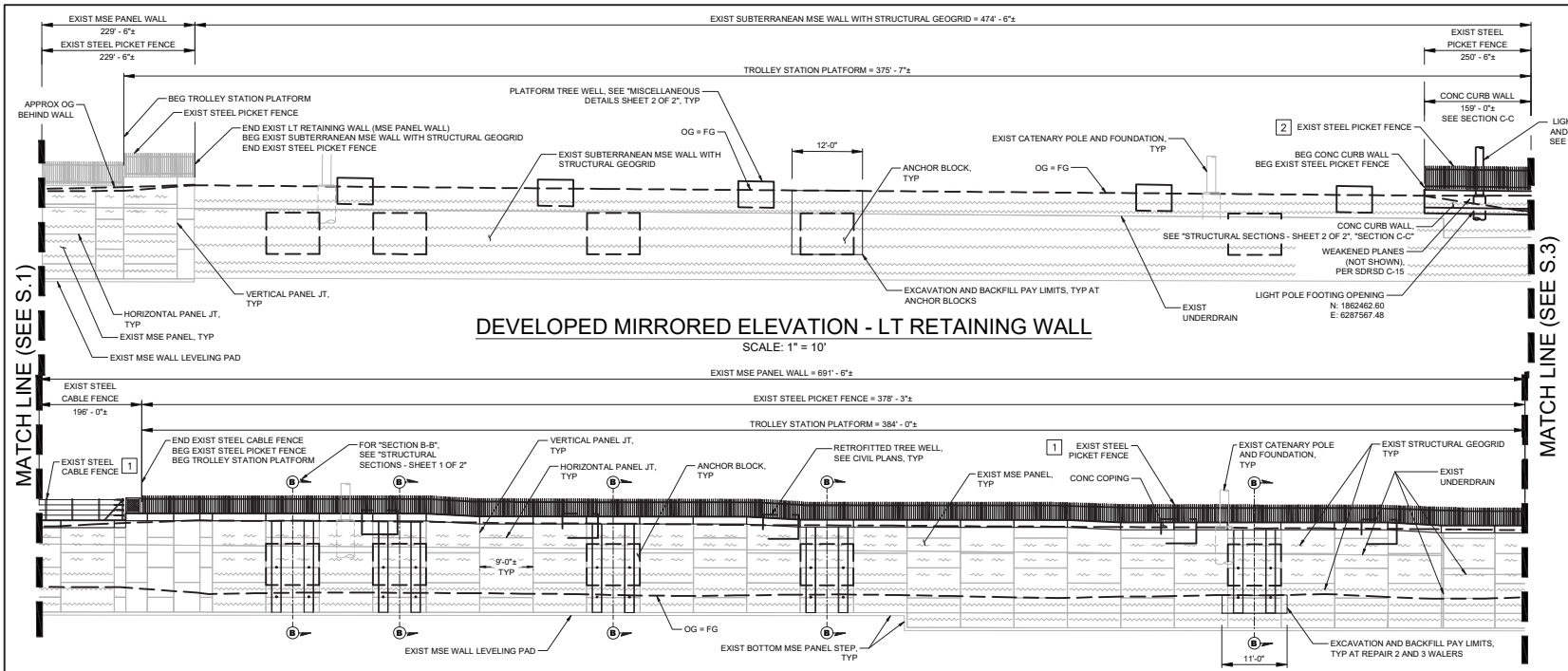
PROJECT TITLE

MTS RIO VISTA PLATFORM DESIGN PHASE II

PROJECT NO.	PWL 353.0-22
DRAWN BY	AS
DATE	07 June, 2024
SCALE	
DRAWING TITLE	1" = 10'

STRUCTURAL PLAN - AREA A

S.1

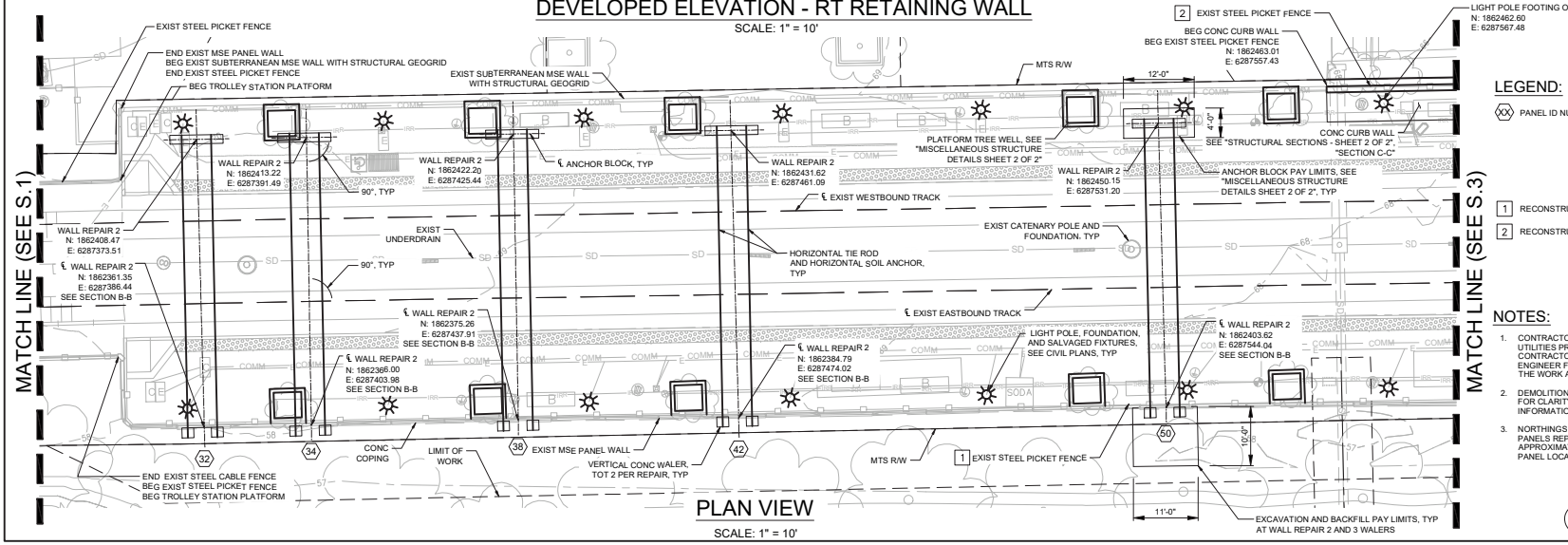


DEVELOPED MIRRORED ELEVATION - LT RETAINING WALL

SCALE: 1" = 10'

DEVELOPED ELEVATION - RT RETAINING WALL

SCALE: 1" = 10'



PLAN VIEW

SCALE: 1" = 10'

LEGEND:

(XX) PANEL ID NUMBER

1 RECONSTRUCT ON CONCRETE COPING

2 RECONSTRUCT ON CONCRETE CURB WALL

NOTES:

1. CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR ANY UTILITIES IN CONFLICT WITH THE WORK AS SHOWN ON THESE PLANS
2. DEMOLITION AND CIVIL IMPROVEMENTS NOT SHOWN FOR CLARITY. SEE CIVIL PLANS FOR ADDITIONAL INFORMATION.
3. NORTHINGS AND EASTINGS OF EXISTING MSE PANELS REPRESENT CENTERS OF PANELS AND ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY PANEL LOCATIONS.

N 0' 5'-0" 10'-0" 20'-0" 1"=10'

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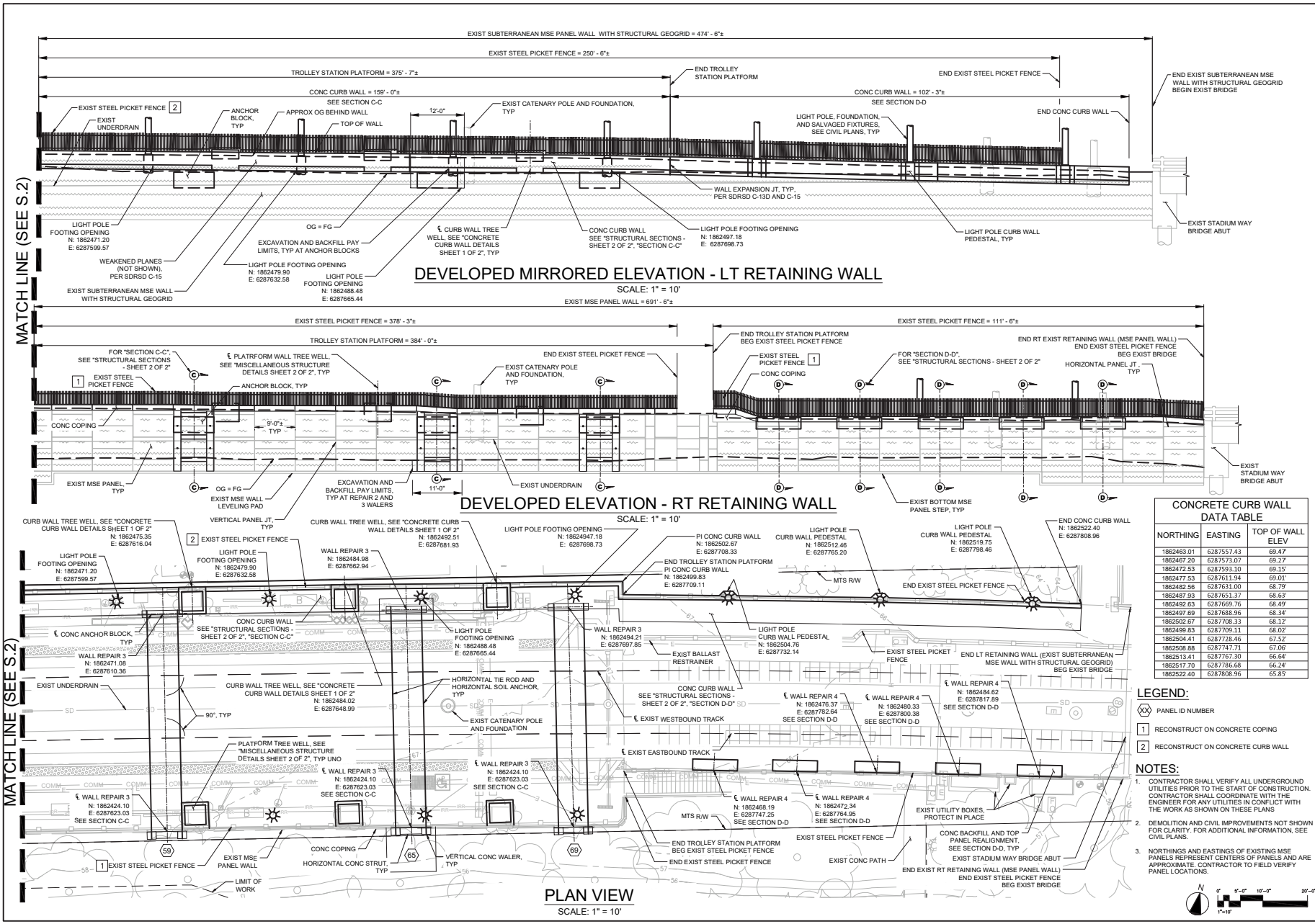
DRAWING TITLE	1" = 10'

STRUCTURAL PLAN - AREA B

S.2



CONCRETE CURB WALL DATA TABLE

NORTHING	EASTING	TOP OF WALL ELEV
1862463.01	6287557.43	69.47'
1862467.20	6287573.07	69.27'
1862472.53	6287593.10	69.15'
1862477.53	6287611.94	69.01'
1862482.56	6287631.00	68.79'
1862487.93	6287651.37	68.63'
1862492.63	6287669.76	68.49'
1862497.69	6287688.96	68.34'
1862502.67	6287708.33	68.12'
1862499.83	6287709.11	68.02'
1862504.41	6287728.46	67.52'
1862508.88	6287747.71	67.06'
1862513.41	6287767.30	66.64'
1862517.70	6287786.68	66.24'
1862522.40	6287808.96	65.85'

LEGEND:

- (XX) PANEL ID NUMBER
- 1 RECONSTRUCT ON CONCRETE COPING
- 2 RECONSTRUCT ON CONCRETE CURB WALL

NOTES:

1. CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR ANY UTILITIES IN CONFLICT WITH THE WORK AS SHOWN ON THESE PLANS
2. DEMOLITION AND CIVIL IMPROVEMENTS NOT SHOWN FOR CLARITY. FOR ADDITIONAL INFORMATION, SEE CIVIL PLANS.
3. NORTHINGS AND EASTINGS OF EXISTING MSE PANELS REPRESENT CENTERS OF PANELS AND ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY PANEL LOCATIONS.

N 0' 5'-0" 10'-0" 20'-0" 1"=10'

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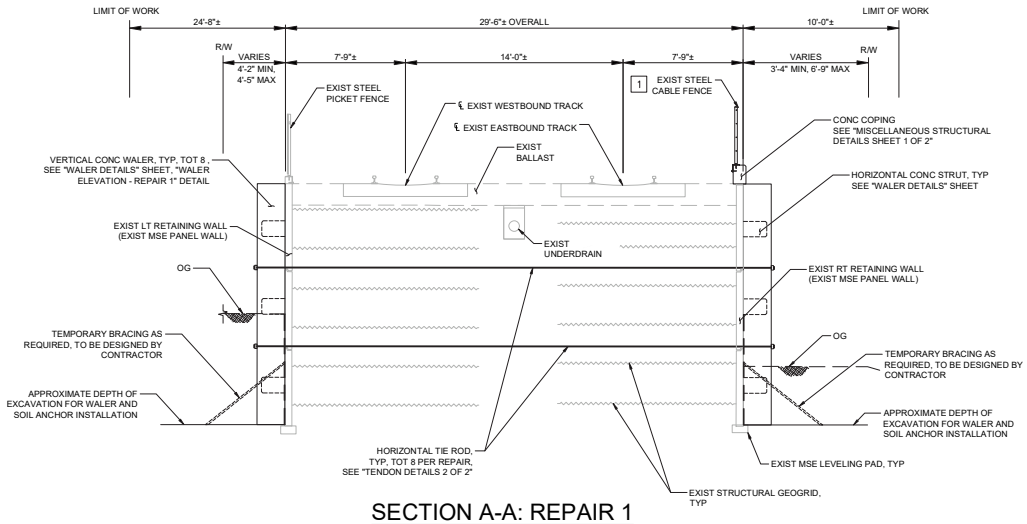
DRAWING TITLE	1" = 10'

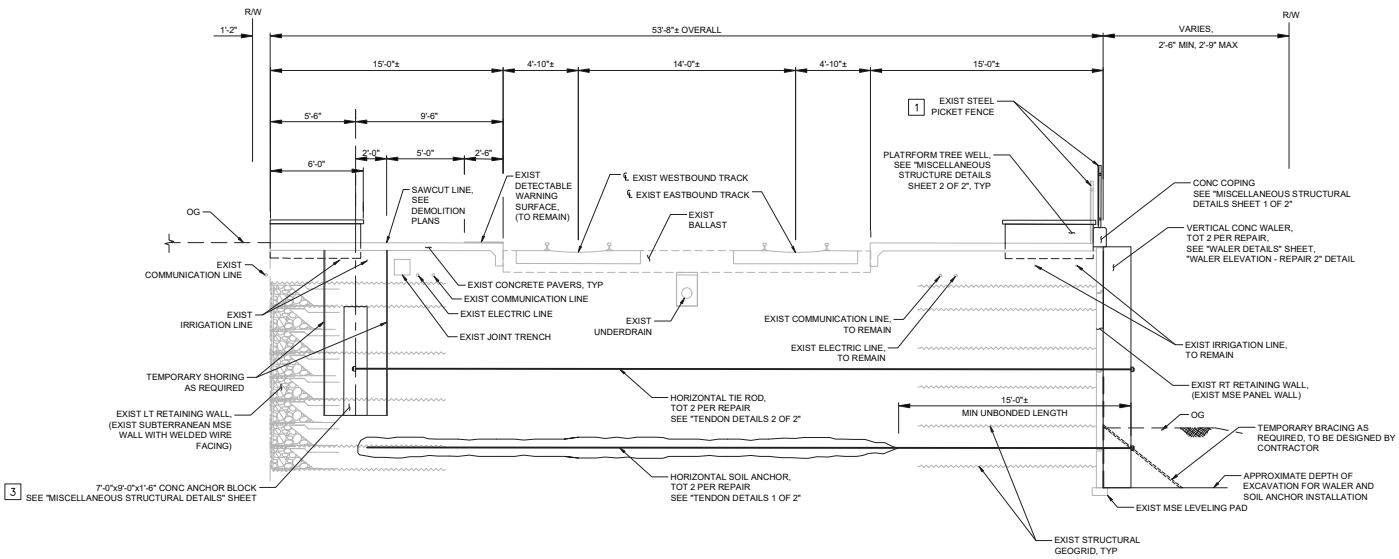
STRUCTURAL PLAN - AREA C

S.3



SECTION A-A: REPAIR 1

SCALE: ¼" = 1'-0"



SECTION B-B: REPAIR 2

SCALE: ¼" = 1'-0"

LEGEND:

1 RECONSTRUCT ON CONCRETE COPING

3 CUT EXIST EARTH REINFORCEMENT AS NEEDED TO INSTALL CONCRETE ANCHOR BLOCK

NOTES:

1. CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR ANY UTILITIES IN CONFLICT WITH THE WORK AS SHOWN ON THESE PLANS
2. DEMOLITION AND CIVIL IMPROVEMENT NOT SHOWN FOR CLARITY. SEE CIVIL PLANS.

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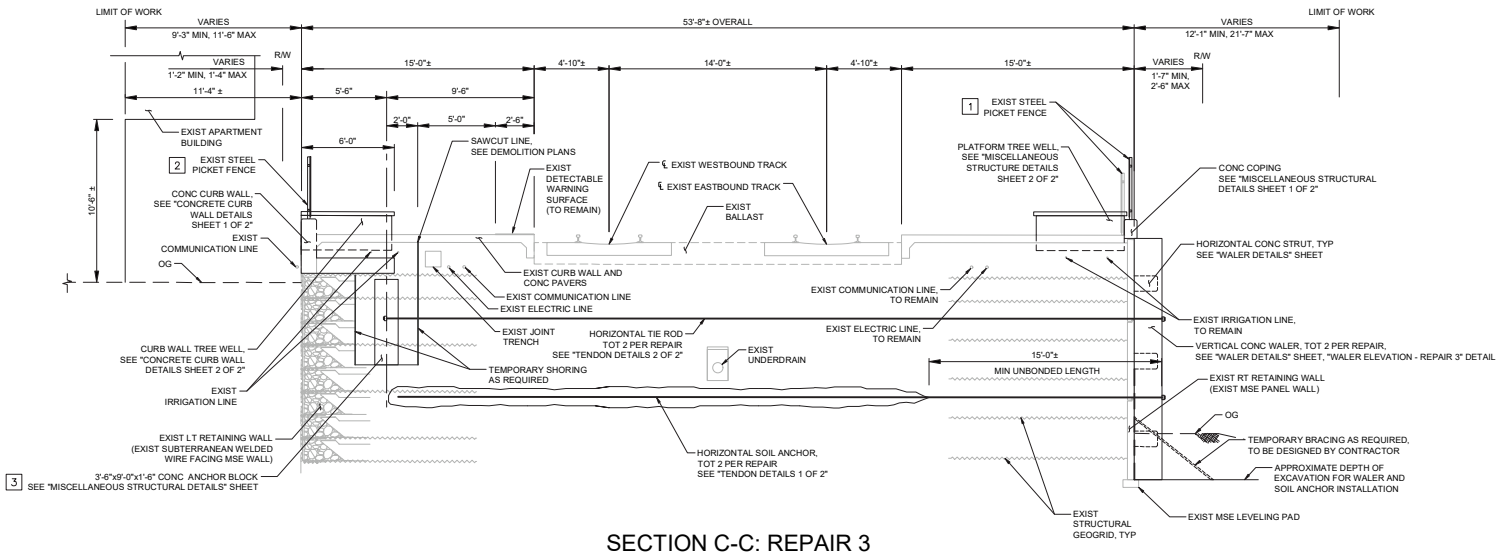
SCALE	
DRAWING TITLE	1" = 10'

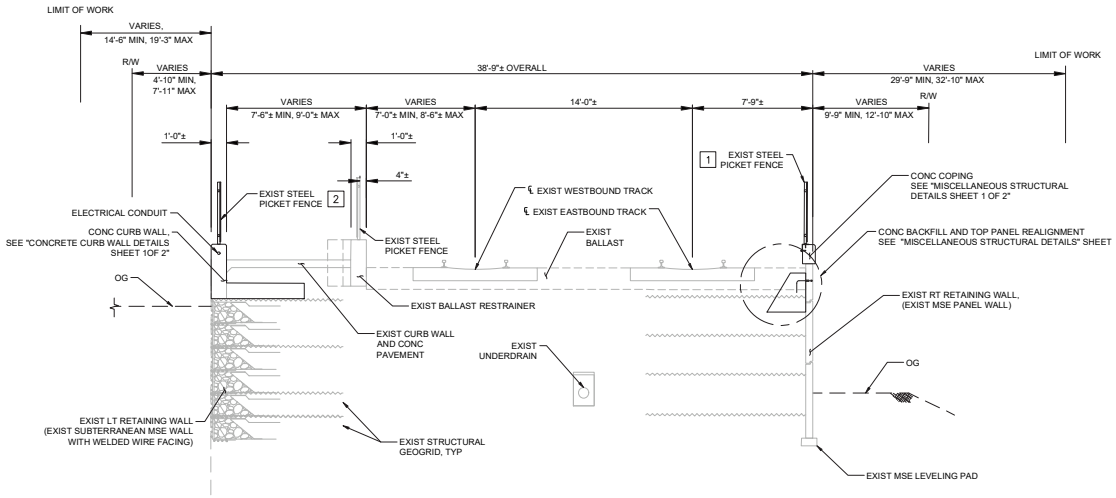
STRUCTURAL SECTIONS - REPAIRS SHEET 1 OF 2

S.4



SECTION C-C: REPAIR 3

SCALE: ¼" = 1'-0"



SECTION D-D: REPAIR 4

SCALE: ¼" = 1'-0"

LEGEND:

1. RECONSTRUCT ON CONCRETE COPING
2. RECONSTRUCT ON CONCRETE CURB WALL
3. CUT EXIST EARTH REINFORCEMENT AS NEEDED TO INSTALL CONCRETE ANCHOR BLOCK

NOTES:

1. CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR ANY UTILITIES IN CONFLICT WITH THE WORK AS SHOWN ON THESE PLANS
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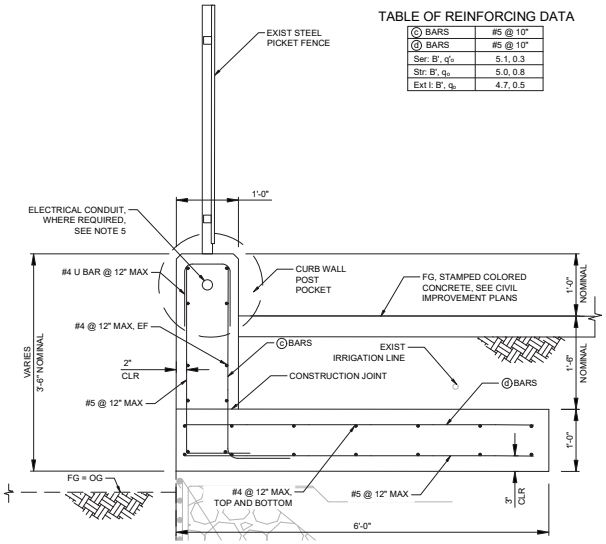
SCALE	
DRAWING TITLE	1" = 10'

STRUCTURAL SECTIONS - REPAIRS SHEET 2 OF 2

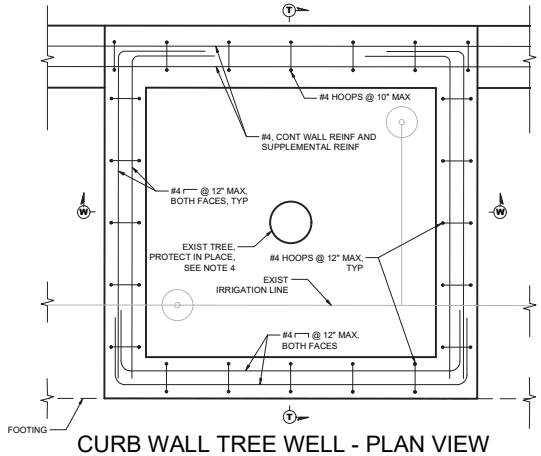
S.5

TABLE OF REINFORCING DATA

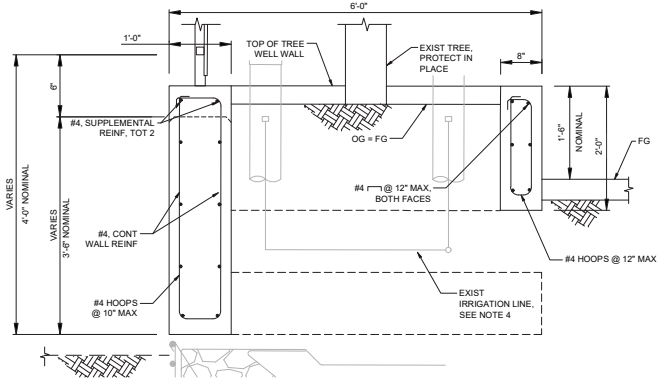
ⓒ BARS	#5 @ 10"
ⓓ BARS	#5 @ 10"
Ser: B', q'_o	5.1, 0.3
Str: B', q_p	5.0, 0.8
Ext I: B', q_p	4.7, 0.5



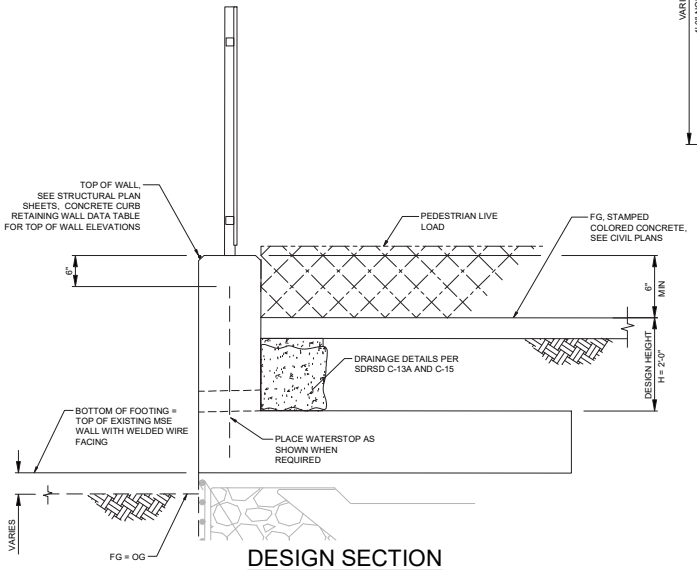
TYPICAL SECTION
SCALE: 1" = 1'-0"



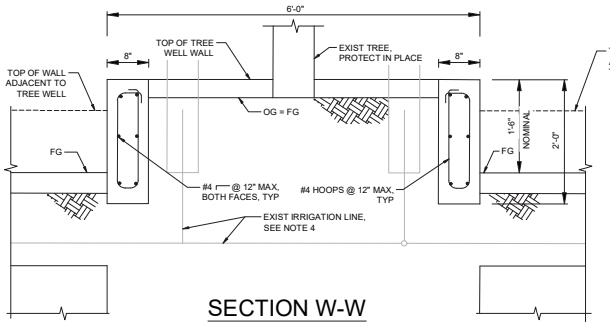
CURB WALL TREE WELL - PLAN VIEW
SCALE: 1" = 1'-0"



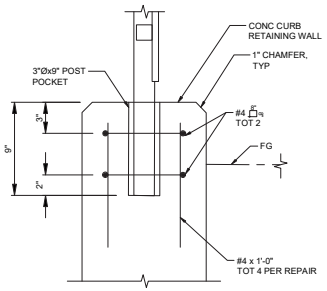
SECTION T-T
SCALE: 1" = 1'-0"



DESIGN SECTION
SCALE: 1" = 1'-0"



SECTION W-W
SCALE: 1" = 1'-0"



CURB WALL POST POCKET
SCALE: 1" = 6"

SYMBOLS:

Ser - Service Limit State I
Str - Strength Limit State I
Ext I - Extreme Limit State I
Ext II - Extreme Limit State II
B' - Effective Footing Width (ft)
q'_o - Net Bearing Stress (ksf), OG assumed to be FG at toe
q_p - Gross Uniform Bearing Stress (ksf)

DESIGN NOTES:

DESIGN: AASHTO LRFD Bridge Design Specifications, 8th Edition with California Amendments, Preface dated April 2019

PL: Pedestrian Live Load on level ground surface & pedestrian railing loading

SEISMIC: kh = 0.24, kv = 0.00

SOIL BACKFILL: Ø = 34°, γ = 120pcf
SOIL FOR BASE FRICTION: Ø = 32°, γ = 120pcf

REINFORCED CONCRETE:
f'_c = 3,600psi
f_y = 60,000psi

LOAD COMBINATIONS AND LIMIT STATES:
Service I Q = 1.00DC + 1.00EV + 1.00EH + 1.00PL
Strength I Q = αDC + βEV + 1.50EH + 1.75PL
Extreme I Q = 1.00DC + 1.00EV + 1.00EH + 1.00EQD + 1.00EQE

Where:
Q: Force Effects
α: 1.25 or 0.90, Whichever controls design
β: 1.35 or 0.90, Whichever controls design
DC: Dead Load of Structural Components
EH: Horizontal Earth Fill Pressure
EV: Vertical Earth Pressure from Earth Fill Weight
PL: Pedestrian Load
EQE: Seismic Earth Pressure
EQD: Soil and Structural and Nonstructural Components Inertia

NOTES:

1. CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR ANY UTILITIES IN CONFLICT WITH THE WORK AS SHOWN ON THESE PLANS
2. FOR DETAILS NOT SHOWN, SEE SDRSD C-13A
3. FOR WALL STEM JOINT DETAILS, SEE SDRSD C-13D AND C-15
4. CONTRACTOR SHALL VERIFY LOCATION OF ALL IRRIGATION LINES PRIOR TO DEMOLITION. ANY IRRIGATION LINES IMPACTED DURING CONSTRUCTION SHALL BE RESTORED TO MATCH EXISTING CONDITIONS. CONTRACTOR SHALL MANUALLY WATER EXISTING TREES UNTIL IRRIGATION IS REESTABLISHED.
5. CONTRACTOR SHALL VERIFY ALL ELECTRICAL CONDUITS PRIOR TO DEMOLITION. ANY ELECTRICAL CONDUITS IMPACTED DURING CONSTRUCTION SHALL BE RESTORED TO MATCH EXISTING CONDITIONS.

DOKKEN ENGINEERING
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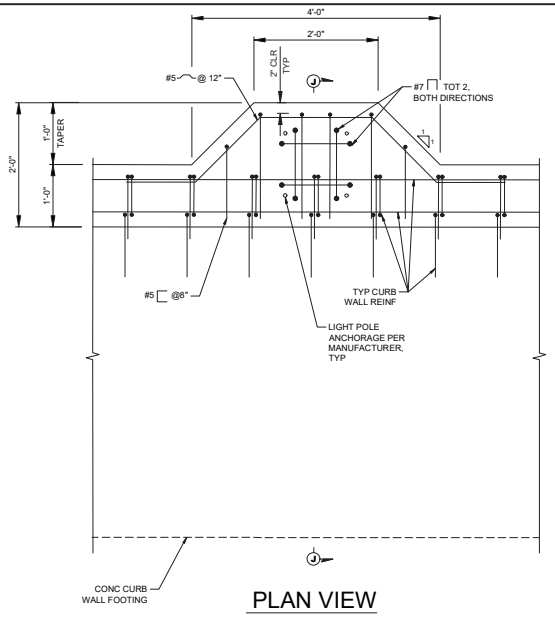
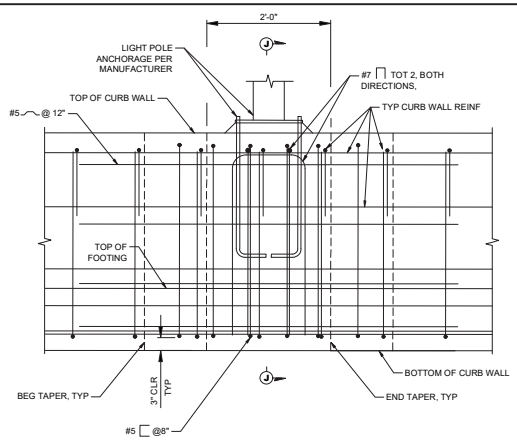
CONCRETE CURB WALL DETAILS SHEET 1 OF 2

S.6



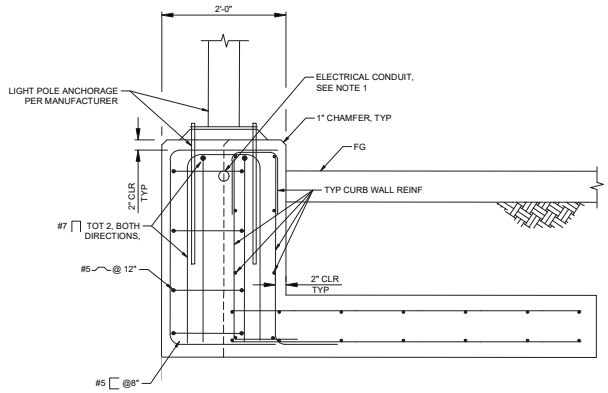
PLAN VIEW



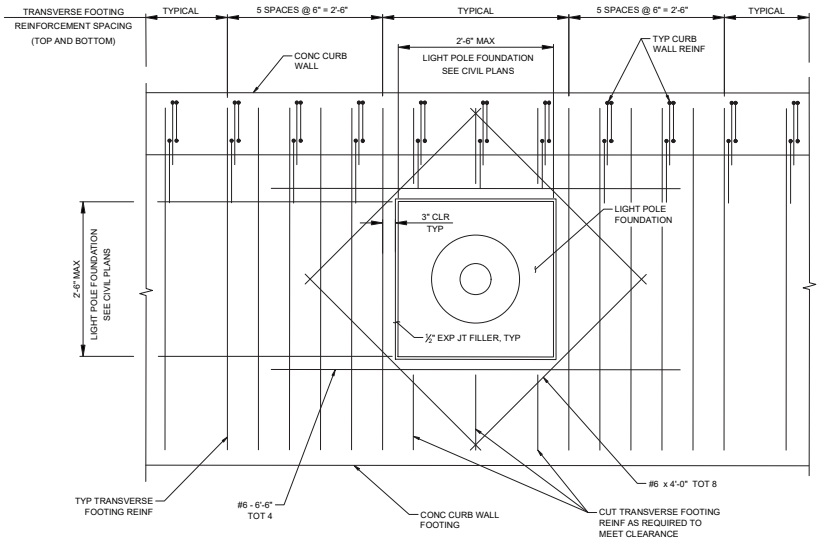
ELEVATION VIEW

LIGHT POLE CURB WALL PEDESTAL

SCALE: 1" = 1'-0"



SECTION J-J



LIGHT POLE FOOTING OPENING

SCALE: 1" = 1'-0"

TYPICAL FOOTING LONGITUDINAL REINFORCEMENT NOT SHOWN FOR CLARITY, CUT AS REQUIRED TO MEET CLEARANCE

NOTES:

1. CONTRACTOR SHALL VERIFY ALL ELECTRICAL CONDUITS PRIOR TO DEMOLITION. ANY ELECTRICAL CONDUITS IMPACTED DURING CONSTRUCTION SHALL BE RESTORED TO MATCH EXISTING CONDITIONS.

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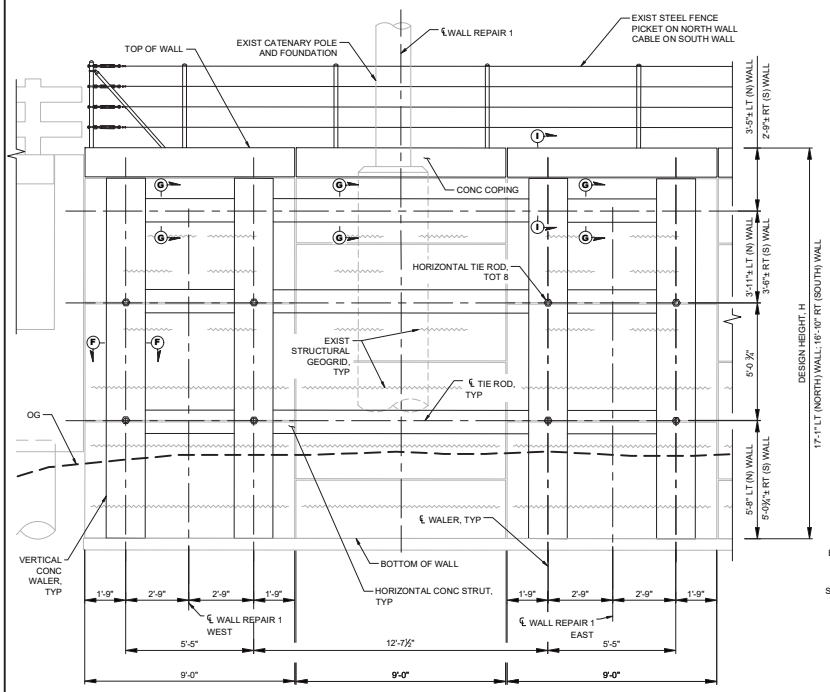
CONCRETE CURB WALL DETAILS SHEET 2 OF 2

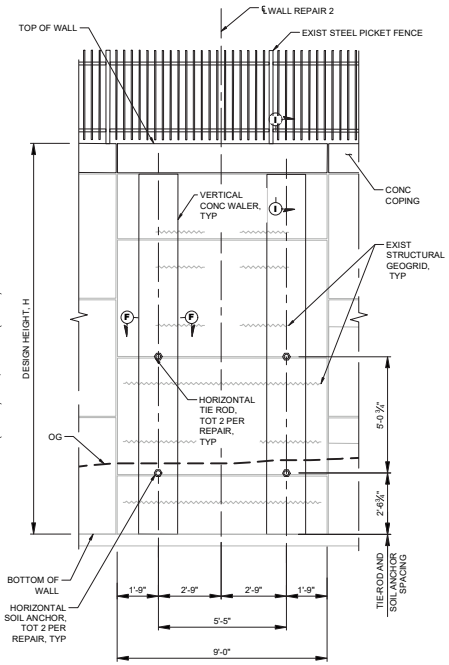
S.7



WALER ELEVATION - REPAIR 1

SCALE: ⅜" = 1'-0"

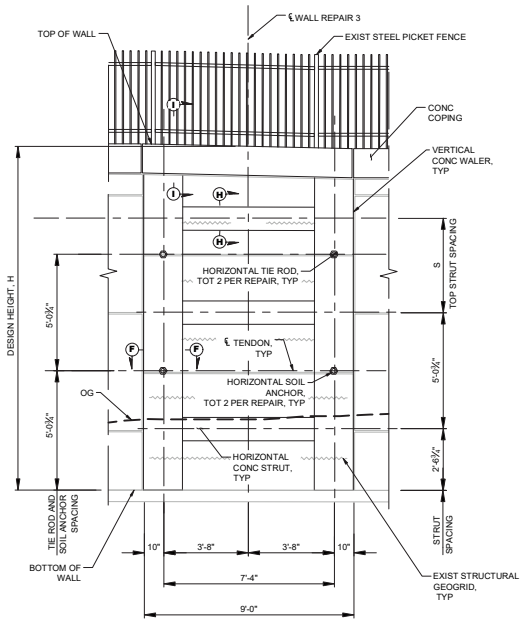
SOUTH SIDE SHOWN, NORTH SIDE SIMILAR



WALER ELEVATION - REPAIR 2

SCALE: ⅜" = 1'-0"

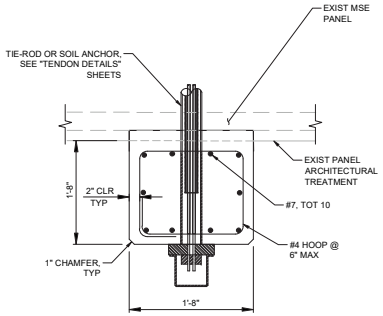
REPAIR 2	
PANEL ID	DESIGN HEIGHT, H
32	16.77 FT
34	16.77 FT
38	16.27 FT
42	15.77 FT
50	15.37 FT



WALER ELEVATION - REPAIR 3

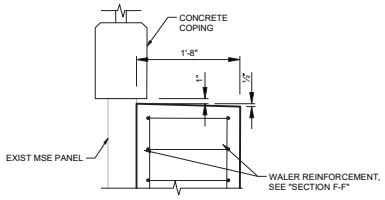
SCALE: ⅜" = 1'-0"

REPAIR 3		
PANEL ID	DESIGN HEIGHT, H	TOP STRUT SPACING, S
59	14.87 FT	5.00 FT
65	14.67 FT	4.50 FT
69	14.17 FT	4.50 FT



SECTION F-F

SCALE: 1" = 1'-0"



SECTION I-I

SCALE: 1" = 1'-0"

NOTES:

1. DESIGNED ACCORDING TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION WITH CALIFORNIA AMENDMENTS. PREFACE DATED APRIL 2019
2. FOR CONCRETE COPING AND FENCE ANCHORAGE DETAILS, SEE MISCELLANEOUS STRUCTURAL DETAILS SHEET
3. FOR PANEL ID LOCATIONS, SEE STRUCTURAL PLAN SHEETS
4. STRUT AND TENDON SPACINGS ARE APPROXIMATE. EXACT LOCATIONS SHALL BE RELATIVE TO THE EXISTING PANELS AND ALIGN WITH EITHER ℄ OF PANEL OR PANEL JOINT.

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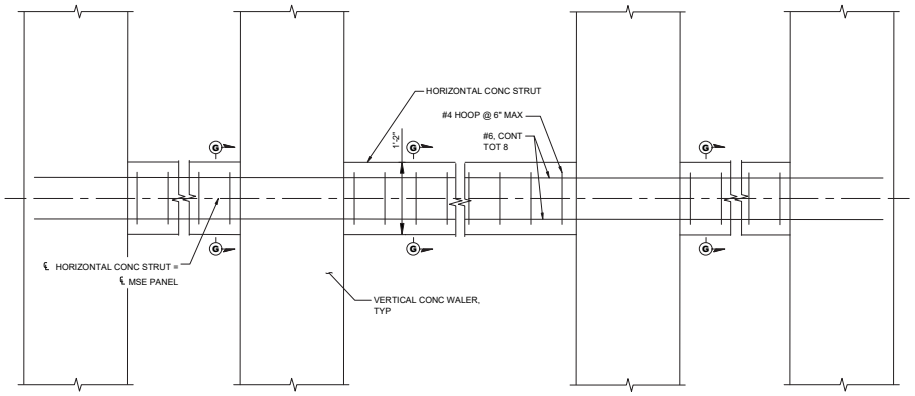
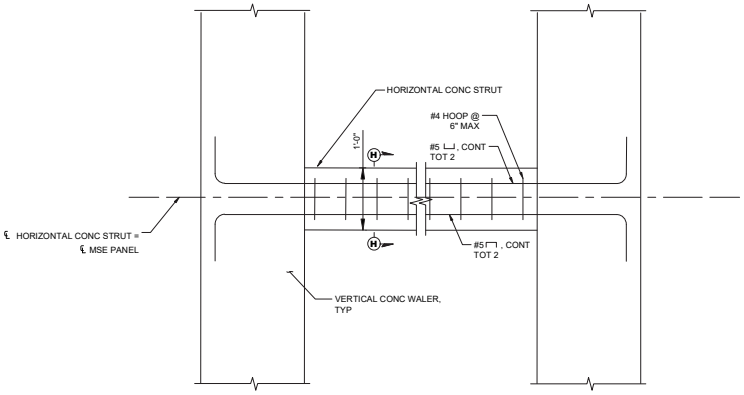
WALER DETAILS SHEET 1 OF 2

S.8



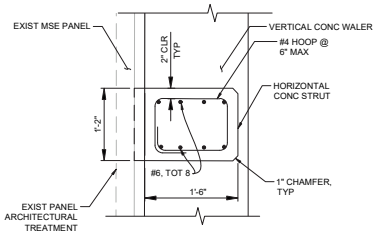
HORIZONTAL CONCRETE STRUT - REPAIR 1

SCALE: 1" = 1'-0"



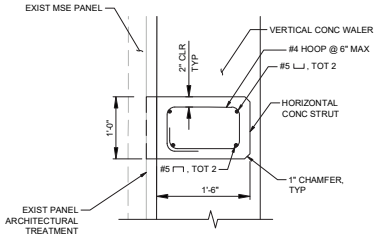
HORIZONTAL CONCRETE STRUT - REPAIR 2

SCALE: 1" = 1'-0"



SECTION G-G

SCALE: 1" = 1'-0"



SECTION H-H

SCALE: 1" = 1'-0"

DOKKEN ENGINEERING

DOKKEN ENGINEERING
1450 FRAZEE ROAD
SUITE 100
SAN DIEGO, CA 92108
TEL: (858) 514-8377

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REVISION LIST

NO.	DATE	REVISIONS

STAMPED:

PROJECT TITLE

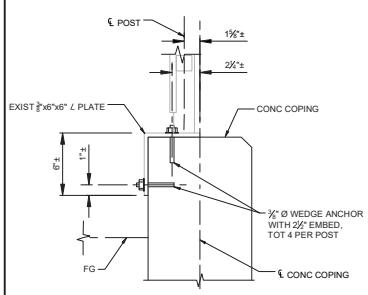
MTS RIO VISTA PLATFORM DESIGN PHASE II

PROJECT NO.	PWL 353.0-22
DRAWN BY	AS
DATE	07 June, 2024
SCALE	

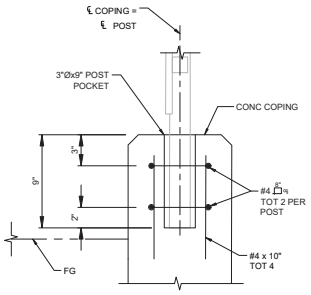
DRAWING TITLE 1" = 10'

WALER DETAILS SHEET 2 OF 2

S.9



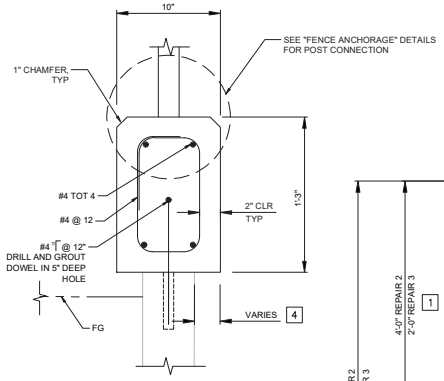
ALTERNATIVE 1
SCALE: 1" = 6"



ALTERNATIVE 2
SCALE: 1" = 6"

FENCE ANCHORAGE 3

3 USE ALTERNATIVE TO MATCH EXISTING FENCE CONDITIONS

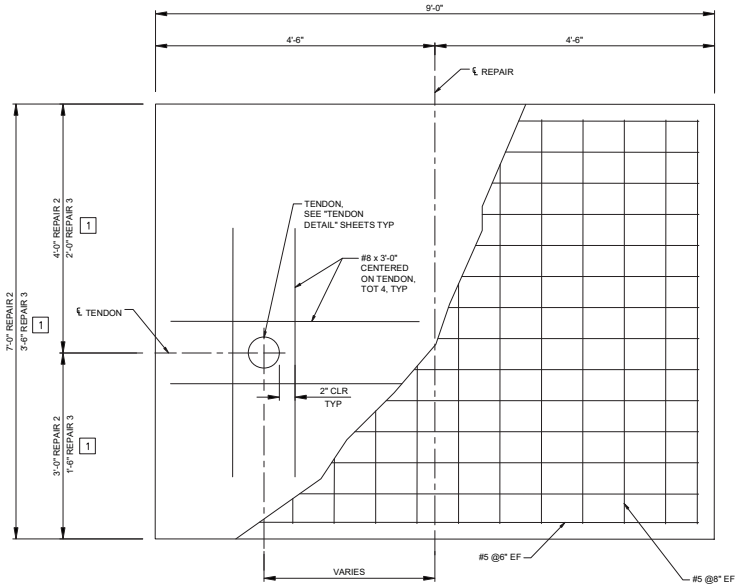


CONCRETE COPING
SCALE: 1" = 6"

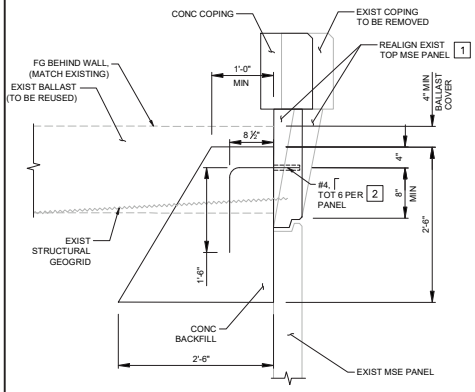
4 1" MIN, 4" MAX OFFSET WITH PANEL. MAY VARY TO KEEP COPING STRAIGHT ALONG THE WALL

NOTES:

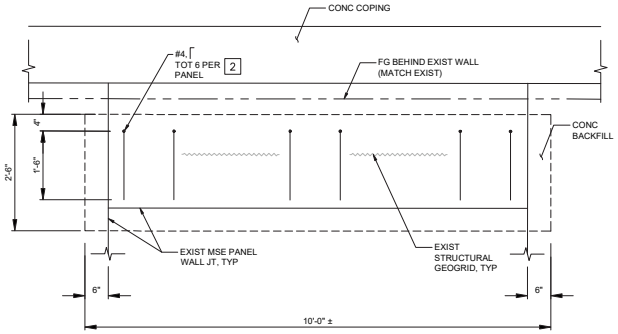
1. FOR DETAILS ON SOIL ANCHORS AND TIE RODS, SEE "TENDON DETAILS" SHEETS.
2. CONCRETE BACKFILL SHALL MEET SPECIFICATIONS FOR CAST-IN-PLACE CONCRETE.
3. CONTRACTOR MAY SUBMIT AN ALTERNATIVE DESIGN FOR ANCHOR BLOCKS TO THE ENGINEER FOR APPROVAL. ALTERNATIVE DESIGNS SHALL BE DESIGNED BY A LICENSED ENGINEER OF THE STATE TO RESIST TENDON FACTORED TEST LOADS (FTL), AND ACCOMMODATE THE TENDON ANCHORAGE ASSEMBLY AND TEMPORARY SHORING.



ELEVATION VIEW
SCALE: 1" = 1'-0"



TYPICAL SECTION
SCALE: 1" = 1'-0"

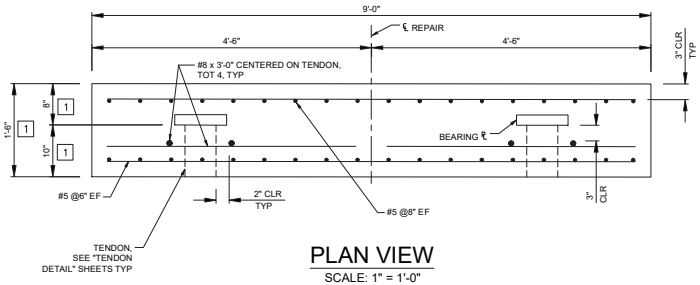


ELEVATION VIEW
SCALE: 3/4" = 1'-0"

CONCRETE BACKFILL AND TOP PANEL REALIGNMENT

1 EXCAVATE BEHIND TOP MSE PANEL TO RELIEVE SOIL PRESSURE. SHIFT PANEL TO BE PLUMB AND ALIGNED WITH ADJACENT PANELS. SUPPORT TEMPORARILY AS NEEDED UNTIL CONCRETE BACKFILL HAS CURED

2 DRILL AND EPOXY DOWEL WITH 3½" EMBEDMENT, PLACE DOWEL BARS AS NEEDED TO AVOID STRUCTURAL GEOGRID WITH 6" MINIMUM SPACING, AND 3'-0" MAXIMUM SPACING



PLAN VIEW
SCALE: 1" = 1'-0"

ANCHOR BLOCK DETAILS

1 TEMPORARY SHORING TO BE REMOVED PRIOR TO SETTING OF CONCRETE. DIMENSIONS SHOWN ARE MINIMUM AND SHALL BE MET AFTER REMOVAL OF SHORING.

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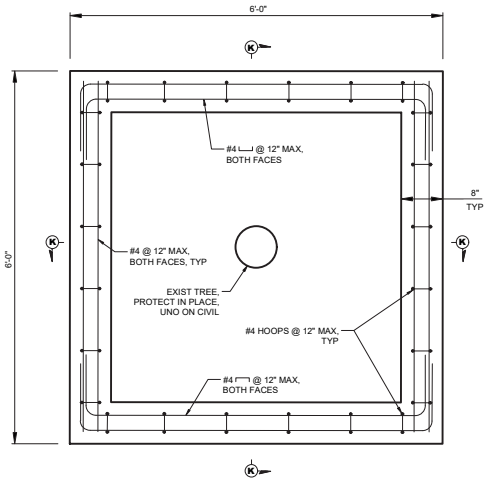
MTS RIO VISTA PLATFORM DESIGN PHASE II

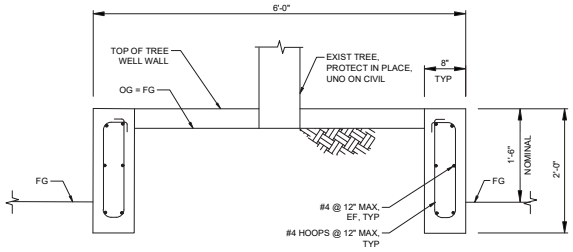
PROJECT NO.	PWL 353.0-22
DRAWN BY	AS
DATE	07 June, 2024
SCALE	
DRAWING TITLE	1" = 10'

MISCELLANEOUS STRUCTURE DETAILS SHEET 1 OF 2

S.10



PLAN VIEW



SECTION K-K

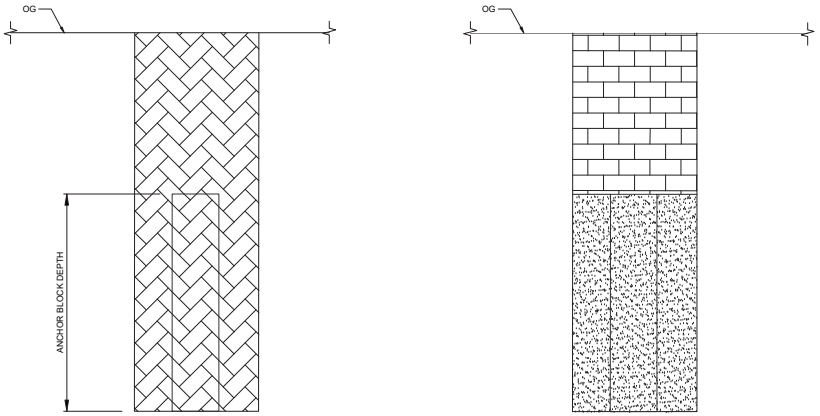
PLATFORM TREE WELL

SCALE: 1" = 6"

NOTE: FOR ADDITIONAL INFORMATION, SEE CIVIL PLANS.

NOTES:

1. CONTRACTOR SHALL VERIFY LOCATION OF ALL IRRIGATION LINES PRIOR TO DEMOLITION. ANY IRRIGATION LINES IMPACTED DURING CONSTRUCTION SHALL BE RESTORED TO MATCH EXISTING CONDITIONS. CONTRACTOR SHALL MANUALLY WATER EXISTING TREES UNTIL IRRIGATION IS REESTABLISHED.



EXCAVATION

BACKFILL

ANCHOR BLOCK EXCAVATION AND BACKFILL PAY LIMITS

NOT TO SCALE

LEGEND:

- STRUCTURAL BACKFILL
- CAST-IN-PLACE CONCRETE
- STRUCTURAL EXCAVATION

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SCALE	

DRAWING TITLE 1" = 10'

MISCELLANEOUS STRUCTURE DETAILS SHEET 2 OF 2

S.11

GENERAL NOTES:

PRESTRESSING STEEL:

Bars:	ASTM Designation: A722 Type II (150ksi)
Strand Tendons:	ASTM Designation: A416 (270ksi Low Relaxation Steel)
FTL:	Factored Test Load per Anchor (Kips)
FDL:	Factored Design Load per Anchor (Kips)
LL:	Lock Off Load per Anchor (Kips)
fpu:	Minimum Tensile Strength per Prestressing Steel
As:	Minimum Cross Sectional Area of Prestressing Steel in Ground Anchor (in^2)

As (Min) = $\frac{1.0\ FTL}{0.75fpu}$ (Strands)

As (Min) = $\frac{1.0\ FTL}{0.80fpu}$ (Bars)

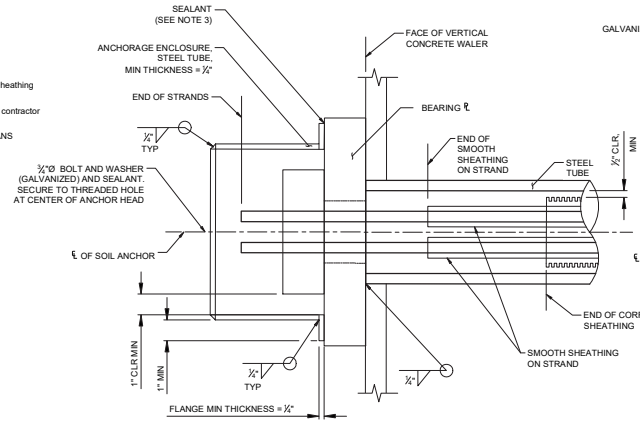
NOTES:

- (A) Level of Initial Grouting
- (C) Level of Initial Grouting inside corrugated sheathing
- (D) Bonded Length shall be determined by the contractor
- (E) For Unbonded Length, see PROJECT PLANS
- (F) Face of Wall Existing MSE Panel
- (G) Face of Vertical Waler

SOIL ANCHORS	FTL (KIPS)	FDL (KIPS)	LL (KIPS)
REPAIR 2	20	20	14
REPAIR 3	28	28	20

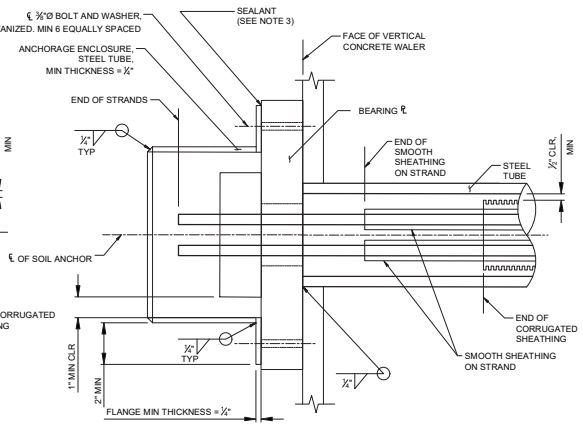
NOTES:

1. Anchorage enclosure shall only be used when anchor head assembly is not enclosed in concrete.
2. Anchorage enclosure shall have provisions to allow injecting grout at low end and venting at high end. Galvanize after fabrication.
3. Silicone sealant to cover full width of flange.
4. Steel tube (Min thickness = ½") welded to bearing plate. Galvanize assembly after fabrication.
5. Steel tube welded to bearing plate. Inside diameter of steel tube (Min thickness = ½") to be 1" greater than outside diameter of smooth sheathing.
6. Galvanize assembly after fabrication.
7. For other wall details, see PROJECT PLANS.
8. Contractor to Verify location of all utilities prior to drilling and installing soil anchors.
9. All anchors to be proof tested.
10. Grout shall be injected under low pressure capable to fully grout voids.
11. Grout levels to be secured by plugs to seal grout injection to the level indicated. The plugs shall have provisions to allow injection of grout and controlled venting through the plug.
12. Controlled venting of plugs shall have provisions to allow grout to achieve and maintain the required pressure until grout has hardened.
13. Permanent casing required through the unbonded length.
14. MSE Panel shall be cored prior to drilling hole. For locations at panel joints, cut filter fabric as needed between panel and soil.



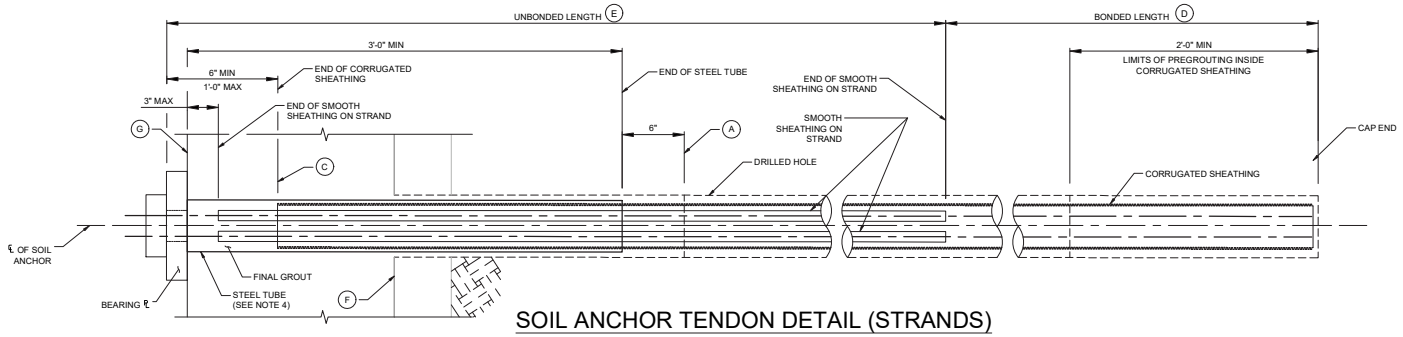
ANCHORAGE ENCLOSURE DETAIL - ALT X

SCALE: 1" = 3"



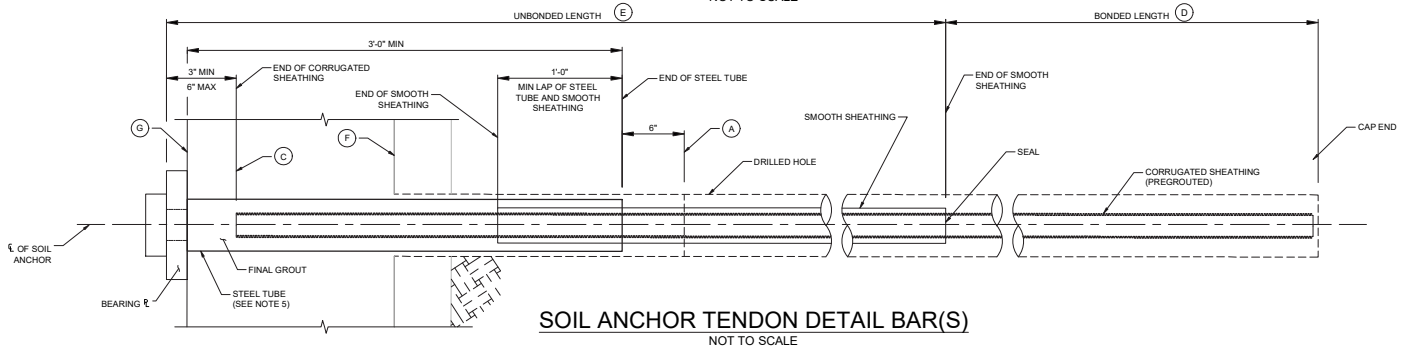
ANCHORAGE ENCLOSURE DETAIL - ALT Y

SCALE: 1" = 3"



SOIL ANCHOR TENDON DETAIL (STRANDS)

NOT TO SCALE



SOIL ANCHOR TENDON DETAIL BAR(S)

NOT TO SCALE

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DOKKEN ENGINEERING
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SUITE 100
SAN DIEGO, CA 92108
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SCALE	

DRAWING TITLE 1" = 10'

TENDON DETAILS 1 OF 2

S.12

GENERAL NOTES:

PRESTRESSING STEEL:

Bars:	ASTM Designation: A722 Type II (150ksi)
Strand Tendons:	ASTM Designation: A416 (270ksi Low Relaxation Steel)
FTL:	Factored Test Load per Anchor (Kips)
FDL:	Factored Design Load per Anchor (Kips)
LL:	Lock Off Load per Anchor (Kips)
fpu:	Minimum Tensile Strength per Prestressing Steel
As:	Minimum Cross Sectional Area of Prestressing Steel in Ground Anchor (in^2)

As (Min) = $\frac{1.0\,FTL}{0.75fpu}$ (Strands)

As (Min) = $\frac{1.0\,FTL}{0.80fpu}$ (Bars)

NOTES:

(C) Level of Initial Grouting inside corrugated sheathing

(D) Bonded Length shall be determined by the contractor

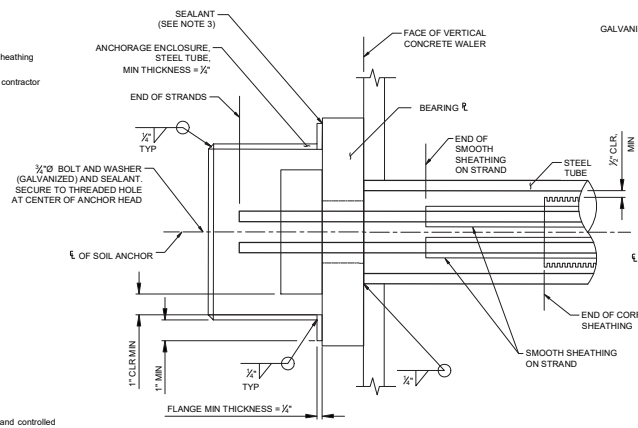
(F) Face of Wall Existing MSE Panel

(G) Face of Vertical Coping

SOIL ANCHORS	FTL (KIPS)	FDL (KIPS)	LL (KIPS)
REPAIR 1	88	88	62
REPAIR 2	76	76	54
REPAIR 3	26	26	19

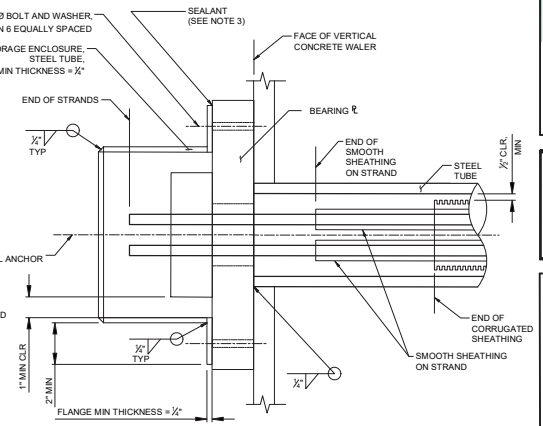
NOTES:

1. Anchorage enclosure shall only be used when anchor head assembly is not enclosed in concrete.
2. Anchorage enclosure shall have provisions to allow injecting grout at low end and venting at high end. Galvanize after fabrication.
3. Silicone sealant to cover full width of flange.
4. Steel tube (Min thickness = ¼") welded to bearing plate. Galvanize assembly after fabrication.
5. Steel tube welded to bearing plate. Inside diameter of steel tube (Min thickness = ¼") to be 1" greater than outside diameter of smooth sheathing.
6. Galvanize assembly after fabrication.
7. For other wall details, see PROJECT PLANS.
8. Contractor to Verify location of all utilities prior to drilling and installing soil anchors.
9. All anchors to be proof tested.
10. Grout shall be injected under low pressure capable to fully grout voids.
11. Grout levels to be secured by plugs to seal grout injection to the level indicated. The plugs shall have provisions to allow injection of grout and controlled venting through the plug.
12. Controlled venting of plugs shall have provisions to allow grout to achieve and maintain the required pressure until grout has hardened.
13. Permanent casing required through the unbonded length.
14. MSE Panel shall be cored at Stressing End prior to drilling hole. Holes shall be drilled from the Stressing End.
15. Where the Passive End is a waler (REPAIR 1), the MSE panel at the Passive End shall be cored. There shall be provisions to ensure the coring of the panel at the Passive End aligns with the drilled hole.
16. Where the Passive End is an Anchor Block (REPAIR 2 and REPAIR 3), there shall be provisions such that the anchor head is embedded in the concrete.
17. Where the coring of the MSE panels occurs at panel joints, cut filter fabric as needed between panel and soil.



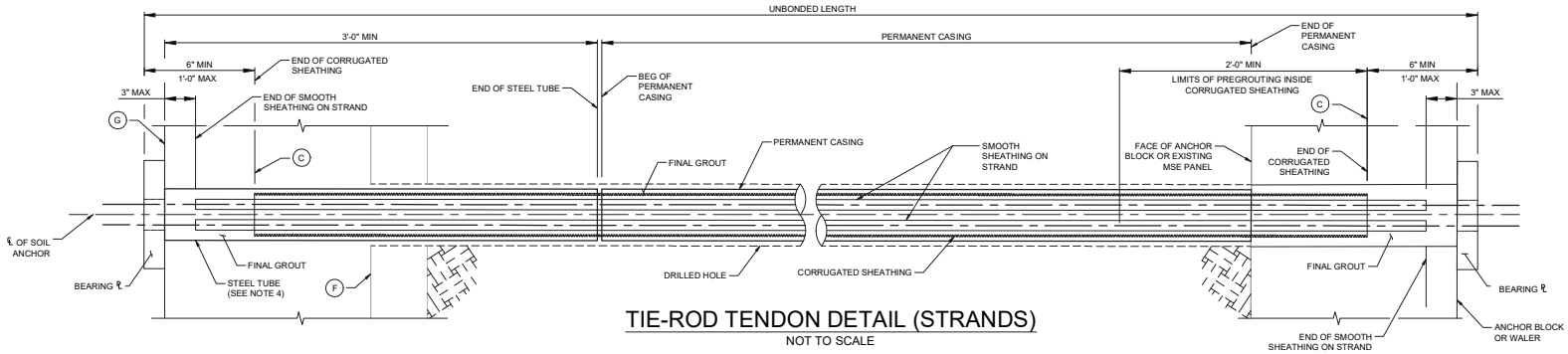
ANCHORAGE ENCLOSURE DETAIL - ALT X

SCALE: 1" = 3"



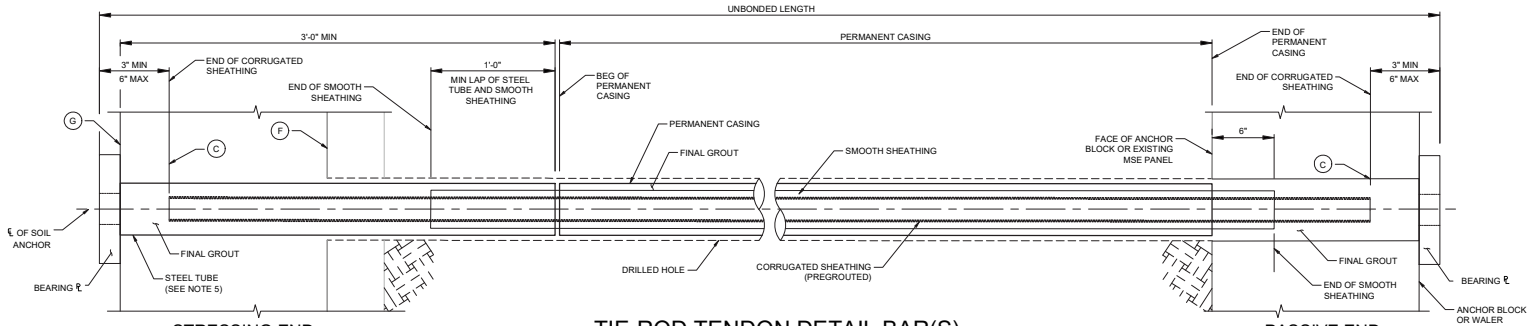
ANCHORAGE ENCLOSURE DETAIL - ALT Y

SCALE: 1" = 3"



TIE-ROD TENDON DETAIL (STRANDS)

NOT TO SCALE



STRESSING END

TIE-ROD TENDON DETAIL BAR(S)

NOT TO SCALE

PASSIVE END

DOKKEN ENGINEERING
DOKKEN ENGINEERING
1450 FRAZEE ROAD
SUITE 100
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SCALE	

DRAWING TITLE 1" = 10'

TENDON DETAILS 2 OF 2

S.13

Eilar Associates, Inc.
Acoustical and Environmental Consulting Services

Appendix B

Applicable Noise Regulations

§59.5.0404 Construction Noise

(a) It shall be unlawful for any person, between the hours of 7:00 p.m. of any day and 7:00 a.m. of the following day, or on legal holidays as specified in Section 21.0104 of the San Diego Municipal Code, with exception of Columbus Day and Washington's Birthday, or on Sundays, to erect, construct, demolish, excavate for, alter or repair any building or structure in such a manner as to create disturbing, excessive or offensive noise unless a permit has been applied for and granted beforehand by the Noise Abatement and Control Administrator. In granting such permit, the Administrator shall consider whether the construction noise in the vicinity of the proposed work site would be less objectionable at night than during the daytime because of different population densities or different neighboring activities; whether obstruction and interference with traffic particularly on streets of major importance, would be less objectionable at night than during the daytime; whether the type of work to be performed emits noises at such a low level as to not cause significant disturbances in the vicinity of the work site; the character and nature of the neighborhood of the proposed work site; whether great economic hardship would occur if the work were spread over a longer time; whether proposed night work is in the general public interest; and he shall prescribe such conditions, working times, types of construction equipment to be used, and permissible noise levels as he deems to be required in the public interest.

(b) Except as provided in subsection C. hereof, it shall be unlawful for any person, including The City of San Diego, to conduct any construction activity so as to cause, at or beyond the property lines of any property zoned residential, an average sound level greater than 75 decibels during the 12–hour period from 7:00 a.m. to 7:00 p.m.

(c) The provisions of subsection B. of this section shall not apply to construction equipment used in connection with emergency work, provided the Administrator is notified within 48 hours after commencement of work.

(Amended 1–3–1984 by O–16100 N.S.)
(Amended 8-9-2019 by O-21114 N.S.; effective 9-8-2019.)

Eilar Associates, Inc.
Acoustical and Environmental Consulting Services

Appendix C

CadnaA Analysis Data and Results

Eilar Associates, Inc.
210 South Juniper Street, Suite 100
Escondido, California 92025-4230
Phone: (760) 738-5570

Date: 18 Apr 2025

Calculation Configuration

Configuration	
Parameter	Value
General	
Max. Error (dB)	0.00
Max. Search Radius (ft)	6561.68
Min. Dist Src to Rcvr	0.00
Partition	
Raster Factor	0.50
Max. Length of Section (ft)	3280.84
Min. Length of Section (ft)	3.28
Min. Length of Section (%)	0.00
Proj. Line Sources	On
Proj. Area Sources	On
Ref. Time	
Daytime Penalty (dB)	0.00
Recr. Time Penalty (dB)	6.00
Night-time Penalty (dB)	10.00
DTM	
Standard Height (m)	0.00
Model of Terrain	Triangulation
Reflection	
max. Order of Reflection	0
Search Radius Src	328.08
Search Radius Rcvr	328.08
Max. Distance Source - Rcvr	3280.84 3280.84
Min. Distance Rvcr - Reflector	3.28 3.28
Min. Distance Source - Reflector	0.33
Industrial (ISO 9613 (1996))	
Lateral Diffraction	some Obj
Obst. within Area Src do not shield	On
Screening	Excl. Ground Att. over Barrier
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	3.0 20.0 0.0
Temperature (°F)	50
rel. Humidity (%)	70
Ground Absorption G	1.00
Wind Speed for Dir. (mph)	6.7
Roads (TNM)	
Railways (Schall 03 (1990))	
Strictly acc. to Schall 03 / Schall-Transrapid	
Aircraft (NONE)	
Strictly acc. to AzB	

Receivers

Name	Sel.	M.	ID	Level Lr		Limit. Value		Land Use			Height		Coordinates		
				Day	Night	Day	Night	Type	Auto	Noise Type			X	Y	Z
				(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
R1-1			1	54.4	-80.2	75.4	0.0				12.00	r	153.20	253.54	82.00
R1-2			2	56.7	-80.2	75.4	0.0				22.00	r	153.20	253.54	92.00
R1-3			3	58.2	-80.2	75.4	0.0				32.00	r	153.20	253.54	102.00
R1-4			4	60.2	-80.2	75.4	0.0				42.00	r	153.20	253.54	112.00
R2-1			5	53.9	-80.2	75.4	0.0				12.00	r	328.84	269.23	82.00
R2-2			6	56.3	-80.2	75.4	0.0				22.00	r	328.84	269.23	92.00
R2-3			7	57.7	-80.2	75.4	0.0				32.00	r	328.84	269.23	102.00
R2-4			8	59.6	-80.2	75.4	0.0				42.00	r	328.84	269.23	112.00
R3-1			9	45.3	-80.2	75.4	0.0				12.00	r	333.39	336.11	82.00
R3-2			10	46.0	-80.2	75.4	0.0				22.00	r	333.39	336.11	92.00
R3-3			11	46.7	-80.2	75.4	0.0				32.00	r	333.39	336.11	102.00
R3-4			12	47.5	-80.2	75.4	0.0				42.00	r	333.39	336.11	112.00
R4-1			13	45.9	-80.2	75.4	0.0				12.00	r	537.40	336.11	82.00
R4-2			14	46.7	-80.2	75.4	0.0				22.00	r	537.40	336.11	92.00
R4-3			15	47.5	-80.2	75.4	0.0				32.00	r	537.40	336.11	102.00
R4-4			16	48.3	-80.2	75.4	0.0				42.00	r	537.40	336.11	112.00
R5-1			17	53.1	-80.2	75.4	0.0				12.00	r	659.88	279.28	82.00
R5-2			18	55.5	-80.2	75.4	0.0				22.00	r	659.88	279.28	92.00
R5-3			19	58.0	-80.2	75.4	0.0				32.00	r	659.88	279.28	102.00
R5-4			20	59.7	-80.2	75.4	0.0				42.00	r	659.88	279.28	112.00
R6-1			21	53.7	-80.2	75.4	0.0				12.00	r	751.65	281.85	82.00
R6-2			22	56.6	-80.2	75.4	0.0				22.00	r	751.65	281.85	92.00
R6-3			23	59.4	-80.2	75.4	0.0				32.00	r	751.65	281.85	102.00
R6-4			24	59.8	-80.2	75.4	0.0				42.00	r	751.65	281.85	112.00

Area Sources

Name	Sel.	M.	ID	Result. PWL			Result. PWL"			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Moving Pt. Src		
				Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day	Special	Night				Number		
				(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(ft²)		(min)	(min)	(min)	(dB)	(Hz)		Day	Evening	Nigh
Mini Excavator			S_1	98.6	-1.4	-1.4	69.4	-30.6	-30.6	PWL-Pt	C2		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	1.0	0.0	0.0
Bulldozer			S_2	114.2	14.2	14.2	85.0	-15.0	-15.0	PWL-Pt	C3		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	1.0	0.0	0.0

Geometry - Area Sources

Name	ID	Height				Coordinates			
		Begin		End		x	y	z	Ground
		(ft)		(ft)		(ft)	(ft)	(ft)	(ft)
Mini Excavator	S_1	5.00	r			335.28	212.57	63.48	58.48
						294.71	209.60	65.16	60.16
						141.41	196.29	67.32	62.32
						144.42	185.44	58.47	53.47
						198.99	194.65	60.69	55.69
						325.89	197.19	60.37	55.37
						336.33	186.31	57.39	52.39
						615.64	198.31	61.11	56.11
						710.38	164.20	49.92	44.92
						740.70	165.58	48.25	43.25
						654.57	196.24	60.70	55.70
						757.58	201.41	58.78	53.78
						755.86	213.12	62.61	57.61
						337.27	198.31	62.11	57.11
						335.77	198.27	62.07	57.07
Bulldozer	S_2	5.00	r			335.28	212.57	63.48	58.48
						294.71	209.60	65.16	60.16
						141.41	196.29	67.32	62.32
						144.42	185.44	58.47	53.47
						198.99	194.65	60.69	55.69
						325.89	197.19	60.37	55.37
						336.33	186.31	57.39	52.39
						615.64	198.31	61.11	56.11
						710.38	164.20	49.92	44.92
						740.70	165.58	48.25	43.25
						654.57	196.24	60.70	55.70
						757.58	201.41	58.78	53.78
						755.86	213.12	62.61	57.61
						337.27	198.31	62.11	57.11
						335.77	198.27	62.07	57.07

Buildings

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	
							Begin	
							(ft)	
West Bldg			BL_1	x	0		45.00	r
East Bldg			BL_2	x	0		45.00	r

Geometry - Buildings

Name	Sel.	M.	ID	RB	Residents	Absorption	Height		Coordinates			
							Begin		x	y	z	Ground
							(ft)		(ft)	(ft)	(ft)	(ft)
West Bldg			BL_1	x	0		45.00	r	70.40	465.87	115.00	70.00
									72.81	248.82	115.00	70.00
									332.58	271.90	115.00	70.00
									325.69	464.49	115.00	70.00
East Bldg			BL_2	x	0		45.00	r	534.03	465.96	115.00	70.00
									539.67	276.27	115.00	70.00
									791.86	283.65	115.00	70.00
									781.01	469.00	115.00	70.00

Terrain Contours

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)
c1							61.61	7.92	32.00
							186.29	17.76	28.00
							288.00	30.89	43.00
							405.03	27.06	32.00
							473.38	23.23	29.00
							690.48	0.27	26.00
							828.29	1.36	33.00
							875.86	0.27	35.00
c2							59.84	61.58	31.00
							146.24	70.88	38.00
							266.00	76.90	29.00
							352.95	80.18	35.00
							511.53	74.71	32.00
							662.46	75.80	32.00
							739.57	59.40	32.00
							818.31	41.35	45.00
							835.81	35.88	36.00
							867.53	35.34	36.00
c3							71.32	127.75	46.00
							111.76	149.36	46.00
							152.23	154.25	47.00
							276.39	143.61	44.00
							372.08	145.25	35.00
							484.74	144.71	39.00
							597.39	145.25	44.00
							684.33	145.80	41.00
							747.22	143.06	42.00
							829.25	143.61	40.00
							842.37	144.71	37.00
							872.45	144.16	37.00
c4							72.96	155.10	42.00
							141.86	163.30	42.00
							206.94	164.39	44.00
							287.32	167.13	44.00
							368.26	166.03	45.00
							472.16	167.13	47.00
							570.59	169.31	44.00
							664.10	167.13	49.00
							753.78	164.39	42.00
							838.55	167.13	38.00
							846.20	166.03	37.00
							866.43	166.03	37.00
c5					70.00		68.11	469.64	70.00
							67.01	244.89	70.00

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)
							165.99	243.25	70.00
							311.45	248.17	70.00
							806.35	258.56	70.00
							799.24	476.75	70.00
							65.37	470.74	70.00
c6					40.00		900.24	483.66	40.00
							829.06	483.66	40.00
							847.29	181.57	40.00
							893.30	181.57	40.00
c7					70.00		79.25	217.55	70.00
							84.77	186.53	70.00
							154.38	203.07	70.00
							268.11	211.35	70.00
							339.10	216.17	70.00
							337.72	200.32	70.00
							696.81	213.41	70.00
							696.12	225.13	70.00
							827.77	229.95	70.00
							831.21	265.11	70.00
c8							763.10	225.47	61.33
							701.98	223.55	61.33
							702.26	218.77	61.33
							698.02	218.77	61.33
							697.61	211.66	59.33
							586.50	207.44	58.17
							335.52	198.74	57.25
							335.70	212.69	58.00
							334.58	212.63	59.33
							152.07	196.50	57.50

Sound Level Spectra

Name	ID	Type	1/3 Oktave Spectrum (dB)											Source
			Weight.	63	125	250	500	1000	2000	4000	8000	A	lin	
Excavator	C1	Lw (c)		111.0	114.0	107.0	104.0	103.0	101.0	100.0	97.0	108.9	117.0	Defra
Mini Excavator	C2	Lw (c)		107.0	104.0	93.0	97.0	93.0	90.0	85.0	80.0	98.6	109.3	Defra
Bulldozer	C3	Lw (c)		114.0	112.0	107.0	108.0	113.0	101.0	96.0	89.0	114.2	118.7	Defra
Dump Truck	C4	Lw (c)		108.0	108.0	107.0	103.0	102.0	100.0	95.0	85.0	107.1	113.5	Defra
Concrete Mixer	C5	Lw (c)		110.0	111.0	104.0	103.0	100.0	99.0	90.0	84.0	105.8	114.6	Defra
Concrete Pump	C6	Lw (c)		115.0	106.0	102.0	101.0	101.0	100.0	92.0	83.0	105.8	116.1	Defra
Generator	C7	Lw (c)		110.0	105.0	98.0	95.0	86.0	82.0	76.0	71.0	96.1	111.5	Defra
Compressor	C8	Lw (c)		115.0	104.0	95.0	90.0	88.0	86.0	89.0	78.0	96.5	115.4	Defra
Jackhammer	C9	Lw (c)		115.0	115.0	105.0	106.0	104.0	108.0	114.0	112.0	117.6	120.8	Defra
Power-Driven Saw	C10	Lw (c)		103.0	120.0	112.0	111.0	111.0	113.0	117.0	116.0	121.6	124.0	Defra
Hydraulic Jack	C11	Lw (c)		98.0	111.0	105.0	103.0	103.0	103.0	99.0	92.0	108.7	113.7	Defra
Drill Rig	C12	Lw (c)		115.0	123.0	112.0	111.0	109.0	107.0	99.0	92.0	114.6	124.4	Defra
Compactor	C13	Lw (c)		112.0	107.0	103.0	104.0	103.0	103.0	99.0	94.0	108.7	114.8	Defra
Compact Crane	C14	Lw (c)		111.0	107.0	102.0	94.0	95.0	94.0	87.0	81.0	100.8	113.0	Defra

Eilar Associates, Inc.
210 South Juniper Street, Suite 100
Escondido, California 92025-4230
Phone: (760) 738-5570

Date: 18 Apr 2025

Calculation Configuration

Configuration	
Parameter	Value
General	
Max. Error (dB)	0.00
Max. Search Radius (ft)	6561.68
Min. Dist Src to Rcvr	0.00
Partition	
Raster Factor	0.50
Max. Length of Section (ft)	3280.84
Min. Length of Section (ft)	3.28
Min. Length of Section (%)	0.00
Proj. Line Sources	On
Proj. Area Sources	On
Ref. Time	
Daytime Penalty (dB)	0.00
Recr. Time Penalty (dB)	6.00
Night-time Penalty (dB)	10.00
DTM	
Standard Height (m)	0.00
Model of Terrain	Triangulation
Reflection	
max. Order of Reflection	0
Search Radius Src	328.08
Search Radius Rcvr	328.08
Max. Distance Source - Rcvr	3280.84 3280.84
Min. Distance Rvcr - Reflector	3.28 3.28
Min. Distance Source - Reflector	0.33
Industrial (ISO 9613 (1996))	
Lateral Diffraction	some Obj
Obst. within Area Src do not shield	On
Screening	Excl. Ground Att. over Barrier
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	3.0 20.0 0.0
Temperature (°F)	50
rel. Humidity (%)	70
Ground Absorption G	1.00
Wind Speed for Dir. (mph)	6.7
Roads (TNM)	
Railways (Schall 03 (1990))	
Strictly acc. to Schall 03 / Schall-Transrapid	
Aircraft (NONE)	
Strictly acc. to AzB	

Receivers

Name	Sel.	M.	ID	Level Lr		Limit. Value		Land Use			Height		Coordinates		
				Day	Night	Day	Night	Type	Auto	Noise Type			X	Y	Z
				(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
R1-1			1	64.4	-80.2	75.4	0.0				12.00	r	153.20	253.54	82.00
R1-2			2	64.4	-80.2	75.4	0.0				22.00	r	153.20	253.54	92.00
R1-3			3	64.3	-80.2	75.4	0.0				32.00	r	153.20	253.54	102.00
R1-4			4	64.3	-80.2	75.4	0.0				42.00	r	153.20	253.54	112.00
R2-1			5	80.9	-80.2	75.4	0.0				12.00	r	328.84	269.23	82.00
R2-2			6	79.9	-80.2	75.4	0.0				22.00	r	328.84	269.23	92.00
R2-3			7	78.7	-80.2	75.4	0.0				32.00	r	328.84	269.23	102.00
R2-4			8	77.5	-80.2	75.4	0.0				42.00	r	328.84	269.23	112.00
R3-1			9	73.5	-80.2	75.4	0.0				12.00	r	333.39	336.11	82.00
R3-2			10	73.3	-80.2	75.4	0.0				22.00	r	333.39	336.11	92.00
R3-3			11	73.0	-80.2	75.4	0.0				32.00	r	333.39	336.11	102.00
R3-4			12	72.6	-80.2	75.4	0.0				42.00	r	333.39	336.11	112.00

Point Sources

Name	Sel.	M.	ID	Result. PWL			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Height		Coordinates		
				Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day	Special	Night						X	Y	Z
				(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(ft²)		(min)	(min)	(min)	(dB)	(Hz)		(ft)		(ft)	(ft)	(ft)
West-Compressor		+		96.5	96.5	96.5	Lw	C8		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	3.00	r	348.79	247.41	73.00
West-Generator		+		96.1	96.1	96.1	Lw	C7		0.0	0.0	0.0				240.00	0.00	0.00	0.0		(none)	5.00	r	348.79	250.80	75.00
West-Dump Truck		+		107.1	107.1	107.1	Lw	C4		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	384.60	332.80	75.00

Area Sources

Name	Sel.	M.	ID	Result. PWL			Result. PWL"			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Moving	
				Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day	Special	Night				Num	
				(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(ft²)		(min)	(min)	(min)	(dB)	(Hz)		Day	Eve
West-Jackhammer		+	S_1	117.6	17.6	17.6	107.6	7.6	7.6	PWL-Pt	C9		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	1.0	0
West-Power Driven Saw		+	S_2	121.6	21.6	21.6	106.7	6.7	6.7	PWL-Pt	C10		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	1.0	0
West-Mini Excavator		+	S_3	98.6	-1.4	-1.4	80.6	-19.4	-19.4	PWL-Pt	C2		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	1.0	0

Geometry - Area Sources

Name	ID	Height				Coordinates			
		Begin		End		x	y	z	Ground
		(ft)		(ft)		(ft)	(ft)	(ft)	(ft)
West-Jackhammer	S_1	3.00	r			336.54	247.96	73.00	70.00
						336.35	238.62	73.00	70.00
						352.02	239.06	73.00	70.00
						352.14	243.59	73.00	70.00
						345.30	243.70	73.00	70.00
						342.82	248.08	73.00	70.00
West-Power Driven Saw	S_2	1.50	r			350.36	255.74	71.50	70.00
						350.65	250.29	71.50	70.00
						406.90	250.37	71.50	70.00
						406.90	256.49	71.50	70.00
West-Mini Excavator	S_3	5.00	r			351.18	255.54	75.00	70.00
						350.67	242.79	75.00	70.00
						407.34	244.00	75.00	70.00
						407.17	255.19	75.00	70.00

Buildings

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	
							Begin	
							(ft)	
West Bldg			BL_1	x	0		45.00	r
East Bldg			BL_2	x	0		45.00	r

Geometry - Buildings

Name	Sel.	M.	ID	RB	Residents	Absorption	Height		Coordinates			
							Begin		x	y	z	Ground
							(ft)		(ft)	(ft)	(ft)	(ft)
West Bldg			BL_1	x	0		45.00	r	70.40	465.87	115.00	70.00
									72.81	248.82	115.00	70.00
									332.58	271.90	115.00	70.00
									325.69	464.49	115.00	70.00
East Bldg			BL_2	x	0		45.00	r	534.03	465.96	115.00	70.00
									539.67	276.27	115.00	70.00
									791.86	283.65	115.00	70.00
									781.01	469.00	115.00	70.00

Terrain Contours

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)
c1							61.61	7.92	32.00
							186.29	17.76	28.00
							288.00	30.89	43.00
							405.03	27.06	32.00
							473.38	23.23	29.00
							690.48	0.27	26.00
							828.29	1.36	33.00
							875.86	0.27	35.00
c2							59.84	61.58	31.00
							146.24	70.88	38.00
							266.00	76.90	29.00
							352.95	80.18	35.00
							511.53	74.71	32.00
							662.46	75.80	32.00
							739.57	59.40	32.00
							818.31	41.35	45.00
							835.81	35.88	36.00
							867.53	35.34	36.00
c3							71.32	127.75	46.00
							111.76	149.36	46.00
							152.23	154.25	47.00
							276.39	143.61	44.00
							372.08	145.25	35.00
							484.74	144.71	39.00
							597.39	145.25	44.00
							684.33	145.80	41.00
							747.22	143.06	42.00
							829.25	143.61	40.00
							842.37	144.71	37.00
							872.45	144.16	37.00
c4							72.96	155.10	42.00
							141.86	163.30	42.00
							206.94	164.39	44.00
							287.32	167.13	44.00
							368.26	166.03	45.00
							472.16	167.13	47.00
							570.59	169.31	44.00
							664.10	167.13	49.00
							753.78	164.39	42.00
							838.55	167.13	38.00
							846.20	166.03	37.00
							866.43	166.03	37.00
c5					70.00		68.11	469.64	70.00
							67.01	244.89	70.00

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)
							165.99	243.25	70.00
							311.45	248.17	70.00
							806.35	258.56	70.00
							799.24	476.75	70.00
							65.37	470.74	70.00
c6					40.00		900.24	483.66	40.00
							829.06	483.66	40.00
							847.29	181.57	40.00
							893.30	181.57	40.00
c7					70.00		79.25	217.55	70.00
							84.77	186.53	70.00
							154.38	203.07	70.00
							268.11	211.35	70.00
							339.10	216.17	70.00
							337.72	200.32	70.00
							696.81	213.41	70.00
							696.12	225.13	70.00
							827.77	229.95	70.00
							831.21	265.11	70.00
c8							763.10	225.47	61.33
							701.98	223.55	61.33
							702.26	218.77	61.33
							698.02	218.77	61.33
							697.61	211.66	59.33
							586.50	207.44	58.17
							335.52	198.74	57.25
							335.70	212.69	58.00
							334.58	212.63	59.33
							152.07	196.50	57.50

Sound Level Spectra

Name	ID	Type	1/3 Oktave Spectrum (dB)											Source
			Weight.	63	125	250	500	1000	2000	4000	8000	A	lin	
Excavator	C1	Lw (c)		111.0	114.0	107.0	104.0	103.0	101.0	100.0	97.0	108.9	117.0	Defra
Mini Excavator	C2	Lw (c)		107.0	104.0	93.0	97.0	93.0	90.0	85.0	80.0	98.6	109.3	Defra
Bulldozer	C3	Lw (c)		114.0	112.0	107.0	108.0	113.0	101.0	96.0	89.0	114.2	118.7	Defra
Dump Truck	C4	Lw (c)		108.0	108.0	107.0	103.0	102.0	100.0	95.0	85.0	107.1	113.5	Defra
Concrete Mixer	C5	Lw (c)		110.0	111.0	104.0	103.0	100.0	99.0	90.0	84.0	105.8	114.6	Defra
Concrete Pump	C6	Lw (c)		115.0	106.0	102.0	101.0	101.0	100.0	92.0	83.0	105.8	116.1	Defra
Generator	C7	Lw (c)		110.0	105.0	98.0	95.0	86.0	82.0	76.0	71.0	96.1	111.5	Defra
Compressor	C8	Lw (c)		115.0	104.0	95.0	90.0	88.0	86.0	89.0	78.0	96.5	115.4	Defra
Jackhammer	C9	Lw (c)		115.0	115.0	105.0	106.0	104.0	108.0	114.0	112.0	117.6	120.8	Defra
Power-Driven Saw	C10	Lw (c)		103.0	120.0	112.0	111.0	111.0	113.0	117.0	116.0	121.6	124.0	Defra
Hydraulic Jack	C11	Lw (c)		98.0	111.0	105.0	103.0	103.0	103.0	99.0	92.0	108.7	113.7	Defra
Drill Rig	C12	Lw (c)		115.0	123.0	112.0	111.0	109.0	107.0	99.0	92.0	114.6	124.4	Defra
Compactor	C13	Lw (c)		112.0	107.0	103.0	104.0	103.0	103.0	99.0	94.0	108.7	114.8	Defra
Compact Crane	C14	Lw (c)		111.0	107.0	102.0	94.0	95.0	94.0	87.0	81.0	100.8	113.0	Defra

Eilar Associates, Inc.
210 South Juniper Street, Suite 100
Escondido, California 92025-4230
Phone: (760) 738-5570

Date: 18 Apr 2025

Calculation Configuration

Configuration	
Parameter	Value
General	
Max. Error (dB)	0.00
Max. Search Radius (ft)	6561.68
Min. Dist Src to Rcvr	0.00
Partition	
Raster Factor	0.50
Max. Length of Section (ft)	3280.84
Min. Length of Section (ft)	3.28
Min. Length of Section (%)	0.00
Proj. Line Sources	On
Proj. Area Sources	On
Ref. Time	
Daytime Penalty (dB)	0.00
Recr. Time Penalty (dB)	6.00
Night-time Penalty (dB)	10.00
DTM	
Standard Height (m)	0.00
Model of Terrain	Triangulation
Reflection	
max. Order of Reflection	0
Search Radius Src	328.08
Search Radius Rcvr	328.08
Max. Distance Source - Rcvr	3280.84 3280.84
Min. Distance Rvcr - Reflector	3.28 3.28
Min. Distance Source - Reflector	0.33
Industrial (ISO 9613 (1996))	
Lateral Diffraction	some Obj
Obst. within Area Src do not shield	On
Screening	Excl. Ground Att. over Barrier
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	3.0 20.0 0.0
Temperature (°F)	50
rel. Humidity (%)	70
Ground Absorption G	1.00
Wind Speed for Dir. (mph)	6.7
Roads (TNM)	
Railways (Schall 03 (1990))	
Strictly acc. to Schall 03 / Schall-Transrapid	
Aircraft (NONE)	
Strictly acc. to AzB	

Receivers

Name	Sel.	M.	ID	Level Lr		Limit. Value		Land Use			Height		Coordinates		
				Day	Night	Day	Night	Type	Auto	Noise Type			X	Y	Z
				(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
R4-1			13	66.2	-80.2	75.4	0.0				12.00	r	537.40	336.11	82.00
R4-2			14	65.9	-80.2	75.4	0.0				22.00	r	537.40	336.11	92.00
R4-3			15	65.2	-80.2	75.4	0.0				32.00	r	537.40	336.11	102.00
R4-4			16	64.4	-80.2	75.4	0.0				42.00	r	537.40	336.11	112.00
R5-1			17	84.0	-80.2	75.4	0.0				12.00	r	659.88	279.28	82.00
R5-2			18	82.2	-80.2	75.4	0.0				22.00	r	659.88	279.28	92.00
R5-3			19	80.3	-80.2	75.4	0.0				32.00	r	659.88	279.28	102.00
R5-4			20	78.6	-80.2	75.4	0.0				42.00	r	659.88	279.28	112.00
R6-1			21	78.3	-80.2	75.4	0.0				12.00	r	751.65	281.85	82.00
R6-2			22	77.3	-80.2	75.4	0.0				22.00	r	751.65	281.85	92.00
R6-3			23	76.2	-80.2	75.4	0.0				32.00	r	751.65	281.85	102.00
R6-4			24	75.2	-80.2	75.4	0.0				42.00	r	751.65	281.85	112.00

Point Sources

Name	Sel.	M.	ID	Result. PWL			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Height		Coordinates		
				Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day	Special	Night						X	Y	Z
				(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(ft²)		(min)	(min)	(min)	(dB)	(Hz)		(ft)		(ft)	(ft)	(ft)
East-Compressor		+		96.5	96.5	96.5	Lw	C8		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	3.00	r	692.59	261.19	73.00
East-Generator		+		96.1	96.1	96.1	Lw	C7		0.0	0.0	0.0				240.00	0.00	0.00	0.0		(none)	5.00	r	692.59	259.07	75.00
East-Dump Truck		+		107.1	107.1	107.1	Lw	C4		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	489.33	329.01	75.00

Area Sources

Name	Sel.	M.	ID	Result. PWL			Result. PWL"			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Moving	
				Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day	Special	Night				Num	
				(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(ft²)		(min)	(min)	(min)	(dB)	(Hz)		Day	Ever
East-Jackhammer		+	S_1	117.6	17.6	17.6	99.1	-0.9	-0.9	PWL-Pt	C9		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	1.0	0.
East-Power Driven Saw		+	S_2	121.6	21.6	21.6	106.4	6.4	6.4	PWL-Pt	C10		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	1.0	0.
East-Mini Excavator		+	S_3	98.6	-1.4	-1.4	80.6	-19.4	-19.4	PWL-Pt	C2		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	1.0	0.

Geometry - Area Sources

Name	ID	Height				Coordinates			
		Begin		End		x	y	z	Ground
		(ft)		(ft)		(ft)	(ft)	(ft)	(ft)
East-Jackhammer	S_1	3.00	r			694.19	263.58	73.00	70.00
						694.53	255.66	73.00	70.00
						796.68	254.80	73.00	70.00
						796.17	261.86	73.00	70.00
East-Power Driven Saw	S_2	1.50	r			634.43	264.76	71.50	70.00
						634.17	258.21	71.50	70.00
						690.41	258.30	71.50	70.00
						690.41	264.41	71.50	70.00
East-Mini Excavator	S_3	5.00	r			634.43	264.76	75.00	70.00
						633.91	252.01	75.00	70.00
						690.58	253.22	75.00	70.00
						690.41	264.41	75.00	70.00

Buildings

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	
							Begin	
							(ft)	
West Bldg			BL_1	x	0		45.00	r
East Bldg			BL_2	x	0		45.00	r

Geometry - Buildings

Name	Sel.	M.	ID	RB	Residents	Absorption	Height		Coordinates			
							Begin		x	y	z	Ground
							(ft)		(ft)	(ft)	(ft)	(ft)
West Bldg			BL_1	x	0		45.00	r	70.40	465.87	115.00	70.00
									72.81	248.82	115.00	70.00
									332.58	271.90	115.00	70.00
									325.69	464.49	115.00	70.00
East Bldg			BL_2	x	0		45.00	r	534.03	465.96	115.00	70.00
									539.67	276.27	115.00	70.00
									791.86	283.65	115.00	70.00
									781.01	469.00	115.00	70.00

Terrain Contours

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)
c1							61.61	7.92	32.00
							186.29	17.76	28.00
							288.00	30.89	43.00
							405.03	27.06	32.00
							473.38	23.23	29.00
							690.48	0.27	26.00
							828.29	1.36	33.00
							875.86	0.27	35.00
c2							59.84	61.58	31.00
							146.24	70.88	38.00
							266.00	76.90	29.00
							352.95	80.18	35.00
							511.53	74.71	32.00
							662.46	75.80	32.00
							739.57	59.40	32.00
							818.31	41.35	45.00
							835.81	35.88	36.00
							867.53	35.34	36.00
c3							71.32	127.75	46.00
							111.76	149.36	46.00
							152.23	154.25	47.00
							276.39	143.61	44.00
							372.08	145.25	35.00
							484.74	144.71	39.00
							597.39	145.25	44.00
							684.33	145.80	41.00
							747.22	143.06	42.00
							829.25	143.61	40.00
							842.37	144.71	37.00
							872.45	144.16	37.00
c4							72.96	155.10	42.00
							141.86	163.30	42.00
							206.94	164.39	44.00
							287.32	167.13	44.00
							368.26	166.03	45.00
							472.16	167.13	47.00
							570.59	169.31	44.00
							664.10	167.13	49.00
							753.78	164.39	42.00
							838.55	167.13	38.00
							846.20	166.03	37.00
							866.43	166.03	37.00
c5					70.00		68.11	469.64	70.00
							67.01	244.89	70.00

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)
							165.99	243.25	70.00
							311.45	248.17	70.00
							806.35	258.56	70.00
							799.24	476.75	70.00
							65.37	470.74	70.00
c6					40.00		900.24	483.66	40.00
							829.06	483.66	40.00
							847.29	181.57	40.00
							893.30	181.57	40.00
c7					70.00		79.25	217.55	70.00
							84.77	186.53	70.00
							154.38	203.07	70.00
							268.11	211.35	70.00
							339.10	216.17	70.00
							337.72	200.32	70.00
							696.81	213.41	70.00
							696.12	225.13	70.00
							827.77	229.95	70.00
							831.21	265.11	70.00
c8							763.10	225.47	61.33
							701.98	223.55	61.33
							702.26	218.77	61.33
							698.02	218.77	61.33
							697.61	211.66	59.33
							586.50	207.44	58.17
							335.52	198.74	57.25
							335.70	212.69	58.00
							334.58	212.63	59.33
							152.07	196.50	57.50

Sound Level Spectra

Name	ID	Type	1/3 Oktave Spectrum (dB)											Source
			Weight.	63	125	250	500	1000	2000	4000	8000	A	lin	
Excavator	C1	Lw (c)		111.0	114.0	107.0	104.0	103.0	101.0	100.0	97.0	108.9	117.0	Defra
Mini Excavator	C2	Lw (c)		107.0	104.0	93.0	97.0	93.0	90.0	85.0	80.0	98.6	109.3	Defra
Bulldozer	C3	Lw (c)		114.0	112.0	107.0	108.0	113.0	101.0	96.0	89.0	114.2	118.7	Defra
Dump Truck	C4	Lw (c)		108.0	108.0	107.0	103.0	102.0	100.0	95.0	85.0	107.1	113.5	Defra
Concrete Mixer	C5	Lw (c)		110.0	111.0	104.0	103.0	100.0	99.0	90.0	84.0	105.8	114.6	Defra
Concrete Pump	C6	Lw (c)		115.0	106.0	102.0	101.0	101.0	100.0	92.0	83.0	105.8	116.1	Defra
Generator	C7	Lw (c)		110.0	105.0	98.0	95.0	86.0	82.0	76.0	71.0	96.1	111.5	Defra
Compressor	C8	Lw (c)		115.0	104.0	95.0	90.0	88.0	86.0	89.0	78.0	96.5	115.4	Defra
Jackhammer	C9	Lw (c)		115.0	115.0	105.0	106.0	104.0	108.0	114.0	112.0	117.6	120.8	Defra
Power-Driven Saw	C10	Lw (c)		103.0	120.0	112.0	111.0	111.0	113.0	117.0	116.0	121.6	124.0	Defra
Hydraulic Jack	C11	Lw (c)		98.0	111.0	105.0	103.0	103.0	103.0	99.0	92.0	108.7	113.7	Defra
Drill Rig	C12	Lw (c)		115.0	123.0	112.0	111.0	109.0	107.0	99.0	92.0	114.6	124.4	Defra
Compactor	C13	Lw (c)		112.0	107.0	103.0	104.0	103.0	103.0	99.0	94.0	108.7	114.8	Defra
Compact Crane	C14	Lw (c)		111.0	107.0	102.0	94.0	95.0	94.0	87.0	81.0	100.8	113.0	Defra

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Phone: (760) 738-5570

Date: 18 Apr 2025

Calculation Configuration

Configuration	
Parameter	Value
General	
Max. Error (dB)	0.00
Max. Search Radius (ft)	6561.68
Min. Dist Src to Rcvr	0.00
Partition	
Raster Factor	0.50
Max. Length of Section (ft)	3280.84
Min. Length of Section (ft)	3.28
Min. Length of Section (%)	0.00
Proj. Line Sources	On
Proj. Area Sources	On
Ref. Time	
Daytime Penalty (dB)	0.00
Recr. Time Penalty (dB)	6.00
Night-time Penalty (dB)	10.00
DTM	
Standard Height (m)	0.00
Model of Terrain	Triangulation
Reflection	
max. Order of Reflection	0
Search Radius Src	328.08
Search Radius Rcvr	328.08
Max. Distance Source - Rcvr	3280.84 3280.84
Min. Distance Rvcr - Reflector	3.28 3.28
Min. Distance Source - Reflector	0.33
Industrial (ISO 9613 (1996))	
Lateral Diffraction	some Obj
Obst. within Area Src do not shield	On
Screening	Excl. Ground Att. over Barrier
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	3.0 20.0 0.0
Temperature (°F)	50
rel. Humidity (%)	70
Ground Absorption G	1.00
Wind Speed for Dir. (mph)	6.7
Roads (TNM)	
Railways (Schall 03 (1990))	
Strictly acc. to Schall 03 / Schall-Transrapid	
Aircraft (NONE)	
Strictly acc. to AzB	

Receivers

Name	Sel.	M.	ID	Level Lr		Limit. Value		Land Use			Height		Coordinates		
				Day	Night	Day	Night	Type	Auto	Noise Type			X	Y	Z
				(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
R1-1			1	59.2	-80.2	75.4	0.0				12.00	r	153.20	253.54	82.00
R1-2			2	61.3	-80.2	75.4	0.0				22.00	r	153.20	253.54	92.00
R1-3			3	63.6	-80.2	75.4	0.0				32.00	r	153.20	253.54	102.00
R1-4			4	64.9	-80.2	75.4	0.0				42.00	r	153.20	253.54	112.00
R2-1			5	53.2	-80.2	75.4	0.0				12.00	r	328.84	269.23	82.00
R2-2			6	54.8	-80.2	75.4	0.0				22.00	r	328.84	269.23	92.00
R2-3			7	56.4	-80.2	75.4	0.0				32.00	r	328.84	269.23	102.00
R2-4			8	57.3	-80.2	75.4	0.0				42.00	r	328.84	269.23	112.00
R3-1			9	44.5	-80.2	75.4	0.0				12.00	r	333.39	336.11	82.00
R3-2			10	44.8	-80.2	75.4	0.0				22.00	r	333.39	336.11	92.00
R3-3			11	45.2	-80.2	75.4	0.0				32.00	r	333.39	336.11	102.00
R3-4			12	45.8	-80.2	75.4	0.0				42.00	r	333.39	336.11	112.00
R4-1			13	46.0	-80.2	75.4	0.0				12.00	r	537.40	336.11	82.00
R4-2			14	46.8	-80.2	75.4	0.0				22.00	r	537.40	336.11	92.00
R4-3			15	47.5	-80.2	75.4	0.0				32.00	r	537.40	336.11	102.00
R4-4			16	48.4	-80.2	75.4	0.0				42.00	r	537.40	336.11	112.00
R5-1			17	56.4	-80.2	75.4	0.0				12.00	r	659.88	279.28	82.00
R5-2			18	57.2	-80.2	75.4	0.0				22.00	r	659.88	279.28	92.00
R5-3			19	57.9	-80.2	75.4	0.0				32.00	r	659.88	279.28	102.00
R5-4			20	58.7	-80.2	75.4	0.0				42.00	r	659.88	279.28	112.00
R6-1			21	54.6	-80.2	75.4	0.0				12.00	r	751.65	281.85	82.00
R6-2			22	55.4	-80.2	75.4	0.0				22.00	r	751.65	281.85	92.00
R6-3			23	56.2	-80.2	75.4	0.0				32.00	r	751.65	281.85	102.00
R6-4			24	57.1	-80.2	75.4	0.0				42.00	r	751.65	281.85	112.00

Point Sources

Name	Sel.	M.	ID	Result. PWL			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Height		Coordinates		
				Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day	Special	Night						X	Y	Z
				(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(ft²)		(min)	(min)	(min)	(dB)	(Hz)		(ft)		(ft)	(ft)	(ft)
Drill Rig				114.6	114.6	114.6	Lw	C12		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	5.00	r	166.17	193.04	60.85
Hydraulic Jack				108.7	108.7	108.7	Lw	C11		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	5.00	r	164.37	187.95	58.85
Concrete Pump				105.8	105.8	105.8	Lw	C6		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	5.00	r	158.56	186.64	58.12
Concrete Mixer				105.8	105.8	105.8	Lw	C5		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	159.02	192.54	60.83
Drill Rig				114.6	114.6	114.6	Lw	C12		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	5.00	r	684.92	209.33	63.77
Hydraulic Jack				108.7	108.7	108.7	Lw	C11		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	5.00	r	686.91	209.24	63.76
Concrete Pump				105.8	105.8	105.8	Lw	C6		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	5.00	r	687.22	205.07	62.79
Concrete Mixer				105.8	105.8	105.8	Lw	C5		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	689.79	207.69	63.40

Buildings

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	
							Begin	
							(ft)	
West Bldg			BL_1	x	0		45.00	r
East Bldg			BL_2	x	0		45.00	r

Geometry - Buildings

Name	Sel.	M.	ID	RB	Residents	Absorption	Height		Coordinates			
							Begin		x	y	z	Ground
							(ft)		(ft)	(ft)	(ft)	(ft)
West Bldg			BL_1	x	0		45.00	r	70.40	465.87	115.00	70.00
									72.81	248.82	115.00	70.00
									332.58	271.90	115.00	70.00
									325.69	464.49	115.00	70.00
East Bldg			BL_2	x	0		45.00	r	534.03	465.96	115.00	70.00
									539.67	276.27	115.00	70.00
									791.86	283.65	115.00	70.00
									781.01	469.00	115.00	70.00

Terrain Contours

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)
c1							61.61	7.92	32.00
							186.29	17.76	28.00
							288.00	30.89	43.00
							405.03	27.06	32.00
							473.38	23.23	29.00
							690.48	0.27	26.00
							828.29	1.36	33.00
							875.86	0.27	35.00
c2							59.84	61.58	31.00
							146.24	70.88	38.00
							266.00	76.90	29.00
							352.95	80.18	35.00
							511.53	74.71	32.00
							662.46	75.80	32.00
							739.57	59.40	32.00
							818.31	41.35	45.00
							835.81	35.88	36.00
							867.53	35.34	36.00
c3							71.32	127.75	46.00
							111.76	149.36	46.00
							152.23	154.25	47.00
							276.39	143.61	44.00
							372.08	145.25	35.00
							484.74	144.71	39.00
							597.39	145.25	44.00
							684.33	145.80	41.00
							747.22	143.06	42.00
							829.25	143.61	40.00
							842.37	144.71	37.00
							872.45	144.16	37.00
c4							72.96	155.10	42.00
							141.86	163.30	42.00
							206.94	164.39	44.00
							287.32	167.13	44.00
							368.26	166.03	45.00
							472.16	167.13	47.00
							570.59	169.31	44.00
							664.10	167.13	49.00
							753.78	164.39	42.00
							838.55	167.13	38.00
							846.20	166.03	37.00
							866.43	166.03	37.00
c5					70.00		68.11	469.64	70.00
							67.01	244.89	70.00

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)
							165.99	243.25	70.00
							311.45	248.17	70.00
							806.35	258.56	70.00
							799.24	476.75	70.00
							65.37	470.74	70.00
c6					40.00		900.24	483.66	40.00
							829.06	483.66	40.00
							847.29	181.57	40.00
							893.30	181.57	40.00
c7					70.00		79.25	217.55	70.00
							84.77	186.53	70.00
							154.38	203.07	70.00
							268.11	211.35	70.00
							339.10	216.17	70.00
							337.72	200.32	70.00
							696.81	213.41	70.00
							696.12	225.13	70.00
							827.77	229.95	70.00
							831.21	265.11	70.00
c8							763.10	225.47	61.33
							701.98	223.55	61.33
							702.26	218.77	61.33
							698.02	218.77	61.33
							697.61	211.66	59.33
							586.50	207.44	58.17
							335.52	198.74	57.25
							335.70	212.69	58.00
							334.58	212.63	59.33
							152.07	196.50	57.50

Sound Level Spectra

Name	ID	Type	1/3 Oktave Spectrum (dB)											Source
			Weight.	63	125	250	500	1000	2000	4000	8000	A	lin	
Excavator	C1	Lw (c)		111.0	114.0	107.0	104.0	103.0	101.0	100.0	97.0	108.9	117.0	Defra
Mini Excavator	C2	Lw (c)		107.0	104.0	93.0	97.0	93.0	90.0	85.0	80.0	98.6	109.3	Defra
Bulldozer	C3	Lw (c)		114.0	112.0	107.0	108.0	113.0	101.0	96.0	89.0	114.2	118.7	Defra
Dump Truck	C4	Lw (c)		108.0	108.0	107.0	103.0	102.0	100.0	95.0	85.0	107.1	113.5	Defra
Concrete Mixer	C5	Lw (c)		110.0	111.0	104.0	103.0	100.0	99.0	90.0	84.0	105.8	114.6	Defra
Concrete Pump	C6	Lw (c)		115.0	106.0	102.0	101.0	101.0	100.0	92.0	83.0	105.8	116.1	Defra
Generator	C7	Lw (c)		110.0	105.0	98.0	95.0	86.0	82.0	76.0	71.0	96.1	111.5	Defra
Compressor	C8	Lw (c)		115.0	104.0	95.0	90.0	88.0	86.0	89.0	78.0	96.5	115.4	Defra
Jackhammer	C9	Lw (c)		115.0	115.0	105.0	106.0	104.0	108.0	114.0	112.0	117.6	120.8	Defra
Power-Driven Saw	C10	Lw (c)		103.0	120.0	112.0	111.0	111.0	113.0	117.0	116.0	121.6	124.0	Defra
Hydraulic Jack	C11	Lw (c)		98.0	111.0	105.0	103.0	103.0	103.0	99.0	92.0	108.7	113.7	Defra
Drill Rig	C12	Lw (c)		115.0	123.0	112.0	111.0	109.0	107.0	99.0	92.0	114.6	124.4	Defra
Compactor	C13	Lw (c)		112.0	107.0	103.0	104.0	103.0	103.0	99.0	94.0	108.7	114.8	Defra
Compact Crane	C14	Lw (c)		111.0	107.0	102.0	94.0	95.0	94.0	87.0	81.0	100.8	113.0	Defra

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Escondido, California 92025-4230
Phone: (760) 738-5570

Date: 18 Apr 2025

Calculation Configuration

Configuration	
Parameter	Value
General	
Max. Error (dB)	0.00
Max. Search Radius (ft)	6561.68
Min. Dist Src to Rcvr	0.00
Partition	
Raster Factor	0.50
Max. Length of Section (ft)	3280.84
Min. Length of Section (ft)	3.28
Min. Length of Section (%)	0.00
Proj. Line Sources	On
Proj. Area Sources	On
Ref. Time	
Daytime Penalty (dB)	0.00
Recr. Time Penalty (dB)	6.00
Night-time Penalty (dB)	10.00
DTM	
Standard Height (m)	0.00
Model of Terrain	Triangulation
Reflection	
max. Order of Reflection	0
Search Radius Src	328.08
Search Radius Rcvr	328.08
Max. Distance Source - Rcvr	3280.84 3280.84
Min. Distance Rvcr - Reflector	3.28 3.28
Min. Distance Source - Reflector	0.33
Industrial (ISO 9613 (1996))	
Lateral Diffraction	some Obj
Obst. within Area Src do not shield	On
Screening	Excl. Ground Att. over Barrier
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	3.0 20.0 0.0
Temperature (°F)	50
rel. Humidity (%)	70
Ground Absorption G	1.00
Wind Speed for Dir. (mph)	6.7
Roads (TNM)	
Railways (Schall 03 (1990))	
Strictly acc. to Schall 03 / Schall-Transrapid	
Aircraft (NONE)	
Strictly acc. to AzB	

Receivers

Name	Sel.	M.	ID	Level Lr		Limit. Value		Land Use			Height		Coordinates		
				Day	Night	Day	Night	Type	Auto	Noise Type			X	Y	Z
				(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
R1-1			1	75.7	-80.2	75.4	0.0				12.00	r	153.20	253.54	82.00
R1-2			2	74.0	-80.2	75.4	0.0				22.00	r	153.20	253.54	92.00
R1-3			3	72.2	-80.2	75.4	0.0				32.00	r	153.20	253.54	102.00
R1-4			4	70.7	-80.2	75.4	0.0				42.00	r	153.20	253.54	112.00
R2-1			5	66.5	-80.2	75.4	0.0				12.00	r	328.84	269.23	82.00
R2-2			6	66.3	-80.2	75.4	0.0				22.00	r	328.84	269.23	92.00
R2-3			7	65.9	-80.2	75.4	0.0				32.00	r	328.84	269.23	102.00
R2-4			8	65.4	-80.2	75.4	0.0				42.00	r	328.84	269.23	112.00
R3-1			9	70.9	-80.2	75.4	0.0				12.00	r	333.39	336.11	82.00
R3-2			10	70.4	-80.2	75.4	0.0				22.00	r	333.39	336.11	92.00
R3-3			11	69.6	-80.2	75.4	0.0				32.00	r	333.39	336.11	102.00
R3-4			12	68.7	-80.2	75.4	0.0				42.00	r	333.39	336.11	112.00
R4-1			13	69.5	-80.2	75.4	0.0				12.00	r	537.40	336.11	82.00
R4-2			14	69.2	-80.2	75.4	0.0				22.00	r	537.40	336.11	92.00
R4-3			15	68.7	-80.2	75.4	0.0				32.00	r	537.40	336.11	102.00
R4-4			16	67.9	-80.2	75.4	0.0				42.00	r	537.40	336.11	112.00
R5-1			17	75.9	-80.2	75.4	0.0				12.00	r	659.88	279.28	82.00
R5-2			18	74.0	-80.2	75.4	0.0				22.00	r	659.88	279.28	92.00
R5-3			19	71.9	-80.2	75.4	0.0				32.00	r	659.88	279.28	102.00
R5-4			20	70.0	-80.2	75.4	0.0				42.00	r	659.88	279.28	112.00
R6-1			21	63.9	-80.2	75.4	0.0				12.00	r	751.65	281.85	82.00
R6-2			22	63.9	-80.2	75.4	0.0				22.00	r	751.65	281.85	92.00
R6-3			23	63.8	-80.2	75.4	0.0				32.00	r	751.65	281.85	102.00
R6-4			24	63.6	-80.2	75.4	0.0				42.00	r	751.65	281.85	112.00

Point Sources

Name	Sel.	M.	ID	Result. PWL			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Height		Coordinates		
				Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day	Special	Night						X	Y	Z
				(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(ft²)		(min)	(min)	(min)	(dB)	(Hz)		(ft)		(ft)	(ft)	(ft)
Excavator				108.9	108.9	108.9	Lw	C1		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	166.17	193.04	60.85
Dump Truck				107.1	107.1	107.1	Lw	C4		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	164.37	187.95	58.85
Concrete Pump				105.8	105.8	105.8	Lw	C6		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	5.00	r	158.56	186.64	58.12
Concrete Mixer				105.8	105.8	105.8	Lw	C5		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	159.02	192.54	60.83
Excavator				108.9	108.9	108.9	Lw	C1		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	684.92	209.33	63.77
Dump Truck				107.1	107.1	107.1	Lw	C4		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	686.91	209.24	63.76
Concrete Pump				105.8	105.8	105.8	Lw	C6		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	5.00	r	687.22	205.07	62.79
Concrete Mixer				105.8	105.8	105.8	Lw	C5		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	689.79	207.69	63.40
Concrete Mixer				105.8	105.8	105.8	Lw	C5		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	364.63	300.90	75.00
Concrete Mixer				105.8	105.8	105.8	Lw	C5		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	506.05	299.53	75.00
Concrete Pump				105.8	105.8	105.8	Lw	C6		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	5.00	r	363.85	290.62	75.00
Concrete Pump				105.8	105.8	105.8	Lw	C6		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	5.00	r	507.72	290.89	75.00
Dump Truck				107.1	107.1	107.1	Lw	C4		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	367.02	353.06	75.00
Dump Truck				107.1	107.1	107.1	Lw	C4		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	489.29	350.33	75.00
Excavator				108.9	108.9	108.9	Lw	C1		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	154.26	233.41	75.00
Excavator				108.9	108.9	108.9	Lw	C1		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	673.71	265.52	75.00

Buildings

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	
							Begin	
							(ft)	
West Bldg			BL_1	x	0		45.00	r
East Bldg			BL_2	x	0		45.00	r

Geometry - Buildings

Name	Sel.	M.	ID	RB	Residents	Absorption	Height		Coordinates			
							Begin		x	y	z	Ground
							(ft)		(ft)	(ft)	(ft)	(ft)
West Bldg			BL_1	x	0		45.00	r	70.40	465.87	115.00	70.00
									72.81	248.82	115.00	70.00
									332.58	271.90	115.00	70.00
									325.69	464.49	115.00	70.00
East Bldg			BL_2	x	0		45.00	r	534.03	465.96	115.00	70.00
									539.67	276.27	115.00	70.00
									791.86	283.65	115.00	70.00
									781.01	469.00	115.00	70.00

Terrain Contours

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)
c1							61.61	7.92	32.00
							186.29	17.76	28.00
							288.00	30.89	43.00
							405.03	27.06	32.00
							473.38	23.23	29.00
							690.48	0.27	26.00
							828.29	1.36	33.00
							875.86	0.27	35.00
c2							59.84	61.58	31.00
							146.24	70.88	38.00
							266.00	76.90	29.00
							352.95	80.18	35.00
							511.53	74.71	32.00
							662.46	75.80	32.00
							739.57	59.40	32.00
							818.31	41.35	45.00
							835.81	35.88	36.00
							867.53	35.34	36.00
c3							71.32	127.75	46.00
							111.76	149.36	46.00
							152.23	154.25	47.00
							276.39	143.61	44.00
							372.08	145.25	35.00
							484.74	144.71	39.00
							597.39	145.25	44.00
							684.33	145.80	41.00
							747.22	143.06	42.00
							829.25	143.61	40.00
							842.37	144.71	37.00
							872.45	144.16	37.00
c4							72.96	155.10	42.00
							141.86	163.30	42.00
							206.94	164.39	44.00
							287.32	167.13	44.00
							368.26	166.03	45.00
							472.16	167.13	47.00
							570.59	169.31	44.00
							664.10	167.13	49.00
							753.78	164.39	42.00
							838.55	167.13	38.00
							846.20	166.03	37.00
							866.43	166.03	37.00
c5					70.00		68.11	469.64	70.00
							67.01	244.89	70.00

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)
							165.99	243.25	70.00
							311.45	248.17	70.00
							806.35	258.56	70.00
							799.24	476.75	70.00
							65.37	470.74	70.00
c6					40.00		900.24	483.66	40.00
							829.06	483.66	40.00
							847.29	181.57	40.00
							893.30	181.57	40.00
c7					70.00		79.25	217.55	70.00
							84.77	186.53	70.00
							154.38	203.07	70.00
							268.11	211.35	70.00
							339.10	216.17	70.00
							337.72	200.32	70.00
							696.81	213.41	70.00
							696.12	225.13	70.00
							827.77	229.95	70.00
							831.21	265.11	70.00
c8							763.10	225.47	61.33
							701.98	223.55	61.33
							702.26	218.77	61.33
							698.02	218.77	61.33
							697.61	211.66	59.33
							586.50	207.44	58.17
							335.52	198.74	57.25
							335.70	212.69	58.00
							334.58	212.63	59.33
							152.07	196.50	57.50

Sound Level Spectra

Name	ID	Type	1/3 Oktave Spectrum (dB)											Source
			Weight.	63	125	250	500	1000	2000	4000	8000	A	lin	
Excavator	C1	Lw (c)		111.0	114.0	107.0	104.0	103.0	101.0	100.0	97.0	108.9	117.0	Defra
Mini Excavator	C2	Lw (c)		107.0	104.0	93.0	97.0	93.0	90.0	85.0	80.0	98.6	109.3	Defra
Bulldozer	C3	Lw (c)		114.0	112.0	107.0	108.0	113.0	101.0	96.0	89.0	114.2	118.7	Defra
Dump Truck	C4	Lw (c)		108.0	108.0	107.0	103.0	102.0	100.0	95.0	85.0	107.1	113.5	Defra
Concrete Mixer	C5	Lw (c)		110.0	111.0	104.0	103.0	100.0	99.0	90.0	84.0	105.8	114.6	Defra
Concrete Pump	C6	Lw (c)		115.0	106.0	102.0	101.0	101.0	100.0	92.0	83.0	105.8	116.1	Defra
Generator	C7	Lw (c)		110.0	105.0	98.0	95.0	86.0	82.0	76.0	71.0	96.1	111.5	Defra
Compressor	C8	Lw (c)		115.0	104.0	95.0	90.0	88.0	86.0	89.0	78.0	96.5	115.4	Defra
Jackhammer	C9	Lw (c)		115.0	115.0	105.0	106.0	104.0	108.0	114.0	112.0	117.6	120.8	Defra
Power-Driven Saw	C10	Lw (c)		103.0	120.0	112.0	111.0	111.0	113.0	117.0	116.0	121.6	124.0	Defra
Hydraulic Jack	C11	Lw (c)		98.0	111.0	105.0	103.0	103.0	103.0	99.0	92.0	108.7	113.7	Defra
Drill Rig	C12	Lw (c)		115.0	123.0	112.0	111.0	109.0	107.0	99.0	92.0	114.6	124.4	Defra
Compactor	C13	Lw (c)		112.0	107.0	103.0	104.0	103.0	103.0	99.0	94.0	108.7	114.8	Defra
Compact Crane	C14	Lw (c)		111.0	107.0	102.0	94.0	95.0	94.0	87.0	81.0	100.8	113.0	Defra

Eilar Associates, Inc.
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Escondido, California 92025-4230
Phone: (760) 738-5570

Date: 18 Apr 2025

Calculation Configuration

Configuration	
Parameter	Value
General	
Max. Error (dB)	0.00
Max. Search Radius (ft)	6561.68
Min. Dist Src to Rcvr	0.00
Partition	
Raster Factor	0.50
Max. Length of Section (ft)	3280.84
Min. Length of Section (ft)	3.28
Min. Length of Section (%)	0.00
Proj. Line Sources	On
Proj. Area Sources	On
Ref. Time	
Daytime Penalty (dB)	0.00
Recr. Time Penalty (dB)	6.00
Night-time Penalty (dB)	10.00
DTM	
Standard Height (m)	0.00
Model of Terrain	Triangulation
Reflection	
max. Order of Reflection	0
Search Radius Src	328.08
Search Radius Rcvr	328.08
Max. Distance Source - Rcvr	3280.84 3280.84
Min. Distance Rvcr - Reflector	3.28 3.28
Min. Distance Source - Reflector	0.33
Industrial (ISO 9613 (1996))	
Lateral Diffraction	some Obj
Obst. within Area Src do not shield	On
Screening	Excl. Ground Att. over Barrier
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	3.0 20.0 0.0
Temperature (°F)	50
rel. Humidity (%)	70
Ground Absorption G	1.00
Wind Speed for Dir. (mph)	6.7
Roads (TNM)	
Railways (Schall 03 (1990))	
Strictly acc. to Schall 03 / Schall-Transrapid	
Aircraft (NONE)	
Strictly acc. to AzB	

Receivers

Name	Sel.	M.	ID	Level Lr		Limit. Value		Land Use			Height		Coordinates		
				Day	Night	Day	Night	Type	Auto	Noise Type			X	Y	Z
				(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
R1-1			1	77.9	-80.2	75.4	0.0				12.00	r	153.20	253.54	82.00
R1-2			2	76.0	-80.2	75.4	0.0				22.00	r	153.20	253.54	92.00
R1-3			3	73.8	-80.2	75.4	0.0				32.00	r	153.20	253.54	102.00
R1-4			4	72.1	-80.2	75.4	0.0				42.00	r	153.20	253.54	112.00
R2-1			5	61.0	-80.2	75.4	0.0				12.00	r	328.84	269.23	82.00
R2-2			6	61.2	-80.2	75.4	0.0				22.00	r	328.84	269.23	92.00
R2-3			7	61.5	-80.2	75.4	0.0				32.00	r	328.84	269.23	102.00
R2-4			8	61.7	-80.2	75.4	0.0				42.00	r	328.84	269.23	112.00
R3-1			9	67.0	-80.2	75.4	0.0				12.00	r	333.39	336.11	82.00
R3-2			10	66.6	-80.2	75.4	0.0				22.00	r	333.39	336.11	92.00
R3-3			11	66.0	-80.2	75.4	0.0				32.00	r	333.39	336.11	102.00
R3-4			12	65.2	-80.2	75.4	0.0				42.00	r	333.39	336.11	112.00
R4-1			13	66.4	-80.2	75.4	0.0				12.00	r	537.40	336.11	82.00
R4-2			14	66.1	-80.2	75.4	0.0				22.00	r	537.40	336.11	92.00
R4-3			15	65.5	-80.2	75.4	0.0				32.00	r	537.40	336.11	102.00
R4-4			16	64.8	-80.2	75.4	0.0				42.00	r	537.40	336.11	112.00
R5-1			17	79.1	-80.2	75.4	0.0				12.00	r	659.88	279.28	82.00
R5-2			18	76.6	-80.2	75.4	0.0				22.00	r	659.88	279.28	92.00
R5-3			19	74.1	-80.2	75.4	0.0				32.00	r	659.88	279.28	102.00
R5-4			20	72.0	-80.2	75.4	0.0				42.00	r	659.88	279.28	112.00
R6-1			21	64.7	-80.2	75.4	0.0				12.00	r	751.65	281.85	82.00
R6-2			22	64.7	-80.2	75.4	0.0				22.00	r	751.65	281.85	92.00
R6-3			23	64.6	-80.2	75.4	0.0				32.00	r	751.65	281.85	102.00
R6-4			24	64.6	-80.2	75.4	0.0				42.00	r	751.65	281.85	112.00

Point Sources

Name	Sel.	M.	ID	Result. PWL			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Height		Coordinates		
				Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day	Special	Night						X	Y	Z
				(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(ft²)		(min)	(min)	(min)	(dB)	(Hz)		(ft)		(ft)	(ft)	(ft)
Excavator				108.9	108.9	108.9	Lw	C1		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	157.73	193.12	61.08
Excavator				108.9	108.9	108.9	Lw	C1		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	683.40	205.01	62.77
Compactor				108.7	108.7	108.7	Lw	C13		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	5.00	r	155.06	193.29	61.09
Compactor				108.7	108.7	108.7	Lw	C13		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	5.00	r	677.54	203.97	62.52
Excavator				108.9	108.9	108.9	Lw	C1		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	149.15	235.16	75.00
Excavator				108.9	108.9	108.9	Lw	C1		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	667.54	264.90	75.00
Compactor				108.7	108.7	108.7	Lw	C13		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	5.00	r	158.68	235.46	75.00
Compactor				108.7	108.7	108.7	Lw	C13		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	5.00	r	660.63	263.58	75.00
Dump Truck				107.1	107.1	107.1	Lw	C4		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	379.60	340.64	75.00
Dump Truck				107.1	107.1	107.1	Lw	C4		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	488.54	345.41	75.00
Dump Truck				107.1	107.1	107.1	Lw	C4		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	162.77	190.98	60.15
Dump Truck				107.1	107.1	107.1	Lw	C4		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	655.21	205.22	62.77

Buildings

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	
							Begin	
							(ft)	
West Bldg			BL_1	x	0		45.00	r
East Bldg			BL_2	x	0		45.00	r

Geometry - Buildings

Name	Sel.	M.	ID	RB	Residents	Absorption	Height		Coordinates			
							Begin		x	y	z	Ground
							(ft)		(ft)	(ft)	(ft)	(ft)
West Bldg			BL_1	x	0		45.00	r	70.40	465.87	115.00	70.00
									72.81	248.82	115.00	70.00
									332.58	271.90	115.00	70.00
									325.69	464.49	115.00	70.00
East Bldg			BL_2	x	0		45.00	r	534.03	465.96	115.00	70.00
									539.67	276.27	115.00	70.00
									791.86	283.65	115.00	70.00
									781.01	469.00	115.00	70.00

Terrain Contours

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)
c1							61.61	7.92	32.00
							186.29	17.76	28.00
							288.00	30.89	43.00
							405.03	27.06	32.00
							473.38	23.23	29.00
							690.48	0.27	26.00
							828.29	1.36	33.00
							875.86	0.27	35.00
c2							59.84	61.58	31.00
							146.24	70.88	38.00
							266.00	76.90	29.00
							352.95	80.18	35.00
							511.53	74.71	32.00
							662.46	75.80	32.00
							739.57	59.40	32.00
							818.31	41.35	45.00
							835.81	35.88	36.00
							867.53	35.34	36.00
c3							71.32	127.75	46.00
							111.76	149.36	46.00
							152.23	154.25	47.00
							276.39	143.61	44.00
							372.08	145.25	35.00
							484.74	144.71	39.00
							597.39	145.25	44.00
							684.33	145.80	41.00
							747.22	143.06	42.00
							829.25	143.61	40.00
							842.37	144.71	37.00
							872.45	144.16	37.00
c4							72.96	155.10	42.00
							141.86	163.30	42.00
							206.94	164.39	44.00
							287.32	167.13	44.00
							368.26	166.03	45.00
							472.16	167.13	47.00
							570.59	169.31	44.00
							664.10	167.13	49.00
							753.78	164.39	42.00
							838.55	167.13	38.00
							846.20	166.03	37.00
							866.43	166.03	37.00
c5					70.00		68.11	469.64	70.00
							67.01	244.89	70.00

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)
							165.99	243.25	70.00
							311.45	248.17	70.00
							806.35	258.56	70.00
							799.24	476.75	70.00
							65.37	470.74	70.00
c6					40.00		900.24	483.66	40.00
							829.06	483.66	40.00
							847.29	181.57	40.00
							893.30	181.57	40.00
c7					70.00		79.25	217.55	70.00
							84.77	186.53	70.00
							154.38	203.07	70.00
							268.11	211.35	70.00
							339.10	216.17	70.00
							337.72	200.32	70.00
							696.81	213.41	70.00
							696.12	225.13	70.00
							827.77	229.95	70.00
							831.21	265.11	70.00
c8							763.10	225.47	61.33
							701.98	223.55	61.33
							702.26	218.77	61.33
							698.02	218.77	61.33
							697.61	211.66	59.33
							586.50	207.44	58.17
							335.52	198.74	57.25
							335.70	212.69	58.00
							334.58	212.63	59.33
							152.07	196.50	57.50

Sound Level Spectra

Name	ID	Type	1/3 Oktave Spectrum (dB)											Source
			Weight.	63	125	250	500	1000	2000	4000	8000	A	lin	
Excavator	C1	Lw (c)		111.0	114.0	107.0	104.0	103.0	101.0	100.0	97.0	108.9	117.0	Defra
Mini Excavator	C2	Lw (c)		107.0	104.0	93.0	97.0	93.0	90.0	85.0	80.0	98.6	109.3	Defra
Bulldozer	C3	Lw (c)		114.0	112.0	107.0	108.0	113.0	101.0	96.0	89.0	114.2	118.7	Defra
Dump Truck	C4	Lw (c)		108.0	108.0	107.0	103.0	102.0	100.0	95.0	85.0	107.1	113.5	Defra
Concrete Mixer	C5	Lw (c)		110.0	111.0	104.0	103.0	100.0	99.0	90.0	84.0	105.8	114.6	Defra
Concrete Pump	C6	Lw (c)		115.0	106.0	102.0	101.0	101.0	100.0	92.0	83.0	105.8	116.1	Defra
Generator	C7	Lw (c)		110.0	105.0	98.0	95.0	86.0	82.0	76.0	71.0	96.1	111.5	Defra
Compressor	C8	Lw (c)		115.0	104.0	95.0	90.0	88.0	86.0	89.0	78.0	96.5	115.4	Defra
Jackhammer	C9	Lw (c)		115.0	115.0	105.0	106.0	104.0	108.0	114.0	112.0	117.6	120.8	Defra
Power-Driven Saw	C10	Lw (c)		103.0	120.0	112.0	111.0	111.0	113.0	117.0	116.0	121.6	124.0	Defra
Hydraulic Jack	C11	Lw (c)		98.0	111.0	105.0	103.0	103.0	103.0	99.0	92.0	108.7	113.7	Defra
Drill Rig	C12	Lw (c)		115.0	123.0	112.0	111.0	109.0	107.0	99.0	92.0	114.6	124.4	Defra
Compactor	C13	Lw (c)		112.0	107.0	103.0	104.0	103.0	103.0	99.0	94.0	108.7	114.8	Defra
Compact Crane	C14	Lw (c)		111.0	107.0	102.0	94.0	95.0	94.0	87.0	81.0	100.8	113.0	Defra

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Date: 18 Apr 2025

Calculation Configuration

Configuration	
Parameter	Value
General	
Max. Error (dB)	0.00
Max. Search Radius (ft)	6561.68
Min. Dist Src to Rcvr	0.00
Partition	
Raster Factor	0.50
Max. Length of Section (ft)	3280.84
Min. Length of Section (ft)	3.28
Min. Length of Section (%)	0.00
Proj. Line Sources	On
Proj. Area Sources	On
Ref. Time	
Daytime Penalty (dB)	0.00
Recr. Time Penalty (dB)	6.00
Night-time Penalty (dB)	10.00
DTM	
Standard Height (m)	0.00
Model of Terrain	Triangulation
Reflection	
max. Order of Reflection	0
Search Radius Src	328.08
Search Radius Rcvr	328.08
Max. Distance Source - Rcvr	3280.84 3280.84
Min. Distance Rvcr - Reflector	3.28 3.28
Min. Distance Source - Reflector	0.33
Industrial (ISO 9613 (1996))	
Lateral Diffraction	some Obj
Obst. within Area Src do not shield	On
Screening	Excl. Ground Att. over Barrier
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	3.0 20.0 0.0
Temperature (°F)	50
rel. Humidity (%)	70
Ground Absorption G	1.00
Wind Speed for Dir. (mph)	6.7
Roads (TNM)	
Railways (Schall 03 (1990))	
Strictly acc. to Schall 03 / Schall-Transrapid	
Aircraft (NONE)	
Strictly acc. to AzB	

Receivers

Name	Sel.	M.	ID	Level Lr		Limit. Value		Land Use			Height		Coordinates		
				Day	Night	Day	Night	Type	Auto	Noise Type			X	Y	Z
				(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
R1-1			1	48.7	-80.2	75.4	0.0				12.00	r	153.20	253.54	82.00
R1-2			2	48.8	-80.2	75.4	0.0				22.00	r	153.20	253.54	92.00
R1-3			3	49.0	-80.2	75.4	0.0				32.00	r	153.20	253.54	102.00
R1-4			4	49.0	-80.2	75.4	0.0				42.00	r	153.20	253.54	112.00
R2-1			5	70.0	-80.2	75.4	0.0				12.00	r	328.84	269.23	82.00
R2-2			6	69.3	-80.2	75.4	0.0				22.00	r	328.84	269.23	92.00
R2-3			7	68.2	-80.2	75.4	0.0				32.00	r	328.84	269.23	102.00
R2-4			8	67.1	-80.2	75.4	0.0				42.00	r	328.84	269.23	112.00
R3-1			9	66.1	-80.2	75.4	0.0				12.00	r	333.39	336.11	82.00
R3-2			10	65.8	-80.2	75.4	0.0				22.00	r	333.39	336.11	92.00
R3-3			11	65.4	-80.2	75.4	0.0				32.00	r	333.39	336.11	102.00
R3-4			12	64.8	-80.2	75.4	0.0				42.00	r	333.39	336.11	112.00
R4-1			13	66.2	-80.2	75.4	0.0				12.00	r	537.40	336.11	82.00
R4-2			14	66.0	-80.2	75.4	0.0				22.00	r	537.40	336.11	92.00
R4-3			15	65.5	-80.2	75.4	0.0				32.00	r	537.40	336.11	102.00
R4-4			16	64.9	-80.2	75.4	0.0				42.00	r	537.40	336.11	112.00
R5-1			17	46.0	-80.2	75.4	0.0				12.00	r	659.88	279.28	82.00
R5-2			18	46.2	-80.2	75.4	0.0				22.00	r	659.88	279.28	92.00
R5-3			19	46.4	-80.2	75.4	0.0				32.00	r	659.88	279.28	102.00
R5-4			20	46.5	-80.2	75.4	0.0				42.00	r	659.88	279.28	112.00
R6-1			21	41.8	-80.2	75.4	0.0				12.00	r	751.65	281.85	82.00
R6-2			22	42.0	-80.2	75.4	0.0				22.00	r	751.65	281.85	92.00
R6-3			23	42.3	-80.2	75.4	0.0				32.00	r	751.65	281.85	102.00
R6-4			24	42.4	-80.2	75.4	0.0				42.00	r	751.65	281.85	112.00

Point Sources

Name	Sel.	M.	ID	Result. PWL			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Height		Coordinates		
				Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day	Special	Night						X	Y	Z
				(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(ft²)		(min)	(min)	(min)	(dB)	(Hz)		(ft)		(ft)	(ft)	(ft)
Concrete Pump				105.8	105.8	105.8	Lw	C6		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	5.00	r	518.81	282.55	75.00
Concrete Mixer				105.8	105.8	105.8	Lw	C5		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	510.77	286.48	75.00
Compact Crane				100.8	100.8	100.8	Lw	C14		0.0	0.0	0.0				76.80	0.00	0.00	0.0		(none)	5.00	r	514.43	294.50	75.00
Concrete Pump				105.8	105.8	105.8	Lw	C6		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	5.00	r	356.62	285.19	75.00
Concrete Mixer				105.8	105.8	105.8	Lw	C5		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	363.30	288.63	75.00
Compact Crane				100.8	100.8	100.8	Lw	C14		0.0	0.0	0.0				76.80	0.00	0.00	0.0		(none)	5.00	r	357.30	276.71	75.00

Buildings

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	
							Begin	
							(ft)	
West Bldg			BL_1	x	0		45.00	r
East Bldg			BL_2	x	0		45.00	r

Geometry - Buildings

Name	Sel.	M.	ID	RB	Residents	Absorption	Height		Coordinates			
							Begin		x	y	z	Ground
							(ft)		(ft)	(ft)	(ft)	(ft)
West Bldg			BL_1	x	0		45.00	r	70.40	465.87	115.00	70.00
									72.81	248.82	115.00	70.00
									332.58	271.90	115.00	70.00
									325.69	464.49	115.00	70.00
East Bldg			BL_2	x	0		45.00	r	534.03	465.96	115.00	70.00
									539.67	276.27	115.00	70.00
									791.86	283.65	115.00	70.00
									781.01	469.00	115.00	70.00

Terrain Contours

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)
c1							61.61	7.92	32.00
							186.29	17.76	28.00
							288.00	30.89	43.00
							405.03	27.06	32.00
							473.38	23.23	29.00
							690.48	0.27	26.00
							828.29	1.36	33.00
							875.86	0.27	35.00
c2							59.84	61.58	31.00
							146.24	70.88	38.00
							266.00	76.90	29.00
							352.95	80.18	35.00
							511.53	74.71	32.00
							662.46	75.80	32.00
							739.57	59.40	32.00
							818.31	41.35	45.00
							835.81	35.88	36.00
							867.53	35.34	36.00
c3							71.32	127.75	46.00
							111.76	149.36	46.00
							152.23	154.25	47.00
							276.39	143.61	44.00
							372.08	145.25	35.00
							484.74	144.71	39.00
							597.39	145.25	44.00
							684.33	145.80	41.00
							747.22	143.06	42.00
							829.25	143.61	40.00
							842.37	144.71	37.00
							872.45	144.16	37.00
c4							72.96	155.10	42.00
							141.86	163.30	42.00
							206.94	164.39	44.00
							287.32	167.13	44.00
							368.26	166.03	45.00
							472.16	167.13	47.00
							570.59	169.31	44.00
							664.10	167.13	49.00
							753.78	164.39	42.00
							838.55	167.13	38.00
							846.20	166.03	37.00
							866.43	166.03	37.00
c5					70.00		68.11	469.64	70.00
							67.01	244.89	70.00

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)
							165.99	243.25	70.00
							311.45	248.17	70.00
							806.35	258.56	70.00
							799.24	476.75	70.00
							65.37	470.74	70.00
c6					40.00		900.24	483.66	40.00
							829.06	483.66	40.00
							847.29	181.57	40.00
							893.30	181.57	40.00
c7					70.00		79.25	217.55	70.00
							84.77	186.53	70.00
							154.38	203.07	70.00
							268.11	211.35	70.00
							339.10	216.17	70.00
							337.72	200.32	70.00
							696.81	213.41	70.00
							696.12	225.13	70.00
							827.77	229.95	70.00
							831.21	265.11	70.00
c8							763.10	225.47	61.33
							701.98	223.55	61.33
							702.26	218.77	61.33
							698.02	218.77	61.33
							697.61	211.66	59.33
							586.50	207.44	58.17
							335.52	198.74	57.25
							335.70	212.69	58.00
							334.58	212.63	59.33
							152.07	196.50	57.50

Sound Level Spectra

Name	ID	Type	1/3 Oktave Spectrum (dB)											Source
			Weight.	63	125	250	500	1000	2000	4000	8000	A	lin	
Excavator	C1	Lw (c)		111.0	114.0	107.0	104.0	103.0	101.0	100.0	97.0	108.9	117.0	Defra
Mini Excavator	C2	Lw (c)		107.0	104.0	93.0	97.0	93.0	90.0	85.0	80.0	98.6	109.3	Defra
Bulldozer	C3	Lw (c)		114.0	112.0	107.0	108.0	113.0	101.0	96.0	89.0	114.2	118.7	Defra
Dump Truck	C4	Lw (c)		108.0	108.0	107.0	103.0	102.0	100.0	95.0	85.0	107.1	113.5	Defra
Concrete Mixer	C5	Lw (c)		110.0	111.0	104.0	103.0	100.0	99.0	90.0	84.0	105.8	114.6	Defra
Concrete Pump	C6	Lw (c)		115.0	106.0	102.0	101.0	101.0	100.0	92.0	83.0	105.8	116.1	Defra
Generator	C7	Lw (c)		110.0	105.0	98.0	95.0	86.0	82.0	76.0	71.0	96.1	111.5	Defra
Compressor	C8	Lw (c)		115.0	104.0	95.0	90.0	88.0	86.0	89.0	78.0	96.5	115.4	Defra
Jackhammer	C9	Lw (c)		115.0	115.0	105.0	106.0	104.0	108.0	114.0	112.0	117.6	120.8	Defra
Power-Driven Saw	C10	Lw (c)		103.0	120.0	112.0	111.0	111.0	113.0	117.0	116.0	121.6	124.0	Defra
Hydraulic Jack	C11	Lw (c)		98.0	111.0	105.0	103.0	103.0	103.0	99.0	92.0	108.7	113.7	Defra
Drill Rig	C12	Lw (c)		115.0	123.0	112.0	111.0	109.0	107.0	99.0	92.0	114.6	124.4	Defra
Compactor	C13	Lw (c)		112.0	107.0	103.0	104.0	103.0	103.0	99.0	94.0	108.7	114.8	Defra
Compact Crane	C14	Lw (c)		111.0	107.0	102.0	94.0	95.0	94.0	87.0	81.0	100.8	113.0	Defra

Eilar Associates, Inc.
210 South Juniper Street, Suite 100
Escondido, California 92025-4230
Phone: (760) 738-5570

Date: 18 Apr 2025

Calculation Configuration

Configuration	
Parameter	Value
General	
Max. Error (dB)	0.00
Max. Search Radius (ft)	6561.68
Min. Dist Src to Rcvr	0.00
Partition	
Raster Factor	0.50
Max. Length of Section (ft)	3280.84
Min. Length of Section (ft)	3.28
Min. Length of Section (%)	0.00
Proj. Line Sources	On
Proj. Area Sources	On
Ref. Time	
Daytime Penalty (dB)	0.00
Recr. Time Penalty (dB)	6.00
Night-time Penalty (dB)	10.00
DTM	
Standard Height (m)	0.00
Model of Terrain	Triangulation
Reflection	
max. Order of Reflection	0
Search Radius Src	328.08
Search Radius Rcvr	328.08
Max. Distance Source - Rcvr	3280.84 3280.84
Min. Distance Rvcr - Reflector	3.28 3.28
Min. Distance Source - Reflector	0.33
Industrial (ISO 9613 (1996))	
Lateral Diffraction	some Obj
Obst. within Area Src do not shield	On
Screening	Excl. Ground Att. over Barrier
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	3.0 20.0 0.0
Temperature (°F)	50
rel. Humidity (%)	70
Ground Absorption G	1.00
Wind Speed for Dir. (mph)	6.7
Roads (TNM)	
Railways (Schall 03 (1990))	
Strictly acc. to Schall 03 / Schall-Transrapid	
Aircraft (NONE)	
Strictly acc. to AzB	

Receivers

Name	Sel.	M.	ID	Level Lr		Limit. Value		Land Use			Height		Coordinates		
				Day	Night	Day	Night	Type	Auto	Noise Type			X	Y	Z
				(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
R1-1			1	58.5	-80.2	75.4	0.0				12.00	r	153.20	253.54	82.00
R1-2			2	58.6	-80.2	75.4	0.0				22.00	r	153.20	253.54	92.00
R1-3			3	58.7	-80.2	75.4	0.0				32.00	r	153.20	253.54	102.00
R1-4			4	59.0	-80.2	75.4	0.0				42.00	r	153.20	253.54	112.00
R2-1			5	64.8	-80.2	75.4	0.0				12.00	r	328.84	269.23	82.00
R2-2			6	66.7	-80.2	75.4	0.0				22.00	r	328.84	269.23	92.00
R2-3			7	72.2	-80.2	75.4	0.0				32.00	r	328.84	269.23	102.00
R2-4			8	74.7	-80.2	75.4	0.0				42.00	r	328.84	269.23	112.00
R3-1			9	66.1	-80.2	75.4	0.0				12.00	r	333.39	336.11	82.00
R3-2			10	65.8	-80.2	75.4	0.0				22.00	r	333.39	336.11	92.00
R3-3			11	65.3	-80.2	75.4	0.0				32.00	r	333.39	336.11	102.00
R3-4			12	64.6	-80.2	75.4	0.0				42.00	r	333.39	336.11	112.00

Point Sources

Name	Sel.	M.	ID	Result. PWL			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Height		Coordinates		
				Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day	Special	Night						X	Y	Z
				(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(ft²)		(min)	(min)	(min)	(dB)	(Hz)		(ft)		(ft)	(ft)	(ft)
West-Compressor		+		96.5	96.5	96.5	Lw	C8		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	3.00	r	348.79	247.41	73.00
West-Generator		+		96.1	96.1	96.1	Lw	C7		0.0	0.0	0.0				240.00	0.00	0.00	0.0		(none)	5.00	r	348.79	250.80	75.00
West-Dump Truck		+		107.1	107.1	107.1	Lw	C4		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	384.60	332.80	75.00

Area Sources

Name	Sel.	M.	ID	Result. PWL			Result. PWL"			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Moving	
				Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day	Special	Night				Num	
				(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(ft²)		(min)	(min)	(min)	(dB)	(Hz)		Day	Eve
West-Jackhammer		+	S_1	117.6	17.6	17.6	107.6	7.6	7.6	PWL-Pt	C9		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	1.0	0
West-Power Driven Saw		+	S_2	121.6	21.6	21.6	106.7	6.7	6.7	PWL-Pt	C10		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	1.0	0
West-Mini Excavator		+	S_3	98.6	-1.4	-1.4	80.6	-19.4	-19.4	PWL-Pt	C2		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	1.0	0

Geometry - Area Sources

Name	ID	Height				Coordinates			
		Begin		End		x	y	z	Ground
		(ft)		(ft)		(ft)	(ft)	(ft)	(ft)
West-Jackhammer	S_1	3.00	r			336.54	247.96	73.00	70.00
						336.35	238.62	73.00	70.00
						352.02	239.06	73.00	70.00
						352.14	243.59	73.00	70.00
						345.30	243.70	73.00	70.00
						342.82	248.08	73.00	70.00
West-Power Driven Saw	S_2	1.50	r			350.36	255.74	71.50	70.00
						350.65	250.29	71.50	70.00
						406.90	250.37	71.50	70.00
						406.90	256.49	71.50	70.00
West-Mini Excavator	S_3	5.00	r			351.18	255.54	75.00	70.00
						350.67	242.79	75.00	70.00
						407.34	244.00	75.00	70.00
						407.17	255.19	75.00	70.00

Barriers

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height			
				left	right		horz.	vert.	Begin		End	
						(ft)	(ft)	(ft)	(ft)		(ft)	
West-Temp Barrier		+							12.00	r		

Geometry - Barriers

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height				Coordinates			
				left	right		horz.	vert.	Begin		End		x	y	z	Ground
						(ft)	(ft)	(ft)	(ft)		(ft)		(ft)	(ft)	(ft)	(ft)
West-Temp Barrier		+							12.00	r			335.52	243.13	82.00	70.00
													335.66	250.42	82.00	70.00
													347.46	250.57	82.00	70.00
													347.27	256.12	82.00	70.00
													407.57	257.34	82.00	70.00

Buildings

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	
							Begin	
							(ft)	
West Bldg			BL_1	x	0		45.00	r
East Bldg			BL_2	x	0		45.00	r

Geometry - Buildings

Name	Sel.	M.	ID	RB	Residents	Absorption	Height		Coordinates			
							Begin		x	y	z	Ground
							(ft)		(ft)	(ft)	(ft)	(ft)
West Bldg			BL_1	x	0		45.00	r	70.40	465.87	115.00	70.00
									72.81	248.82	115.00	70.00
									332.58	271.90	115.00	70.00
									325.69	464.49	115.00	70.00
East Bldg			BL_2	x	0		45.00	r	534.03	465.96	115.00	70.00
									539.67	276.27	115.00	70.00
									791.86	283.65	115.00	70.00
									781.01	469.00	115.00	70.00

Terrain Contours

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)
c1							61.61	7.92	32.00
							186.29	17.76	28.00
							288.00	30.89	43.00
							405.03	27.06	32.00
							473.38	23.23	29.00
							690.48	0.27	26.00
							828.29	1.36	33.00
							875.86	0.27	35.00
c2							59.84	61.58	31.00
							146.24	70.88	38.00
							266.00	76.90	29.00
							352.95	80.18	35.00
							511.53	74.71	32.00
							662.46	75.80	32.00
							739.57	59.40	32.00
							818.31	41.35	45.00
							835.81	35.88	36.00
							867.53	35.34	36.00
c3							71.32	127.75	46.00
							111.76	149.36	46.00
							152.23	154.25	47.00
							276.39	143.61	44.00
							372.08	145.25	35.00
							484.74	144.71	39.00
							597.39	145.25	44.00
							684.33	145.80	41.00
							747.22	143.06	42.00
							829.25	143.61	40.00
							842.37	144.71	37.00
							872.45	144.16	37.00
c4							72.96	155.10	42.00
							141.86	163.30	42.00
							206.94	164.39	44.00
							287.32	167.13	44.00
							368.26	166.03	45.00
							472.16	167.13	47.00
							570.59	169.31	44.00
							664.10	167.13	49.00
							753.78	164.39	42.00
							838.55	167.13	38.00
							846.20	166.03	37.00
							866.43	166.03	37.00
c5					70.00		68.11	469.64	70.00
							67.01	244.89	70.00

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)
							165.99	243.25	70.00
							311.45	248.17	70.00
							806.35	258.56	70.00
							799.24	476.75	70.00
							65.37	470.74	70.00
c6					40.00		900.24	483.66	40.00
							829.06	483.66	40.00
							847.29	181.57	40.00
							893.30	181.57	40.00
c7					70.00		79.25	217.55	70.00
							84.77	186.53	70.00
							154.38	203.07	70.00
							268.11	211.35	70.00
							339.10	216.17	70.00
							337.72	200.32	70.00
							696.81	213.41	70.00
							696.12	225.13	70.00
							827.77	229.95	70.00
							831.21	265.11	70.00
c8							763.10	225.47	61.33
							701.98	223.55	61.33
							702.26	218.77	61.33
							698.02	218.77	61.33
							697.61	211.66	59.33
							586.50	207.44	58.17
							335.52	198.74	57.25
							335.70	212.69	58.00
							334.58	212.63	59.33
							152.07	196.50	57.50

Sound Level Spectra

Name	ID	Type	1/3 Oktave Spectrum (dB)											Source
			Weight.	63	125	250	500	1000	2000	4000	8000	A	lin	
Excavator	C1	Lw (c)		111.0	114.0	107.0	104.0	103.0	101.0	100.0	97.0	108.9	117.0	Defra
Mini Excavator	C2	Lw (c)		107.0	104.0	93.0	97.0	93.0	90.0	85.0	80.0	98.6	109.3	Defra
Bulldozer	C3	Lw (c)		114.0	112.0	107.0	108.0	113.0	101.0	96.0	89.0	114.2	118.7	Defra
Dump Truck	C4	Lw (c)		108.0	108.0	107.0	103.0	102.0	100.0	95.0	85.0	107.1	113.5	Defra
Concrete Mixer	C5	Lw (c)		110.0	111.0	104.0	103.0	100.0	99.0	90.0	84.0	105.8	114.6	Defra
Concrete Pump	C6	Lw (c)		115.0	106.0	102.0	101.0	101.0	100.0	92.0	83.0	105.8	116.1	Defra
Generator	C7	Lw (c)		110.0	105.0	98.0	95.0	86.0	82.0	76.0	71.0	96.1	111.5	Defra
Compressor	C8	Lw (c)		115.0	104.0	95.0	90.0	88.0	86.0	89.0	78.0	96.5	115.4	Defra
Jackhammer	C9	Lw (c)		115.0	115.0	105.0	106.0	104.0	108.0	114.0	112.0	117.6	120.8	Defra
Power-Driven Saw	C10	Lw (c)		103.0	120.0	112.0	111.0	111.0	113.0	117.0	116.0	121.6	124.0	Defra
Hydraulic Jack	C11	Lw (c)		98.0	111.0	105.0	103.0	103.0	103.0	99.0	92.0	108.7	113.7	Defra
Drill Rig	C12	Lw (c)		115.0	123.0	112.0	111.0	109.0	107.0	99.0	92.0	114.6	124.4	Defra
Compactor	C13	Lw (c)		112.0	107.0	103.0	104.0	103.0	103.0	99.0	94.0	108.7	114.8	Defra
Compact Crane	C14	Lw (c)		111.0	107.0	102.0	94.0	95.0	94.0	87.0	81.0	100.8	113.0	Defra

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Date: 18 Apr 2025

Calculation Configuration

Configuration	
Parameter	Value
General	
Max. Error (dB)	0.00
Max. Search Radius (ft)	6561.68
Min. Dist Src to Rcvr	0.00
Partition	
Raster Factor	0.50
Max. Length of Section (ft)	3280.84
Min. Length of Section (ft)	3.28
Min. Length of Section (%)	0.00
Proj. Line Sources	On
Proj. Area Sources	On
Ref. Time	
Daytime Penalty (dB)	0.00
Recr. Time Penalty (dB)	6.00
Night-time Penalty (dB)	10.00
DTM	
Standard Height (m)	0.00
Model of Terrain	Triangulation
Reflection	
max. Order of Reflection	0
Search Radius Src	328.08
Search Radius Rcvr	328.08
Max. Distance Source - Rcvr	3280.84 3280.84
Min. Distance Rvcr - Reflector	3.28 3.28
Min. Distance Source - Reflector	0.33
Industrial (ISO 9613 (1996))	
Lateral Diffraction	some Obj
Obst. within Area Src do not shield	On
Screening	Excl. Ground Att. over Barrier
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	3.0 20.0 0.0
Temperature (°F)	50
rel. Humidity (%)	70
Ground Absorption G	1.00
Wind Speed for Dir. (mph)	6.7
Roads (TNM)	
Railways (Schall 03 (1990))	
Strictly acc. to Schall 03 / Schall-Transrapid	
Aircraft (NONE)	
Strictly acc. to AzB	

Receivers

Name	Sel.	M.	ID	Level Lr		Limit. Value		Land Use			Height		Coordinates		
				Day	Night	Day	Night	Type	Auto	Noise Type			X	Y	Z
				(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
R4-1			13	66.2	-80.2	75.4	0.0				12.00	r	537.40	336.11	82.00
R4-2			14	65.9	-80.2	75.4	0.0				22.00	r	537.40	336.11	92.00
R4-3			15	65.2	-80.2	75.4	0.0				32.00	r	537.40	336.11	102.00
R4-4			16	64.4	-80.2	75.4	0.0				42.00	r	537.40	336.11	112.00
R5-1			17	65.8	-80.2	75.4	0.0				12.00	r	659.88	279.28	82.00
R5-2			18	67.7	-80.2	75.4	0.0				22.00	r	659.88	279.28	92.00
R5-3			19	71.3	-80.2	75.4	0.0				32.00	r	659.88	279.28	102.00
R5-4			20	73.9	-80.2	75.4	0.0				42.00	r	659.88	279.28	112.00
R6-1			21	60.4	-80.2	75.4	0.0				12.00	r	751.65	281.85	82.00
R6-2			22	63.1	-80.2	75.4	0.0				22.00	r	751.65	281.85	92.00
R6-3			23	67.9	-80.2	75.4	0.0				32.00	r	751.65	281.85	102.00
R6-4			24	71.1	-80.2	75.4	0.0				42.00	r	751.65	281.85	112.00

Point Sources

Name	Sel.	M.	ID	Result. PWL			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Height		Coordinates		
				Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day	Special	Night						X	Y	Z
				(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(ft²)		(min)	(min)	(min)	(dB)	(Hz)		(ft)		(ft)	(ft)	(ft)
East-Compressor		+		96.5	96.5	96.5	Lw	C8		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	3.00	r	692.59	261.19	73.00
East-Generator		+		96.1	96.1	96.1	Lw	C7		0.0	0.0	0.0				240.00	0.00	0.00	0.0		(none)	5.00	r	692.59	259.07	75.00
East-Dump Truck		+		107.1	107.1	107.1	Lw	C4		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	489.33	329.01	75.00

Area Sources

Name	Sel.	M.	ID	Result. PWL			Result. PWL"			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Moving	
				Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day	Special	Night				Num	
				(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(ft²)		(min)	(min)	(min)	(dB)	(Hz)		Day	Ever
East-Jackhammer		+	S_1	117.6	17.6	17.6	99.1	-0.9	-0.9	PWL-Pt	C9		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	1.0	0.
East-Power Driven Saw		+	S_2	121.6	21.6	21.6	106.4	6.4	6.4	PWL-Pt	C10		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	1.0	0.
East-Mini Excavator		+	S_3	98.6	-1.4	-1.4	80.6	-19.4	-19.4	PWL-Pt	C2		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	1.0	0.

Geometry - Area Sources

Name	ID	Height				Coordinates			
		Begin		End		x	y	z	Ground
		(ft)		(ft)		(ft)	(ft)	(ft)	(ft)
East-Jackhammer	S_1	3.00	r			694.19	263.58	73.00	70.00
						694.53	255.66	73.00	70.00
						796.68	254.80	73.00	70.00
						796.17	261.86	73.00	70.00
East-Power Driven Saw	S_2	1.50	r			634.43	264.76	71.50	70.00
						634.17	258.21	71.50	70.00
						690.41	258.30	71.50	70.00
						690.41	264.41	71.50	70.00
East-Mini Excavator	S_3	5.00	r			634.43	264.76	75.00	70.00
						633.91	252.01	75.00	70.00
						690.58	253.22	75.00	70.00
						690.41	264.41	75.00	70.00

Barriers

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height			
				left	right		horz.	vert.	Begin		End	
						(ft)	(ft)	(ft)	(ft)		(ft)	
East-Temp Barrier		+							12.00	r		

Geometry - Barriers

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height				Coordinates			
				left	right		horz.	vert.	Begin		End		x	y	z	Ground
						(ft)	(ft)	(ft)	(ft)		(ft)		(ft)	(ft)	(ft)	(ft)
East-Temp Barrier		+							12.00	r			632.30	251.14	82.00	70.00
													632.28	264.82	82.00	70.00
													692.27	265.02	82.00	70.00
													797.69	262.57	82.00	70.00

Buildings

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	
							Begin	
							(ft)	
West Bldg			BL_1	x	0		45.00	r
East Bldg			BL_2	x	0		45.00	r

Geometry - Buildings

Name	Sel.	M.	ID	RB	Residents	Absorption	Height		Coordinates			
							Begin		x	y	z	Ground
							(ft)		(ft)	(ft)	(ft)	(ft)
West Bldg			BL_1	x	0		45.00	r	70.40	465.87	115.00	70.00
									72.81	248.82	115.00	70.00
									332.58	271.90	115.00	70.00
									325.69	464.49	115.00	70.00
East Bldg			BL_2	x	0		45.00	r	534.03	465.96	115.00	70.00
									539.67	276.27	115.00	70.00
									791.86	283.65	115.00	70.00
									781.01	469.00	115.00	70.00

Terrain Contours

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)
c1							61.61	7.92	32.00
							186.29	17.76	28.00
							288.00	30.89	43.00
							405.03	27.06	32.00
							473.38	23.23	29.00
							690.48	0.27	26.00
							828.29	1.36	33.00
							875.86	0.27	35.00
c2							59.84	61.58	31.00
							146.24	70.88	38.00
							266.00	76.90	29.00
							352.95	80.18	35.00
							511.53	74.71	32.00
							662.46	75.80	32.00
							739.57	59.40	32.00
							818.31	41.35	45.00
							835.81	35.88	36.00
							867.53	35.34	36.00
c3							71.32	127.75	46.00
							111.76	149.36	46.00
							152.23	154.25	47.00
							276.39	143.61	44.00
							372.08	145.25	35.00
							484.74	144.71	39.00
							597.39	145.25	44.00
							684.33	145.80	41.00
							747.22	143.06	42.00
							829.25	143.61	40.00
							842.37	144.71	37.00
							872.45	144.16	37.00
c4							72.96	155.10	42.00
							141.86	163.30	42.00
							206.94	164.39	44.00
							287.32	167.13	44.00
							368.26	166.03	45.00
							472.16	167.13	47.00
							570.59	169.31	44.00
							664.10	167.13	49.00
							753.78	164.39	42.00
							838.55	167.13	38.00
							846.20	166.03	37.00
							866.43	166.03	37.00
c5					70.00		68.11	469.64	70.00
							67.01	244.89	70.00

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)
							165.99	243.25	70.00
							311.45	248.17	70.00
							806.35	258.56	70.00
							799.24	476.75	70.00
							65.37	470.74	70.00
c6					40.00		900.24	483.66	40.00
							829.06	483.66	40.00
							847.29	181.57	40.00
							893.30	181.57	40.00
c7					70.00		79.25	217.55	70.00
							84.77	186.53	70.00
							154.38	203.07	70.00
							268.11	211.35	70.00
							339.10	216.17	70.00
							337.72	200.32	70.00
							696.81	213.41	70.00
							696.12	225.13	70.00
							827.77	229.95	70.00
							831.21	265.11	70.00
c8							763.10	225.47	61.33
							701.98	223.55	61.33
							702.26	218.77	61.33
							698.02	218.77	61.33
							697.61	211.66	59.33
							586.50	207.44	58.17
							335.52	198.74	57.25
							335.70	212.69	58.00
							334.58	212.63	59.33
							152.07	196.50	57.50

Sound Level Spectra

Name	ID	Type	1/3 Oktave Spectrum (dB)											Source
			Weight.	63	125	250	500	1000	2000	4000	8000	A	lin	
Excavator	C1	Lw (c)		111.0	114.0	107.0	104.0	103.0	101.0	100.0	97.0	108.9	117.0	Defra
Mini Excavator	C2	Lw (c)		107.0	104.0	93.0	97.0	93.0	90.0	85.0	80.0	98.6	109.3	Defra
Bulldozer	C3	Lw (c)		114.0	112.0	107.0	108.0	113.0	101.0	96.0	89.0	114.2	118.7	Defra
Dump Truck	C4	Lw (c)		108.0	108.0	107.0	103.0	102.0	100.0	95.0	85.0	107.1	113.5	Defra
Concrete Mixer	C5	Lw (c)		110.0	111.0	104.0	103.0	100.0	99.0	90.0	84.0	105.8	114.6	Defra
Concrete Pump	C6	Lw (c)		115.0	106.0	102.0	101.0	101.0	100.0	92.0	83.0	105.8	116.1	Defra
Generator	C7	Lw (c)		110.0	105.0	98.0	95.0	86.0	82.0	76.0	71.0	96.1	111.5	Defra
Compressor	C8	Lw (c)		115.0	104.0	95.0	90.0	88.0	86.0	89.0	78.0	96.5	115.4	Defra
Jackhammer	C9	Lw (c)		115.0	115.0	105.0	106.0	104.0	108.0	114.0	112.0	117.6	120.8	Defra
Power-Driven Saw	C10	Lw (c)		103.0	120.0	112.0	111.0	111.0	113.0	117.0	116.0	121.6	124.0	Defra
Hydraulic Jack	C11	Lw (c)		98.0	111.0	105.0	103.0	103.0	103.0	99.0	92.0	108.7	113.7	Defra
Drill Rig	C12	Lw (c)		115.0	123.0	112.0	111.0	109.0	107.0	99.0	92.0	114.6	124.4	Defra
Compactor	C13	Lw (c)		112.0	107.0	103.0	104.0	103.0	103.0	99.0	94.0	108.7	114.8	Defra
Compact Crane	C14	Lw (c)		111.0	107.0	102.0	94.0	95.0	94.0	87.0	81.0	100.8	113.0	Defra

Eilar Associates, Inc.
210 South Juniper Street, Suite 100
Escondido, California 92025-4230
Phone: (760) 738-5570

Date: 18 Apr 2025

Calculation Configuration

Configuration	
Parameter	Value
General	
Max. Error (dB)	0.00
Max. Search Radius (ft)	6561.68
Min. Dist Src to Rcvr	0.00
Partition	
Raster Factor	0.50
Max. Length of Section (ft)	3280.84
Min. Length of Section (ft)	3.28
Min. Length of Section (%)	0.00
Proj. Line Sources	On
Proj. Area Sources	On
Ref. Time	
Daytime Penalty (dB)	0.00
Recr. Time Penalty (dB)	6.00
Night-time Penalty (dB)	10.00
DTM	
Standard Height (m)	0.00
Model of Terrain	Triangulation
Reflection	
max. Order of Reflection	0
Search Radius Src	328.08
Search Radius Rcvr	328.08
Max. Distance Source - Rcvr	3280.84 3280.84
Min. Distance Rvcr - Reflector	3.28 3.28
Min. Distance Source - Reflector	0.33
Industrial (ISO 9613 (1996))	
Lateral Diffraction	some Obj
Obst. within Area Src do not shield	On
Screening	Excl. Ground Att. over Barrier
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	3.0 20.0 0.0
Temperature (°F)	50
rel. Humidity (%)	70
Ground Absorption G	1.00
Wind Speed for Dir. (mph)	6.7
Roads (TNM)	
Railways (Schall 03 (1990))	
Strictly acc. to Schall 03 / Schall-Transrapid	
Aircraft (NONE)	
Strictly acc. to AzB	

Receivers

Name	Sel.	M.	ID	Level Lr		Limit. Value		Land Use			Height		Coordinates		
				Day	Night	Day	Night	Type	Auto	Noise Type			X	Y	Z
				(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
R1-1			1	70.1	-80.2	75.4	0.0				12.00	r	153.20	253.54	82.00
R1-2			2	73.7	-80.2	75.4	0.0				22.00	r	153.20	253.54	92.00
R1-3			3	72.1	-80.2	75.4	0.0				32.00	r	153.20	253.54	102.00
R1-4			4	70.7	-80.2	75.4	0.0				42.00	r	153.20	253.54	112.00
R2-1			5	66.3	-80.2	75.4	0.0				12.00	r	328.84	269.23	82.00
R2-2			6	66.0	-80.2	75.4	0.0				22.00	r	328.84	269.23	92.00
R2-3			7	65.6	-80.2	75.4	0.0				32.00	r	328.84	269.23	102.00
R2-4			8	65.2	-80.2	75.4	0.0				42.00	r	328.84	269.23	112.00
R3-1			9	70.9	-80.2	75.4	0.0				12.00	r	333.39	336.11	82.00
R3-2			10	70.4	-80.2	75.4	0.0				22.00	r	333.39	336.11	92.00
R3-3			11	69.6	-80.2	75.4	0.0				32.00	r	333.39	336.11	102.00
R3-4			12	68.7	-80.2	75.4	0.0				42.00	r	333.39	336.11	112.00
R4-1			13	69.5	-80.2	75.4	0.0				12.00	r	537.40	336.11	82.00
R4-2			14	69.2	-80.2	75.4	0.0				22.00	r	537.40	336.11	92.00
R4-3			15	68.7	-80.2	75.4	0.0				32.00	r	537.40	336.11	102.00
R4-4			16	67.9	-80.2	75.4	0.0				42.00	r	537.40	336.11	112.00
R5-1			17	73.7	-80.2	75.4	0.0				12.00	r	659.88	279.28	82.00
R5-2			18	74.0	-80.2	75.4	0.0				22.00	r	659.88	279.28	92.00
R5-3			19	71.9	-80.2	75.4	0.0				32.00	r	659.88	279.28	102.00
R5-4			20	70.0	-80.2	75.4	0.0				42.00	r	659.88	279.28	112.00
R6-1			21	63.9	-80.2	75.4	0.0				12.00	r	751.65	281.85	82.00
R6-2			22	63.9	-80.2	75.4	0.0				22.00	r	751.65	281.85	92.00
R6-3			23	63.8	-80.2	75.4	0.0				32.00	r	751.65	281.85	102.00
R6-4			24	63.6	-80.2	75.4	0.0				42.00	r	751.65	281.85	112.00

Point Sources

Name	Sel.	M.	ID	Result. PWL			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Height		Coordinates		
				Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day	Special	Night						X	Y	Z
				(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(ft²)		(min)	(min)	(min)	(dB)	(Hz)		(ft)		(ft)	(ft)	(ft)
Excavator				108.9	108.9	108.9	Lw	C1		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	166.17	193.04	60.85
Dump Truck				107.1	107.1	107.1	Lw	C4		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	164.37	187.95	58.85
Concrete Pump				105.8	105.8	105.8	Lw	C6		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	5.00	r	158.56	186.64	58.12
Concrete Mixer				105.8	105.8	105.8	Lw	C5		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	159.02	192.54	60.83
Excavator				108.9	108.9	108.9	Lw	C1		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	684.92	209.33	63.77
Dump Truck				107.1	107.1	107.1	Lw	C4		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	686.91	209.24	63.76
Concrete Pump				105.8	105.8	105.8	Lw	C6		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	5.00	r	687.22	205.07	62.79
Concrete Mixer				105.8	105.8	105.8	Lw	C5		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	689.79	207.69	63.40
Concrete Mixer				105.8	105.8	105.8	Lw	C5		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	364.63	300.90	75.00
Concrete Mixer				105.8	105.8	105.8	Lw	C5		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	506.05	299.53	75.00
Concrete Pump				105.8	105.8	105.8	Lw	C6		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	5.00	r	363.85	290.62	75.00
Concrete Pump				105.8	105.8	105.8	Lw	C6		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	5.00	r	507.72	290.89	75.00
Dump Truck				107.1	107.1	107.1	Lw	C4		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	367.02	353.06	75.00
Dump Truck				107.1	107.1	107.1	Lw	C4		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	489.29	350.33	75.00
Excavator				108.9	108.9	108.9	Lw	C1		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	154.26	233.41	75.00
Excavator				108.9	108.9	108.9	Lw	C1		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	673.71	265.52	75.00

Barriers

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height			
				left	right		horz.	vert.	Begin		End	
						(ft)	(ft)	(ft)	(ft)		(ft)	
Sound Barrier									8.00	r		
Sound Barrier									8.00	r		

Geometry - Barriers

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height				Coordinates			
				left	right		horz.	vert.	Begin		End		x	y	z	Ground
						(ft)	(ft)	(ft)	(ft)		(ft)		(ft)	(ft)	(ft)	(ft)
Sound Barrier									8.00	r			667.73	266.40	78.00	70.00
													668.28	272.96	78.00	70.00
													679.49	271.60	78.00	70.00
													679.49	266.95	78.00	70.00
Sound Barrier									8.00	r			148.85	233.85	78.00	70.00
													149.40	240.41	78.00	70.00
													160.61	239.05	78.00	70.00
													160.61	234.40	78.00	70.00

Buildings

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	
							Begin	
							(ft)	
West Bldg			BL_1	x	0		45.00	r
East Bldg			BL_2	x	0		45.00	r

Geometry - Buildings

Name	Sel.	M.	ID	RB	Residents	Absorption	Height		Coordinates			
							Begin		x	y	z	Ground
							(ft)		(ft)	(ft)	(ft)	(ft)
West Bldg			BL_1	x	0		45.00	r	70.40	465.87	115.00	70.00
									72.81	248.82	115.00	70.00
									332.58	271.90	115.00	70.00
									325.69	464.49	115.00	70.00
East Bldg			BL_2	x	0		45.00	r	534.03	465.96	115.00	70.00
									539.67	276.27	115.00	70.00
									791.86	283.65	115.00	70.00
									781.01	469.00	115.00	70.00

Terrain Contours

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)
c1							61.61	7.92	32.00
							186.29	17.76	28.00
							288.00	30.89	43.00
							405.03	27.06	32.00
							473.38	23.23	29.00
							690.48	0.27	26.00
							828.29	1.36	33.00
							875.86	0.27	35.00
c2							59.84	61.58	31.00
							146.24	70.88	38.00
							266.00	76.90	29.00
							352.95	80.18	35.00
							511.53	74.71	32.00
							662.46	75.80	32.00
							739.57	59.40	32.00
							818.31	41.35	45.00
							835.81	35.88	36.00
							867.53	35.34	36.00
c3							71.32	127.75	46.00
							111.76	149.36	46.00
							152.23	154.25	47.00
							276.39	143.61	44.00
							372.08	145.25	35.00
							484.74	144.71	39.00
							597.39	145.25	44.00
							684.33	145.80	41.00
							747.22	143.06	42.00
							829.25	143.61	40.00
							842.37	144.71	37.00
							872.45	144.16	37.00
c4							72.96	155.10	42.00
							141.86	163.30	42.00
							206.94	164.39	44.00
							287.32	167.13	44.00
							368.26	166.03	45.00
							472.16	167.13	47.00
							570.59	169.31	44.00
							664.10	167.13	49.00
							753.78	164.39	42.00
							838.55	167.13	38.00
							846.20	166.03	37.00
							866.43	166.03	37.00
c5					70.00		68.11	469.64	70.00
							67.01	244.89	70.00

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)
							165.99	243.25	70.00
							311.45	248.17	70.00
							806.35	258.56	70.00
							799.24	476.75	70.00
							65.37	470.74	70.00
c6					40.00		900.24	483.66	40.00
							829.06	483.66	40.00
							847.29	181.57	40.00
							893.30	181.57	40.00
c7					70.00		79.25	217.55	70.00
							84.77	186.53	70.00
							154.38	203.07	70.00
							268.11	211.35	70.00
							339.10	216.17	70.00
							337.72	200.32	70.00
							696.81	213.41	70.00
							696.12	225.13	70.00
							827.77	229.95	70.00
							831.21	265.11	70.00
c8							763.10	225.47	61.33
							701.98	223.55	61.33
							702.26	218.77	61.33
							698.02	218.77	61.33
							697.61	211.66	59.33
							586.50	207.44	58.17
							335.52	198.74	57.25
							335.70	212.69	58.00
							334.58	212.63	59.33
							152.07	196.50	57.50

Sound Level Spectra

Name	ID	Type	1/3 Oktave Spectrum (dB)											Source
			Weight.	63	125	250	500	1000	2000	4000	8000	A	lin	
Excavator	C1	Lw (c)		111.0	114.0	107.0	104.0	103.0	101.0	100.0	97.0	108.9	117.0	Defra
Mini Excavator	C2	Lw (c)		107.0	104.0	93.0	97.0	93.0	90.0	85.0	80.0	98.6	109.3	Defra
Bulldozer	C3	Lw (c)		114.0	112.0	107.0	108.0	113.0	101.0	96.0	89.0	114.2	118.7	Defra
Dump Truck	C4	Lw (c)		108.0	108.0	107.0	103.0	102.0	100.0	95.0	85.0	107.1	113.5	Defra
Concrete Mixer	C5	Lw (c)		110.0	111.0	104.0	103.0	100.0	99.0	90.0	84.0	105.8	114.6	Defra
Concrete Pump	C6	Lw (c)		115.0	106.0	102.0	101.0	101.0	100.0	92.0	83.0	105.8	116.1	Defra
Generator	C7	Lw (c)		110.0	105.0	98.0	95.0	86.0	82.0	76.0	71.0	96.1	111.5	Defra
Compressor	C8	Lw (c)		115.0	104.0	95.0	90.0	88.0	86.0	89.0	78.0	96.5	115.4	Defra
Jackhammer	C9	Lw (c)		115.0	115.0	105.0	106.0	104.0	108.0	114.0	112.0	117.6	120.8	Defra
Power-Driven Saw	C10	Lw (c)		103.0	120.0	112.0	111.0	111.0	113.0	117.0	116.0	121.6	124.0	Defra
Hydraulic Jack	C11	Lw (c)		98.0	111.0	105.0	103.0	103.0	103.0	99.0	92.0	108.7	113.7	Defra
Drill Rig	C12	Lw (c)		115.0	123.0	112.0	111.0	109.0	107.0	99.0	92.0	114.6	124.4	Defra
Compactor	C13	Lw (c)		112.0	107.0	103.0	104.0	103.0	103.0	99.0	94.0	108.7	114.8	Defra
Compact Crane	C14	Lw (c)		111.0	107.0	102.0	94.0	95.0	94.0	87.0	81.0	100.8	113.0	Defra

Eilar Associates, Inc.
210 South Juniper Street, Suite 100
Escondido, California 92025-4230
Phone: (760) 738-5570

Date: 18 Apr 2025

Calculation Configuration

Configuration	
Parameter	Value
General	
Max. Error (dB)	0.00
Max. Search Radius (ft)	6561.68
Min. Dist Src to Rcvr	0.00
Partition	
Raster Factor	0.50
Max. Length of Section (ft)	3280.84
Min. Length of Section (ft)	3.28
Min. Length of Section (%)	0.00
Proj. Line Sources	On
Proj. Area Sources	On
Ref. Time	
Daytime Penalty (dB)	0.00
Recr. Time Penalty (dB)	6.00
Night-time Penalty (dB)	10.00
DTM	
Standard Height (m)	0.00
Model of Terrain	Triangulation
Reflection	
max. Order of Reflection	0
Search Radius Src	328.08
Search Radius Rcvr	328.08
Max. Distance Source - Rcvr	3280.84 3280.84
Min. Distance Rvcr - Reflector	3.28 3.28
Min. Distance Source - Reflector	0.33
Industrial (ISO 9613 (1996))	
Lateral Diffraction	some Obj
Obst. within Area Src do not shield	On
Screening	Excl. Ground Att. over Barrier
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	3.0 20.0 0.0
Temperature (°F)	50
rel. Humidity (%)	70
Ground Absorption G	1.00
Wind Speed for Dir. (mph)	6.7
Roads (TNM)	
Railways (Schall 03 (1990))	
Strictly acc. to Schall 03 / Schall-Transrapid	
Aircraft (NONE)	
Strictly acc. to AzB	

Receivers

Name	Sel.	M.	ID	Level Lr		Limit. Value		Land Use			Height		Coordinates		
				Day	Night	Day	Night	Type	Auto	Noise Type			X	Y	Z
				(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
R1-1			1	69.7	-80.2	75.4	0.0				12.00	r	153.20	253.54	82.00
R1-2			2	73.6	-80.2	75.4	0.0				22.00	r	153.20	253.54	92.00
R1-3			3	73.6	-80.2	75.4	0.0				32.00	r	153.20	253.54	102.00
R1-4			4	72.0	-80.2	75.4	0.0				42.00	r	153.20	253.54	112.00
R2-1			5	58.5	-80.2	75.4	0.0				12.00	r	328.84	269.23	82.00
R2-2			6	59.1	-80.2	75.4	0.0				22.00	r	328.84	269.23	92.00
R2-3			7	59.7	-80.2	75.4	0.0				32.00	r	328.84	269.23	102.00
R2-4			8	60.1	-80.2	75.4	0.0				42.00	r	328.84	269.23	112.00
R3-1			9	66.9	-80.2	75.4	0.0				12.00	r	333.39	336.11	82.00
R3-2			10	66.6	-80.2	75.4	0.0				22.00	r	333.39	336.11	92.00
R3-3			11	65.9	-80.2	75.4	0.0				32.00	r	333.39	336.11	102.00
R3-4			12	65.2	-80.2	75.4	0.0				42.00	r	333.39	336.11	112.00
R4-1			13	66.4	-80.2	75.4	0.0				12.00	r	537.40	336.11	82.00
R4-2			14	66.1	-80.2	75.4	0.0				22.00	r	537.40	336.11	92.00
R4-3			15	65.5	-80.2	75.4	0.0				32.00	r	537.40	336.11	102.00
R4-4			16	64.8	-80.2	75.4	0.0				42.00	r	537.40	336.11	112.00
R5-1			17	70.1	-80.2	75.4	0.0				12.00	r	659.88	279.28	82.00
R5-2			18	74.5	-80.2	75.4	0.0				22.00	r	659.88	279.28	92.00
R5-3			19	72.9	-80.2	75.4	0.0				32.00	r	659.88	279.28	102.00
R5-4			20	71.6	-80.2	75.4	0.0				42.00	r	659.88	279.28	112.00
R6-1			21	58.1	-80.2	75.4	0.0				12.00	r	751.65	281.85	82.00
R6-2			22	59.6	-80.2	75.4	0.0				22.00	r	751.65	281.85	92.00
R6-3			23	60.8	-80.2	75.4	0.0				32.00	r	751.65	281.85	102.00
R6-4			24	62.4	-80.2	75.4	0.0				42.00	r	751.65	281.85	112.00

Point Sources

Name	Sel.	M.	ID	Result. PWL			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Height		Coordinates		
				Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day	Special	Night						X	Y	Z
				(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(ft²)		(min)	(min)	(min)	(dB)	(Hz)		(ft)		(ft)	(ft)	(ft)
Excavator				108.9	108.9	108.9	Lw	C1		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	157.73	193.12	61.08
Excavator				108.9	108.9	108.9	Lw	C1		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	683.40	205.01	62.77
Compactor				108.7	108.7	108.7	Lw	C13		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	5.00	r	155.06	193.29	61.09
Compactor				108.7	108.7	108.7	Lw	C13		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	5.00	r	677.54	203.97	62.52
Excavator				108.9	108.9	108.9	Lw	C1		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	149.15	235.16	75.00
Excavator				108.9	108.9	108.9	Lw	C1		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	667.54	264.90	75.00
Compactor				108.7	108.7	108.7	Lw	C13		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	5.00	r	158.68	235.46	75.00
Compactor				108.7	108.7	108.7	Lw	C13		0.0	0.0	0.0				96.00	0.00	0.00	0.0		(none)	5.00	r	660.63	263.58	75.00
Dump Truck				107.1	107.1	107.1	Lw	C4		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	379.60	340.64	75.00
Dump Truck				107.1	107.1	107.1	Lw	C4		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	488.54	345.41	75.00
Dump Truck				107.1	107.1	107.1	Lw	C4		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	162.77	190.98	60.15
Dump Truck				107.1	107.1	107.1	Lw	C4		0.0	0.0	0.0				192.00	0.00	0.00	0.0		(none)	5.00	r	655.21	205.22	62.77

Barriers

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height			
				left	right		horz.	vert.	Begin		End	
						(ft)	(ft)	(ft)	(ft)		(ft)	
Sound Barrier									8.00	r		
Sound Barrier									8.00	r		

Geometry - Barriers

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height				Coordinates			
				left	right		horz.	vert.	Begin		End		x	y	z	Ground
						(ft)	(ft)	(ft)	(ft)		(ft)		(ft)	(ft)	(ft)	(ft)
Sound Barrier									8.00	r			654.77	263.11	78.00	70.00
													655.63	267.42	78.00	70.00
													673.37	266.90	78.00	70.00
													672.85	261.22	78.00	70.00
Sound Barrier									8.00	r			144.86	231.99	78.00	70.00
													144.21	239.37	78.00	70.00
													164.07	239.15	78.00	70.00
													163.96	233.08	78.00	70.00

Buildings

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	
							Begin	
							(ft)	
West Bldg			BL_1	x	0		45.00	r
East Bldg			BL_2	x	0		45.00	r

Geometry - Buildings

Name	Sel.	M.	ID	RB	Residents	Absorption	Height		Coordinates			
							Begin		x	y	z	Ground
							(ft)		(ft)	(ft)	(ft)	(ft)
West Bldg			BL_1	x	0		45.00	r	70.40	465.87	115.00	70.00
									72.81	248.82	115.00	70.00
									332.58	271.90	115.00	70.00
									325.69	464.49	115.00	70.00
East Bldg			BL_2	x	0		45.00	r	534.03	465.96	115.00	70.00
									539.67	276.27	115.00	70.00
									791.86	283.65	115.00	70.00
									781.01	469.00	115.00	70.00

Terrain Contours

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)
c1							61.61	7.92	32.00
							186.29	17.76	28.00
							288.00	30.89	43.00
							405.03	27.06	32.00
							473.38	23.23	29.00
							690.48	0.27	26.00
							828.29	1.36	33.00
							875.86	0.27	35.00
c2							59.84	61.58	31.00
							146.24	70.88	38.00
							266.00	76.90	29.00
							352.95	80.18	35.00
							511.53	74.71	32.00
							662.46	75.80	32.00
							739.57	59.40	32.00
							818.31	41.35	45.00
							835.81	35.88	36.00
							867.53	35.34	36.00
c3							71.32	127.75	46.00
							111.76	149.36	46.00
							152.23	154.25	47.00
							276.39	143.61	44.00
							372.08	145.25	35.00
							484.74	144.71	39.00
							597.39	145.25	44.00
							684.33	145.80	41.00
							747.22	143.06	42.00
							829.25	143.61	40.00
							842.37	144.71	37.00
							872.45	144.16	37.00
c4							72.96	155.10	42.00
							141.86	163.30	42.00
							206.94	164.39	44.00
							287.32	167.13	44.00
							368.26	166.03	45.00
							472.16	167.13	47.00
							570.59	169.31	44.00
							664.10	167.13	49.00
							753.78	164.39	42.00
							838.55	167.13	38.00
							846.20	166.03	37.00
							866.43	166.03	37.00
c5					70.00		68.11	469.64	70.00
							67.01	244.89	70.00

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)
							165.99	243.25	70.00
							311.45	248.17	70.00
							806.35	258.56	70.00
							799.24	476.75	70.00
							65.37	470.74	70.00
c6					40.00		900.24	483.66	40.00
							829.06	483.66	40.00
							847.29	181.57	40.00
							893.30	181.57	40.00
c7					70.00		79.25	217.55	70.00
							84.77	186.53	70.00
							154.38	203.07	70.00
							268.11	211.35	70.00
							339.10	216.17	70.00
							337.72	200.32	70.00
							696.81	213.41	70.00
							696.12	225.13	70.00
							827.77	229.95	70.00
							831.21	265.11	70.00
c8							763.10	225.47	61.33
							701.98	223.55	61.33
							702.26	218.77	61.33
							698.02	218.77	61.33
							697.61	211.66	59.33
							586.50	207.44	58.17
							335.52	198.74	57.25
							335.70	212.69	58.00
							334.58	212.63	59.33
							152.07	196.50	57.50

Sound Level Spectra

Name	ID	Type	1/3 Oktave Spectrum (dB)											Source
			Weight.	63	125	250	500	1000	2000	4000	8000	A	lin	
Excavator	C1	Lw (c)		111.0	114.0	107.0	104.0	103.0	101.0	100.0	97.0	108.9	117.0	Defra
Mini Excavator	C2	Lw (c)		107.0	104.0	93.0	97.0	93.0	90.0	85.0	80.0	98.6	109.3	Defra
Bulldozer	C3	Lw (c)		114.0	112.0	107.0	108.0	113.0	101.0	96.0	89.0	114.2	118.7	Defra
Dump Truck	C4	Lw (c)		108.0	108.0	107.0	103.0	102.0	100.0	95.0	85.0	107.1	113.5	Defra
Concrete Mixer	C5	Lw (c)		110.0	111.0	104.0	103.0	100.0	99.0	90.0	84.0	105.8	114.6	Defra
Concrete Pump	C6	Lw (c)		115.0	106.0	102.0	101.0	101.0	100.0	92.0	83.0	105.8	116.1	Defra
Generator	C7	Lw (c)		110.0	105.0	98.0	95.0	86.0	82.0	76.0	71.0	96.1	111.5	Defra
Compressor	C8	Lw (c)		115.0	104.0	95.0	90.0	88.0	86.0	89.0	78.0	96.5	115.4	Defra
Jackhammer	C9	Lw (c)		115.0	115.0	105.0	106.0	104.0	108.0	114.0	112.0	117.6	120.8	Defra
Power-Driven Saw	C10	Lw (c)		103.0	120.0	112.0	111.0	111.0	113.0	117.0	116.0	121.6	124.0	Defra
Hydraulic Jack	C11	Lw (c)		98.0	111.0	105.0	103.0	103.0	103.0	99.0	92.0	108.7	113.7	Defra
Drill Rig	C12	Lw (c)		115.0	123.0	112.0	111.0	109.0	107.0	99.0	92.0	114.6	124.4	Defra
Compactor	C13	Lw (c)		112.0	107.0	103.0	104.0	103.0	103.0	99.0	94.0	108.7	114.8	Defra
Compact Crane	C14	Lw (c)		111.0	107.0	102.0	94.0	95.0	94.0	87.0	81.0	100.8	113.0	Defra

Attachment A: Exhibit 2

Rio Vista Platform Design Phase II Project

Mitigation Monitoring and Reporting Plan

Task and Brief Description	Timing	Responsible Party	Completed	Initials	Notes (optional)
Biological Resources/Land Use					
BIO-1: Every individual working on the Project must attend a biological awareness training session delivered by a CDFW qualified biologist. This training program will include information regarding the sensitive habitats and special status species occurring or potentially occurring within the Project area, and the importance of avoiding impacts to these species and their habitat.	Prior to and During Construction	Contractor	☐	_____	
BIO-2: Prior to the start of construction activities, the Project limits within the San Diego River Parkway will be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking in accordance with the First San Diego River Improvement Plan to ensure construction will not further encroach into sensitive resources.	Prior to Construction	Contractor	☐	_____	
BIO-3: Best Management Practices (BMPs) will be incorporated into Project design and Project management to minimize impacts on the environment including erosion and the release of pollutants (e.g., oils, fuels): • Exposed soils and material stockpiles will be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities; • All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters; • Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants; • Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life will be prevented from contaminating the soil or entering jurisdictional waters; • All erosion control measures, and storm water control measures would be properly maintained until the site has returned to a pre-construction state; • All construction materials would be hauled off-site after completion of construction.	Prior to and During Construction	Contractor	☐	_____	

Task and Brief Description	Timing	Responsible Party	Completed	Initials	Notes (optional)
BIO-4: Vegetation removal will be avoided to the greatest extent practicable. Where feasible, trees and shrubs will be trimmed rather than removed.	Prior to Construction	Contractor	☐	_____	
BIO-5: Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants must remain outside of sensitive habitat marked with high-visibility fencing. Any necessary equipment washing must occur where the water cannot flow into sensitive habitat communities.	During Construction	Contractor	☐	_____	
BIO-6: A chemical spill kit must be kept onsite and available for use in the event of a spill.	During Construction	Contractor	☐	_____	
BIO-7: MTS will develop a post-construction revegetation and monitoring plan to restore the Project's temporary impacts to riparian vegetation. Revegetation of the temporarily impacted Project areas will be conducted in accordance with the Development and Mitigation Guidelines outlined in the NRMP of the FSDRIP. The revegetation plan, monitoring period, and associated success criteria will be determined in coordination with CDFW during the permitting phase of the Project.	Prior to Construction and Post Construction	MTS	☐	_____	
BIO-8: Prior to vegetation removal or initial ground disturbance during the nesting bird season (February 1 – September 30) a pre-construction nesting bird survey must be conducted by a Project biologist prior to the start of work. The nesting bird survey must include the Project area plus a 250-foot buffer. Within 2 weeks of the nesting bird survey, all areas surveyed by the biologist must be cleared by the contractor or a supplemental nesting bird survey is required. A minimum 100 foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 300 foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the buffer area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the Project biologist and in coordination with wildlife agencies) in the buffer area until	Prior to Construction	MTS and Contractor	☐	_____	

Task and Brief Description	Timing	Responsible Party	Completed	Initials	Notes (optional)
a qualified biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by the Project biologist and approved by CDFW.					
BIO-9: To avoid impacts to special status migratory birds, clearing, grubbing, grading, and other Project-related construction activities will occur between September 15 and February 15, outside the southwestern willow flycatcher breeding season (April 15 - August 31), the coastal California gnatcatcher breeding season (February 15 – August 15), and the least Bell's vireo breeding season (March 15 - September 15). No incidental take of the above species is permitted by this Project.	Prior to Construction	MTS and Contractor	☐	_____	
BIO-10: To avoid impacts to roosting bats, trees that may contain roosting bats must be removed between September 1 and March 1, outside of the bat maternity season.	Prior to Construction	MTS and Contractor	☐	_____	
BIO-11: Prior to vegetation removal or initial ground disturbance, a pre-construction clearance survey must be conducted by a Project biologist within two-striped gartersnake habitat (riparian corridor). Within 2 weeks of the pre-construction survey, all areas surveyed by the biologist must be cleared by the contractor or a supplemental clearance survey is required.	Prior to Construction	MTS and Contractor	☐	_____	
BIO-12: All excavated steep-walled holes and trenches within two-striped gartersnake habitat that are more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps at an angle of no more than 30 degrees constructed of earth fill or wooden planks at the end of each workday or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within two-striped gartersnake habitat will be inspected for two-striped gartersnake prior to being moved.	During Construction	Contractor	☐	_____	

Task and Brief Description	Timing	Responsible Party	Completed	Initials	Notes (optional)
BIO-13: If erosion control is implemented within two-striped gartersnake habitat (riparian corridor), nonentangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure snakes are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.	During Construction	Contractor	☐	_____	
BIO-14: If a two-striped gartersnake is encountered during construction activities, the Project biologist will be notified and construction activities will be suspended in a 50-foot radius of the animal until it leaves the project site on its own volition. A qualified biologist may relocate a two-striped gartersnake to outside the project area.	During Construction	Contractor	☐	_____	
Cultural Resources/Tribal Cultural Resources					
CR-1 The construction contractor will implement an archaeological and Native American monitoring program during initial grading and other ground-disturbing construction activities. The monitoring program will include the retention of a qualified archaeologist and a Native American monitor from the Campo Band of Mission Indians. The archaeological and Native American monitors will attend a pre-construction meeting with the construction manager and be in attendance during initial ground disturbing activities at the project site. The monitors will determine the extent of their presence during soil disturbing activities. The archaeological and Native American monitors will have the authority to temporarily halt or redirect grading and other ground-disturbing activity if cultural resources are encountered. If a resource is encountered, all operations within 50 feet of where the resource was found will be suspended immediately, MTS will be notified, and the qualified archaeologist, in consultation with the Native American monitor, will evaluate the significance of the find. If cultural material is determined to be significant, the qualified archaeologist will coordinate with the consulting tribes and MTS staff to develop and implement appropriate treatment	Prior to and During Construction	MTS, archaeological and Native American monitors, and Contractor	☐	_____	

Task and Brief Description	Timing	Responsible Party	Completed	Initials	Notes (optional)
measures. Pursuant to California PRC § 21083.2(b), avoidance is the preferred method of preservation. The archaeologist and the tribal representative will make recommendations to MTS on the measures that will be implemented to protect the newly discovered cultural resource(s), including but not limited to, avoidance in place, excavation, relocation, and further evaluation of the discoveries in accordance with CEQA. No further ground disturbance will occur in the area of the discovery until MTS approves the measures to protect the significant cultural resource(s).					
CR-2 Section 5097.94 of the PRC and Section 7050.5 of the California Health and Safety Code protect Native American burials, skeletal remains and grave goods, regardless of age and provide method and means for the appropriate handling of such remains. If human remains are encountered, work would halt in that vicinity and the county coroner would be notified immediately. At the same time, an archaeologist would be contacted to evaluate the situation. If the human remains are of Native American origin, the coroner must notify the NAHC within twenty-four hours of such identification. CEQA details steps to be taken if human burials are of Native American origin.	During Construction	MTS and Contractor	☐	_____	
Noise					
NOI-1 During Phase 1, Phase 3, and Phase 4 of construction of the Project, temporary sound barriers will be required. During Phase 1, a sound barrier with a minimum height of 12 feet is required when the power-driven saw and/or jackhammer will be used within 50 feet of residential buildings. For Phases 3 and 4, a sound barrier with a minimum height of 8 feet is required when activities will take place within 30 feet of residential buildings.	Prior to and During construction	MTS and Contractor	☐	_____	
NOI-2 The Project will comply with the construction noise limits found within Section 59.5.0404 of the San Diego Municipal Code. Construction activity is prohibited between the hours of 7 p.m. and 7 a.m. and on Sundays or legal holidays, and that during permissible hours of operation, noise levels from construction	Prior to and During construction	MTS and Contractor	☐	_____	

Task and Brief Description	Timing	Responsible Party	Completed	Initials	Notes (optional)
activity must be limited to a 12-hour average of no greater than 75 dBA at any residential use unless a permit has been applied for and granted beforehand by the City of San Diego's Noise Abatement and Control Administrator.					
CDFW Permit Conditions: To be Included upon Issuance of the Section 1602 Streambed Alteration Agreement					

Metropolitan Transit System

April 22, 2024

MTS Doc. No. PWL353.0-22
WOA353-AE-09.01

John Klemunes, PE Regional
Manager
Dokken Engineering
1450 Frazee Road, Suite
100 San Diego, CA 92108

Dear John Klemunes:

Subject: AMENDMENT NO. 1 TO WORK ORDER WOA353-AE-09, TO MTS DOC. NO. PWL353.0-22, ENGINEERING SERVICES FOR RIO VISTA/MORENA WALL BUTTRESS

This letter shall serve as Amendment No. 1 Work Order WOA353-AE-09, under the General Engineering Consultant Agreement, MTS Doc. No. PWL353.0-22, as further described below.

SCOPE OF SERVICES

This Amendment shall add environmental clearance and 90% design services to the Scope of Services for Rio Vista/Morena Wall Buttress (Attachment A).

SCHEDULE

As a result of this Amendment, the Schedule shall be extended by a period of seventy (70) weeks. The revised completion date of the Scope of Services, as described above, shall be for a period of one-hundred twenty-seven (127) weeks from the date of the Notice to Proceed.

PAYMENT

As a result of this amendment, the payment shall be increased by $141,335.96. The revised payment shall be based on actual costs in the amount not to exceed $712,181.85 without prior authorization of MTS (Attachment B).

Please sign below, and return the document to the Contracts Specialist at MTS. All other terms and conditions shall remain the same and in effect.

Sincerely,

Sharon Cooney

Sharon Cooney
Chief Executive Officer

Accepted:

John Klemunes, PE
~~Regional Manager~~, Dokken Engineering
President

Date: May 7 2024

Attachments: A. Scope of Services
B. Negotiated Fee Proposal

ATTACHMENT A
SCOPE OF SERVICES

WORK ORDER TITLE: RIO VISTA PLATFORM DESIGN – PHASE II
WORK ORDER NO. WOA353-AE-09.01

I. SCOPE OF WORK

This task order is for work required to develop recommendations for the retrofit of the walls, plan and obtain temporary construction easements and construction access to the site, develop environmental documents required for construction, and develop construction plans, specifications, and estimates, which includes the following:

Task 3.1.4 Environmental Permits

3.1.4.1 Section 1602 Streambed Alteration Agreement

Activities that have permanent or temporary impacts to lakes, streambeds, or their associated riparian areas are regulated by the California Department of Fish and Wildlife (CDFW). The project would impact riparian habitat as a result of the temporary construction access road; therefore, upon receipt of 60% plans, Consultant shall coordinate with the CDFW to obtain a Section 1602 Streambed Alteration Agreement. On MTS' behalf, Consultant shall delineate boundaries of CDFW jurisdiction, assess project impacts, prepare a Notification of Streambed Alteration, and enter into a Streambed Alteration Agreement with CDFW for the trail construction.

Deliverables: Section 1602 Streambed Alteration Agreement

3.1.4.2 Habitat Mitigation and Monitoring Plan

Pursuant to CDFW requirements, a Habitat Mitigation and Monitoring Plan (HMMP) will need to be prepared in support of the 1602 application. The HMMP presents a compensatory mitigation strategy for temporary and permanent impacts to State jurisdictional resources. Mitigation is anticipated to include revegetation of temporarily impacted areas, as well as incorporating enhancement, restoration, or establishment opportunities within or directly adjacent to the project site. The HMMP will be generated as a comprehensive document with supportive maps and graphics detailing project impacts and mitigation requirements, existing conditions of areas anticipated for impacts and provide strategies for the mitigation program. The HMMP will describe specific methods of habitat restoration, including restoration goals and objectives, plant and seed palettes, installation methods, site protection measures, a projected project timeline, preliminary, high-level cost estimate, methods for site appropriate quantitative data collection, and specific guidelines for a post-installation interim maintenance and monitoring period. The HMMP will articulate a rationale for success of the proposed mitigation program, establish functional performance standards based on the site assessment, and set realistic and achievable success criteria goals for end of project acceptance. The HMMP will be sent to MTS for review prior to sending to CDFW along with the 1602 permit application.

Deliverables: Draft and Final Habitat Mitigation and Monitoring Plan

Task 5 Design Development (90%)

5.5 Survey

Aguirre & Associates (A&A) will support Dokken Engineering in preparing a comprehensive topographic survey for the Rio Vista Station Platform Design- Phase II project site. A&A will conduct reconnaissance, tying to nearby monuments, with the primary survey control based on ROS 14492 and vertical control set at NGVD 29 per the city benchmark.

The survey scope encompasses topographic mapping of existing station platform features, platform amenities, bridge abutment features, retaining wall features, above-ground evidence of underground utilities, and any other notable surface features within the improvement limits, as provided by the design engineer. A&A will also perform dipping and detailing of all storm drain and sanitary sewer manholes/inlets within the project boundaries.

Work included Right of Entry and flaggers will be coordinated by Dokken.

Deliverables: Digital Terrain Model (DTM), Topographic Mapping in AutoCAD, .Txt file and PDF copies of dip details

5.6 Plats and Legals

Aguirre & Associates will identify existing right-of-way lines and prepare a boundary survey for three private properties adjacent to the project site and conduct a boundary survey. In order to perform work on the MTS site, construction crews will need to ingress/egress through the following three private properties:

- Promenade Acquisition LLC, APN:438-362-13-00
- San Diego Metropolitan Transit System, APN:438-362-12-00
- Conrock, APN:438-362-11-00

A&A will also prepare a boundary survey to support plats and legal descriptions for various existing easements within the private properties. The design engineer has identified up to 11 existing easements within the properties that that may be impacted during construction. These legal descriptions and plats will be developed from the land net base mapping and signed and sealed by a California Professional Land Surveyor.

Deliverables: Land Net Base Map, Plats and legals for up to 11 Existing Easements, .Txt file and PDF copies of Plats and Legals

5.7 Base Map Creation/Design Update to New Survey

Once the topographic data is delivered and reviewed by Dokken Engineering (DE), DE will create an existing conditions base map using the digital terrain model (DTM) and topographic mapping. The original base map was generated for the 60% early package submittal, based on 2018 design and existing files from MTS. Our team identified a significant horizontal shift of up to 3' when compared to recent wall monitoring survey data. Due to the unreliability of the original line work, a completely new base map needs to be constructed, resulting in a considerable amount of rework for the layout of proposed improvements consistent with the new topographic survey mapping.

Dokken Engineering will also generate an updated existing utilities base map, based on above-ground evidence of underground utilities obtained from the survey.

Deliverables: Existing Conditions Base Map, Existing Utilities Base Map

5.8 Additional Structural Detailing/Calculations

The original project scope assumed a single global solution for repairing of the existing displaced Mechanically Stabilized Embankment (MSE) panels of the South and North-East segments of the retaining wall. However, upon a thorough review of the site conditions and constraints, available as-built documents, and consultation with the project team discipline experts during the Schematic Design phase of the project, it was determined that individual repair solutions would be required at limited elements of the existing MSE walls in lieu of a single global repair for the entirety of the MSE walls.

During the 9/14/2023 Project Development Team meeting, repair alternatives were presented to MTS, leading to the selection of three discrete repair strategies by the project team. These repair solutions were based on the site access for construction, constraints of the existing wall configuration, and the non-metallic soil reinforcement of the existing MSE system at the Rio Vista Station platform.

The repair solutions include:

- Utilizing horizontal tie-rods anchored into concrete deadman blocks in combination with horizontal ground anchors at the Rio Vista Station platform,
- Implementing horizontal tie-rods anchored into opposing MSE panels to the West of the station,
- Excavation with concrete backfill to realign affected panels East of the station.

Each distinct repair solution requires individual engineering analysis, repair details, and a unique construction sequence that must be provided within the project retrofit documents (plans and specifications), requiring additional time and resources beyond the originally scoped single global solution.

Deliverables: Additional repair alternatives and calculations in PSEs.

II. PERIOD OF PERFORMANCE

Services shall add seventy (70) weeks to the work order duration.

III. DELIVERABLES

The following deliverables will be prepared under this amendment: Section 1602 Streambed Alteration Agreement, a Habitat Mitigation and Monitoring Plan, Digital Terrain Model (DTM), Topographic Mapping in AutoCAD, .Txt file and PDF copies of dip details, Land Net Base Map, Plats and legals for up to 11 Existing Easements, .Txt file and PDF copies of Plats and Legals, Existing Conditions Base Map, Existing Utilities Base Map, additional repair alternatives and calculations in PSEs.

IV. SCHEDULE OF SERVICES/MILESTONES/DELIVERABLES

A. Tasks Schedule

Task	Begin/End Dates
TASK 3.1.4: Environmental Permits	70 Weeks
TASK 5.5: Survey	4 Weeks
TASK 5.6: Plats and Legals	16 Weeks
TASK 5.7: Base Map Creation	8 Weeks

TASK 5.8: Additional Structural Detailing	14 Weeks

B. Milestones/Deliverables Schedule

Milestone/Deliverable	**Due Date**
Monthly progress reports	Monthly
Task 5: 90% DD Completion	15 Weeks
Task 3.1.4 Completion	70 Weeks

ATTACHMENT B
NEGOTIATED FEE PROPOSAL

Work Order Estimate Summary

MTS Doc. No.	**PWL353.0-22**
Work Order No.	**WOA353-AE-09.01**
Attachment:	**B**

Work Order Title: **MTS RIO VISTA PLATFORM DESIGN – PHASE II**

Project No:

Table 1 - Cost Codes Summary (Costs & Hours)

Item	Cost Codes	Cost Codes Description	Total Costs
1	Labor	Direct Labor	$140,095.96
2	ODC	Other Direct Costs	$1,240.00
		Totals =	**$141,335.96**

Table 2 - TASKS/WBS Summary (Costs & Hours)

Item	TASKS/WBS	TASKS/WBS Description	Labor Hrs	Total Costs
3	Task 3	Environmental Clearance	160	$21,744.08
5	Task 5	Design Development (90%)	706	$118,391.88
		Totals =	**866**	**$141,335.96**

Table 3 - Consultant/Subconsultant Summary (Costs & Hours)

(If Applicable, Select One)				Consultant	Labor Hrs	Total Costs
DBE	DVBE	SBE	Other			
				Dokken Engineering	504	$78,236.48
				Aguirre & Associates	362	$63,099.48
				Totals =	**866**	**$141,335.96**

Work Order Estimate
Summary

Total Hours = **504**

Total Costs = **$78,236.48**

Consultant/Subconsultant: **Dokken Engineering**

Work Order Title: **MTS RIO VISTA PLATFORM DESIGN – PHASE II**

MTS Doc. No.: **PWL353.0-22**

Work Order No.: **WOA353-AE-09.01**

Attachment: **B**

Item	TASKS/WBS	TASKS/WBS Description	ODCs (See Attachment)	Engineer - Principal	Contract Manager	Task Manager	Task Manager (Structures)	Engineer - Senior	Engineer - 3	Engineer - 2	Engineer - 1	Biologist - Senior	Biologist - 3	Biologist - 2	Environmentalist - 3	Total Hours	Totals
				$ 403.65	$ 299.01	$ 212.00	$ 212.00	$ 202.46	$ 169.80	$ 150.11	$ 111.07	$ 215.29	$ 128.58	$ 89.70	$ 146.52		
3	**Task 3**	**Environmental Clearance**															
3.1.4	**Environmental Permits**																
3.1.4.1	Section 1602 Streambed Alteration Agreement				4							16	16	40	8	84	$11,458.12
3.1.4.2	Habitat Mitigation and Monitoring Plan				4							16	16	40		76	$10,285.96
	Total ODCs for Task 3																
		Subtotals (Hours) =	N/A		8							32	32	80	8	160	$21,744.08
		Subtotals (Costs) =			$2,392.08							$6,889.28	$4,114.56	$7,176.00	$1,172.16	**160**	**$21,744.08**
5	**Task 5**	**Design Development (90%)**															
5.5	Survey				2	6	4		8							20	$4,076.42
5.6	Plats and Legals				2	12			12							26	$5,179.62
5.7	Basemap creation/Design Update to New Survey					8				20	40					68	$9,141.00
5.8	Additional Structural Detailing/Calculations				4	6	8	32	80	40	60					230	$36,895.36
	Total ODCs for Task 5																
		Subtotals (Hours) =	N/A		8	32	12	32	100	60	100					344	$55,292.40
		Subtotals (Costs) =			$2,392.08	$6,784.00	$2,544.00	$6,478.72	$16,980.00	$9,006.60	$11,107.00					**344**	**$55,292.40**
																504	**$78,236.48**
		Totals (Summary) =														**504**	**$78,236.48**
		Total (Hours) =	N/A		16	32	12	32	100	60	100	32	32	80	8	504	$78,236.48
		Total (Costs) =	$1,200.00		$4,784.16	$6,784.00	$2,544.00	$6,478.72	$16,980.00	$9,006.60	$11,107.00	$6,889.28	$4,114.56	$7,176.00	$1,172.16		
		Percentage of Total (Hours) =	N/A		3%	6%	2%	6%	20%	12%	20%	6%	6%	16%	2%		
		Percentage of Total (Costs) =	2%		6%	9%	3%	8%	22%	12%	14%	9%	5%	9%	1%		

Work Order Estimate
Summary

Consultant/ Subconsultant: **Dokken Engineering**

Work Order Title: **MTS RIO VISTA PLATFORM DESIGN – PHASE II**

Contract No: **PWL353.0-22**

Task Order No. **WOA353-AE-09.01**

Attachment: **B**

TASKS/WBS (1-5)

ODC Item	Description	Unit	Unit Cost	Task 1		Task 2		Task 3		Task 4		Task 5	
				Quantity	Total	Quantity	Total	Quantity	Total	Quantity	Total	Quantity	Total
1	Right of Entry Permit Fee	LS	$1,200.00	1	$1,200.00								
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
				Subtotal =	**$1,200.00**	Subtotal =		Subtotal =		Subtotal =		Subtotal =	

TASKS/WBS (6-10)

ODC Item	Description	Task 6		Task 7		Task 8						Totals	
		Quantity	Total	Quantity	Total	Quantity	Total	Quantity	Total	Quantity	Total	Quantity	Total
1	Right of Entry Permit Fee											1	$1,200.00
2													
3													
4													
5													
6													
7													
8													
9													
10													
		Subtotal =		Subtotal =		Subtotal =		Subtotal =		Subtotal =		**Totals =**	**$1,200.00**

Work Order Estimate Summary

Consultant/Subconsultant: **Aguirre & Associates**

MTS Doc. No.: **PWL353.0-22**

Work Order No.: **WOA353-AE-09.01**

Total Hours = **362**

Total Costs = **$63,099.48**

Work Order Title: **MTS RIO VISTA PLATFORM DESIGN – PHASE II**

Attachment: **B**

Item	TASKS/WBS	TASKS/WBS Description	ODCs (See Attachment)	Surveyor - Senior	Surveyor - 3	Party Chief (PW)	Chainman (PW)				Total Hours	Totals
				$ 170.66	$ 117.66	$ 247.22	$ 242.98					
3	Task 3	Environmental Clearance										
3.1.4	Environmental Permits											
3.1.4.1	Section 1602 Streambed Alteration Agreement											
3.1.4.2	Habitat Mitigation and Monitoring Plan											
	Total ODCs for Task 3											
		Subtotals (Hours) =	N/A									
		Subtotals (Costs) =										
5	Task 5	Design Development (90%)										
5.5	Survey			88	150	62	62				362	$63,059.48
5.6	Plats and Legals											
5.7	Basemap creation/Design Update to New Survey											
5.8	Additional Structural Detailing/Calculations											
	Total ODCs for Task 5		$40.00									$40.00
		Subtotals (Hours) =	N/A	88	150	62	62				362	$63,099.48
		Subtotals (Costs) =	$40.00	$15,018.08	$17,649.00	$15,327.64	$15,064.76				**362**	**$63,099.48**
											362	**$63,099.48**
		Totals (Summary) =								Totals =	**362**	**$63,099.48**
		Total (Hours) =	N/A	88	150	62	62				362	$63,099.48
		Total (Costs) =	$40.00	$15,018.08	$17,649.00	$15,327.64	$15,064.76					
		Percentage of Total (Hours) =	N/A	24%	41%	17%	17%					
		Percentage of Total (Costs) =	0%	24%	28%	24%	24%					

Work Order Estimate
Summary

Consultant/ Subconsultant: **Aguirre & Associates**

Work Order Title: **MTS RIO VISTA PLATFORM DESIGN – PHASE II**

Contract No: **PWL353.0-22**

Task Order No. **WOA353-AE-09.01**

Attachment: **B**

TASKS/WBS (1-5)

ODC Item	Description	Unit	Unit Cost	Task 1 Quantity	Task 1 Total	Task 2 Quantity	Task 2 Total	Task 3 Quantity	Task 3 Total	Task 4 Quantity	Task 4 Total	Task 5 Quantity	Task 5 Total
1	Reference Maps	1	$40.00									1	$40.00
2													
3													
4													
5													
6													
7													
8													
9													
10													
				Subtotal =		Subtotal =		Subtotal =		Subtotal =		Subtotal =	**$40.00**

TASKS/WBS (6-10)

ODC Item	Description	Quantity	Total	Quantity	Total	Quantity	Total	Quantity	Total	Quantity	Total	Totals Quantity	Totals Total
1	Reference Maps											**1**	**$40.00**
2													
3													
4													
5													
6													
7													
8													
9													
10													
		Subtotal =		Subtotal =		Subtotal =		Subtotal =		Subtotal =		**Totals =**	**$40.00**

Metropolitan Transit System

February 12, 2026

MTS Doc. No. PWL353.0-22
WOA353-AE-09.02

Mr. John Klemunes, PE
Regional Manager
Dokken Engineering
1450 Frazee Road, Suite 100
San Diego, CA 92108

Dear Mr. Klemunes:

Subject: AMENDMENT NO. 2 TO WORK ORDER WOA353-AE-09, TO MTS DOC. NO. PWL353.0-22, ENGINEERING SERVICES FOR RIO VISTA/MORENA WALL BUTTRESS

This letter shall serve as Amendment No. 2 Work Order WOA353-AE-09, under the General Engineering Consultant Agreement, MTS Doc. No. PWL353.0-22, as further described below.

SCOPE OF SERVICES

This Amendment shall add following funds and/or tasks to the Scope of Services for Rio Vista/Morena Wall Buttress (Attachment A):

1. Task 1, Project Management – Add funds for existing task.
2. Task 2.3.1, Obtain Updated Preliminary Title Reports/Title Research – Add new task and funds.
3. Task 2.9, Project Update and Introductory Letter – Add new task and funds.
4. Task 2.10, Right of Way Support to MTS/Coordination with City of San Diego - Add new task and funds.
5. Task 2.11, Appraisals, Negotiations and Escrow - Add new task and funds.
6. Task 9, Track Replacement – Add new task and funds.
7. Task 10, Tieback Revisions – Add new task and funds
8. Task 11, Eminent Domain/Condemnation Support Services (Optional) – Add new task and funds

SCHEDULE

As a result of this Amendment, the Schedule for the original work order and subsequent Amendment No. 1, shall be extended by one (1) year. The revised Schedule for the original work order and Amendment No. 1 shall be for a period of approximately three (3) years, four (4) months and twenty-nine (29) days from the date of the Notice to Proceed, or until December 17, 2026.

Furthermore, the Schedule for Amendment No. 2 shall be for a period of one (1) year from the issuance of a separate Notice to Proceed.

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PAYMENT

As a result of this amendment, the payment shall be increased by $148,689.69. The revised payment shall be based on actual costs in the amount not to exceed $860,871.54 without prior authorization of MTS (Attachment B).

Please sign below, and return the document to the Contracts Specialist at MTS. All other terms and conditions shall remain the same and in effect.

Sincerely,

Sharon Cooney
Chief Executive Officer

Accepted:

_____
John Klemunes, PE
Regional Manager, Dokken Engineering

Date: _____

Attachments: Attachment A, Scope of Services
Attachment B, Negotiated Fee Proposal

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ATTACHMENT A
SCOPE OF SERVICES

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WORK ORDER TITLE: RIO VISTA PLATFORM DESIGN – PHASE II **WORK ORDER NO.** WOA353-AE-09.02

I. SCOPE OF WORK

This task order covers the development of additional recommendations for the wall retrofits, track replacement, and ADA ramp upgrades at the Rio Vista Station, along with the associated right-of-way coordination, title updates, and acquisition services.

TASK 2 RIGHT OF WAY SERVICES

2.3.1 Obtain Updated Preliminary Title Reports/Title Research

Dokken Engineering will obtain three (3) updated preliminary title reports for three (3) affected parcels. The Dokken Engineering right of way team will perform all necessary research for each parcel being acquired. Agents may resolve or oversee resolution of problems relating to unusual circumstances with regard to title or ownership and uncover any flaws, noting any exceptions pertaining to property such as mortgage liens, restrictions, easements and rights of way.

Deliverables: 3 Preliminary Title Reports

2.9 Project Update and Introductory Letter

In adherence to the project schedule and transition into the right of way phase, two (2) notification letters will be prepared and delivered for three (3) affected parcels. These letters will inform the respective property owners of the project's status and provide recent updates. Additionally, the notification letter will serve to introduce Dokken Engineering as the designated right of way consultant and notify property owners that the right of way phase will commence shortly. This will also be utilized as a means of gaining contact information for the impacted property owners.

2.10 Right of Way Support to MTS/Coordination with City of San Diego

Due to the presence of City of San Diego–owned easements within the project limits, coordination with the City will be required to ensure compliance with existing encumbrances and easement terms. It is understood that the MTS will serve as the lead agency for all coordination efforts with the City. Dokken Engineering's right of way team will provide support to MTS, which will include participation in up to six (6) coordination meetings with City representatives, collaboration with title staff to obtain and review recorded easement documents, and analysis of easement rights and restrictions. The review will assess permissible uses, limitations, and the necessity of obtaining City consent or permits for any proposed work impacting City-held easements.

2.11 Appraisals, Negotiations and Escrow

Task 2 of Original Work Order WOA353-AE-09 identifies Right of Way efforts for two parcels. This task consists of the additional effort to incorporate a third parcel (APN 438-362-14-00). These efforts include appraisals, negotiations and escrow coordination, as well as inclusion into the project tracking table and close-out as described in Task 2 of the Original Work Order.

Deliverables: Plat maps and legmsal descriptions, Appraisal Report, Right of Way Agreement, Temporary Construction Easement Deed, Administrative Settlements, Diaries, Escrow Documents, Closing Statements, and updating Assessor Information

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TASK 9 TRACK REPLACEMENT

9.1 Track Replacement

The trolley tracks within the limits of the Rio Vista Station platform will be upgraded to an open ballast area. Dokken will provide Plans, Specifications, and Estimate (PS&E) for the removal of the existing concrete pavement to the open ballast condition, including replacement of the rail and underlying ballast and ties, as necessary.

Three ramps will be designed per SANDAG LRT standards to provide pedestrian crossings over the ballast tracks. Two ramps at the ends of the platform will be compliant with Americans with Disabilities Act (ADA) Accessibility Guidelines..

Deliverables: Revised 90% PS&E package

TASK 10 TIEBACK REVISIONS (TOP DOWN METHOD)

10.1 Structure Design

There are three design configurations for repairs of the south retaining wall (See Repair 1, Repair 2, and Repair 3 from the 90% structural drawings), that utilize tiebacks, dead-man anchors and horizontal soil anchors to minimize impacts to the platform and transit operations. With the addition of Track Replacement, transit closures enable alternative economic solutions to repair the wall. The 'Top-Down' method will be evaluated.

An preliminary concept and cost estimate of the revised alternative will be developed and presented to MTS. Upon approval, the Plans, Specifications and Estimate (PS&E) will be revised to incorporate the alternative design. An ODC is included for consultation with a Mechanically Stabilized Embankment (MSE) wall specialist.

Deliverables: Preliminary Concept submittal, Revised 90% PS&E package

TASK 11 EMINENT DOMAIN/CONDEMNATION SUPPORT SERVICES (OPTIONAL)

11.1 Eminent Domain/Condemnation Support Services

This task shall not be executed without prior written authorization from MTS.

Should this become necessary, Dokken Engineering will provide support and document preparation for all phases of condemnation if this becomes necessary. A resolution of necessity (RON) package will be generated by the MTS's counsel and Dokken will provide the following documents: litigation guarantee, an update to the appraisal if the report is dated more than six months from date of submittal of RON package, confirmation of market value. In addition, Dokken Engineering and its team will be available to provide support for the following: obtaining or serving as an expert witness, participating in an appraisal review meeting, attending settlement conferences.

Deliverables: RON Package

II. PERIOD OF PERFORMANCE

Services shall be completed within one (1) year from the approval date of the CEQA Initial Study/Mitigated Negative Declaration (IS/MND), which is assumed to coincide with the NTP for

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this amendment. Should Emininent Domain be required and authorized, services may be extended up to two (2) years from the date that CEQA is approved.

III. DELIVERABLES

Based on an assumed NTP start date of January 2026, the deliverables identified in the tasks above will be prepared under this amendment within 104 weeks of NTP.

IV. SCHEDULE OF SERVICES/MILESTONES/DELIVERABLES

A. Tasks Schedule

Task	Begin/End Dates
TASK 1: Project Management	NTP/52 Weeks
TASK 2: Additional Right of Way Services	NTP/52 Weeks
TASK 9: Track Replacement	NTP/16 Weeks
TASK 10: Tieback Revisions (Top Down Method)	NTP/16 Weeks
TASK 11: Eminent Domain Support (OPTIONAL)	52 Weeks/ 104 Weeks

B. Milestones/Deliverables Schedule

Milestone/Deliverable	Due Date
Monthly progress reports	Monthly
Preliminary Concept Submittal	NTP/6 Weeks
Revised 90% Construction Documents-Design Development (DD)	6 Weeks/16 Weeks
100% Construction Documents (CD)	16 Weeks/26 Weeks
Right of Way	NTP/52 Weeks
Resolution of Necessity (RON) [OPTIONAL]	NTP/104 Weeks

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ATTACHMENT B
NEGOTIATED FEE PROPOSAL

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Work Order Estimate Summary

MTS Doc. No.	PWL353.0-22
Work Order No.	WOA353-AE-09.02
Attachment:	B

Work Order Title: MTS Rio Vista Platform Design Phase II

Project No:

Table 1 - Cost Codes Summary (Costs & Hours)

Item	Cost Codes	Cost Codes Description	Total Costs
1	Labor	Total Direct Labor	$146,689.69
2	ODCs	Total Other Direct Costs	$2,000.00
		Totals =	**$148,689.69**

Table 2 - TASKS/WBS Summary (Costs & Hours)

Item	TASKS/WBS	TASKS/WBS Description	Labor Hrs	Total Costs
1	1	Project Management	46.0	$12,303.22
4	2	Right of Way Services	186.0	$31,067.34
2	9	Track Replacement	314.0	$51,151.08
3	10	Tieback Revisions (Top Down Method)	204.0	$39,287.82
5	11	Eminent Domain/Condemnation Support Services (OPTIONAL)	87.0	$14,880.23
8				
9				
10				
11				
6				
		Totals =	**546.0**	**$148,689.69**

Table 3 - Consultant/Subconsultant Summary (Costs & Hours)

(If Applicable, Select One)				Consultant	Labor Hrs	Total Costs
DBE	DVBE	SBE	Other			
				DOKKEN ENGINEERING	837.0	$148,689.69
				Totals =	**837.0**	**$148,689.69**

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Work Order Estimate
Summary

Total Hours: **837**

Total Costs: **$148,689.69**

Consultant/Subconsultant: **DOKKEN ENGINEERING**

Work Order Title: **MTS Rio Vista Platform Design Phase II**

Item	TASKS/WBS	TASKS/WBS Description	ODCs (See Attachment)	Contract Manager	Project Manager	Task Manager	Engineer - Senior	Engineer - 3	Engineer - 2	Engineer - 1	Environmentalist - 3	Technical Expert	Technician - 2	CADD - Senior	CADD - 3	Total Hours	Totals
				$ 335.35		$ 237.76	$ 227.06	$ 190.44	$ 168.34	$ 124.57	$ 164.32	$ 181.09	$ 83.84	$ 214.63	$ 145.88		
1	**Task 1**	**Project Management**															
1.1	Project Management			14		32										46	$12,303.22
		Subtotals (Hours) =	N/A	14		32										46	$12,303.22
		Subtotals (Costs) =		$4,694.90		$7,608.32										**46**	**$12,303.22**
2	**Task 2**	**Right of Way Services**															
2.3.1	Obtain Updated PTRs/Titlte Research (3)					2						10				12	$2,286.42
2.9	Project Update and Introductory Letter			2		5						10	15			32	$4,928.00
2.10	Right of Way Support to MTS/Coordination with City of San Diego			4		10		8				20	15			57	$10,121.92
2.11	Appraisals, Negotiations and Escrow					5						60	20			85	$13,731.00
		Subtotals (Hours) =	N/A	6		22		8				100	50			186	$31,067.34
		Subtotals (Costs) =		$2,012.10		$5,230.72		$1,523.52				$18,109.00	$4,192.00			**186**	**$31,067.34**
3	**Task 9**	**Track Replacement**															
9.1	Track Replacement			8			16	106	20	124					40	314	$51,151.08
		Subtotals (Hours) =	N/A	8			16	106	20	124					40	314	$51,151.08
		Subtotals (Costs) =		$2,682.80			$3,632.96	$20,186.64	$3,366.80	$15,446.68					$5,835.20	**314**	**$51,151.08**
4	**Task 10**	**Tieback Revisions (Top Down Method)**															
10.1	Structure Design			6		10	30	48	40						70	204	$37,287.82
	Total ODCs for Task 10		$2,000.00														$2,000.00
		Subtotals (Hours) =	N/A	6		10	30	48	40						70	204	$39,287.82
		Subtotals (Costs) =	$2,000.00	$2,012.10		$2,377.60	$6,811.80	$9,141.12	$6,733.60						$10,211.60	**204**	**$37,287.82**
5	**Task 11**	**Eminent Domain/Condemnation Support Services (OPTIONAL)**															
11.1	Eminent Domain/Condemnation Support Services			4		8						55	20			87	$14,880.23
		Subtotals (Hours) =	N/A	4		8						55	20			87	$14,880.23
		Subtotals (Costs) =		$1,341.40		$1,902.08						$9,959.95	$1,676.80			**87**	**$16,880.23**
	Totals (Summary) =															**837**	**$148,689.69**

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Work Order Estimate
Summary

Consultant/ Subconsultant: **DOKKEN ENGINEERING**

Work Order Title: **MTS Rio Vista Platform Design Phase II**

TASKS/WBS (1-6)

ODC Item	Description	Unit	Unit Cost	Task 1		Task 2		Task 3		Task 4		Task 5		Task 6	
				Quantity	Total	Quantity	Total	Quantity	Total	Quantity	Total	Quantity	Total	Quantity	Total
1	SSL (MSE)		$2,000.00					1							
2															
3															
4															
5															
6															
7															
8															
9															
10															
				Subtotal =		Subtotal =		Subtotal =		Subtotal =		Subtotal =		Subtotal =	

TASKS/WBS (7-10)

ODC Item	Description	Unit	Unit Cost	Task 7		Task 8		Task 9		Task 10		Task 11		Totals	
				Quantity	Total	Quantity	Total	Quantity	Total	Quantity	Total	Quantity	Total	Quantity	Total
1	SSL (MSE)		$2,000.00								$2,000.00			**1**	**$2,000.00**
2															
3															
4															
5															
6															
7															
8															
9															
10															
				Subtotal =		Subtotal =		Subtotal =		Subtotal =	**$2,000.00**	Subtotal =		**Totals =**	**$2,000.00**

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Agenda Item No. 06

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM
BOARD OF DIRECTORS

February 12, 2026

SUBJECT:

Interior Bus Cleaning Services – Sole Source Contract Award

RECOMMENDATION:

That the San Diego Metropolitan Transit System (MTS) Board of Directors authorize the Chief Executive Officer (CEO) to:

1) Execute MTS Doc. No. B0788.0-26 (in substantially the same format as Attachment A), with the ARC of San Diego (ARC), for deep cleaning the interiors of San Diego Transit Corporation (SDTC) buses for a five (5) year base period with two (2) 1-year options for a total of seven (7) years in the amount of $3,710,143.68; and

2) Exercise each option year at the CEO's discretion.

Budget Impact

The total cost of this contract is estimated to be $3,710,143.68 ($2,570,849.28 for the base years and $1,139,294.40 for the option years). This project will be funded by the SDTC Maintenance Operating Budget account 311014-536150.

DISCUSSION:

ARC is a private, not-for-profit charitable organization providing services for people with disabilities to promote personal, social, and economic independence. In 2005, the MTS Board of Directors awarded a one-year contract to ARC to deep-clean SDTC buses on a trial basis. At that time, staff worked in conjunction with the International Brotherhood of Electrical Workers (IBEW) 465 union and signed an agreement to allow ARC members to perform this work. This agreement made ARC workers honorary union members, which allowed them to perform this work without participating in the collective bargaining process. Since that trial contract was awarded, ARC has performed these services through a series of 5-year agreements. The most recent agreement, awarded in 2019, expires on March 31, 2026.

ARC's performance during the current contract term has been exceptional, and the costs have remained fair and reasonable. In addition, the socioeconomic benefit of a contract with ARC provides a win-win situation for both MTS and ARC.

The California Legislature encourages public agencies to purchase materials or services provided by public or private nonprofit California corporations operating workshops serving individuals with disabilities whenever it is feasible to do so as it provides equality of competitive advantage for organizations operating workshops for individuals with disabilities. Per Welfare and Institutions Code (WIC) Section 19404, public agencies may, without advertising or calling for bids, purchase materials or supplies provided by public or private nonprofit California corporations operating community rehabilitation program serving persons with disabilities, provided the goods or service meet the specifications and needs of the purchasing public agency and are purchased at a fair market price. ARC is an eligible nonprofit organization under this statute.

Staff recommends awarding a Sole Source agreement to ARC to continue the service they are providing. ARC has demonstrated that its personnel provide services at a consistently high level, and staff would like to renew the contract to continue receiving the services. By awarding this agreement to ARC, MTS provides direct support to people with disabilities to achieve some degree of financial independence and a meaningful means of livelihood.

Based on the staff's cost analysis, contracting this work to ARC will provide MTS an estimated annual savings of $55,000.00 as compared to performing this service in-house.

Therefore, staff recommends that the MTS Board of Directors authorize the CEO to:

1) Execute MTS Doc. No. B0788.0-26 (in substantially the same format as Attachment A), with the ARC, for deep cleaning the interiors of SDTC buses for a five (5) year base period with two (2) 1-year options for a total of seven (7) years in the amount of $3,710,143.68; and

2) Exercise each option year at the CEO's discretion.

/s/ Sharon Cooney
Sharon Cooney
Chief Executive Officer

Key Staff Contact: Julia Tuer, 619.557.4515, Julia.Tuer@sdmts.com

Attachments: A. Draft Agreement No. B0788.0-26
B. Scope of Work
C. Cost Form

Metropolitan Transit System

STANDARD AGREEMENT

FOR

MTS DOC. NO. B0788.0-26

INTERIOR BUS CLEANING SERVICES

THIS AGREEMENT is entered into this _____ day of _____, 2026 in the State of California by and between San Diego Metropolitan Transit System ("MTS"), a California public agency, and the following, hereinafter referred to as "Contractor":

Name: The Arc of San Diego

Address: 3030 Market Street

San Diego (City) CA (State) 92102 (Zip)

Form of Business: Non-Profit Organization
(Corporation, Partnership, Sole Proprietor, etc.)

Email: mmouer@arc-sd.com

Telephone: 619-795-4125

Authorized person to sign contracts Matt Mouer (Name) Vice President & COO (Title)

The Contractor agrees to provide services as specified in the conformed Scope of Work/Technical Specification (Exhibit A), Contractor's Cost/Pricing Form (Exhibit B), and in accordance with the Standard Agreement, including Standard Conditions (Exhibit C), Federal Requirements (Exhibit D), and Forms (Exhibit E).

The contract term is for five (5) base years and two (2) 1-year options, exercisable at MTS's sole discretion, for a total of up to seven (7) years. Base period shall be effective April 1, 2026 through March 31, 2031 and option years shall be effective April 1, 2031 through March 31, 2033, if exercised by MTS.

Payment terms shall be net 30 days from invoice date. The total cost of this contract shall not exceed $2,570,849.28 for the base years and $1,139,294.40 for the option years, for a contract total not to exceed $3,710,143.68 without the express written consent of MTS.

SAN DIEGO METROPOLITAN TRANSIT SYSTEM	THE ARC OF SAN DIEGO
By: _____ Sharon Cooney, Chief Executive Officer	By _____
Approved as to form:	
By: _____ Karen Landers, General Counsel	Title: _____

SCOPE OF WORK
INTERIOR BUS CLEANING SERVICES

I. General

MTS is requesting a quote to provide services for interior bus cleaning of MTS buses as described herein.

The contract term is for up to a seven (7) year period (*5-year base with two 1-year options, exercisable at MTS' sole discretion*). Base period shall be effective from April 1, 2026, through March 31, 2031. Option Years shall be effective from April 1, 2031, through March 31, 2033.

II. Tasks

The contract is for deep cleaning and detailing of the interior of MTS buses. This cleaning will be performed on the 40-foot buses and 60-foot articulated buses at the following locations below:

Imperial Avenue Division (IAD)	**Kearny Mesa Division (KMD)**
100 16th Street	4630 Ruffner Street
San Diego, CA 92101	Kearny Mesa, CA 92111

Uniforms shall be provided and laundered by MTS. All cleaning materials shall be provided by MTS. Minimum productivity shall be three (3) buses per day, per division, with articulated buses counting as 1.5 buses for incentive calculations.

The tasks include:

- Thorough washing and cleaning of vehicles ceilings, sidewalls, stanchions, handrails, windows (including tracks), passenger seats, and floors;
- Detailed cleaning of the rear section of the bus (from the rear door back);
- Removal of all gum from the interior, especially the floors, walls, and seats;
- Removal of all graffiti from the walls and seats;
- Other cleaning-related duties as assigned and approved by Contractor.

NOTE: Contractor's employees are required to verify the bus wheels have been chalked by MTS employees before starting to clean the bus. Employees shall not clean or enter the driver's area of the bus to eliminate the potential of a roll away bus or accident.

III. Required Manpower

Four (4) teams consisting of (3) Contractor's Employees and (1) Job Coach will perform this work. All Employees and Job Coaches must be at least 18 years of age. No Employees will be assigned to this project if there has been any known incident of violence or aggressive behavior. Each team will have a full-time Job Coach for supervision and assistance. MTS retains the right to remove any Contractor Employee or Job Coach from MTS's property and will retain the right to have an employee barred from working on this project.

There will be two (2) teams for each division working 6.5-hour days Monday through Friday, of which 6 will be paid for Employees and 6.5 for the Job Coaches. Each team will begin work at 8:30 a.m. and end work at 3:00 p.m. A half-hour lunch period and two 10-minute breaks (one during the morning and one during the afternoon) will be provided. Employees will not be compensated for lunch. There shall be two teams at the Imperial Avenue Division (IAD) and two teams at the Kearny Mesa Division (KMD).

The Maintenance Managers at each division are the MTS contacts and emergency phone numbers will be provided to appropriate Contractor staff. Contractor will provide contact names and emergency phone numbers for pertinent staff available during the cleaning shifts in the event of an emergency.

If the quality of work becomes unsatisfactory or the productivity should drop below 3-buses per day, per division minimum, MTS shall notify Contractor in writing if the performance is inadequate. This notice shall describe the problem and shall specify a time frame for correction.

Note: The contract pricing shall be based on the required staffing above. Currently, MTS does not pay for the Job Coaches, which is paid for by Contractor under an alternative funding source. If during the term of the contract this alternative funding source is discontinued and/or no longer available, the hourly rate for the Job Coaches shall be subject to negotiations. Any changes shall be made via a formal contract amendment.

IV. Compensation

MTS shall pay Contractor a “lump sum” per month as reimbursement for all cost incurred in the performance for the contract, including all wages, fees and overhead. Contractor shall compensate each Employee at an hourly rate per hour. Employees’ wages shall be based upon six (6) hours per day, five (5) days per week. The hourly compensation shall be submitted to validate the firm fixed monthly payments. The hourly wage submitted for Contractor’s Employees and Job Coaches shall include all benefits, payroll taxes and services, workers compensation, liability insurance and all overhead cost.

The amount paid to the Contractor per month for both divisions (IAD/KMD) shall be firm, fixed price but this does not include union dues paid directly to IBEW by MTS and nonmonetary incentives.

MTS shall compensate the Contractor for the observed holidays listed below (to be consistent with MTS maintenance employees working on the property):

- New Year’s Day
- Presidents Day
- Martin Luther King Jr. Day or Cesar Chavez Day (one or the other)
- Independence Day
- Labor Day
- Memorial Day
- Thanksgiving
- Christmas

An incentive program for the Job Coaches and Employees is a part of this agreement and is described below.

V. Incentive Program

This contract includes an incentive program. This program provides an opportunity for additional nonmonetary compensation for the Job Coaches and Employees. The incentives will be goal-oriented and based upon productivity and quality of work. The Job Coaches and the Employees will be eligible for nonmonetary incentives such as lunches.

a. Applicability

The incentive program applies to all buses cleaned per month for each division, which is above the minimum 3 buses per day, per division. It also will only apply when Employees and Job Coaches have met their minimum work requirements for the entire quarter; (i.e., dressing appropriately, showing up on time, working their complete shift, etc.). Excused absence from illness, etc. is excluded.

b. Process

After each bus is cleaned it will be inspected and scored by the Shop Foreman according to the inspection sheet (refer to **Attachment No. 1 – "Sample" Bus Inspection Check List**). It will be the Job Coaches' responsibility to inform the foreman that a bus is ready for inspection and to ensure the form is complete and signed. The buses will be scored on a pass or fail basis. If it does not pass, the deficiencies will be noted and will be required to be corrected. The total number of buses above the minimum of 3 buses per day for each working day of the month will equate to the bonus compensation as described below.

c. Compensation

Each team of Employee (including Job Coach) shall be compensated based upon the number of buses cleaned per quarter (above the 3 buses per day minimum) as reflected below. The incentive compensation will be determined solely at the discretion of MTS.

Quantity of Buses	Incentive
1+ Additional Buses per day for a quarter	Lunch

VI. Union Dues

MTS will pay the correct determined amount directly to the Union every month for union dues. This amount is subject to change according to adjustments to the Internal Brotherhood of Electrical Workers (IBEW) Local 465 Collective Bargaining Agreement with MTS/SDTC.

VII. Invoice/Payment

MTS will process the payment of each invoice within thirty (30) days of the invoice date. All invoices must always reference the Purchase Order number and/or Contract Number. Contractor shall submit two (2) copies of an itemized invoice along with satisfactory supporting documentation to be approved by the MTS Project Manager to the following email address: ap@sdmts.com

Attachment(s): Attachment No. 1 - "Sample" Bus Inspection Check List

ATTACHMENT NO. 1

INTERIOR BUS CLEANING SERVICES
BUS INSPECTION CHECK LIST

☐ Y ☐ N Floor behind front open doors cleaned?

☐ Y ☐ N A/C vents in the front of bus cleaned?

☐ Y ☐ N Floor free of gum spots?

☐ Y ☐ N: Hand rails cleaned?

☐ Y ☐ N: Rear seat area side panels and surfaces cleaned?

☐ Y ☐ N: A/C vents in the rear of bus cleaned?

☐ Y ☐ N: Area around sides of radio box cleaned?

☐ Y ☐ N: Top of radio box wiped down?

☐ Y ☐ N: Windows frames cleaned?

☐ Y ☐ N: Window frames free of caked dust in corners?

☐ Y ☐ N: Window frame cleaned top and bottom?

☐ Y ☐ N: Seats swept and/or wiped clean?

☐ Y ☐ N: Seat backs cleaned?

☐ Y ☐ N: Seat frames cleaned?

☐ Y ☐ N: Seat bolts not gummed up?

☐ Y ☐ N: Floor under seats cleaned on bus?

☐ Y ☐ N: Side panels on bus cleaned?

☐ Y ☐ N: Rear seat area (front rail cleaned)?

☐ Y ☐ N: Front wheel well-scrubbed?

☐ Y ☐ N: Floor in rear seat area cleaned?

☐ Y ☐ N: Floor in rear of seat area cleaned?

☐ Y ☐ N: Emergency access panels on roof cleaned?

☐ Y ☐ N: Floor behind rear doors cleaned?

☐ Y ☐ N: Floor by rear doors scrubbed, yellow cleaned?

☐ Y ☐ N: Front and rear doors cleaned and free of dust?

☐ Y ☐ N: Panels on the sides of front and rear doors cleaned?

☐ Y ☐ N: Hand rails wiped down at end of job

INTERIOR BUS CLEANING SERVICES
REQUIREMENTS: - Thorough washing and cleaning of the vehicle ceilings, sidewalls, stanchions, handrails, windows (including tracks), passenger seats, front steps and floor. - Detailed cleaning of the rear section of the bus (rear door, rear steps, rear bulkhead, A/C grille). - Removal of gum from the interior especially on the floor, walls and seats. - Removal of all graffiti from the walls and seats.

RATING SYSTEM POINTS: (1) PASS / (0) FAIL

Week beginning on: _____ Total points: _____

#	BUS NO.	DAILY CONTRACTOR CREW #	LOCATION (IAD/KMD)	DATE	SDTC INSPECTOR	CONTRACTOR COACH	RATING
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

QUOTA MET?	☐ YES	☐ NO	ELIGIBLE FOR BONUS?	☐ YES	☐ NO

BONUS BUS CLEANING							
#	BUS NO.	DAILY CONTRACTOR CREW #	LOCATION (IAD/KMD)	DATE	SDTC INSPECTOR	CONTRACTOR COACH	RATING
1							
2							
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The Arc.
of San Diego

www.arc-sd.com

Anthony DeSalis, President & CEO
Esther Coit, Board Chair

3030 Market Street
San Diego, CA 92102

Tel 619 685-1175
Fax 619 234-3759

To: **Brianda Diaz, San Diego MTS**
Re: **Interior Deep Cleaning and Detailing of San Diego MTS Buses at Imperial Ave and Kearny Mesa Divisions**

The following chart represents The Arc of San Diego's price proposal for Interior Deep Cleaning and Detailing of Buses for San Diego MTS at Imperial Ave and Kearny Mesa Divisions for the service period April 1, 2026 through March 31, 2033.

Fiscal Year	FY26Q4 – FY27Q3	FY27Q4 – FY28Q3	FY28Q4 – FY29Q3	FY29Q4 – FY30Q3	FY30Q4 – FY31Q3	FY31Q4 – FY32Q3	FY32Q4 – FY33Q3
Contract Year	12	12	12	12	12	12	12
Monthly Cost per Division	$20,129.21	$20,733.09	$21,355.08	$21,995.73	$22,655.61	$23,335.27	$24,035.33
Monthly Cost SDTC	$40,258.42	$41,466.18	$42,710.16	$43,991.46	$45,311.22	$46,670.54	$48,070.66
Annual Costs Arc Deep Clean	$483,101.04	$497,594.16	$512,521.92	$527,897.52	$543,734.64	$560,046.48	$576,847.92
Quarterly Incentive	$300	$300	$300	$300	$300	$300	$300
Annual Incentive	$1,200	$1,200	$1,200	$1,200	$1,200	$1,200	$1,200
Total Annual Cost	**$484,301.04**	**$498,794.16**	**$513,721.92**	**$529,097.52**	**$544,934.64**	**$561,246.48**	**$578,047.92**

Total Base Contract	**$2,570,849.28**
2 Option Years	**$1,139,294.40**
Total 7 Year Contract	**$3,710,143.68**

The proposal reflects the State of California minimum wage increases which are scheduled to adjust to $17.75 per hour effective January 1, 2026.

The Arc of San Diego looks forward to continuing to work with San Diego MTS and would like to thank you for your continued support of people working with disabilities. If you require further documentation or information, please contact me by phone at 619-795-4125 or by email at mmouer@arc-sd.com.

Sincerely,

Matt Mouer
Vice President & COO
The Arc of San Diego

Achieve with us.

Metropolitan Transit System

Agenda Item No. 07

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM
BOARD OF DIRECTORS

February 12, 2026

SUBJECT:

Purchase of Water - Contract Award

RECOMMENDATION:

That the San Diego Metropolitan Transit System (MTS) Board of Directors authorize the Chief Executive Officer (CEO) to execute MTS Doc. No. G3131.0-26 (in substantially the same format as Attachment A), with MJ Service Industries LLC, for the purchase of water for five (5) years in the amount of $417,446.92 (including 7.75 % CA Sales Tax).

Budget Impact

The total cost of this contract is estimated to be $417,446.92 (Attachment A). This inventory item will be funded by various San Diego Trolley, Inc. (SDTI) Operating Budgets at the time the product is issued on an as-needed basis from inventory.

DISCUSSION:

MTS requires a regular supply of drinking water to ensure its staff and field workers remain hydrated in their course of work. This is a requirement set forth by the California Division of Occupational Safety and Health (Cal OSHA) to ensure the safety of employees across MTS operations. The water has regular high consumption and will be stocked at MTS Warehouse B. MTS estimates that the agency will require 12,426 cases of 16.9 oz water bottles (24 per case) each year. A limited number of 5-gallon water bottles are also needed each year.

To ensure constant product availability in the most efficient and cost-effective manner, it is essential that MTS purchase these items under a long-term contract to leverage price savings and lead time predictability.

On October 22, 2025, MTS issued an Invitation for Bids (IFB) to purchase water at MTS's estimated quantities. MTS reserves the right increase or decrease annual quantities based on operational needs. In response, MTS received bids from two (2) contractors by the due date of December 16, 2025. MJ Service Industries LLC is deemed the lowest responsive, responsible bidder with the overall total amount $417,446.92, including California 7.75% sales tax.

The bid summary is shown below:

Company Name	Certification	Amount	CA 7.75% Sales Tax	Total Amount
MJ Service Industries, LLC *	Disabled Veteran Business Enterprise (DVBE), Small Business (SB) (Micro)	$387,421.74	$30,025.18	**$417,446.92**
Waxie Sanitary Supply	NA	$398,951.60	$30,918.75	$429,870.35
MTS Independent Cost Estimate (ICE)		$427,355.32	$33,120.04	$460,475.36

**Lowest responsive and responsible bidder*

Based on the price comparison of the bids received and MTS's Independent Cost Estimate (ICE) ($460,870.35), staff have determined MJ Service Industries LLC's pricing to be fair and reasonable.

Therefore, staff recommends that the MTS Board of Directors authorize the CEO to execute MTS Doc. No. G3131.0-26 (in substantially the same format as Attachment A), with MJ Service Industries LLC, for the purchase of water for five (5) years in the amount of $417,446.92 (including 7.75 % CA Sales Tax).

/s/ Sharon Cooney
Sharon Cooney
Chief Executive Officer

Key Staff Contact: Julia Tuer, 619.557.4515, Julia.Tuer@sdmts.com

Attachments: A. Draft Agreement, MTS Doc. No G3131.0-26
B. Scope of Work
C. Bid Form

Metropolitan Transit System

STANDARD AGREEMENT

FOR

MTS DOC. NO. G3131.0-26

PURCHASE OF WATER

THIS AGREEMENT is entered into this _____ day of _____, 2026 in the State of California by and between San Diego Metropolitan Transit System ("MTS"), a California public agency, and the following, hereinafter referred to as "Contractor":

Name: MJ Service Industries LLC

Address: 35345 Bonita Road

Yucaipa CA 92399

City State Zip

Form of Business: LLC
(Corporation, Partnership, Sole Proprietor, etc.)

Email: mjequipmentservice@yahoo.com

Telephone: (909) 257-9915

Authorized person to sign contracts Ruben Jaramillo Owner

Name Title

The Contractor agrees to provide goods as specified in the conformed Scope of Work/Technical Specification (Exhibit A), Contractor's Cost/Pricing Form (Exhibit B), and in accordance with the Standard Agreement, including Standard Conditions (Exhibit C), Forms (Exhibit D.

The contract term is for a five (5) year period effective March 1, 2026 through February 28, 2030.

Payment terms shall be net 30 days from invoice date. The total cost of this contract shall not exceed $417,446.92 (inclusive of 7.75% CA Sales tax) without the express written consent of MTS.

SAN DIEGO METROPOLITAN TRANSIT SYSTEM	MJ SERVICE INDUSTRIES LLC
By: _____ Sharon Cooney, Chief Executive Officer	By _____
Approved as to form:	
By: _____ Karen Landers, General Counsel	Title: _____

1. SCOPE OF WORK/TECHNICAL SPECIFICATIONS

1.1. BACKGROUND

The San Diego Metropolitan Transit System (MTS) is requesting bids from qualified firms to establish a multi-year contract for water supplies to secure a fixed price and lead-time across the contract period.

The Contractor shall, based on the provided historical consumption information provided by MTS, develop a proposal in providing the requested supplies under a competitive pricing structure. The successful Contractor must be able to streamline its front-end supply chain to drive savings through leveraging volume through procurement, warehouse, and distribution efficiencies across all products identified in the bid forms. MTS has developed the following goals for management of products, in no order:

A. **Reduce Cumulative Products Costs** - Utilize the Contractor's buying power/leverage and procurement sources; Contractor shall work in compliance with the established KPIs listed herein.

B. **Improve Product Availability** - Ensure all identified products are shipped within 24 hours after Purchase Order (P.O.) notification, allowing MTS to meet its service requirements. The Contractor shall undertake usage analysis, providing feedback and suggestions on how best to drive inventory optimization.

C. **Meet Procurement Guidelines** – With respect to any products not included in the initial solicitation, the Contractor shall ensure that such products are procured by the Contractor using competitive procedures that comply with laws of California (as applicable), as well as Federal laws and regulations applicable to MTS. MTS will have the right to review and approve all products procurements and will have the final determination in supplier selection;

D. **Quality** - Ensure products provided are per the request outlined or have been accepted as an approved equal by MTS Staff.

E. **Alternative and Local Sourcing -** Identify new/additional products sourcing options to optimize cost, quality and reduce lead times, with an emphasis on local sources if possible.

Safety - Ensure MTS safety standards are met in any program activity per the paragraph below

1.2. CONTRACT ITEMS

The following items will be available for bid under this solicitation:

A. Bottled drinking water 16.90x / 24 bottles per case
B. Distilled water 5-gallon bottles

1.3. CONTRACT TERMS

The period of performance under the resultant Agreement shall be for a five (5) year period effective approximately March 1, 2026 – February 28, 2030.

1.4. INVENTORY SUPPORT

MTS desires to have the ability, at any time during the contract period, to increase or decrease supplies on the Products List under a mutually agreed process. Such adjustments shall be made in accordance with the “CHANGE” clause in this contract. If additional products or quantities are added to the contract, the Contractor shall ensure that such products are procured by the Contractor using competitive procedures that comply with laws of California (as applicable), as well as Federal laws and regulations (SDMTS only).

MTS will have the right to review and approve all product procurements and will have the final determination in supplier selection; MTS may request to combine multiple products on the Products List into a kit or any other option that is deemed appropriate from time to time. Due to campaigns or other unforeseen circumstances, MTS may inform Firm(s) that additional material not related to historical usage may be required.

All products shall be new unless otherwise agreed by MTS.

Products that are neither on the products list, nor currently identified as approved equals by MTS must be qualified and tested by the Contractor and subsequently approved by MTS staff. Contractors shall provide MTS staff adequate time to review requests for approved equals, product substitutions, or the implementation of new products.

The Contractor must include all comparative product specifications and brand name with the proposal and when submitting any proposed alternative products during the contract to ensure quality standards are met.

1.5. REQUIRED MATERIAL PLANNING DATA

MTS uses SAP as the maintenance materials management system. Upon request, a data file may be provided to allow for the review of stock levels for contracted inventory items, usage history, and any necessary reorder points to improve material availability.

1.6. MATERIAL RETURNS

The Contractor shall accept returns from MTS due to any material defect or rejections and provide either a replacement within 3 business days or a full credit for materials up to 90 days from date of receipt.

1.7. LABELING AND SHIPPING

1. Minimum part label and/or barcode requirements for all products (examples must be provided as part of bid package):
2. Manufacturer product number
3. MTS product number
4. Product description
5. Serial number (where applicable)
6. PO number
7. Date shipped

8. Shelf-Life expiry date (where applicable) – Any shelf-life controlled item must have a minimum of 75% remaining shelf life from the manufacturer cure date and is to be clearly identified on the product and packing slip

1.8. SHIPPING REQUIREMENTS

All shipments shall be FOB to each specified delivery location as specified under 4.24.

All materials shall be packaged sufficiently to arrive undamaged at its destination. Material received in damaged condition will be rejected and returned to the Contractor at Contractor's cost. Materials packaged in crates, palletized material or heavy-duty boxes shall be indelibly labeled as directed by MTS.

All shipments of products shall contain a packing list that will minimally state MTS specific purchase order and release number, supplier product number, MTS product identification number, quantity ordered, shipped, and backordered, as well as bar codes that express the same information.

1.9. PRICE ADJUSTMENTS

Unit prices will be fixed for 12 months from the start of the contract. An adjustment may be made annually at each contract anniversary start date and not again for 365 days.

All annual escalations will be based on the lower of the average Producer Price Index (PPI) for "Bottled Water Manufacturing" (PCU3121123121120) across the preceding 12 months, up to a 5% cap. Contractor is responsible for notifying MTS of any intended price increase at a minimum of 60 days before the effective date of the price increase and provide the PPT index calculation with the proposed prices. Failure to do so may result in a forfeiture of annual PPI escalation and any late price increases will not be retroactive to the annual contract anniversary date.

Any price changes must be accompanied by an explanation for the change, along with the name of two (2) public agencies who are procuring the exact same item, with the cost each agency is paying. This must be presented on a spreadsheet with the MTS number alongside the Vendor/Manufacturer Part Number.

If accepted, MTS will attempt to update contract pricing within thirty (60) days of notification by the contractor.

1.10. CUSTOMER SERVICE

Contractor shall identify a single point of contact for all customer service needs.

1.11. PRICING

Unit pricing shall be all-inclusive, except for California sales tax. MTS will calculate sales tax at PO issuance; therefore, bidders should NOT include sales tax in their pricing. The all-inclusive price should include, but is not limited to, overhead costs, labor, shipping and delivery costs. Pricing shall be firm fixed. Other than sales tax, MTS will not pay any other additional costs.

1.12. QUANTITIES

All Bidders must complete the bid forms as provided; failure to do so may deem the bid non-responsive. The estimated annual usage is provided as an approximate guideline only. Actual usage may be more or less than estimated. MTS reserves the right to increase or decrease usage based on operational needs.

1.13. BID FORM

To be deemed responsive, bidders must provide pricing for both line items, using the MTS Bid Form (ATT 1) provided herein, as the award will be made on a combined basis for both items.

On the Bid Form, if a Bidder would like to submit an alternate product or request for an approved equal (RFA), please refer to Section 3.25 for more information related to MTS' Request for Approved Equal (RFA) process, including the RFA form in Section 8.

Bidder shall provide its standard lead time (in calendar days) in the column provided in the bid form. The lead time provided shall apply for all years. Lead times shall signify the date MTS may anticipate the receipt of the items from its Purchase Order date. All orders must be delivered completely within this time frame unless otherwise approved. MTS reserves the right to consider the lead time as an element of the award.

1.14. [NOT APPLICABLE] PAYMENT PROCESSING SECURITY AND PAYMENT CARD INDUSTRY (PCI) DATA SECURITY STANDARD (DSS) COMPLIANCE

1.15. [NOT APPLICABLE] CONTRACTOR'S INFORMATION SECURITY RESPONSIBILITIES

1.16. [NOT APPLICABLE] SAFETY DATA SHEETS (SDS)

1.17. [NOT APPLICABLE] NO RIGHT TO POST SIGNS

1.18. WARRANTY

Bidders shall outline in detail their warranty on the equipment offered, including the method of adjustment in cases of equipment, component or parts failure. Warranty shall also be stated for installation labor, materials, and method of adjustment.

1.19. REPLACEMENT PARTS

Replacement parts and technical support for the specified equipment must be guaranteed by the manufacturer; to be available for a ten (10) year period from the date of purchase. Manufacturer shall keep parts books and maintenance manuals up-to-date for that period.

1.20. DELIVERY AND ACCEPTANCE

Equipment or any deliverable provided under this contract shall be delivered F.O.B. to the addresses listed unless otherwise specified, in first class condition, complete and ready for operation, and the Contractor shall assume all responsibility and risk of loss incident to said delivery.

Imperial Avenue Division (IAD)
100 16th Street
San Diego, CA 92101

Kearny Mesa Division (KMD)
4630 Ruffner Road
Kearny Mesa, CA 92111

Building B
1341 Commercial St.
San Diego, CA 92113

Contractor shall indicate delivery date on the Bid Form unless already specified, in which case, shall be made within the time set forth. Delivery is part of the consideration and must be adhered to as specified.

Contractor will not be held liable for failure to make delivery because of strikes, construction of property, governmental regulations, acts of God or any other causes beyond his control, provided a written extension of time is obtained from MTS.

Upon delivery, MTS will acknowledge receipt of said items or products. Delivery shall not constitute acceptance. Upon inspection and testing (if necessary) by MTS, a determination will be made whether said items or products are in conformance with contract requirements. If found in conformance, MTS shall approve the Contractor's invoice for payment; thereby constituting acceptance. Payment terms begin from this point. If the delivered items or products are found not in compliance, MTS will immediately notify the Contractor, and furnish all details of deficiencies. Contractor shall correct the deficiencies or supply new items or products (at the discretion of MTS) and resubmit for inspection and testing (if necessary) within 5 business days.

1.21. [NOT APPLICABLE] LIQUIDATED DAMAGES

1.22. INVOICES

Invoices must be sent to the MTS Accounting Department, via email, at ap@sdmts.com. All invoices must have the Purchase Order and contract number clearly displayed to ensure timely payment. MTS will not pay on packing slips, receiving documents, delivery documents, or other similar documents. Invoices must be submitted for payment.

Payment terms shall be net 30 days from invoice date. If MTS rejects an incorrectly submitted invoice and sends it back for correction, the net 30 days restart from the corrected invoice date.

Contractors must also indicate if any of the invoiced amount(s) is for service or work provided by a subcontractor and indicate the amount that will be paid to the subcontractor. Contractors must also comply with the prompt payment requirements in the *Prompt Progress Payments* section of the Standard Conditions.

Invoices must list the MTS part number alongside the OEM/Vendor part numbers.

Metropolitan Transit System

PURCHASE OF WATER IFB - Bid Form

MTS Doc No. G3131.0-26

Bidder Name

Item#	Material	Material Description	BUn	Manufacturer's Part No.	Alternate Part#	Est. Annual Usage	Vendor Part#	Lead Time (Delivery in calendar days from PO issued date)	Order Unit	Conversion to Each (If not Each/Bulk)	Minimum Order QTY (If applicable)	Order QTY Increment (If applicable)	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5		5 YEAR Total
													Unit$	Extended$	Unit$	Extended$	Unit$	Extended$	Unit$	Extended$	Unit$	Extended$	
1	70143123	Bottled Drinking Water 16.9 OZ, 24/CS,	Case	1013400	218-340 88ESNCGW24514 11881-03062	12,426		3	Case				$5.99	$74,431.74	$6.10	$75,798.60	$6.20	$77,041.20	$6.30	$78,283.80	$6.40	$79,526.40	$385,081.74
2	70200035	Distilled Water (5 Gallon Bottle)	Each	BW02	BW02 W20525-5GAL	40		3	Bottle				$11.50	$460.00	$11.60	$464.00	$11.70	$468.00	$11.80	$472.00	$11.90	$476.00	$2,340.00
														$74,891.74		$76,262.60		$77,509.20		$78,755.80		$80,002.40	$387,421.74
																						Total	$387,421.74
																						Tax 7.75%	$30,025.18
																						Grand Total	$417,446.92

Metropolitan Transit System

Agenda Item No. 08

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM
BOARD OF DIRECTORS

February 12, 2026

SUBJECT:

Printing Timetables – Contract Amendment

RECOMMENDATION:

That the San Diego Metropolitan Transit System (MTS) Board of Directors:

1) Ratify MTS Doc. No. G2686.1-23 (Amendment 1), with Neyenesch Printers, Inc. (Neyenesch), in the amount of $85,805.64 (Attachment A);

2) Ratify MTS Doc. No. G2686.2-23 (Amendment 2), with Neyenesch, in the amount of $55,303.66 (Attachment B); and

3) Authorize the Chief Executive Officer (CEO) to execute MTS Doc. No. G2686.3-23 (Amendment No. 3), with Neyenesch, to add $53,203.74 in additional funds due to an increased demand for printed timetables (in substantially the same format as Attachment C).

Budget Impact

The total cost of these amendments is estimated to be $194,313.04 and the total contract cost is estimated to be $570,044.13 (inclusive of the total costs for Amendments 1-3). The contract will be funded by the MTS Administration Operating Budget account 902010-571220.

The contract costs are summarized below:

Description	Amount	Approval
Original Contract	$375,731.09	2/16/23 (AI 9)
Amendment 1	$85,805.64	CEO – Policy 41 (Ratify)
Amendment 2	$55,303.66	CEO – Policy 41 (Ratify)
Subtotal	$516,840.39	
Amendment 3	$53,203.74	Today's Proposed Action
New Board Approved Amount	**$570,044.13**	

DISCUSSION:

On February 16, 2023 (Agenda Item (AI) 9), the MTS Board approved a contract with Neyenesch for printing timetables. The contract is for a three (3) year contract period (April 1, 2023, through March 31, 2026).

Bus and Trolley printed timetables are an important way for passengers to access arrival times, route maps, and other transit information. This is particularly important for vulnerable passengers stuck in the digital divide who do not have access to a smartphone or other digital devices. Passenger demand for timetables on the bus and Trolley was higher than anticipated during year three (3) of the contract. In year three (3), MTS anticipated ordering approximately 700,000 timetables, but with increased demand, over 1,030,000 timetables were ordered. That amount does not include what was needed for the January 2026 service change and reorder.

MTS is implementing ways to reduce demand for printed timetables on its vehicles by encouraging riders to access digital versions instead, while still having printed versions available for those who need them the most. Staff anticipate this approach will keep costs in line with estimates in the new timetable contract that begins on April 1, 2026

Amendment 3 is intended to provide sufficient funds throughout the remaining term of the contract. Today's proposed action would approve Amendment 3.

Therefore, staff recommends that the MTS Board of Directors:

1) Ratify MTS Doc. No. G2686.1-23 (Amendment 1), with Neyenesch, in the amount of $85,805.64 (Attachment A);

2) Ratify MTS Doc. No. G2686.2-23 (Amendment 2), with Neyenesch, in the amount of $55,303.66 (Attachment B); and

3) Authorize the CEO to execute MTS Doc. No. G2686.3-23 (Amendment No. 3), with Neyenesch, to add $53,203.74 in additional funds due to an increased demand for printed timetables (in substantially the same format as Attachment C).

/s/ Sharon Cooney
Sharon Cooney
Chief Executive Officer

Key Staff Contact: Julia Tuer, 619.557.4515, Julia.Tuer@sdmts.com

Attachments: A. Amendment No. 1, MTS Doc. No. G2686.1-23
B. Amendment No. 2, MTS Doc. No. G2686.2-23
C. Draft Amendment No. 3, MTS Doc. No. G2686.3-23

Metropolitan Transit System

Amendment 1

Date: January 16, 2024 MTS Doc No. G2686.1-23

Time Tables Amendment

Neyenesch Printers, Inc
Kandy Neyenesch
CFO
2750 Kettner Blvd
San Diego CA, 92101

This shall serve as Amendment No.1 to the original agreement G2686.0-23 as further described below.

SCOPE

The San Diego Metropolitan Transit System (MTS) shall authorize additional contract capacity to include the additional one hundred forty thousand (140,000) estimated timetables per year for three (3) base years due to an increase in ridership.

SCHEDULE

There shall be no change to the schedule of this agreement.

PAYMENT

This contract amendment shall authorize additional costs not-to-exceed $85,805.64 ($79,634.00 plus $6,171.64 tax) as reflected below:

Base Period	Original	Amended	Change	Tax
Year 1 (4/1/23 to 3/31/24)	$ 118,721.29	$ 145,939.48	$ 25,260.50	$ 1,957.69
Year 2 (4/1/24 to 3/31/25)	$ 125,406.06	$ 153,986.21	$ 26,524.50	$ 2,055.65
Year 3 (4/1/25 to 3/31/26)	$ 131,603.75	$ 161,611.04	$ 27,849.00	$ 2,158.30
Total:	**$375,731.11**	**$461,536.73**	**$79,634.00**	**$6,171,64**

The total value of this contract including this amendment shall be in the amount of $461,536.73 ($375,731.09 current contract plus $85,805.64 for this amendment). This amount shall not be exceeded without prior written approval from MTS.

Please sign and return the copy to the Contract Specialist at MTS. All other terms and conditions shall remain the same and in effect. Retain the other copies for your records.

Sincerely,

Sharon Cooney

Sharon Cooney, Chief Executive Officer

Agreed:

Kandy Neyenesch

Kandy Neyenesch, CFO
Vendor Name

Date: 2/13/24

Attachment: A – Updated Cost Form

ATTACHMENT A
UPDATED COST FORM

UPDATED COST FORM

AMENDMENT 1 - ADDITIONAL FUNDS

Year One

Paper Size	# of Colors	Order Quantity								
		1- 9,999			10,000 - 19,999			35,000 - 49,999		
		Unit Price	Yearly Quantity	Total	Unit Price	Yearly Quantity	Total	Unit Price	Yearly Quantity	Total
14.5" x 21.25"	4							0.2025	15,000	$ 3,037.50
11" x 21"	2				0.1842	15,000	$ 2,763.00			
11" x 17"	2	0.1846	100,000	$ 18,460.00						
8.5" x 11"	2	0.1000	10,000	$ 1,000.00						
	Totals			$ 19,460.00			$ 2,763.00			$ 3,037.50
									Year One Total	$ 25,260.50

Year Two

Paper Size	# of Colors	Quantity Ordered								
		1- 9,999			10,000 - 19,999			35,000 - 49,999		
		Unit Price	Yearly Quantity	Total	Unit Price	Yearly Quantity	Total	Unit Price	Yearly Quantity	Total
14.5" x 21.25"	4							0.2125	15,000	$ 3,187.50
11" x 21"	2				0.1938	15,000	$ 2,907.00			
11" x 17"	2	0.1938	100,000	$ 19,380.00						
8.5" x 11"	2	0.1050	10,000	$ 1,050.00						
	Totals			$ 20,430.00			$ 2,907.00			$ 3,187.50
									Year Two Total	$26,524.50

Year Three

Paper Size	# of Colors	Quantity Ordered								
		1- 9,999			10,000 - 19,999			35,000 - 49,999		
		Unit Price	Yearly Quantity	Total	Unit Price	Yearly Quantity	Total	Unit Price	Yearly Quantity	Total
14.5" x 21.25"	4							0.2231	15,000	$ 3,346.50
11" x 21"	2				0.2035	15,000	$ 3,052.50			
11" x 17"	2	0.2035	100,000	$ 20,350.00						
8.5" x 11"	2	0.1100	10,000	$ 1,100.00						
	Totals			$ 21,450.00			$ 3,052.50			$ 3,346.50
									Year Three Total	$27,849.00
									Amendment Subtotal	$79,634.00
									Sales Tax (7.75%)	$6,171.64
									Amendment Total	$85,805.64

Metropolitan Transit System

Amendment 2

Date: January 28, 2025 MTS Doc No. G2686.2-23

Time Tables Amendment

Neyenesch Printers, Inc
Kandy Neyenesch
CFO
2750 Kettner Blvd
San Diego CA, 92101

This shall serve as Amendment No.2 to the original agreement G2686.0-23 as further described below.

SCOPE

The San Diego Metropolitan Transit System (MTS) shall authorize additional contract capacity to include an additional three hundred thousand (300,000) estimated timetables for Year Two due to an increase in demand.

SCHEDULE

There shall be no change to the schedule of this agreement.

PAYMENT

This contract amendment shall authorize additional costs not to exceed $55,303.66 ($51,325.90 plus $3,977.76 tax) as reflected below:

Base Period	Original	AM1 + Tax	Amended	Change	Tax
Year 1 (4/1/23 to 3/31/24)	$118,721.29	$27,218.19	N/A	N/A	N/A
Year 2 (4/1/24 to 3/31/25)	$125,406.06	$28,580.15	$209,289.87	$51,325.90	$3,977.76
Year 3 (4/1/25 to 3/31/26)	$131,603.75	$30,007.30	N/A	N/A	N/A
Total:	**$375,731.11**	**$85,805.64**	**$516,840.41**	**$51,325.90**	**$3,977.76**

The total value of this contract including this amendment shall be in the amount of $516,840.41 ($461,536.75 current contract plus $55,303.66 for this amendment). This amount shall not be exceeded without prior written approval from MTS.

Please sign and return the copy to the Contract Specialist at MTS. All other terms and conditions shall remain the same and in effect. Retain the other copies for your records.

Sincerely,

Sharon Cooney

Sharon Cooney, Chief Executive Officer

Agreed:

Kandy Neyenesch Digitally signed by Kandy Neyenesch Date: 2025.02.28 12:18:40 -08'00'

Kandy Neyenesch, CFO
Vendor Name

Date: _____

Attachments:

Attachment A – Updated Cost Form

ATTACHMENT A
UPDATED COST FORM

UPDATED COST FORM

AMENDMENT 2 - ADDITIONAL FUNDS

Year Two

Paper Size	# of Colors	Order Quantity											
		1- 9,999			10,000 - 19,999			20,000 - 24,999			35,000 - 49,999		
		Unit Price	Yearly Quantity	Total	Unit Price	Yearly Quantity	Total	Unit Price	Yearly Quantity	Total	Unit Price	Yearly Quantity	Total
14.5" x 21.25"	4										0.2125	25,000	$ 5,312.50
11" x 21"	2				0.1938	11,000	$ 2,131.80						
11" x 17"	2	0.1938	182,000	$ 35,271.60	0.1938		$ -						
8.5" x 11"	2	0.1050	82,000	$ 8,610.00	0.1050		$ -	0.1050		$ -			
	Totals			$ 43,881.60			$ 2,131.80			$ -			$ 5,312.50
												Year Two Subtotal	$ 51,325.90
												Sales Tax (7.75%)	$ 3,977.76
												Amendment Total	**$ 55,303.66**

Metropolitan Transit System

Amendment 3

February 12, 2026 MTS Doc No. G2686.3-23

PRINTING TIMETABLES SERVICES

Neyenesch Printers, Inc.
Kandy Neyenesch
CFO
2750 Kettner Blvd
San Diego, CA, 92101

This shall serve as Amendment No.3 to the original agreement G2686.0-23 as further described below.

SCOPE

This amendment shall authorize additional funds for Year Three of the agreement due to an unexpected increase in passenger demand for timetables.

SCHEDULE

There shall be no change to the schedule of this agreement.

PAYMENT

This contract amendment shall authorize additional costs not-to-exceed $53,203.74 ($49,377.02 plus $3,826.72 tax) as reflected below:

Base Period	Current	AM3 + Tax	Grand Total
Year 1 (4/1/23 to 3/31/24)	$145,939.48	N/A	$145,939.48
Year 2 (4/1/24 to 3/31/25)	$209,289.87	N/A	$209,289.87
Year 3 (4/1/25 to 3/31/26)	$161,611.05	$53,203.74	$214,814.79
Total:	**$516,840.40**	**$53,203.74**	**$570,044.14**

The total value of this contract, including this amendment, shall be in the amount of $570,044.14 ($516,840.40 current contract plus $53,203.74 for this amendment). This amount shall not be exceeded without prior written approval from MTS.

DRAFT

Please sign and return the copy to the Contract Specialist at MTS. All other terms and conditions shall remain the same and in effect. Retain the other copies for your records.

Sincerely,

Sharon Cooney, Chief Executive Officer

Agreed:

Kandy Neyenesch, CFO
Neyenesch Printers, Inc.

Date: _____

DRAFT

Agenda Item No. 09

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM
BOARD OF DIRECTORS

February 12, 2026

SUBJECT:

Proposed Revisions to MTS Policy NO. 50 (Engineering and Construction Expense Cost Recovery for Plan Review, Real Estate Actions, and Right of Entry Permits) – Policy Revision

RECOMMENDATION:

That the Board of Directors approve revisions to MTS Policy No. 50 (Engineering and Construction Cost Recovery for Plan Review, Real Estate Actions, and Right of Entry Permits) (Attachment A) to increase the current right of entry permit and real estate license fees.

Budget Impact

Fiscal year 2025 MTS Right of Entry Permit revenue was $231,421.92, and the proposed action is projected to increase revenue to approximately $531,400 per year. MTS Real Estate License revenue for the same period is $47,983.16 and would increase to approximately $55,600.

DISCUSSION:

Overview

MTS owns and controls long linear right of ways (ROW) in San Diego and Imperial Counties. Other agencies and private utilities often have projects that must cross the ROW to serve the community in and around the railroad corridor. Similarly, properties abutting the ROW may need to temporarily or permanently enter into the ROW for projects primarily on the abutting property. In order to accommodate infrastructure and development projects in and around the MTS ROW, but also protect MTS's ability to safely operate its transit services and preserve future opportunities for new projects, MTS has established a Right of Entry permit (ROE Permit) process to review and approve third party work or facility installation in and around MTS's ROW.

As part of this process, MTS staff reviews plans to ensure the proposed work or facility is compatible with MTS operations, reviews third party insurance certificates to ensure MTS is protected against accidents, negotiates additional ROE Permit conditions if needed, and determines if long-term real estate entitlements are required. These activities incur costs to MTS which are reimbursed by the third party, as defined in MTS Policy No. 50. MTS Policy No. 50 was last updated in 2013. The purpose of this revision is to ensure fees charged by MTS are

commensurate with MTS staff time and provides for future fee updates to fully reimburse MTS for the cost associated with the ROE Permit process.

ROE Permit Program

ROE Permit Program expenses can be broken out into two categories. The first category is external engineering consultant review and the second is internal MTS staff review costs. External engineering consultant review is performed by MTS's on-call architectural & engineering design services consultant, Psomas.[1] Psomas reviews engineering and work execution plans of third parties doing work on or around the MTS ROW. 100% of the review costs by Psomas are directly billed to the ROE Permit applicant. The proposed MTS Board Policy 50 update leaves this current process in place.

The second ROE Permit Program cost category is MTS staff costs. MTS staff costs are broken down into full-time employees (FTE) dedicated to running the ROE Permit Program and subject matter expert (SME) review of permit applications. 1.5 FTEs are required to maintain the ROE Permit program. They are tasked with processing and reviewing permit applications, coordinating MTS SME review, managing the Psomas contract, confirming third party insurance levels, negotiating permit language, invoicing permittees, and document management. After Psomas completes their initial permit application review, MTS SMEs provide final review and guidance. Depending on the permit application, SME review may include the MTS Rail, Maintenance of Way, Facilities and Bus Operations departments. SMEs make determinations on the requirement of safety personnel on site during construction, ensure engineering standards are being maintained, and maintain safe bus and trolley operations.

Over the last six months MTS performed a comprehensive review of FTE and SME time required to maintain the ROE Permit Program. Permits were broken into Access-Only ROE Permit (Access) requests and Engineering Plan Review or Construction Right of Entry Permit Requests (Engineering). Access requests were more numerous but took significantly less time to process since Access requests were non-invasive and are short duration activities. Engineering requests were fewer but required significant FTE and SME time as the proposed activities were invasive (i.e. drilling utilities under trolley lines) and permittees were in the MTS ROW for weeks or months.

The fees for ROE Permit reviews, set forth in Board Policy 50, have not been updated since February 21, 2013 (Agenda Item 14). In reviewing Board Policy 50 and implementation of the permit fee process over the intervening thirteen (13) years, staff concluded that comprehensive review of the internal staff time, fee structure, and fee amounts was warranted. Over the last several months, staff completed an internal survey of FTE and SME time spent on each permit type.

To properly capture and obtain reimbursement of MTS's true costs to undertake the ROE Permit process, staff sought to capture all of the 1.5 FTE costs and SME time in the proposed ROE Permit fee updates set forth below. MTS recently procured cloud permitting software to

[1] An as-needed ROE Permit Engineering Review Services work order with Psomas was approved by the MTS Board on October 17, 2024 (Agenda Item 20) following a competitive request for proposal process with the MTS Architectural & Engineering Design Services On-Call Bench. The Psomas work order (WOA355-AE-43 under master agreement PWL355.022) is for a term of December 5, 2024 to June 30, 2027.

streamline ROE Permit and For Hire Vehicle Administration operations.[2] The portion of the software cost related to ROE Permit administration has been included in the proposed ROE Permit fees. Finally, the proposed fees were checked against similar transit agency fees and inflation since 2013. Based upon staff's analysis, the following fee structure is proposed:

Permit Type	Current Fee	Proposed Fee
Access Only ROE Permit	$750	$1,500
Engineering Plan Review	$750*	$7,300
Construction ROE Permit	$750*	$7,300
Durable ROE Permit	$1,500	$3,000

**Although current Board Policy 50.2 and 50.3 allows MTS to charge staff time for permit activities that are expected to have a "Minor Impact" or a "Major Impact", in practice only the standard $750 fee and outside consultant time was billed for most permits.* It was found that most of the internal FTE and SME time was not individually captured or billed as a line item against a specific permit review fee, and that doing so was difficult under MTS's timekeeping and invoicing system. Further, individually billing staff hours for a specific permit would not capture some of the overall costs that MTS incurs to staff and maintain the ROE Permit Program in general. The new Proposed Fee structure captures all such costs and allows MTS to collect the permit fee in full without complicated and staff-intensive invoicing processes.

Real Estate Entitlements

It is common that ROE Permits trigger a real estate entitlement for permanent improvements (i.e. water line under trolley tracks) in the MTS ROW. Entitlements are based on the value of the land right granted to the third party plus a one-time setup fee to recoup MTS staff time. Entitlements are classified as minor entitlements, where a standard license is granted to the third party and MTS staff time is minimal, or major entitlements, where land value is determined by fair market value and staff time is significant. MTS staff reviewed internal staff time required for both entitlement types to determine a reasonable one-time setup fee to adequately reimburse MTS for the cost of this function. The standard entitlement fee was also compared to similar transit agencies and inflation to ensure correct valuation. Based upon staff's analysis, the following fee structure is proposed:

Entitlement Type	Current Fee	Proposed Fee
Minor Real Estate Entitlement	$1,300/Year + $0 Setup Fee	$2,300/Year + $800 Setup Fee
Major Real Estate Entitlement	Fair Market Value + $0 Setup Fee	Fair Market Value + $2,000 Setup Fee

Additional Policy Updates

Staff reviewed the existing MTS Board Policy 50 and proposes the following changes or updates to streamline Policy language and to ensure continued cost recovery:

[2] On September 11, 2025 (Agenda Item 21), the MTS Board approved a Cloud Permitting Software agreement with GeoCivix, LLC (MTS Doc. No. G2902.24).

- ROE Permit Fee Deposit: Currently, Board Policy 50 allows MTS to collect a deposit for projects with an estimated MTS cost to be greater than $5,000. To increase flexibility and ensure timely cost recovery, the proposed revision removes the minimum project cost estimate but requires all deposits to be approved by the MTS Chief Executive Officer (CEO).

- Durable ROE Permit: Currently, MTS issues long-term Durable ROE Permits for defined low risk activities to account for a third party with many similar activities within MTS ROW. This type of permit is not addressed in the current policy. The proposed revision adds a reference to Durable ROE Permits.

- Fee Increases: Currently, Board Policy 50 requires MTS Board approval to increase fees. The proposed revision includes an automatic biennial increase based on inflation (using the Consumer Price Index (CPI) for San Diego). Any non-CPI related fee changes would still require Board approval.

- Sample Materials: Currently, Board Policy 50 includes a sample form and instructions which are out of date. The proposed revision directs third parties to MTS's ROE Permit Website for up-to-date forms and instructions.

/s/ Sharon Cooney
Sharon Cooney
Chief Executive Officer

Key Staff Contact: Julia Tuer, 619.557.4515, Julia.Tuer@sdmts.com

Attachments: A. Proposed Revisions to MTS Board Policy 50 – Clean Version
B. Proposed Revisions to MTS Board Policy 50 – Redline Version

Metropolitan Transit System

Policies and Procedures No. 50

Board Approval: 2/12/2026

SUBJECT:

ENGINEERING AND CONSTRUCTION EXPENSE COST RECOVERY FOR PLAN REVIEW, REAL ESTATE ACTIONS, AND RIGHT OF ENTRY PERMITS

PURPOSE:

It is the intent of MTS to recover engineering, construction, real estate, legal, consultant, and administrative expenses incurred in support of actions from public agencies and private parties that impact MTS and San Diego and Arizona Eastern (SD&AE) facilities and property.

BACKGROUND:

Public agencies and private parties request access to MTS and SD&AE (collectively MTS) Right-of-Way Corridors and fee property for various reasons. Some requests are for temporary access with minimal impact on MTS facilities or operations. Other requests can have a significant impact on MTS facilities and may include placement of permanent third-party facilities within the right-of-way. The various requests burden MTS staff time and incur costs which should be reimbursed by the requestor. MTS staff time and costs include plan reviews by internal MTS staff and engineering consultants, real estate entitlement processing, legal review, construction inspection, documentation, and closeout. This policy will formalize procedures for MTS staff to process requests for entry and various real estate actions and to recover costs incurred by the agency in this effort.

POLICY:

MTS will recover expenses incurred for engineering plan review, real estate entitlements, and Right of Entry Permit (ROE Permit) reviews and inspections according to the following criteria:

50.1 Access-Only ROE Permit Requests. These requests for access to MTS facilities have minimal to no impact and are typically for limited duration

ROE Permits with no real estate entitlement required. The staff effort is light, and a fixed fee is charged to the applicant. Access Only ROE Permit fees are shown in Attachment A. Durable ROE Permits may be granted to entities who have a continuous and long-term need to access the MTS Right-of-Way Corridors for non-intrusive maintenance.

50.2 Engineering Plan Review or Construction Right of Entry Permit Requests. Engineering Plan Review or Construction ROE Permit requests require significant internal MTS staff time as well as external contracted engineering support. MTS staff and MTS contractor time often include multiple iterations of plan reviews, field meetings, interagency coordination, California Public Utilities Commission approvals, and on-site construction monitoring. A standard Engineering Plan Review and Construction ROE Permit Fee (Attachment A) is assessed in addition to reimbursement of all MTS contracted engineering review, flagging, security, bus bridge, and any other costs directly related to the request.

50.3 Fee Deposit. Engineering Plan Reviews and Construction ROE Permits require MTS to pay the up-front cost of engineering consultant, flagging, security, and bus bridge services. To ensure payment and insulate MTS from excess risk, MTS reserves the right to request a deposit before evaluating an Engineering Plan Review or issuing a Construction ROE Permit. The deposit would be based on a reasonable estimate of all MTS costs and approved by the Chief Executive Officer (CEO) or designee. Unspent deposit funds will be returned to the requestor once the permit review process and/or project construction is complete, as applicable.

50.4 Real Estate Entitlements. Entitlements are required when a third party places a permanent improvement on, over, or under MTS owned property or the MTS Right-of-Way Corridor. Entitlement costs are based on the value of the land right plus a one-time setup fee. Entitlements are broken into minor and major categories and fees are shown in Attachment A.

Minor entitlements don’t materially conflict with regular MTS current or future operations and the third party signs a standard entitlement agreement. Staff effort is light, and the entitlement land value is low. Major entitlements require unique entitlement agreements in exchange for fair market value. Staff time is significant and entitlement value is variable.

To the extent applicable, the procedures outlined in Chapter 7 (Appraisals) of the Caltrans Right of Way Manual and the Uniform Standards of Professional Appraisal Practice by The Appraisal Foundation will be applied when determining the value of the major entitlement.

50.5 Waiver of Fees. Fees may be waived at the discretion of the CEO or designee. Examples of fee waivers are when a pre-existing reciprocal fee waiver agreement is in place between the requestor and MTS or when the project has a significant positive benefit to MTS and/or the community such that an MTS contribution to the project in the form of a fee waiver is warranted.

50.6 Biennial Fee Increases. All fees are subject to a biennial increase based on the U.S. Bureau of Labor Statistics Consumer Price Index all items in San Diego-Carlsbad, CA, all urban consumers, not seasonally adjusted. In the event of a deflationary event, fees will remain at their current levels. Increases will be rounded to the nearest ten dollars.

50.7 ROE Permit Website. MTS will maintain a ROE Permit website for permit and real estate entitlement applications. The ROE Permit website will list instructions and common guidelines for permit and entitlement requests. Requestors are required to fill out an application on the ROE Permit website for all permit and entitlement requests. The ROE Permit website address is: https://www.sdmts.com/business-center/permits/right-entry

Attachments: A. List of fees

Original Policy approved on 10/16/03.
Policy revised on 5/13/04.
Policy revised on 2/21/13.
Policy revised on 2/12/26.

Attachment A
Effective 3/1/2026

Permit Fee Structure

Access Only ROE Permit	$1,500 one-time fee
Engineering Plan Review	$7,300 one-time fee plus reimbursement of MTS engineering consultant costs and applicable MTS costs* related to the review
Construction ROE Permit	$7,300 one-time fee plus reimbursement of MTS engineering consultant costs and applicable MTS costs* related to the permit
Durable ROE Permit	$3,000 one-time fee

Real Estate Fee Structure

Minor Real Estate Entitlement	$2,300/year + $800 one-time setup fee
Major Real Estate Entitlement Value	Fair Market Value + $2,000 one-time setup fee

* Applicable MTS costs may include flagging, bus bridge, security, passenger support representative, power shut down, and other operational support resources related to the permit or project.

Policies and Procedures No. 50

SUBJECT: Board Approval: 2/21/1312/2026

SUBJECT:

ENGINEERING AND CONSTRUCTION EXPENSE COST RECOVERY FOR PLAN REVIEW, REAL ESTATE ACTIONS, AND RIGHT OF ENTRY PERMITS

PURPOSE:

It is the intentionintent of MTS to recover engineering and, construction, real estate, legal, consultant, and administrative expenses incurred in support of actions from public agencies and private parties that impact MTS and San Diego and Arizona Eastern (SD&AE) facilities and property..

BACKGROUND:

Public agencies and private parties request access to MTS rightand SD&AE (collectively MTS) Right-of-wayWay Corridors and fee property for various reasons. Some requests are for temporary access with minimal impact on MTS facilities or operations. Other requests can have a significant impact on MTS facilities and may include placement of permanent third-party facilities within the right-of-way. The various requests taxburden MTS staff time, including consultant effort, for and incur costs which should be reimbursed by the requestor. MTS staff time and costs include plan reviews, coordination by internal MTS staff and engineering consultants, real estate entitlement processing, right of entry (ROE) permit reviews, approvalslegal review, construction inspection, documentation, and closeout. This policy will formalize procedures for MTS staff to process requests for entry and various real estate actions and to recover costs incurred by the agency in this effort..

POLICY:

MTS will recover expenses incurred for engineering plan review, real estate actionsentitlements, and Right of Entry Permit (ROE permitPermit) reviews and inspections according to the following criteria:

50.1 Minimum to No-ImpactAccess-Only ROE Permit Requests –. These requests for access to MTS facilities have minimal to no impactsimpact and are typically for day-use ROE permits.limited duration ROE Permits with

no real estate entitlement required. The staff effort is light, and a fixed fee ~~will be~~is charged to the applicant. ~~The standard fee is $750 to cover staff preparation time, approvals, and processing. This fee will be evaluated on an annual basis and will be adjusted if warranted upon approval from the Chief Executive Officer. The applicant will be required to complete the ROE Permit/Plan Review Application (Attachment A) and to submit the application according to the MTS/San Diego and Arizona Eastern (SD&AE) Railway Company~~Access Only ROE Permit ~~Instructions (Attachment B).~~

~~50.2 Minor Impact Requests – These requests for access to MTS facilities have minor impacts but require up to $5,000 of staff time to process the encroachment. These impacts typically require engineering review and construction coordination for the ROE permit. Some real estate entitlement may be required, such as granting an easement. The staff time to analyze the request, coordinate reviews, conduct field inspections, and closeout the permit exceeds the minimum permit fee. Staff will estimate engineering and construction inspection expenses, including consultant~~ fees~~. For fees estimated below $5,000, staff will submit the estimate to the~~ are shown in Attachment A. Durable ROE Permits may be granted to entities who have a continuous and long-term need to access the MTS Right-of-Way ~~Manager for approval. This approval will constitute the permit fee. Additional funds may be necessary if a scope change or additional work is identified. The applicant will follow the application process as described in No. 1 above. Plan review submittals with an expense below $5,000 will follow the same process.~~Corridors for non-intrusive maintenance.

~~50.3 Major Impact Requests – For those access requests with a staff expense over $5,000, a deposit of funds will be required to cover costs. MTS will account for the draw down of the funds and require additional funds as necessary. Any excess deposited funds will be reimbursed to the applicant after MTS is satisfied that all requirements are met.~~

~~50.4 Real Estate Actions – Any real estate transaction generated by a public agency or a private party will follow the above criteria.~~

~~50.5~~ 50.2 Engineering Plan Review or Construction Right of Entry Permit Requests. Engineering Plan Review or Construction ROE Permit requests require significant internal MTS staff time as well as external contracted engineering support. MTS staff and MTS contractor time often include multiple iterations of plan reviews, field meetings, interagency coordination, California Public Utilities Commission approvals, and on-site construction monitoring. A standard Engineering Plan Review and Construction ROE Permit Fee (Attachment A) is assessed in addition to reimbursement of all MTS contracted engineering review, flagging, security, bus bridge, and any other costs directly related to the request.

50.3 Fee Deposit. Engineering Plan Reviews and Construction ROE Permits require MTS to pay the up-front cost of engineering consultant, flagging, security, and bus bridge services. To ensure payment and insulate MTS from excess risk, MTS reserves the right to request a deposit before

evaluating an Engineering Plan Review or issuing a Construction ROE Permit. The deposit would be based on a reasonable estimate of all MTS costs and approved by the Chief Executive Officer (CEO) or designee. Unspent deposit funds will be returned to the requestor once the permit review process and/or project construction is complete, as applicable.

50.4 Real Estate Entitlements. Entitlements are required when a third party places a permanent improvement on, over, or under MTS owned property or the MTS Right-of-Way Corridor. Entitlement costs are based on the value of the land right plus a one-time setup fee. Entitlements are broken into minor and major categories and fees are shown in Attachment A.

Minor entitlements don't materially conflict with regular MTS current or future operations and the third party signs a standard entitlement agreement. Staff effort is light, and the entitlement land value is low. Major entitlements require unique entitlement agreements in exchange for fair market value. Staff time is significant and entitlement value is variable.

To the extent applicable, the procedures outlined in Chapter 7 (Appraisals) of the Caltrans Right of Way Manual and the Uniform Standards of Professional Appraisal Practice by The Appraisal Foundation will be applied when determining the value of the major entitlement.

50.5 Waiver of Fees~~ –~~. Fees may be waived at the ~~descretion~~discretion of the ~~Chief Executive Officer.~~ CEO or designee. Examples of fee waivers ~~would be for nonprofit agencies or for local agencies that have a~~are when a pre-existing reciprocal fee waiver agreement ~~with MTS.~~is in place between the requestor and MTS or when the project has a significant positive benefit to MTS and/or the community such that an MTS contribution to the project in the form of a fee waiver is warranted.

50.6 Biennial Fee Increases. All fees are subject to a biennial increase based on the U.S. Bureau of Labor Statistics Consumer Price Index all items in San Diego-Carlsbad, CA, all urban consumers, not seasonally adjusted. In the event of a deflationary event, fees will remain at their current levels. Increases will be rounded to the nearest ten dollars.

50.7 ROE Permit Website. MTS will maintain a ROE Permit website for permit and real estate entitlement applications. The ROE Permit website will list instructions and common guidelines for permit and entitlement requests. Requestors are required to fill out an application on the ROE Permit website for all permit and entitlement requests. The ROE Permit website address is: https://www.sdmts.com/business-center/permits/right-entry

Attachments: A. ~~Right of Entry Permit/Plan Review Application~~List of fees
~~B. MTS/SD&AE Right of Entry Permit Instructions~~

Original Policy approved on 10/16/03.
Policy revised on 5/13/04.
Policy revised on 2/21/13.
Policy revised on 2/12/26.

~~MTS / SD&AE RIGHT OF ENTRY PERMIT INSTRUCTIONS~~

- ~~A Right of Entry Permit (Permit) is necessary when entering MTS / SD&AE right-of-way, including airspace, for any purpose. A permit is also required when working in public right-of-way occupied by MTS / SD&AE facilities. Prior to issuance of Permit, project plans/specifications must be approved by MTS.~~

- ~~To initiate project review, complete a "Plan Review / Right of Entry Permit Application" form located on the MTS website (http://www.sdmts.com/Business/Permits.asp). Return form to MTS along with the required number of plan sets, a $750 application fee, and an 8.5"x11" size vicinity map or Thomas Guide page showing the location of project.~~

- ~~A letter of findings will be issued, generally within two weeks, indicating provisional approval or if additional engineering review is required. Permit fees including plan review, Permit processing, and general Permit oversight costs are assessed at this time and an invoice is processed. If a comprehensive, engineering review is necessary, a deposit will be required for the probable reimbursable cost to cover reviews and other expenses.~~

- ~~Permission to proceed with the Permit process will be granted only after the project has engineering review approval. If the encroachment requires an easement or a license to allow permanent facilities within the right-of-way, the license or easement will be processed concurrent with the Permit. A plat and legal description, signed by a land surveyor licensed in the State of California, and an appraisal to determine fair market value are required. Additional fees for processing the easement or license will be assessed. Board approval is required for Railroad rights.~~

- ~~Permit processing and approval should be granted within two weeks once the plans have been approved, the proper insurance certificates have been received, and permit fees have been paid. Urgent permits will need authorization from the Chief Executive Officer or his designee.~~

- ~~MTS Insurance Requirements can be downloaded from the MTS website. As a general note, most general liability insurance do not cover railroads. Any exclusions relating to performance of operations within the vicinity of any railroad, bridge, trestle, track, roadbed, tunnel, underpass, or crossing must be deleted from the policy. If the exclusions can't be removed, a separate Railroad Protective Liability Policy will be required.~~

- ~~A construction schedule that includes the number of days anticipated to encroach on the right-of- way must be submitted to process the permit. Include times and lengths of shifts, along with anticipated construction methods. Also submit approved Traffic control Plans where applicable. Contact San Diego Trolley Inc. (SDTI) for information on Trolley schedules. Contact Rail America for information on freight train schedules.~~

- ~~Flagging will be required anytime work is within 15 feet of track including airspace or as deemed necessary by Trolley personnel. Permitte will complete and fax SDTI Flagperson / Right-of-Way Work Request form and to MTS and SDTI a minimum of two business days~~

~~prior to anticipated work day. Normally, the cost for flagging is $25.00 an hour for one man or $50.00 for a two-man team. Billing will be directly from SDTI to the Permittee and is separate from the Permit fee.~~

- ~~A pre-construction meeting will be required with MTS and SDTI prior to work commencing within the right-of-way. A written notice of planned start of work must be submitted to MTS a minimum of five business days prior to work starting in the right-of-way. All work will be stopped and Permittee will not be allowed in the right-of-way without proper notification.~~

- ~~Permittee must adhere to construction and safety standards required by MTS of their contractors when working within the right-of-way.~~

- ~~A written notice shall be submitted to MTS that work has been completed per the permit. Any additional work required to replace or repair the railroad facilities in good working order will be the responsibility of the Permittee prior to work acceptance. A notice to the Permittee will be issued upon acceptance of the work by MTS.~~

- ~~Any excess deposited funds will be reimbursed to the Permittee after all requirements of the permit are met. This does not include Permit fees which are non-refundable.~~

- ~~Permittee will provide MTS with a set of as-builts, hard copy and electronic file upon request, within thirty days of relief from maintenance. No excess deposited funds will be released until as-builts are submitted signed by a licensed engineer in the State of California.~~

PLAN REVIEW / RIGHT OF ENTRY APPLICATION

FOR MTS USE ONLY	
MTS Doc. No.	
Application No.	
Date MTS recd	
Milepost Limits	

1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
Telephone: 619.557.4501
Fax: 619.230.6878

Submittal Date:

APPLICANT INSTRUCTIONS

Complete all applicable boxes below (click in boxes to type & then print) and return with submittal requirements (as noted below).

Submittal Requirements:

1) 8½ X 11 vicinity map
2) 3 full- & 3 half-size sets of plans, drawings, exhibits
3) 3 sets of reports, specs, & calculations if applicable
4) Nonrefundable application fee of $750

* Make checks payable to *Metropolitan Transit System*
* Additional permit fees, copies, and information may be required upon request to the Metropolitan Transit System

Applicant Name & Company (Owner/Project Manager)	Permittee Name & Company (Contractor/Engineer/Firm)

Applicant Mailing Address	Permittee Mailing Address

Contact person:		Contact person:	
Telephone:		Telephone:	
Fax:		Fax:	
E-mail		E-mail	

Project Location (street address and nearest cross street)

Project Description

Anticipated Dates - Begin work: End work:

Authorizing Agencies / Jurisdictions (i.e., MTS, NCTD, local cities & counties, government agencies, etc.)

Revised 2/13

Attachment A
Effective 3/1/2026

Permit Fee Structure	
Access Only ROE Permit	$1,500 one-time fee
Engineering Plan Review	$7,300 one-time fee plus reimbursement of MTS engineering consultant costs and applicable MTS costs* related to the review
Construction ROE Permit	$7,300 one-time fee plus reimbursement of MTS engineering consultant costs and applicable MTS costs* related to the permit
Durable ROE Permit	$3,000 one-time fee
Real Estate Fee Structure	
Minor Real Estate Entitlement	$2,300/year + $800 one-time setup fee
Major Real Estate Entitlement Value	Fair Market Value + $2,000 one-time setup fee

* Applicable MTS costs may include flagging, bus bridge, security, passenger support representative, power shut down, and other operational support resources related to the permit or project.

Metropolitan Transit System

Agenda Item No. 10

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM
BOARD OF DIRECTORS

February 12, 2026

SUBJECT:

HPE Synergy Blades and Nimble Storage – Contract Award

RECOMMENDATION:

That the San Diego Metropolitan Transit System (MTS) Board of Directors authorize the Chief Executive Officer (CEO) to execute MTS Doc. No. G3105.0-26 (in substantially the same format as Attachment A), with GigaKOM Corporation (GigaKom), a Small Business (SB), for the purchase of HPE Synergy Blades and Nimble Storage, in the amount of $415,073.54, inclusive of 7.75% CA sales tax.

Budget Impact

The total cost of this contract is estimated to be $415,073.54, inclusive of 7.75% CA Sales Tax (Attachment C). This project is funded by the Capital Improvement Project (CIP) WBS Element 1007122201 - Server Refresh.

DISCUSSION:

MTS's virtual environment is hosted on Hewlett Packard Enterprise (HPE) Synergy chassis with HPE Nimble shared storage. This enterprise hardware hosts critical systems and applications and is a core piece of the MTS infrastructure. Adding the three blades and storage to each existing Synergy chassis at Imperial Avenue Division (IAD) and Operations Control Center (OCC) for a total of six blades, and an additional Nimble storage shelf will expand our virtual infrastructure and support the migration and consolidation of the Regional Transit Management System (RTMS) and Centralized Train Control (CTC) systems. The Synergy blades will add computer and memory resources to host additional virtual machines, while the Nimble storage will provide the underlying storage to store critical system files and data.

On October 2nd, 2025, MTS issued an Invitation for Bids (IFB) for HPE Synergy Blades and Nimble Storage. On November 25th, MTS received nine (9) bids from the following bidders.

San Diego Metropolitan Transit System (MTS) is a California public agency comprised of San Diego Transit Corp., San Diego Trolley, Inc. and San Diego and Arizona Eastern Railway Company (nonprofit public benefit corporations). MTS member agencies include the cities of Chula Vista, Coronado, El Cajon, Imperial Beach, La Mesa, Lemon Grove, National City, Poway, San Diego, Santee, and the County of San Diego. MTS is also the For-Hire Vehicle administrator for multiple cities in San Diego County.

Name	Certification	Amount	7.75% CA Sales Tax	Overall Total Amount
Asimer Tech LLC **	N/A	$391,312.66	$0	$391,312.66
GigaKOM *	SB (Micro)	$392,200.73	$22,872.81	$415,073.54
Nth Generation Computing Inc	N/A	$406,587.00	$24,186.36	$430,773.36
Secure Techies LLC	N/A	$497,747.98	$27,523.47	$525,271.45
IT Devices Online Inc	SB	$571,283.24	$36,813.08	$608,096.32
AlxTel	N/A	$598,395.20	$38,481.91	$636,877.11
vPrime Tech Inc	N/A	$733,775.02	$50,325.06	$784,100.08
Sai Infotek Inc	N/A	$926,686.36	$66,226.81	$992,913.17
Techbranium	N/A	$1,247,979.18	$88,375.69	$1,336,354.86
	MTS Independent Cost Estimate (ICE)			$874,668.34

**Lowest responsive and responsible bidder*
***Non-responsive bidders*

The initial lowest bidder, Asimer Tech, was deemed non-responsive due to incomplete submission in which they failed to account for all line items and therefore did not submit a complete bid. The second lowest bidder, GigaKOM, met all the solicitation requirements and was deemed to be the lowest responsive and responsible bidder. Their bid is determined to be fair and reasonable based on the comparison of all bids received. Bids under the MTS ICE represented significant discounts of the list price of the equipment.

Therefore, staff recommends that the MTS Board of Directors authorize the CEO to execute MTS Doc. No. G3105-26 (In substantially the same format as Attachment A), with GigaKOM, a SB, for the purchase of HPE Synergy Blades and Nimble Storage, in the amount of $415,073.54, inclusive of 7.75% CA Sales Tax.

/s/ Sharon Cooney
Sharon Cooney
Chief Executive Officer

Key Staff Contact: Julia Tuer, 619.557.4515, Julia.Tuer@sdmts.com

Attachments: A. Draft Agreement, MTS Doc. No. G3105.0-26
B. Scope of Work
C. Cost Form

Metropolitan Transit System

STANDARD AGREEMENT
FOR

MTS DOC. NO. G3105.0-26

HPE SYNERGY BLADES AND NIMBLE STORAGE

THIS AGREEMENT is entered into this _____ day of _____, 2026 in the State of California by and between San Diego Metropolitan Transit System ("MTS"), a California public agency, and the following, hereinafter referred to as "Contractor":

Name: GigaKOM

Address: 9245 Activity Road Suite 105
San Diego, CA, 92126

Form of Business: Corporation
(Corporation, Partnership, Sole Proprietor, etc.)

Email: sasastojanovic@gigakom.com

Telephone: 858-769-5408 ext. 15513

Authorized person to sign contracts Sasa Stojanovic (Name) Senior Sales Administrator (Title)

The Contractor agrees to provide services with goods as specified in the conformed Scope of Work/Minimum Technical Specification (Exhibit A), Contractor's Bid/Pricing Form (Exhibit B), and in accordance with the Standard Agreement, including Standard Conditions (Exhibit C), Forms (Exhibit D).

The contract term is for a five (5) year period effective from PO issuance.

Payment terms shall be net 30 days from invoice date. The total cost of this contract shall not exceed $415,073.54 without the express written consent of MTS.

SAN DIEGO METROPOLITAN TRANSIT SYSTEM	GIGAKOM
By: _____ Sharon Cooney, Chief Executive Officer	By _____
Approved as to form: By: _____ Karen Landers, General Counsel	Title: _____

DRAFT

1. SCOPE OF WORK/TECHNICAL SPECIFICATIONS

4.1. BACKGROUND

MTS virtual environment is hosted on Hewlett Packard Enterprise (HPE) Synergy chassis with HPE Nimble shared storage. This enterprise hardware hosts critical systems and applications and is a core piece of the MTS infrastructure. The Synergy chassis, which consists of internal blade servers, allows for more efficient management and deployment, paired with the Nimble array which allows shared storage between all the enclosed the blades, provides a robust and scalable solution for the MTS infrastructure.

Adding three (3) blades and storage to each existing Synergy chassis in Imperial Avenue Division (IAD) and (operations Control Center (OCC) for a total of six (6) blades. Also adding an additional Nimble storage shelf at each data center as shared storage between the blades.

4.2. OBJECTIVE

MTS' objective is to add resources to its virtual environment to support the migration and consolidation of the Regional Transit Management System (RTMS) and Centralized Train Control (CTC) systems. The additional storage can also be used to save exported Closed Circuit Television (CCTV) videos with storage replication for data redundancy. All hardware is added to a pool of resources that can be consumed and distributed between current and new servers for applications and services as needed by MTS.

4.3. TECHNICAL SPECIFICATIONS

Bill of Materials (BOM) provided by HPE includes five (5)-year support for the blades and three (3) year support for the storage. Total of 6 Synergy blades and 2 Nimble storage expansion shelves to be purchased with the following specifications.

IAD Synergy requires an upgrade to its fans to support the increased power consumption and heat from the additional blades. Fan kit and installation services included with the bill of materials for the IAD Synergy shown in Attachment 1.

4.4. [NOT APPLICABLE] PAYMENT PROCESSING SECURITY AND PAYMENT CARD INDUSTRY (PCI) DATA SECURITY STANDARD (DSS) COMPLIANCE

4.5. HEWLETT PACKARD ENTERPRISE (HPE) MINIMUM REQUIREMENTS

A. All HPE equipment or hardware shall come from HPE or from authorized HPE reseller. Only with an active HPE Partner ID.

B. All HPE equipment shall be in proper condition, brand new and not refurbished or remanufactured with its original HPE packaging.

C. All HPE equipment shall be running the safest and most up-to-date software specified in this Scope of work.

D. All HPE equipment warranty shall cover the defects resulting from defective parts, materials, or manufacturing if such defects are revealed during the period of 6 months since the date of purchase or/and shall have hardware limited warranty option.

E. For the defective parts under warranty, the vendor shall provide a return label. MTS will only send back the defective parts once we have received the replacement.

F. HPE Brand or any HPE compatible products and services herein, is required to be with the highest level of quality standards and backed by warranty and shall be sourced through authorized HPE distributors.

G. All HPE equipment shall be delivered in complete\full packages to the address specified. In addition, the packages label shall specify the PO number.

4.6. [NOT APPLICABLE] CISCO MINIMUM REQUIREMENTS

4.7. [NOT APPLICABLE] CONTRACTOR'S INFORMATION SECURITY RESPONSIBILITIES

4.8. [NOT APPLICABLE] SAFETY DATA SHEETS (SDS)

4.9. [NOT APPLICABLE] NO RIGHT TO POST SIGNS

4.10. WARRANTY

Bidders shall outline in detail their warranty on the equipment offered, including the method of adjustment in cases of equipment, component or parts failure. Warranty shall also be stated for installation labor, materials, and method of adjustment.

4.11. REPLACEMENT PARTS

Replacement parts and technical support for the specified equipment must be guaranteed by the manufacturer; to be available for a ten (10) year period from the date of purchase. Manufacturer shall keep parts books and maintenance manuals up-to-date for that period.

4.12. DELIVERY AND ACCEPTANCE

All hardware must be configured-to-order with drop shipment directly from HPE with the reseller being an HPE partner. MTS anticipates deploying the new hardware in FY26. MTS will confirm all parts in the BOM have been accounted for when received. Any hardware issues discovered during deployment will require a Return Material Authorization (RMA) to be initiated by MTS.

Equipment or any deliverable provided under this contract shall be delivered F.O.B. to MTS, 100 16th Street, San Diego, California 92101 unless otherwise specified, in first class condition, complete and ready for operation, and the Contractor shall assume all responsibility and risk of loss incident to said delivery.

Contractor shall indicate delivery date on the Bid Form unless already specified, in which case, shall be made within the time set forth. Delivery is part of the consideration and must be adhered to as specified.

Contractor will not be held liable for failure to make delivery because of strikes, construction of property, governmental regulations, acts of God or any other causes beyond his control, provided a written extension of time is obtained from MTS.

Upon delivery, MTS will acknowledge receipt of said items or products. Delivery shall not constitute acceptance. Upon inspection and testing (if necessary) by MTS, a determination will be made whether said items or products are in conformance with contract requirements. If found in conformance, MTS shall approve the Contractor's invoice for payment; thereby constituting acceptance. Payment terms begin from this point. If the delivered items or products are found not

in compliance, MTS will immediately notify the Contractor, and furnish all details of deficiencies. Contractor shall correct the deficiencies or supply new items or products (at the discretion of MTS) and resubmit for inspection and testing (if necessary).

4.13. [NOT APPLICABLE] LIQUIDATED DAMAGES

4.14. INVOICES

Invoices must be sent to the MTS Accounting Department, via email, at ap@sdmts.com. All invoices must have the Purchase Order and contract number clearly displayed to ensure timely payment. MTS will not pay on packing slips, receiving documents, delivery documents, or other similar documents. Invoices must be submitted for payment.

Payment terms shall be net 30 days from invoice date. If MTS rejects an incorrectly submitted invoice and sends it back for correction, the net 30 days restart from the corrected invoice date.

Contractors must also indicate if any of the invoiced amount(s) is for service or work provided by a subcontractor and indicate the amount that will be paid to the subcontractor. Contractors must also comply with the prompt payment requirements in the *Prompt Progress Payments* section of the Standard Conditions.

HPE Synergy Blades and Nimble Storage IFB
MTS DOC. NO. G3105.0-26

		Gigakom	
Description	**Qty**	**Unit Price**	**Total Price**
Synergy Blades for IAD			
HPE Synergy 480 Gen11 Configure-to-order Compute Module	3	$ 2,949.22	$ 8,847.66
Intel Xeon-Gold 5418Y 2.0GHz 24-core 185W Processor for HPE	6	$ 3,645.75	$ 21,874.50
HPE 64GB (1x64GB) Dual Rank x4 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit	36	$ 881.06	$ 31,718.16
HPE Synergy 480 Gen11 without Drive Front Cage Kit	3	$ 133.91	$ 401.73
HPE 480GB NVMe Gen4 Mainstream Performance Read Intensive M.2 Multi Vendor SSD	6	$ 511.29	$ 3,067.74
HPE Synergy NS204i-d Gen11 NVMe Boot Storage Device	3	$ 255.20	$ 765.60
HPE Synergy 4820C 10/20/25Gb Converged Network Adapter	3	$ 507.16	$ 1,521.48
HPE Synergy 480 Gen11 CPU Front Heat Sink Kit	3	$ 140.29	$ 420.87
HPE Synergy 480 Gen11 CPU Rear Heat Sink Kit	3	$ 152.96	$ 458.88
HPE Synergy Node Installation Service	3	$ 515.37	$ 1,546.11
HPE 5Y Tech Care Critical Service SY480 Gen11 Support	3	$ 9,122.60	$ 27,367.80
HPE Synergy 12000 High Capacity Fan Kit	10	$ 214.71	$ 2,147.10
HPE Add On Options Install SVC (Fan Kit Installation)	3	$ 165.89	$ 497.67
Subtotal	1	$ 19,195.41	$ 100,635.30
7.75% CA Sales Tax	1	$ 727.85	$ 5,519.84
Shipping	1	$ -	$ -
Total	1	**$ 19,923.26**	**$ 106,155.14**
Synergy Blades for OCC			
HPE Synergy 480 Gen11 Configure-to-order Compute Module	3	$ 2,949.22	$ 8,847.66
Intel Xeon-Gold 5418Y 2.0GHz 24-core 185W Processor for HPE	6	$ 3,645.75	$ 21,874.50
HPE 64GB (1x64GB) Dual Rank x4 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit	36	$ 881.06	$ 31,718.16
HPE Synergy 480 Gen11 without Drive Front Cage Kit	3	$ 133.91	$ 401.73
HPE 480GB NVMe Gen4 Mainstream Performance Read Intensive M.2 Multi Vendor SSD	6	$ 511.29	$ 3,067.74
HPE Synergy NS204i-d Gen11 NVMe Boot Storage Device	3	$ 255.20	$ 765.60
HPE Synergy 4820C 10/20/25Gb Converged Network Adapter	3	$ 507.16	$ 1,521.48
HPE Synergy 480 Gen11 CPU Front Heat Sink Kit	3	$ 140.29	$ 420.87
HPE Synergy 480 Gen11 CPU Rear Heat Sink Kit	3	$ 152.96	$ 458.88
HPE Synergy Node Installation Service	3	$ 515.37	$ 1,546.11
HPE 5Y Tech Care Critical Service SY480 Gen11 Support	3	$ 9,122.60	$ 27,367.80
Subtotal	1	$ 18,814.81	$ 97,990.53
7.75% CA Sales Tax	1	$ 711.21	$ 5,353.44
Shipping	1	$ -	$ -
Total	1	**$ 19,526.02**	**$ 103,343.97**
Firmware Updates			
HPE Synergy FW Updt Implem Remote SVC	6	$ 1,076.46	$ 6,458.76
Total		**$ 1,076.46**	**$ 6,458.76**
Firmware Updates			
HPE Nimble Storage HF40/60 Adaptive ES3 210TB (21x10TB) HDD 17.28TB Cache CTO Expansion Shelf	2	$ 74,859.65	$ 149,719.30
HPE Alletra Storage 2120 2x 1200W FIO Power Supply Kit	2	$ 2,441.87	$ 4,883.74
HPE Nimble Storage NEMA 5-15P to C13 125V 10Amp 1.8m US FIO Power Cord	4	$ 30.14	$ 120.56
HPE Nimble Storage C13 to C14 250V 10Amp 1.8m Universal FIO Power Cord	4	$ 27.28	$ 109.12
HPE 3Y Tech Care Essential Exchange Service NS HF40/60 ES3 210TB 17TB Shelf Supp	2	$ 14,080.22	$ 28,160.44
HPE Tier 1 Storage Array Upg Startup SVC	2	$ 2,061.49	$ 4,122.98
Subtotal	1	$ 93,500.65	$ 187,116.14
7.75% CA Sales Tax	1	$ 5,995.32	$ 11,999.54
Shipping	1	$ -	$ -
Total	1	**$ 99,495.97**	**$ 199,115.68**
(BASIS OF AWARD) GRAND TOTAL (All Inclusive of all charges e.g Tax etc.):		**$**	**415,073.54**

Agenda Item No. 11

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM
BOARD OF DIRECTORS

February 12, 2026

SUBJECT:

Homeless Encampment Cleanup Services – Contract Award

RECOMMENDATION:

That the San Diego Metropolitan Transit System (MTS) Board of Directors authorize the Chief Executive Officer (CEO) to execute MTS Doc. No. PWG453.0-26 (in substantially the same format as Attachment A), with Urban Corps of San Diego County (Urban Corps), for on-call homeless encampment cleanup services in the amount of $763,045.56 for a five (5) year period.

Budget Impact

The total contract cost is estimated to be $763,045.56. The project will be funded by the respective Fiscal Years' (FY) Land Management (LM) and San Diego Trolley, Inc.'s (SDTI) Facilities departments' operating budget as follows:

Department	Budget Account	Total Amount
LM	791010-571250	$324,852.60
SDTI	380016-571140	$438,192.96
	Total	**$763,045.56**

DISCUSSION:

MTS contracts for on-call homeless encampment clean-up services at MTS stations and along the MTS right-of-way. On occasion, some MTS properties have become places for homeless to establish camps. It is difficult to predict how many camps will be cleaned or the size and scope of each camp. In some instances, the camp size is much larger than first anticipated, and in other instances, the camp sites are vacated and are simpler to address. The existing contract for these services is due to expire on February 15, 2026.

On November 17, 2025, MTS issued an Invitation for Bids (IFB) for Homeless Encampment Cleanup Services.

On December 19, 2025, a total of six (6) bids were received from the following firms:

Bidder	Certification	Bid Price
Jetstream Power Wash**	N/A	$565,140.00
Urban Corps of San Diego County *	**N/A**	**$763,045.56**
Nature Scape Services	N/A	$1,392,223.20
NRC Environmental Services, Inc.	N/A	$1,484,526.00
Singh Group Inc.	Small Business (SB)	$1,760,040.00
HCI Environmental	N/A	$7,831,224.00
MTS Independent Cost Estimate (ICE)		*$703,456.07*

**Lowest responsive and responsible bidder*
***Non-responsive bidder*

Jetstream Power Wash, the initial lowest bidder, was deemed non-responsive for not submitting any of the required federal forms and was disqualified. The second lowest bidder, Urban Corps, met all the requirements of the IFB; therefore, Urban Corps was deemed the lowest responsive and responsible bidder.

Staff determined Urban Corp's bid to be fair and reasonable based on a comparison of all bids and MTS's ICE above.

Therefore, staff recommends that the MTS Board of Directors authorize the CEO to execute MTS Doc. No. PWG453.0-26 (in substantially the same format as Attachment A), with Urban Corps, for on-call homeless encampment cleanup services in the amount of $763,045.56 for a five (5) year period.

/s/ Sharon Cooney
Sharon Cooney
Chief Executive Officer

Key Staff Contact: Julia Tuer, 619.557.4515, Julia.Tuer@sdmts.com

Attachments: A. Draft Standard Agreement MTS Doc. No. PWG453.0-26
B. Scope of Work
C: Bid Form

Metropolitan Transit System

STANDARD AGREEMENT

FOR

MTS DOC. NO. PWG453.0-26

HOMELESS ENCAMPMENT CLEANUP SERVICES

THIS AGREEMENT is entered into this ____ day of _____, 2026 in the State of California by and between San Diego Metropolitan Transit System ("MTS"), a California public agency, and the following, hereinafter referred to as "Contractor":

Name: Urban Corps of San Diego County

Address: 3127 Jefferson Street

San Diego | CA | 92110
City | State | Zip

Form of Business: Non-Profit - 501(C)(3)

Email: rsoria@urbancorps.org

Telephone: (619) 235-6884 ext 3114

Authorized person to sign contracts Rhody Soria (Name) Chief Executive Officer (Title)

The Contractor agrees to provide services as specified in the conformed Scope of Work/Technical Specification (Exhibit A), Contractor's Cost/Pricing Form (Exhibit B), and in accordance with the Standard Agreement, including Standard Conditions (Exhibit C), and Forms (Exhibit D).

The contract term is for a five (5) year period effective February 16, 2026 through February 15, 2031.

Payment terms shall be net 30 days from invoice date. The total cost of this contract shall not exceed $763,045.56 without the express written consent of MTS.

SAN DIEGO METROPOLITAN TRANSIT SYSTEM	URBAN CORPS OF SAN DIEGO COUNTY
By: _____ Sharon Cooney, Chief Executive Officer	By _____
Approved as to form:	
By: _____ Karen Landers, General Counsel	Title: _____

DRAFT

SCOPE OF WORK

ON-CALL HOMELESS ENCAMPMENT CLEANUP SERVICES

A. INTRODUCTION

The San Diego Metropolitan Transit System (MTS) is seeking a reliable company to perform On-Call Homeless Encampment Cleanup Services for the Facilities (SDTI) and Land Management (LM) Departments.

Some MTS properties have become places for homeless to establish camps. It is difficult to predict how many camps will be cleaned and the size and scope of each. On occasion, the size is much larger than originally anticipated. However, for other cleanups, they may turn-out to be vacated and simple jobs. MTS has therefore been relying on time-and-disposal job estimates on a per-site basis.

The Contractor shall complete this project in its entirety and shall provide all labor, materials, and equipment required for all work including removing and disposing of excess material, procuring all necessary equipment, tools, materials and labor necessary to complete the services in accordance with this Scope of Work.

B. CONTRACT TERM

This contract shall be for a period of five (5) years. The anticipated contract start date is February 16, 2026.

C. MINIMUM QUALIFICATIONS

1. Contractor must have demonstrated experience in property waste and debris removal work for a minimum of five (5) years. Contractor must provide proof of, insurance, and business license upon award. Business license must be registered with the City of San Diego.

D. SERVICE LOCATIONS AND MTS CONTACTS

During the term of this agreement, services may be performed on, or near any MTS properties or right of way.

Program	Contact Information
SDTI	Rolando Montes Superintendent of Facilities - Rail Division San Diego Trolley Inc. Office: 619-595-4927 Cell: 619-454-7207 Rolando.Montes@sdmts.com
LM	Ali Al Bahar Project Engineer – Capital Projects 1255 Imperial Ave., Ste. 1000 San Diego, CA 92101 619.289.6556 ali.albahar@sdmts.com
Hazardous Waste	Ngan Nguyen Environmental Health & Safety Specialist 100 16th Street 1255 Imperial Avenue, Suite 1000 San Diego, CA 92101 858-466-7522 Ngan.nguyen@sdmts.com

E. REGULAR SERVICE HOURS

Monday through Friday, 8:00 a.m. to 5:00 p.m. (excluding holidays)

MTS Holidays (Subject to change during contract)

1. New Year's Day	6. Independence Day
2. Martin Luther King Day	7. Labor Day
3. President's Day	8. Veterans Day
4. Cesar Chavez Day	9. Thanksgiving Day
5. Memorial Day	10. Christmas Day

F. CLEANUP SERVICES

1. Contractor shall cleanup areas as assigned by MTS. All cleanup work will be coordinated through the MTS Facilities Manager or designee. Contractor shall provide all labor, materials, tools, equipment, transportation, and supplies required to abate the encampments on MTS properties.

2. It is expected that cleanup can be completed with the use of hand tools and standard equipment. Hourly rates must be all inclusive of all tools, equipment, protective gear etc. Disposal and vehicle fees will be listed separately as noted on the bid forms.

3. Cleanup duties shall include, but are not limited to, surveying sites, collecting debris, dismantling temporary structures, removing trash, and disposing of all debris at an approved landfill or disposal site.

4. Contractor shall properly handle and dispose of solid waste and hazardous waste in accordance with all applicable laws. Contractor shall notify the MTS Facilities Manager and the Environmental Health and Safety Specialist listed herein, if hazardous waste is discovered and/or a release of chemicals has occurred. Contractor shall be required to document the hazardous material type (if known), approximate quantity/volume, location and provide photos where possible, and provide this information to the Environmental Health and Safety Specialist, who will coordinate removal with the MTS hazardous waste contractor.

5. MTS Transit Enforcement and/or the MTS Facilities Department will post a notice at the encampment, ordering the occupant(s) to vacate the premises and take belongings with them. MTS Transit Enforcement will respond to person(s) who are violent, refuse to leave, or unable to care for themselves. Contractor shall commence work when the occupants are no longer there, and will be escorted by an MTS Transit Enforcement Officer. If the person(s) that occupied the site returns during the cleanup, the Contractor shall stop work immediately, notify the MTS Transit Enforcement Officer escort, and wait for site to be cleared by MTS Transit Enforcement before continuing work.

6. Under most circumstances, the MTS Transit Enforcement will have confiscated weapons and illegal contraband prior to the arrival of the Contractor. If an undiscovered cache is found, the Contractor shall stop work immediately, notify the MTS Transit Enforcement Officer escort, and wait for the site to be cleared by MTS Transit Enforcement before continuing work.

7. In the event that an adjacent encampment is discovered in the same general area during the course of abatement, Contractor must notify the MTS Facilities Manager to obtain

authorization prior to proceeding with any additional work. This will prevent conflicts regarding billing and safety issues if MTS Transit Enforcement hasn't cleared the area.

8. Large jobs may require special arrangements for taking material to a waste management facility. Contractor shall be responsible to arrange delivery and removal of roll-off containers provided by a waste management facility, at no additional cost to MTS.

9. Some camps are established in areas that are difficult to access. Sometimes it isn't possible for trucks and other vehicles to park close to the jobsite. The debris will have to be carried out.

10. Contractor shall photograph the encampment site before and after the cleanup to document the condition of the site and the date of the cleanup. Photographs will be provided to the MTS Facilities Superintendent, or designee, electronically after completion of the cleanup.

11. Contractor shall perform work in a timely and efficient manner and conduct themselves in a courteous and business-like manner at all times.

12. Contractor shall notify the MTS Facilities Manager, or designee, when the work is complete. The MTS Facilities Manager will sign-off a confirmation that the abatement meets MTS requirements.

G. GENERAL REQUIREMENTS

1. Contractor shall only perform work that is approved by MTS. Approval by the MTS Project Manager is required prior to any work being performed.

2. Prior to performing any cleanup services, Contractor shall provide a quote for the services to be performed. The quote shall include at minimum the following information:

   a) Estimated hour(s) and hourly rate
   b) Date the service is to be performed and completed

3. Contractor shall perform and complete each work order in the agreed upon manner and time period.

4. In the event of accidental site damage by the Contractor, Contractor shall be responsible to return the site to its original condition at no cost to MTS.

5. Unless otherwise stated, Contractor shall remove all equipment, materials, etc. as directed by MTS.

6. Contractor is responsible for clarifying with the MTS Project Manager any questions regarding the work that is to be performed.

H. BILLING RATES

1. As-Needed Repair Services shall be billed at the labor rates as set forth in the Bid Form (ATT1) for actual time worked. There shall be no minimum guarantee of hours per cleanup assignment.

a. Labor Rates:

i. Supervisor - Straight Time Hourly Rate
ii. Worker - Straight Time Hourly Rate

All estimated travel time to and from MTS property, and travel subsistence costs (i.e. mileage, fuel surcharge, etc.), projected to be utilized by the Contractor during the term of performance of any resultant Contract are to be absorbed, amortized, and incorporated into the Bidder's fully burdened unit price per hourly rate as set forth in the Bid Form.

b. Fees:

i. Disposal Fee – Per Ton
   1. This fee is for the costs, including dumpsite fees, permits, etc. of , disposal of waste collected during each cleanup.
ii. Vehicle Fee for transportation of crew, and waste disposal – Per Day
   1. This fee is for the costs, including vehicle rental (if any), fuel, insurance, maintenance, etc. associated with the transportation of personnel, equipment and disposal of waste.

All estimated labor, travel time to and from MTS property, and travel subsistence costs (i.e. mileage, fuel surcharge, etc.), projected to be utilized by the Contractor during the term of performance of any resultant Contract are to be absorbed, amortized, and incorporated into the Bidder's unit price per fee as set forth in the Bid Form.

I. SCHEDULE AND RESPONSE TIME

1. MTS will schedule abatement of encampments with the Contractor on an as-needed basis. Areas must be cleaned within (3) three to (5) five days from request from the MTS Facilities Superintendent in order to decrease the chance of re-occupation.

2. If a camp presents an immediate threat, a more urgent response of (1) one day may be required. The MTS Facilities Superintendent will specify which areas are considered an immediate threat.

3. Contractor shall contact the MTS Facilities Superintendent, or designee, if something interferes with completion of the project as scheduled. MTS expects this will be a rare occurrence.

J. SAFETY

1. MTS emphasizes safety in all employee and Contractor performance. Contractor shall assign a person responsible for the on-site supervision/management of its crew and shall ensure all necessary safety procedures are followed. This superintendent/manager shall also serve as the MTS contact for all cleanup projects.

2. Safety and appropriate training are critical requirements for the selected Contractor. Field staff must be trained annually in OSHA's Blood Borne Pathogen Standard 1910.1030. Contractor shall comply with all safety rules, protocols, and licensing requirements mandated by the State of California.

3. Contractor shall follow best practices work procedures to safely manage any potentially hazardous or biological materials that may be found on the jobsite, including urine, feces, soiled personal hygiene items, syringes, unmarked containers, drums and other materials which could pose a health threat.

4. Contractor shall conform to all applicable occupational safety and health standards, rules, regulation and orders established by the State of California, including, but not limited to providing all safety equipment, personal protective equipment (PPE), apparel, materials, and training, etc. to its employees.

5. At no time is the Contractor expected to interact with the encampment residents.

6. Work may be performed in inclement weather. Jobsites can be in heavy foliage, poison oak, steep embankments, next to train tracks, by creeks, and other areas requiring alertness to the environment and preplanning to prevent injury or illness. Contractor shall perform a hazard assessment and provide all training and supplies necessary to its employees upon initiating work at a jobsite.

7. Most cleanup work will be in and/or along the MTS railroad right-of-way and/or general working area. Contractor shall comply with MTS ROW training and certifications required by MTS.

8. Contractor shall request flaggers from MTS/SDTI, seventy-two (72) hours in advance of any work activity within the MTS right-of-way. The MTS Facilities Superintendent, or designee shall furnish the necessary forms to request flaggers. MTS shall bear the expense of the flaggers.

9. All Contractor employees or representatives shall be trained through the MTS Railroad Worker Safety Training Program prior to the work per paragraph 6.44, Roadway Workers Protection Training of the Standard Agreement, Standard Conditions. Any costs related to RWP training courses shall be at the sole expense of the Contractor.

10. Within 30 days, or sooner of the date of the Notice to Proceed, Contractor shall provide proof that workers received required training in accordance with items 2 and 9 of this section, and a copy of the Contractor’s Injury and Illness prevention Program (IIPP). MTS reserves the right to periodically review Contractor's training records and licenses.

K. PAYMENT

1. Payment shall be made at the hourly rate contractually agreed upon between the Contractor and MTS. This is an all-inclusive rate taking into account labor, fuel, equipment and supplies. Hourly rates, disposal fees, and vehicle fees are to be billed at the rates indicated on the Bid Form. No additional billing for costs shall be made, nor shall any payment be made for travel time of any crew or equipment. Prices shall be firm and fixed during the term of the Agreement.

2. Unless otherwise stated in the specifications or bid form, one hundred (100%) of the contract price for each unit or units of material or equipment furnished and delivered under these specifications, will be paid to the Contractor within thirty (30) days after delivery to and acceptance by MTS of the unit or units ordered, as herein provided, and after the statements covering the unit or units have been presented to MTS by the Contractor.

3. Cash discounts as shown on the bid form shall be accepted at the option of MTS. Otherwise the terms will be Net thirty (30) from acceptance. Payment terms less than ten (10) days from acceptance will not be considered. Advanced Payment is Not Allowable

L. INVOICING

1. The following information must be on the bill:

a. Purchase order number
b Date the service was performed
c. Location of the cleanup
d. Name of MTS official that made the request
e. Hourly rate
f. Name of MTS staff who signed-off that the abatement met MTS requirements
g. Weigh tickets for disposal of debris from cleanup

2. Invoices must be sent to the MTS Accounting Department, via email at ap@sdmts.com. All invoices must have the Purchase Order and contract number clearly displayed to ensure timely payment. MTS will not pay on packing slips, receiving documents, delivery documents, or other similar documents. Invoices must be submitted for payment.

   Contractors must also indicate if any of the invoiced amount is for service or work provided by a subcontractor and indicate the amount that will be paid to the subcontractor. Contractors must also comply with the prompt payment requirements in Section 16 Prompt Progress Payments of the Standard Conditions.

MTS BID FORM (PWG453.0-26) - As-Needed Homeless Encampment Clean-Up Services IFB

Table I: AS-NEEDED SERVICES				Year One (2/16/26 - 2/15/27)		Year Two (2/16/27 - 2/15/28)		Year Three (2/16/28 - 2/15/29)		Year Four (2/16/29 - 2/15/30)		Year Five (2/16/30 - 2/15/31)	
Item	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total	Unit Price	Item Total	Unit Price	Item Total	Unit Price	Item Total	Unit Price	Item Total
1	Supervisor Labor	HR	456	$ 63.00	$ 28,728.00	$ 66.15	$ 30,164.40	$ 69.45	$ 31,669.20	$ 72.92	$ 33,251.52	$ 76.57	$ 34,915.92
2	Worker Labor	HR	1824	$ 38.00	$ 69,312.00	$ 39.90	$ 72,777.60	$ 41.90	$ 76,425.60	$ 44.00	$ 80,256.00	$ 46.20	$ 84,268.80
3	Disposal Fee	TON	84	$ 129.60	$ 10,886.40	$ 136.08	$ 11,430.72	$ 142.88	$ 12,001.92	$ 150.02	$ 12,601.68	$ 157.52	$ 13,231.68
4	Vehicle Fee	DAY	108	$ 270.00	$ 29,160.00	$ 283.50	$ 30,618.00	$ 297.67	$ 32,148.36	$ 312.55	$ 33,755.40	$ 328.17	$ 35,442.36
			Table I Subtotals:		$ 138,086.40		$ 144,990.72		$ 152,245.08		$ 159,864.60		$ 167,858.76

Grand Total (BASIS OF AWARD)	**$ 763,045.56**

Metropolitan Transit System

Agenda Item No. 12

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM
BOARD OF DIRECTORS

February 12, 2026

SUBJECT:

Purchase of Oil, Lubricants, and Liquids Contract Award

RECOMMENDATION:

That the San Diego Metropolitan Transit System (MTS) Board of Directors authorize the Chief Executive Officer (CEO) to:

1) Execute MTS Doc. No. G3182.0-26 (in substantially the same format as Attachment A), with Blue Angel International LLC (Blue Angel), a Small Business (SB), for the purchase of Oil, Lubricants, and Liquids for five (5) years in the amount of $186,999.98 (including 7.75 % CA Sales Tax); and

2) Execute MTS Doc. No. G3183.0-26 (in substantially the same format as Attachment B), with Jamison Transportation Products (Jamison), a SB, for the purchase of Oil, Lubricants, and Liquids for five (5) years in the amount of $1,023,094.06 (including 7.75 % CA Sales Tax).

Budget Impact

The total cost of these contracts is estimated to be $1,210,094.04 (including 7.75 % CA Sales Tax). These inventory items will be funded by the San Diego Transit Corporation (SDTC) and San Diego Trolley, Inc. (SDTI) Operating Budgets as they are issued on an as-needed basis from inventory.

DISCUSSION:

MTS requires various specialized oils and lubricants for use across its entire operation, which includes its facilities, buses, and light rail vehicles. The various types of oils and lubricants are used across multiple applications to ensure the state of good repair across the many platforms.

The assignment for these products under contract will ensure the establishment of agreed pricing and lead time over the contract period, which will ensure maintaining availability and service levels for each end-user department and facilitate efficiency across the procurement process.

On September 9, 2025, MTS released an Invitation for Bid (IFB) solicitation for the provision of oil, lubricants, and liquids for a five-year period. A total of three (3) bids were received from Blue Angel, Jamison and The Jankovich Company, LLC on December 29, 2025.

One (1) of the three (3) bidders, The Jankovich Company, LLC was deemed non-responsive and subsequently disqualified from consideration due to non-compliance with Buy America requirements.

Basis of award is by line, based on which bidder provided the lowest price and lead-times for each item, which are shown in Attachment D. Blue Angel and Jamison provided firm-fixed pricing for the next five (5) contract years and were deemed the lowest responsive and responsible bidders. The total bid amount for each Bidder is deemed fair and reasonable based on a comparison of all bids and MTS's ICE ($1,263,313.23) for all items. The bid amount is based on a calculation of the unit price for each item and MTS's estimated quantity needs over the term of the contract. MTS will only pay for the items ordered and received. In the event the contract underestimates the quantities needed, additional funding will be authorized according to Board Policy 41.

MTS Contract No.	Bidder Name	Firm Certification	Total Bid Amount
G3182.0-26	Blue Angel	SB (Micro)	$186,999.98
G3183.0-26	Jamison	SB (Micro)	$1,023,094.06

On January 16, 2026, MTS issued a Notice of Intent to Award to Blue Angel and Jamison.

Therefore, staff recommends that the MTS Board of Directors authorize the CEO to:

1) Execute MTS Doc. No. G3182.0-26 (in substantially the same format as Attachment A), with Blue Angel, a SB, for the purchase of Oil, Lubricants, and Liquids for five (5) years in the amount of $186,999.98 (including 7.75 % CA Sales Tax); and

2) Execute MTS Doc. No. G3183.0-26 (in substantially the same format as Attachment B), with Jamison, a SB, for the purchase of Oil, Lubricants, and Liquids for five (5) years in the amount of $1,023,094.06 (including 7.75 % CA Sales Tax).

/s/ Sharon Cooney
Sharon Cooney
Chief Executive Officer

Key Staff Contact: Julia Tuer, 619.557.4515, Julia.Tuer@sdmts.com

Attachments: A. Draft Agreement, MTS Doc. No. G3182.0-26
B. Draft Agreement, MTS Doc. No. G3183.0-26
C. Scope of Work
D. Bid Form

Metropolitan Transit System

BLSTANDARD AGREEMENT

FOR

MTS DOC. NO. G3182.0-26

[Title]

THIS AGREEMENT is entered into this _____ day of _____, 2026 in the State of California by and between San Diego Metropolitan Transit System ("MTS"), a California public agency, and the following, hereinafter referred to as "Contractor":

Name: Blue Angel International LLC

Address: 2342 Shattuck Ave #800

Berkeley, CA 94704

City State Zip

Form of Business: LLC
(Corporation, Partnership, Sole Proprietor, etc.)

Email: care@blueangel.com

Telephone: (510)931-777

Authorized person to sign contracts Avon Zhang President

Name Title

The Contractor agrees to provide goods as specified in the conformed Scope of Work/Technical Specification (Exhibit A), Contractor's Cost/Pricing Form (Exhibit B), and in accordance with the Standard Agreement, including Standard Conditions (Exhibit C), Federal Requirements (Exhibit D), and Forms (Exhibit E).

The contract term is for five (5) years effective March 1, 2026 through February 28, 2031.

Payment terms shall be net 30 days from invoice date. The total cost of this contract shall not exceed $186,999.98 (including CA 7.75% sales tax) without the express written consent of MTS.

SAN DIEGO METROPOLITAN TRANSIT SYSTEM	BLUE ANGEL INTERNATIONAL LLC
By: _____ Sharon Cooney, Chief Executive Officer	By _____
Approved as to form:	
By: _____ Karen Landers, General Counsel	Title: _____

Metropolitan Transit System

STANDARD AGREEMENT

FOR

MTS DOC. NO. G3183.0-26

[Title]

THIS AGREEMENT is entered into this _____ day of _____, 2026 in the State of California by and between San Diego Metropolitan Transit System ("MTS"), a California public agency, and the following, hereinafter referred to as "Contractor":

Name: Jamison Professional Services

Address: 4255 S. Buckley Rd. #108

Aurora, CO 80013

City State Zip

Form of Business: LLC
(Corporation, Partnership, Sole Proprietor, etc.)

Email: tony@jamisontransportationproducts.com

Telephone: (720) 535-9759

Authorized person to sign contracts: Tony Jamison — Owner/Principal

Name Title

The Contractor agrees to provide goods as specified in the conformed Scope of Work/Technical Specification (Exhibit A), Contractor's Cost/Pricing Form (Exhibit B), and in accordance with the Standard Agreement, including Standard Conditions (Exhibit C), Federal Requirements (Exhibit D), and Forms (Exhibit E).

The contract term is for five (5) years effective March 1, 2026 through February 28, 2031.

Payment terms shall be net 30 days from invoice date. The total cost of this contract shall not exceed $1,023,094.06 (including CA 7.75 % sales tax) without the express written consent of MTS.

SAN DIEGO METROPOLITAN TRANSIT SYSTEM	JAMISON PROFESSIONAL SERVICES
By: _____ Sharon Cooney, Chief Executive Officer	By _____
Approved as to form:	
By: _____ Karen Landers, General Counsel	Title: _____

DRAFT

4. SCOPE OF WORK/TECHNICAL SPECIFICATIONS

4.1. GENERAL

San Diego Transit Corp., (Bus division) and San Diego Trolley Inc., (Trolley division), jointly identified as “MTS” is seeking bids for the provision of Oil & Lubrication supplies that are used across its facilities, platforms, transit buses and Light Rail Vehicles (LRVs). The successful bidder shall be qualified and responsible in supplying the products as specified under the exact requirements outlined under this solicitation over a five (5) year period.

A non-mandatory Pre-Bid/Site visit will be held on the date in the calendar of events if requested

4.2. BID FORM

All products under this bid are listed on the bid form by each individual item. Bidders are allowed to bid based on a line-by-line basis for all five (5) years. The contract may be awarded to either a single bidder or multiple bidders.

The lowest responsive, responsible Bidder for each line will be determined by a comparison of the cost for that line for 5 years. For each line, MTS will add the Extended Cost for 5 years to determine the lowest bidder for that line.

Bidders must state their part number in the column provided and provide their best price and lead time in weeks. If lead time is less than a week, the bidder should indicate < week. If more than a week bidder should indicate the number of weeks. The lead time provided shall apply for all years. Lead times shall reflect the date of the Contractor’s receipt date of the Purchase Order to the day of delivery at the MTS location. MTS reserves the right to consider the lead time as an overall factor of the award.

Unit pricing shall be all-inclusive except for California sales tax. MTS will calculate tax at Purchase Order (PO) issuance.

Products that are subject to shelf life must have a minimum of 75% of remaining shelf life from the manufacture date.

Shipping/delivery shall be F.O.B destination as described herein shall be the sole responsibility of the bidder. MTS will not pay additional shipping/delivery charges; therefore, bidders should bid accordingly.

Annual consumption provided under the solicitation is to be estimated quantities only for bidding purposes. As these are based on current usage, it does not represent a guaranteed forecast. Actual usage may be more or less than estimated. Invoicing will be based on actual order.

MTS reserves the right to order a quantity of one (1), or more of each item per PO as its needs dictate.

4.3. SUPPORTING MSDS DOCUMENTS

Each Bidder shall submit one (1) copy of MSDS and material handling instructions covering each items included in the bid.

4.4. ADDITIONS AND CHANGES

Any proposed change to the items under this contract must be submitted through MTS Procurement and approved by the SDTC or SDTI Quality department.

Any changes to the products or any aspect of the contract will be amended through a formal written and mutually executed MTS change order. Changes are not effective until confirmed by an executed amendment.

4.5. PACKAGING

All parts must be packaged individually in boxes designed to occupy the least amount of shelf space as possible without damage to the materials. The box must be visibly labeled with full details of the product.

4.6. DAMAGED OR DEFECTIVE MATERIAL

Any materials delivered damaged, defect and/or incorrect information will be returned to the Contractor. The Contractor will replace the rejected material within a maximum of five (5) business days unless MTS at their discretion, requests a full credit. Any additional costs incurred by MTS related to the return such as freight, packaging, or re-stocking, will be reimbursed by the Contractor.

4.7. TARIFF ADJUSTMENTS

Any tariffs that may be applicable across items in the contract shall be formally communicated to MTS through an email to the Buyer with supporting documentation in either a CBP Form 7501 or a CBP payment receipt that itemizes each respective item charge. MTS will not approve any tariff charges without the appropriate acceptable documentation.

Details on the CBP document should match the part number, description and quantity on the MTS Purchase Order. Once this charge is approved, MTS shall confirm and request any tariff charges to be invoiced under a separate line on the Purchase Order for payment.

4.8. MANUFACTURING REQUIREMENTS AND MATERIALS

4.8.1. MTS BUS

A. BRAND NAMES AND MODEL NUMBERS: Specifications in this IFB are not meant to be restrictive but descriptive. Specifications contained herein reflect the minimum acceptable standards and are not intended to restrict competition. No substitute specification may be included. Exceptions may be made only if required to match existing equipment or conform to pre-existing conditions which preclude mismatch of size or color. Substitutions which would include additional delivery time, expenses or modifications of the original design may be rejected.

B. ITEM DECRIPTIONS : All items on all pages of the specification are representative of desired size and dimension and such are intended as guides to bidders in the preparation of bids, Bids of equivalent items will be considered for award if (1) such item are clearly identified by manufactures name, brand, and model number, if any, in the offer, (2) descriptive literature or other such data is

provided to show that the equivalent items are equal to the brand name, and (3) MTS determines such items to be equal in all material respects to the salient specifications of product required.

C. COMPATIBILITY or BRAND NAMES: Bidders shall clearly indicate that it is offering and “equal” product unless the bidder is offering the brand name product(s) referenced in the inquiry. Should any specified brands or models be listed incorrectly, discontinued or improved, the bidder should note such changes in its responses and include the pertinent details regarding the change. In the event the item has been discontinued, the bidder will be allowed to propose comparable goods or services along with the necessary supplemental documentation supporting their position.

D. EVALUATION AND DETERMINATION OF PRODUCT(S): The evaluation of bids and the determination as to equality of the product or services proposed shall be the responsibility of MTS and will be based on information provided in the bid and/or information reasonably available to MTS.

4.8.2. LIGHT RAIL VEHICLES (LRVs)

A. BRAND NAMES AND MODEL NUMBERS: Specifications in this IFB are not meant to be restrictive but descriptive. Specifications contained herein reflect the minimum acceptable standards and are not intended to restrict competition. No substitute specification may be included. Exceptions may be made only if required to match existing equipment or conform to pre-existing conditions which preclude mismatch of size or color. Substitutions which would include additional delivery time, expenses or modifications of the original design may be rejected.

B. ITEM DECRIPTIONS : All items on all pages of the specification are representative of desired size and dimension and such are intended as guides to bidders in the preparation of bids, Bids of equivalent items will be considered for award if (1) such item are clearly identified by manufactures name, brand, and model number, if any, in the offer, (2) descriptive literature or other such data is provided to show that the equivalent items are equal to the brand name, and (3) MTS determines such items to be equal in all material respects to the salient specifications of product required.

C. COMPATIBILITY or BRAND NAMES: Bidders shall clearly indicate that it is offering and “equal” product unless the bidder is offering the brand name product(s) referenced in the inquiry. Should any specified brands or models be listed incorrectly, discontinued or improved, the bidder should note such changes in its responses and include the pertinent details regarding the change. In the event the item has been discontinued, the bidder will be allowed to propose comparable goods or services along with the necessary supplemental documentation supporting their position.

D. EVALUATION AND DETERMINATION OF PRODUCT(S): The evaluation of bids and the determination as to equality of the product or services proposed shall be the responsibility of MTS and will be based on information provided in the bid and/or information reasonably available to MTS.

4.9. [NOT APPLICABLE] Payment Processing Security and PCI DSS CompliancE

4.10. [NOT APPLICABLE] CONTRACTOR'S INFORMATION SECURITY RESPONSIBILITIES

4.11. BUY AMERICA

This scope of work may trigger Buy America and/or Build America Buy America requirements, which apply to construction materials, manufactured products, rolling stock, iron and steel. The below list of definitions and examples is not exhaustive and is only to be used as illustrative and a guidance tool for Contractor compliance.

A. [NOT APPLICABLE] CONSTRUCTION MATERIALS

B. MANUFACTURED PRODUCT

Per IIJA Section 70912 (2)(B), all manufactured products used in the project must be produced in the United States. Examples for manufactured products provided per Appendix A to 49 CFR 661.3 include: Infrastructure projects not made primarily of steel or iron, including structures (terminals, depots, garages, and bus shelters), ties and ballast; contact rail not made primarily of steel or iron; fare collection systems; computers; information systems; security systems; data processing systems; and mobile lifts, hoists, and elevators.

C. [NOT APPLICABLE] ROLLING STOCK

D. [NOT APPLICABLE] IRON OR STEEL

4.12. [NOT APPLICABLE] ACQUISITION OF ROLLING STOCK

4.13. ASAFETY DATA SHEETS (SDS)

Upon award, Contractors shall email the SDS for materials/ chemicals that will be used or stored at the construction site during the duration of the project, attention Ngan Nguyen, MTS Environmental Health and Safety Specialist at Ngan.Nguyen@sdmts.com for review or comment if needed. The Contractor shall notify the MTS Environmental Health and Safety Specialist if there are changes or updates to the SDS during the term of the contract to ensure the MTS recordkeeping is kept updated throughout the contract. Any disposal of hazardous waste must be communicated to MTS Environmental Health and Safety Specialist for approval prior to disposal.

4.14. [NOT APPLICABLE] NO RIGHT TO POST SIGNS

4.15. WARRANTY

Orders Products supplied under the contract shall be covered by a manufacturer's written guarantee and/or vendor's warranty that such products will be free of defects in material, workmanship and performance for the lifetime of the product.

The successful bidder shall administer the warranty on MTS' behalf and shall ensure that the manufacture repairs, replaces at no charge with MTS that violate either the above warranty or the manufactures warranty. It shall be the responsibility of the manufacturer

or the successful bidder to pay all packaging and shipping cost associated with warranty repairs or replacements.

Bidders shall outline in detail their warranty on the equipment offered, including the method of adjustment in cases of equipment, component or parts failure. Warranty shall also be stated for installation labor, materials, and method of adjustment.

4.16. REPLACEMENT PARTS

Replacement parts and technical support for the specified equipment must be guaranteed by the manufacturer; to be available for a ten (10) year period from the date of purchase. Manufacturer shall keep parts books and maintenance manuals up-to-date for that period.

4.17. [NOT APPLICABLE] DELIVERY AND ACCEPTANCE

SAN DIEGO TRANSIT CORPORATION (SDTC) – MTS BUS: Orders will be placed by the MTS Procurement Department only. All shipments made against a PO must be accompanied by a packing slip referencing the PO number. Unless otherwise specified by SDTC, all items must be delivered F.O.B. destination to either:

A. Imperial Avenue Division (IAD), 100 16th Street, San Diego, CA 92101

B. Kearny Mesa Division (KMD), 4630 Ruffner Road, San Diego, CA 92111

SAN DIEGO TROLLEY, INC. (SDTI) – MTS RAIL/LRVs: Orders will be placed by the MTS Procurement Department only. All shipments made against a PO must be accompanied by a packing slip referencing the PO number. Unless otherwise specified by SDTI all items must be delivered F.O.B. destination to:

1341 Commercial Street, San Diego, CA 92113

All orders must be shipped in full per the quantities requested on each MTS Purchase Order within the contract lead time.

The Contractor will provide the details for a single point of contact where MTS shall use to resolve all shipping and quality discrepancies. It is the Contractor's responsibility to handle all claims with the shipper, provide proof of deliveries, and correct discrepancies within five (5) working days of notification by MTS.

At a minimum, all deliveries must have the following clearly displayed:

A. Purchase Order reference
B. MTS stock code reference
C. Part Number
D. Item Description
E. Order Quantity
F. Unit of Measure
G. Date of Manufacture (where applicable)
H. Cure Dates (where applicable)
I. Expiry Date (where applicable)
J. Copy of MSDS

Equipment or any deliverable provided under this contract shall be delivered in first class condition, complete and ready for operation, and the Contractor shall assume all responsibility and risk of loss incident to said delivery.

Contractor shall indicate delivery date on the Bid Form unless already specified, in which case, shall be made within the time set forth. Delivery is part of the consideration and must be adhered to as specified.

Contractor will not be held liable for failure to make delivery because of strikes, construction of property, governmental regulations, acts of God or any other causes beyond his control, provided a written extension of time is obtained from MTS.

Upon delivery, MTS will acknowledge receipt of said items or products. Delivery shall not constitute acceptance. Upon inspection and testing (if necessary) by MTS, a determination will be made whether said items or products are in conformance with contract requirements. If found in conformance, MTS shall approve the Contractor's invoice for payment; thereby constituting acceptance. Payment terms begin from this point. If the delivered items or products are found not in compliance, MTS will immediately notify the Contractor and furnish all details of deficiencies. Contractor shall correct the deficiencies or supply new items or products (at the discretion of MTS) and resubmit for inspection and testing (if necessary).

4.18. [NOT APPLICABLE] LIQUIDATED DAMAGES

4.19. PAYMENT TERMS

Unless otherwise stated in the specifications or bid forms, one hundred (100%) of the contract price for each unit or units of material or equipment furnished and delivered under these specifications, will be paid to the Contractor within thirty (30) days after delivery to and acceptance by MTS of the unit or units ordered, as herein provided, and after the statements covering the unit or units have been presented to MTS by the Contractor.

Cash discounts as shown on the bid form shall be accepted at the option of MTS. Otherwise the terms will be net thirty (30) from acceptance. Payment terms of less than ten (10) days from acceptance will not be considered. ***Advanced Payment is Not Allowable***.

4.20. INVOICES

Invoices must be sent to the MTS Accounting Department, via email, at ap@sdmts.com. All invoices must have the Purchase Order and contract number clearly displayed to ensure timely payment. MTS will not pay on packing slips, receiving documents, delivery documents, or other similar documents. Invoices must be submitted for payment.

All invoices must have the following clearly displayed to ensure timely payment.

A. Appropriate SDTI or SDTC PO numbers
B. MTS stock code #
C. Vendor part number
D. Item description
E. Applicable dates

Payment terms shall be net 30 days from invoice date. If MTS rejects an incorrectly submitted invoice and sends it back for correction, the net 30 days restart from the corrected invoice date.

Contractors must also indicate if any of the invoiced amount(s) is for service or work provided by a subcontractor and indicate the amount that will be paid to the subcontractor. Contractors must also comply with the prompt payment requirements in the *Prompt Progress Payments* section of the Standard Conditions.

Blue Angel MTS Doc No. G3101.0-26

#1-Blue Angel

#	Material	Material Description	Unit	Manufacturer's Part No.	1st Year Unit Price	2nt Year Unit Price	3rd Year Unit Price	4th Year Unit Price	5th Year Unit Price	5 YEAR Total
1	70032847	HYD RAM OIL, SHELL TELLUS T15, RAPIDS	Canister	SOCOSH187	$258.63	$305.18	$360.11	$424.93	$501.42	$3,700.54
2	70092924	OIL HYDRAULIC JACK,QT	Each	SL2552	$22.04	$26.01	$30.69	$36.21	$42.73	$2,680.56
3	70092965	GREASE ALL PURPOSE,3310	Each		$8.36	$9.86	$11.63	$13.72	$16.19	$1,075.68
4	70093005	OIL MOTOR,10W30 SYNTHETIC,QT	Each	5XB58	$15.84	$18.69	$22.05	$26.02	$30.70	$2,266.00
5	70094755	Loctite-Watr Resist Anti-Seize Lubricant	Each	234263	$24.26	$28.63	$33.78	$39.86	$47.03	$1,388.48
6	70143982	GEAR OIL 80W90,QT	Each		$14.08	$16.61	$19.60	$23.13	$27.29	$1,409.94
7	70145011	FUNNEL MOTOR OIL,30048	Each	34UH65	$5.52	$6.51	$7.68	$9.06	$10.69	$315.68
8	70147280	OIL PENETRATING,723	Each		$26.28	$31.01	$36.59	$43.18	$50.95	$6,768.36
9	70152769	ANTI-SEIZE PERMATEX,COPPER LUBRICANT	Each	09128	$22.58	$26.64	$31.44	$37.10	$43.78	$1,292.32
10	70159095	SD7/8 TM GREASE RETINAX 1X2 GADUS S3	Box	5067709	$112.39	$132.62	$156.49	$184.66	$217.90	$8,844.66
11	70168013	OIL MOTOR,5W20,QT	Each	CQ610	$11.31	$13.35	$15.75	$18.59	$21.94	$404.70
12	70169482	GREASE SHELL GADUS,T/M,,5 GAL	Each	GADUSS2V2202	$328.19	$387.26	$456.97	$539.22	$636.28	$2,347.92
13	70169508	Grease Mobil, 5 Gal	Each	71013	$516.38	$609.33	$719.01	$848.43	$1,001.15	$7,388.60
14	70187518	GREASE DI-ELECTRIC,6OZ.	Each	CRC02085	$29.30	$34.57	$40.79	$48.13	$56.79	$1,047.90
15	70188417	DEGREASER NON-SOLVENT,T-91 55 GAL.DRUM	Drum	06355T91	$3,589.37	$4,235.46	$4,997.84	$5,897.45	$6,958.99	$102,716.44
16	70062026	DIELECTRIC GREASE	Tube	29050	$22.93	$27.06	$31.93	$37.68	$44.46	$3,281.20
17	70198497	TRU-FLATE LUBRICANT AND PRESERVATIVE	US gallon	1EKX8	$22.88	$27.00	$31.86	$37.59	$44.36	$327.38
18	70202175	Tapmatic Cutting Oil	Bottle	40320	$20.37	$24.04	$28.37	$33.48	$39.51	$1,895.01
19	70202698	Kaishan Air Compressor Oil - 5 Gal	Each	KTL-8000-5	$801.66	$945.96	$1,116.23	$1,317.15	$1,554.24	$11,470.48
20	70069922	AC VACUUM PUMP OIL, BLACK GOLD, QUART	Each	20HJ90	$16.72	$19.73	$23.28	$27.47	$32.41	$837.27
21	70082875	GREASE MOTOR ASSEMBLY(LUBRIPLATE)	Tube	N0105	$35.96	$42.43	$50.07	$59.08	$69.71	$12,090.75
									Total	$173,549.87
									CA Tax 7.75%	$13,450.11
									Grand Total	$186,999.98

Jamison MTS Doc No. G3101.0-26

#2-Jamison

#	Material	Material Description	Unit	Manufacturer's Part No.	1st Year Unit Price	2nt Year Unit Price	3rd Year Unit Price	4th Year Unit Price	5th Year Unit Price	5 YEAR Total
1	70092908	Oil Two-Cycle 2.6OZ	Each		$3.14	$3.30	$3.47	$3.64	$3.82	$5,315.22
2	70092973	GREASE MOLY-GRAPH,3330 14OZ	Each	STAL3330	$8.71	$9.14	$9.60	$10.08	$10.58	$1,683.85
3	70092999	OIL MOTOR,15W40,DIESEL,QT	Each		$9.73	$10.21	$10.72	$11.25	$11.81	$966.96
4	70134684	Multipurpose Cleaner/Degreaser	Each	320060	$47.80	$50.19	$52.70	$55.35	$58.12	$31,435.04
5	70040071	GREASE MULTI-PURPOSE,EP-2	Drum	CH274503D400	$1,488.00	$1,562.40	$1,640.52	$1,722.55	$1,808.67	$49,332.84
6	70147272	LUBRICANT PARTING LUBE,785	Each		$15.43	$16.20	$17.01	$17.86	$18.75	$1,023.00
7	70168989	OIL TELLUS 46,WHEEL TRUE MACH,55G SHELL	Each	TELLUS46	$1,081.00	$1,135.05	$1,191.80	$1,251.39	$1,313.95	$65,705.09
8	70188946	GREASE KLUBER BARRIERTA,1KG,DOOR 2.2 LBS	Each	L25DL	$2,945.00	$3,092.25	$3,246.86	$3,409.20	$3,579.66	$162,729.70
9	70188953	Grease Kluber Isoflex LDS18 - SD8	Each	0UN300160R08	$224.90	$236.15	$247.98	$260.38	$273.40	$52,198.02
10	70064634	Rust Preventative WD40 - 16-OZ	Each	890100	$12.38	$12.99	$13.65	$14.33	$15.04	$43,017.31
11	70068411	GREASE BEARING,HIGH TEMP.	Drum	CH277111D400	$1,780.00	$1,869.00	$1,962.45	$2,060.57	$2,163.60	$275,397.36
12	70092783	OIL LPS 1	Each	6Y743	$22.14	$23.25	$24.41	$25.63	$26.91	$119,036.82
13	70092791	OIL LPS 2	Each	6Y744	$22.49	$23.61	$24.80	$26.04	$27.34	$126,268.48
14	70092809	OIL LPS 3	Each	6Y745	$25.80	$27.09	$28.45	$29.87	$31.36	$15,397.56
									Total	$949,507.25
									CA Tax 7.75%	$73,586.81
									Grand Total	$1,023,094.06

Total	$1,123,057.12
Ca Tax 7.75%	$87,036.93
Grand Total	$1,210,094.05

Metropolitan Transit System

Agenda Item No. 13

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM
BOARD OF DIRECTORS

February 12, 2026

SUBJECT:

SAP Support Services – Amendment

RECOMMENDATION:

That the San Diego Metropolitan Transit System (MTS) Board of Directors authorize the Chief Executive Officer (CEO) to execute Amendment No. 1 to MTS Doc. No. G2447.0-21 (in substantially the same format as Attachment A), with Labyrinth Solutions, Inc. (LSI), for additional funds for as-needed SAP Support Services in the amount of $326,000.00.

Budget Impact

The total cost of this amendment is estimated to be $326,000.00, and the total cost of the services is estimated to be $2,126,000.00. These services will be funded by the Information Technology (IT) Operations Budget account 661010-571250.

Document	Description	Authorization	Board Authorized Amount	Exercised Contract Value
Original	SAP Support Services (5 base & 1 option)	9/16/2021 (Agenda Item (AI) 7)	$1,800,000.00	$1,500,000.00
		Board Authorized Subtotal	**$1,800,000.00**	
AM 1	Add funds	Today's Proposed Action - Execute	$326,000.00	Today's Proposed Action
		Today's Action Subtotal	**$326,000.00**	
		Grand Total	**$2,126,000.00**	

DISCUSSION:

The SAP Enterprise Resource Planning (ERP) system is one of the Agency's most critical business software solutions. It is used throughout the organization to provide financial, budgetary, inventory/asset management, customer relationship management and reporting functions. Due to the system's size, critical nature, and required enhancements, additional support is needed from a specialized SAP-certified vendor.

On September 16, 2021 (AI 7), following a competitive request for proposal process, the MTS Board approved a six (6) year contract with LSI for SAP Support Services, consisting of a 5-year base period (effective December 1, 2021 to November 30, 2026) and a 1-year option period (December 1, 2026 to November 30, 2027). The contract approval included $1,800,000 in total funding, which equated to an estimated $300,000 per year. This funding amount was based on expected SAP-related needs over the six (6) year period. The SAP-related needs during the first three years of the contract averaged $309,000 per year, tracking closely with the funding authority. However, for Year 4, which ended on November 30, 2025, the total expenditures were $560,768.50, which significantly exceeded the original funding estimates. Without considering the $300,000 in funding that will be available upon the exercise of the option year (Year 6), there is only $12,041.75 in funding remaining for contract year 5 (December 1, 2025 to November 30, 2026).

LSI SAP Consultant Services - MTS Doc. No. G2447.0-21		
Contract Year	**Total Spending**	**Contract Authority Remaining**
Year 1 (Dec 21 to Nov 22) - Base	$196,907.50	$1,603,092.50
Year 2 (Dec 22 to Nov 23) - Base	$286,052.75	$1,317,039.75
Year 3 (Dec 23 to Nov 24) - Base	$444,229.50	$872,810.25
Year 4 (Dec 24 to Nov 25) - Base	$560,768.50	$312,041.75
Year 5 (Dec 25 to Nov 26) - Base		$312,041.75
Year 6 (Dec 26 to Nov 26) - Option		$312,041.75
TOTAL TO DATE	$1,487,958.25	

Today's proposed action would authorize an additional $326,000 in funding under this as-needed SAP Support Services contract, which staff estimates will provide sufficient funding through the end of the contract term. This would bring the average annual spending over the 5-year base period to $365,200 instead of the original estimate of $300,000.

The original funding need estimate was exceeded due to unexpected workload supporting various security and system initiatives. Adding the proposed $326,000 in funding for SAP Support Services with LSI will ensure continuity of services over the next calendar year (Year 5 of the contract), supporting operational requirements essential to agency functions, along with keeping the SAP ecosystem in a state of good repair. MTS staff do not expect to need additional funding (beyond the remaining balance in the Board's funding authority) in Option Year 6 due to the planned upgrade/conversion to S/4HANA RISE, SAP's next-generation ERP system hosted in the cloud. Because of this conversion to S/4HANA RISE, the current SAP ERP Central Component (ECC) environment will be 'frozen' – no new development and/or system upgrades will be performed. MTS staff expect ECC support to be limited to maintaining its current functionality.

Therefore, staff recommend that the MTS Board of Directors authorize the CEO to execute Amendment No. 1 to MTS Doc. No. G2447.0-21 (in substantially the same format as Attachment A), with LSI, for additional funds for as-needed SAP Support Services in the amount of $326,000.00.

/s/ Sharon Cooney
Sharon Cooney
Chief Executive Officer

Key Staff Contact: Julia Tuer, 619.557.4515, Julia.Tuer@sdmts.com

Attachment: A. Draft Amendment, MTS Doc. No. G2447.1-21

Metropolitan Transit System

Amendment 1

February 12, 2026 MTS Doc No. G2447.1-21

SAP SUPPORT SERVICES

Labyrinth Solutions, Inc.
Nader Tirandazi
Chief Executive Officer
550 W B Street, Fourth Floor
San Diego, CA 92101

This shall serve as Amendment No.1 to the original agreement G2447.0-21 as further described below.

SCOPE

There shall be no changes to the scope of work due to this amendment.

SCHEDULE

There shall be no changes to the contract schedule, and the end of the base period remains November 30, 2026.

PAYMENT

This contract amendment shall authorize additional costs not to exceed $326,000.00 to the base period. The total value of this contract including this amendment shall be in the amount of $1,826,000.00 for the base period and $300,000.00 for the option year, for a contract total of $2,126,000.00. This amount shall not be exceeded without prior written approval from MTS.

Please sign and return a copy to the Contract Specialist at MTS. All other terms and conditions shall remain the same and in effect. Retain a other copy for your records.

Sincerely,

Sharon Cooney, Chief Executive Officer

Agreed:

Nader Tirandazi, Chief Executive Officer
Labyrinth Solutions, Inc.

Date: _____

Metropolitan Transit System

Agenda Item No. 14

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM
BOARD OF DIRECTORS

February 12, 2026

SUBJECT:

Operations Budget Status Report for December 2025

INFORMATIONAL ONLY

Budget Impact

None.

DISCUSSION:

This report summarizes the year-to-date operating results for December 2025 compared to the Fiscal Year (FY) 2026 budget for the San Diego Metropolitan Transit System (MTS). Attachment A-1 combines the operations', administrations' and other activities' results for December 2025. Attachment A-2 details the December 2025 combined operations' results and Attachments A-3 to A-7 present budget comparisons for each MTS operation. Attachment A-8 details budget comparisons for MTS Administration, and Attachment A-9 provides December 2025 results for MTS's other activities (For Hire Vehicle Administration (FHVA)/San Diego and Arizona Eastern Railway Company (SD&AE)).

MTS NET-OPERATING SUBSIDY RESULTS

As indicated within Attachment A-1, for the year-to-date period ending December 2025, MTS's net-operating income unfavorable variance totaled $1,235,000 (-0.7%). Operations produced a $1,486,000 (-0.9%) unfavorable variance and the administrative/other activities areas were favorable by $251,000.

MTS COMBINED RESULTS

Operating Revenues. Year-to-date combined revenues through December 2025 were $54,326,000, compared to the year-to-date budget of $58,326,000, resulting in an unfavorable variance of $4,000,000 (-6.9%). Year-to-date passenger revenue was unfavorable by $4,092,000 (-9.3%) through December. Passenger revenue is up by $1,795,000 (4.7%) versus the prior year while passenger levels have remained relatively flat versus the prior year.

Other operating revenue was favorable by $91,000 (0.6%), primarily due to favorable interest income and lease revenue which is partially offset by unfavorable energy credit revenue.

Operating Expenses. Year-to-date combined expenses through December 2025 were $229,507,000, compared to the budget of $232,272,000, representing a $2,765,000 (1.2%) favorable variance.

Personnel Costs. Year-to-date personnel-related costs totaled $100,833,000, compared to a budgetary figure of $103,177,000, producing a favorable variance of $2,344,000 (2.3%). This is primarily due to favorable Operator overtime wages and healthcare costs within Bus Operations, Flagging wages within Rail Operations, and Code Compliance wages within Administration.

Outside Services and Purchased Transportation. Total outside services through six months of the fiscal year totaled $81,390,000, compared to a budget of $82,488,000, resulting in a favorable variance of $1,098,000 (1.3%). This is primarily due to favorable performance bonuses and fixed costs within Paratransit Operations and favorable performance bonuses and purchased transportation costs within Fixed Route Operations.

Materials and Supplies. Total year-to-date materials and supplies expenses were $10,272,000, compared to a budgetary figure of $10,189,000, resulting in an unfavorable variance of $83,000 (-0.8%). This is primarily due to unfavorable revenue vehicle parts and maintenance costs within Bus Operations.

Energy. Total year-to-date energy costs were $26,372,000, compared to the budget of $26,204,000, resulting in an unfavorable variance of $168,000 (-0.6%). This is primarily due to unfavorable revenue vehicle traction electricity which is partially offset by favorable commodity rates and lower consumption for Compressed Natural Gas (CNG).

Risk Management. Total year-to-date expenses for risk management were $5,500,000 compared to the budget of $5,648,000, resulting in a favorable variance totaling $148,000 (2.6%). This is primarily due to favorable claims recoveries within Rail Operations.

General and Administrative. The year-to-date general and administrative costs were $3,901,000 through December 2025, compared to a budget of $3,510,000, resulting in an unfavorable variance of $390,000 (-11.1%). This is primarily due to unfavorable Pronto-related fare materials and credit card fees, as well as unfavorable radio equipment costs within Bus Operations.

Vehicle and Facility Leases. The year-to-date vehicle and facilities lease costs were $1,240,000 compared to the budget of $1,055,000, resulting in a $185,000 (-17.5%) unfavorable variance. This is primarily due to unfavorable non-revenue vehicle lease costs within Administration and Bus Operations.

YEAR-TO-DATE SUMMARY

The December 2025, year-to-date net-operating income totaled an unfavorable variance of $1,235,000 (-0.7%). These factors include favorable variances in other revenue, personnel, outside services, and risk management costs; offset by unfavorable variances in passenger revenue, materials and supplies, energy, general and administrative costs, and vehicle/facility lease costs.

/s/ Sharon Cooney
Sharon Cooney
Chief Executive Officer

Key Staff Contact: Julia Tuer, 619.557.4515, Julia.Tuer@sdmts.com

Attachment: A. December FY26 Operating Budget Results

SAN DIEGO METROPOLITAN TRANSIT SYSTEM

MTS
CONSOLIDATED

COMPARISON TO BUDGET - FISCAL YEAR 2026
DECEMBER 31, 2025
(in $000's)

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	VAR. %
Passenger Revenue	$ 40,035	$ 44,127	$ (4,092)	-9.3%
Other Revenue	14,291	14,199	91	0.6%
Total Operating Revenue	**$ 54,326**	**$ 58,326**	**$ (4,000)**	**-6.9%**
Personnel costs	$ 100,833	$ 103,177	$ 2,344	2.3%
Outside services	81,390	82,488	1,098	1.3%
Materials and supplies	10,272	10,189	(83)	-0.8%
Energy	26,372	26,204	(168)	-0.6%
Risk management	5,500	5,648	148	2.6%
General & administrative	3,901	3,510	(390)	-11.1%
Vehicle/facility leases	1,240	1,055	(185)	-17.5%
Administrative Allocation	-	-	-	0.0%
Total Operating Expenses	**$ 229,507**	**$ 232,272**	**$ 2,765**	**1.2%**
Operating Income (Loss)	**$ (175,181)**	**$ (173,946)**	**$ (1,235)**	**-0.7%**
Total Non-Operating Activities	**148**	**148**	**-**	**0.0%**
Income (Loss) before Capital Contributions	**$ (175,033)**	**$ (173,798)**	**$ (1,235)**	**0.7%**

SAN DIEGO METROPOLITAN TRANSIT SYSTEM
OPERATIONS
CONSOLIDATED
COMPARISON TO BUDGET - FISCAL YEAR 2026
DECEMBER 31, 2025
(in $000's)

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	VAR. %
Passenger Revenue	$ 40,035	$ 44,127	$ (4,092)	-9.3%
Other Revenue	334	378	(44)	-11.7%
Total Operating Revenue	**$ 40,369**	**$ 44,505**	**$ (4,136)**	**-9.3%**
Personnel costs	$ 82,936	$ 84,900	$ 1,964	2.3%
Outside services	66,262	67,334	1,072	1.6%
Materials and supplies	10,234	10,159	(75)	-0.7%
Energy	25,817	25,513	(304)	-1.2%
Risk management	4,931	5,115	184	3.6%
General & administrative	704	582	(122)	-21.1%
Vehicle/facility leases	852	783	(69)	-8.8%
Administrative Allocation	21,523	21,523	-	0.0%
Total Operating Expenses	**$ 213,260**	**$ 215,910**	**$ 2,650**	**1.2%**
Operating Income (Loss)	**$ (172,891)**	**$ (171,405)**	**$ (1,486)**	**-0.9%**
Total Non-Operating Activities	**148**	**148**	**-**	**0.0%**
Income (Loss) before Capital Contributions	**$ (172,743)**	**$ (171,257)**	**$ (1,486)**	**0.9%**

SAN DIEGO METROPOLITAN TRANSIT SYSTEM
OPERATIONS
BUS - DIRECTLY OPERATED (SAN DIEGO TRANSIT CORP.)
COMPARISON TO BUDGET - FISCAL YEAR 2026
DECEMBER 31, 2025
(in $000's)

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	VAR. %
Passenger Revenue	$ 10,100	$ 10,089	$ 10	0.1%
Other Revenue	30	25	5	20.8%
Total Operating Revenue	**$ 10,130**	**$ 10,114**	**$ 16**	**0.2%**
Personnel costs	$ 50,580	$ 51,756	$ 1,176	2.3%
Outside services	1,126	1,083	(42)	-3.9%
Materials and supplies	4,081	3,869	(211)	-5.5%
Energy	3,956	4,241	285	6.7%
Risk management	1,873	1,911	38	2.0%
General & administrative	422	267	(155)	-58.0%
Vehicle/facility leases	338	254	(84)	-33.0%
Administrative Allocation	4,273	4,273	-	0.0%
Total Operating Expenses	**$ 66,648**	**$ 67,655**	**$ 1,007**	**1.5%**
Operating Income (Loss)	**$ (56,518)**	**$ (57,540)**	**$ 1,023**	**1.8%**
Total Non-Operating Activities	**-**	**-**	**-**	**-**
Income (Loss) before Capital Contributions	**$ (56,518)**	**$ (57,540)**	**$ 1,023**	**-1.8%**

SAN DIEGO METROPOLITAN TRANSIT SYSTEM
OPERATIONS
RAIL (SAN DIEGO TROLLEY INC.)
COMPARISON TO BUDGET - FISCAL YEAR 2026
DECEMBER 31, 2025
(in $000's)

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	VAR. %
Passenger Revenue	$ 16,546	$ 21,255	$ (4,709)	-22.2%
Other Revenue	303	353	(50)	-14.0%
Total Operating Revenue	**$ 16,850**	**$ 21,608**	**$ (4,758)**	**-22.0%**
Personnel costs	$ 31,888	$ 32,662	$ 774	2.4%
Outside services	6,418	6,507	89	1.4%
Materials and supplies	6,065	6,239	174	2.8%
Energy	16,832	16,151	(681)	-4.2%
Risk management	3,043	3,189	146	4.6%
General & administrative	273	302	28	9.4%
Vehicle/facility leases	321	325	4	1.4%
Administrative Allocation	15,654	15,654	-	0.0%
Total Operating Expenses	**$ 80,495**	**$ 81,029**	**$ 534**	**0.7%**
Operating Income (Loss)	**$ (63,646)**	**$ (59,422)**	**$ (4,224)**	**-7.1%**
Total Non-Operating Activities	**-**	**-**	**-**	**-**
Income (Loss) before Capital Contributions	**$ (63,646)**	**$ (59,422)**	**$ (4,224)**	**7.1%**

SAN DIEGO METROPOLITAN TRANSIT SYSTEM
OPERATIONS
BUS - CONTRACTED SERVICES (FIXED ROUTE)
COMPARISON TO BUDGET - FISCAL YEAR 2026
DECEMBER 31, 2025
(in $000's)

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	VAR. %
Passenger Revenue	$ 12,516	$ 11,970	$ 546	4.6%
Other Revenue	-	-	-	-
Total Operating Revenue	**$ 12,516**	**$ 11,970**	**$ 546**	**4.6%**
Personnel costs	$ 374	$ 371	$ (4)	-1.0%
Outside services	48,869	49,365	496	1.0%
Materials and supplies	88	51	(38)	-74.5%
Energy	4,358	4,465	107	2.4%
Risk management	-	-	-	-
General & administrative	9	7	(2)	-23.6%
Vehicle/facility leases	22	32	10	31.1%
Administrative Allocation	1,328	1,328	-	0.0%
Total Operating Expenses	**$ 55,049**	**$ 55,618**	**$ 569**	**1.0%**
Operating Income (Loss)	**$ (42,533)**	**$ (43,648)**	**$ 1,115**	**2.6%**
Total Non-Operating Activities	**-**	**-**	**-**	**-**
Income (Loss) before Capital Contributions	**$ (42,533)**	**$ (43,648)**	**$ 1,115**	**-2.6%**

SAN DIEGO METROPOLITAN TRANSIT SYSTEM
OPERATIONS
BUS - CONTRACTED SERVICES (PARATRANSIT)
COMPARISON TO BUDGET - FISCAL YEAR 2026
DECEMBER 31, 2025
(in $000's)

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	VAR. %
Passenger Revenue	$ 873	$ 813	$ 61	7.5%
Other Revenue	-	-	-	-
Total Operating Revenue	**$ 873**	**$ 813**	**$ 61**	**7.5%**
Personnel costs	$ 94	$ 111	$ 17	15.7%
Outside services	9,701	10,231	530	5.2%
Materials and supplies	-	-	-	-
Energy	671	656	(15)	-2.3%
Risk management	15	15	0	0.3%
General & administrative	-	6	6	-
Vehicle/facility leases	171	171	0	0.1%
Administrative Allocation	268	268	-	0.0%
Total Operating Expenses	**$ 10,920**	**$ 11,459**	**$ 539**	**4.7%**
Operating Income (Loss)	**$ (10,047)**	**$ (10,646)**	**$ 600**	**5.6%**
Total Non-Operating Activities	**-**	**-**	**-**	**-**
Income (Loss) before Capital Contributions	**$ (10,047)**	**$ (10,646)**	**$ 600**	**-5.6%**

SAN DIEGO METROPOLITAN TRANSIT SYSTEM

OPERATIONS
CORONADO FERRY

COMPARISON TO BUDGET - FISCAL YEAR 2026
DECEMBER 31, 2025
(in $000's)

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	VAR. %
Passenger Revenue	$ -	$ -	$ -	-
Other Revenue	-	-	-	-
Total Operating Revenue	**$ -**	**$ -**	**$ -**	**-**
Personnel costs	$ -	$ -	$ -	-
Outside services	148	148	-	0.0%
Materials and supplies	-	-	-	-
Energy	-	-	-	-
Risk management	-	-	-	-
General & administrative	-	-	-	-
Vehicle/facility leases	-	-	-	-
Administrative Allocation	-	-	-	0.0%
Total Operating Expenses	**$ 148**	**$ 148**	**$ -**	**0.0%**
Operating Income (Loss)	**$ (148)**	**$ (148)**	**$ -**	**0.0%**
Total Non-Operating Activities	**148**	**148**	**-**	**0.0%**
Income (Loss) before Capital Contributions	**$ -**	**$ -**	**$ -**	**-**

SAN DIEGO METROPOLITAN TRANSIT SYSTEM
ADMINISTRATION
CONSOLIDATED
COMPARISON TO BUDGET - FISCAL YEAR 2026
DECEMBER 31, 2025
(in $000's)

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	VAR. %
Passenger Revenue	$ -	$ -	$ -	-
Other Revenue	12,966	12,886	80	0.6%
Total Operating Revenue	**$ 12,966**	**$ 12,886**	**$ 80**	**0.6%**
Personnel costs	$ 17,548	$ 17,935	$ 387	2.2%
Outside services	14,809	15,066	257	1.7%
Materials and supplies	38	30	(8)	-26.3%
Energy	551	687	136	19.8%
Risk management	502	496	(7)	-1.3%
General & administrative	3,155	2,883	(272)	-9.4%
Vehicle/facility leases	374	258	(116)	-45.1%
Administrative Allocation	(21,545)	(21,545)	-	0.0%
Total Operating Expenses	**$ 15,432**	**$ 15,810**	**$ 377**	**2.4%**
Operating Income (Loss)	**$ (2,466)**	**$ (2,924)**	**$ 458**	**15.7%**
Total Non-Operating Activities	**-**	**-**	**-**	**-**
Income (Loss) before Capital Contributions	**$ (2,466)**	**$ (2,924)**	**$ 458**	**-15.7%**

SAN DIEGO METROPOLITAN TRANSIT SYSTEM

OTHER ACTIVITIES
CONSOLIDATED

COMPARISON TO BUDGET - FISCAL YEAR 2026
DECEMBER 31, 2025
(in $000's)

	YEAR TO DATE			
	ACTUAL	BUDGET	VARIANCE	VAR. %
Passenger Revenue	$ -	$ -	$ -	-
Other Revenue	991	936	56	5.9%
Total Operating Revenue	**$ 991**	**$ 936**	**$ 56**	**5.9%**
Personnel costs	$ 349	$ 342	$ (7)	-2.0%
Outside services	320	88	(232)	-262.6%
Materials and supplies	0	0	0	86.0%
Energy	3	4	1	15.6%
Risk management	66	37	(29)	-80.2%
General & administrative	42	46	4	8.9%
Vehicle/facility leases	14	14	1	3.9%
Administrative Allocation	22	22	-	0.0%
Total Operating Expenses	**$ 815**	**$ 553**	**$ (262)**	**-47.5%**
Operating Income (Loss)	**$ 176**	**$ 383**	**$ (207)**	**54.0%**
Total Non-Operating Activities	**-**	**-**	**-**	**-**
Income (Loss) before Capital Contributions	**$ 176**	**$ 383**	**$ (207)**	**-54.0%**

Agenda Item No. 15

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM
BOARD OF DIRECTORS

February 12, 2026

SUBJECT:

California State Transportation Agency (CalSTA) Transit Transformation Task Force Report (Michael Pimentel, California Transit Association)

INFORMATIONAL ONLY

Budget Impact

None.

DISCUSSION:

Senate Bill (SB) 125 (Chapter 54, Statutes of 2023) required CalSTA to establish and convene the Transit Transformation Task Force on or before January 1, 2024, and include representatives from the department, various local agencies, academic institutions, nongovernmental organizations, and other stakeholders.

The task force was required to solicit and develop a structured, coordinated process for engagement of all parties to develop policy recommendations to grow transit ridership and improve the transit experience for all users of those services.

CalSTA, in consultation with the task force, was required to prepare and submit a report of findings and policy recommendations based on the task force's efforts to the appropriate policy and fiscal committees of the Legislature. The task force held 13 in-person meetings between February 2024 and September 2025. In December 2025, CalSTA released the final report (Attachment A). Michael Pimentel, Executive Director of the California Transit Association, and member of the Transit Transformation Task Force, will present on the report and takeaways from this effort.

/s/ Sharon Cooney
Sharon Cooney
Chief Executive Officer

Key Staff Contact: Julia Tuer, 619.557.4515, Julia.Tuer@sdmts.com

Attachment: A. CalSTA Transit Transformation Task Force – Final Report

SB125 Transit Transformation Task Force Final Report

CALIFORNIA STATE TRANSPORTATION AGENCY

Message from the Secretary

It is a true privilege for the California State Transportation Agency (CalSTA) to help shape our State's transit to the benefit of all people. This SB125 Transit Transformation Task Force Report reflects a bold vision for the future of transit in California. More than a document, this final report is a testament to the past two years over which the Task Force has brought together leaders, experts and community voices to develop transformative ideas for transit. This collective effort, time and expertise have proven invaluable toward our goals to improve lives for all Californians. Through robust collaboration and dialogue, members forged a set of guiding principles and recommendations to transform transit in alignment with CalSTA's Core Four priorities of safety, climate action, equity and economic prosperity. California must continue to invest in transit options that are sustainable, convenient, seamless and affordable while also connecting our communities throughout the State. With sustained investment and commitment, this report charts a path toward a more resilient, equitable and sustainable transit system—one that will strengthen communities, drive economic prosperity and inspire future generations to see transit as the backbone of California's shared future. Building on this incredible momentum, we continue pushing forward and are eager to embrace the exciting opportunities that lie ahead for California transit.

Toks Omishakin

Secretary, California State Transportation Agency

Acknowledgements

The California State Transportation Agency (CalSTA) extends our sincere appreciation to the dedicated Transit Transformation Task Force members for their participation in the Task Force process and their work on this report.

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Executive Summary

Transit is more than just a way to get from place to place—it is a vital component of California's vision for a more equitable, prosperous, and environmentally sustainable future. Forward-thinking legislation laid a powerful foundation by recognizing transit as a cornerstone of California's ambitious climate goals. For example, over the past two decades, California passed laws to encourage transit-oriented development and funding for transit improvements to reduce car dependency, and positioned transit as a key solution to reduce greenhouse gas emissions.[1] These laws elevate public transit not only as a solution to meeting California's climate goals, but also as a catalyst for reimagining how Californians live, move, and connect. From integrated, regional planning and transit-oriented development to clean energy innovation, California is charting a path where transit drives progress across every corner statewide.

California's recent housing legislation underscores a growing commitment to building vibrant, transit-connected communities where people can thrive without needing to rely on a car. Recent legislation enabled affordable and mixed-income housing to be built along transit-friendly commercial corridors, and expedited approval processes for urban infill projects, including many near transit.[2] These laws are paving the way for walkable neighborhoods that are affordable, accessible, and sustainable—and they accelerate the creation of homes in the very places where transit can offer the greatest benefit. However, for these laws to work, we need robust, reliable public transportation to serve Californians.

Across California, transit agencies are already proving what is possible when we invest in people, safety, and community. For example, Bay Area Rapid Transit's (BART) Ambassador Program has redefined the rider experience by fostering a sense of presence and care on the system, helping restore trust and safety for thousands of daily riders. In Los Angeles, a groundbreaking, collaborative approach to Measure M united communities and secured transformative, long-term funding to reshape regional mobility. And when

[1] These include the California Green Tariff Shared Renewables Program (S.B. 43, 2014) the California Sustainable Communities and Climate Protection Act (S.B. 375, 2008) and the California Global Warming (A.B. 32, 2006).
[2] These include the California Affordable Housing and High Road Jobs Act (A.B. 2011, 2022); the California Middle Class Housing Act (S.B. 6, 2022); and the California Streamlined Multifamily Housing Approval Act (S.B. 423, 2023).

disaster strikes, transit acts as a lifeline, playing a critical role in mass evacuations and emergency response, such as during California's recent wildfires. These successes show that transit can be an engine for resilience, equity, and shared prosperity.

Transit in California is at a pivotal moment—facing real challenges yet holding immense promise. Declining ridership and revenues and rising costs test the resilience of our systems, even as operators navigate the effects of complex social issues such as the effect of homelessness, the opioid crisis, and more. Still, transit remains essential to achieving a livable climate, equitable access to opportunity, vibrant communities, and a thriving economy.

Transit reduces traffic congestion and greenhouse gas emissions by moving people with fewer vehicles and it supports economic activity by enabling access to jobs, education, healthcare, and commerce—greatly improving quality of life, particularly for those who cannot drive to due to age, ability, or income. California's population is aging, and transit connects elderly or disabled riders to vital accessible services. Additionally, transit fosters more livable, inclusive communities by reducing the need for extensive parking and encouraging walkable neighborhoods. For individual users, public transit can offer an affordable, convenient alternative to car ownership, and transit increases mobility and independence for society at large.

California's transit agencies face challenges driven by falling ridership, declining revenues, and rising costs from inflation, infrastructure needs, land-use patterns, and the transition to zero-emission fleets. Together, these factors threaten transit service reliability and financial stability. Task Force members noted that addressing these challenges requires more than reallocating existing dollars—it could be addressed through increased, flexible, and dedicated revenues and funding, efficiencies in capital and operating spending, and diversified revenue streams such as real estate development, toll revenues, and innovative financing tools. Task Force members also noted that legislative changes that reduce costs and expand agencies' authority to capture value from their assets will advance these goals.

With leadership and smart policy, we can transform public transit into a fast, reliable, and dignified alternative to driving—one that connects millions

more people to what matters most. Going forward, California can lead the nation in creating a transportation system that is truly built for the future.

This report is intended as a starting point for future conversations, and not as a menu of ready-made policy or fiscal proposals. Implementation of the recommendations found within this report will require additional development to determine the necessary resources, statutory changes, or other programmatic changes that would be needed before they can be implemented. This additional detail is beyond the scope of this report.

The Task Force's vision is that public transit is the backbone of a prosperous, affordable, climate-resilient, and equitable California—empowering Californians to move freely, reliably, and sustainably.

1.0 Background: SB125 and the Transit Transformation Task Force

The Transit Transformation Task Force (TTTF or Task Force) was established through SB125 (Chapter 54, Statutes of 2023), which required CalSTA to convene representative transit leadership and subject matter experts from State government, local agencies, academic institutions, nongovernmental organizations, labor and other transit stakeholders. The Task Force's mandate was to develop recommendations to grow transit ridership and improve the transit experience for all users. Based on the Task Force's efforts, CalSTA was directed to prepare and submit a report of findings and recommendations to the Legislature.

The Task Force met 13 times around California between December 2023 and September 2025 to discuss and develop recommendations on the topics stipulated in SB125 for CalSTA's consideration.

To support the development of the report, the Task Force organized its work into three levels: principles, strategies, and recommendations.

- Principles are high-level value statements that articulate what is needed to achieve the Task Force's goals. They serve as a foundation for organizing strategies and recommendations.
- Strategies define the key issue areas, derived from SB 125 enabling legislation. They help group related recommendations under common themes.
- Recommendations are specific actions or initiatives that stakeholders—such as policymakers, state, local agencies, or transit authorities—can consider for implementation.

CalSTA, as chair and convener of the Task Force, engaged in a robust public outreach process. CalSTA compiled recommendations for inclusion in this report , using the input of Task Force members, the Technical Working Group (TWG), Subject Matter Experts (SMEs), and the public. Recommendations were first presented to the Task Force as a staff report, and then were either approved, rejected, or modified during the meetings. Some approved recommendations have not been selected by CalSTA for inclusion in the

report, but are included in Appendix B to document the process. Given the extensive and public nature of this consultation, numerous comments, suggestions, and ideas can be found on the SB125 CalSTA webpage.

In addition to the Task Force meetings, CalSTA formed a TWG as an advisory body to support the Task Force. TWG members included representatives from CalSTA, Caltrans, and technical partners who were identified as subject matter experts with deep expertise and experience in public transit. The TWG members attended monthly meetings to provide expertise and insight on key transit topics for the Task Force to consider.

Lastly, CalSTA conducted over 70 individual interviews with SMEs, including TTTF, TWG members, and other individuals identified by the Task Force and TWG as experts in their field. The information obtained during SME interviews was used to inform TWG and Task Force meetings.

2.0 Recent California Transit Trends and Challenges

Public transit in the U.S. and California is at an inflection point. Overall transit ridership and transit reliability has declined, while increasing traffic congestion has reduced transit operating speeds. At the same time, California has also experienced a noted decline in the perception of transit security. These challenges are not just a California issue, but affect systems throughout the U.S.

Task Force members discussed how urban transit operators face different challenges than suburban and rural operators. However, they also indicated that across the board, the cost to operate transit has risen faster than inflation, causing some California transit agencies to face immediate funding challenges in a post-COVID revenue environment. California also has ambitious climate goals, requiring a reduction of vehicle miles traveled (VMT) by 30% below 2019 levels by 2045.[3] These goals will require a robust, complete, and connected transit network, per the California Air Resources Board (CARB) scoping plan. A transformed transit system is needed to meet California's safety, equity, climate, and economic goals.

Public transit created the original cities and streetcar suburbs of California. In the 21st century, as transit faces increasing competition from new technologies including autonomous vehicles and app-based ride hailing services, public transit can once again be the mode of choice. Research has shown that fast, frequent, and reliable transit service increases transit ridership and mode share at a rate exceeding the rate of investment, while infrequent, slow networks have declining or stagnant ridership.

Task Force members noted that some of the recent California transit trends and challenges include:

- **Local and State governments hinder progress on delivering effective transit.** These include outdated regulations, the absence of transit-first policies, and the fact that transit operators have limited to no control of

[3] California Air Resources Board, "2022 Scoping Plan Appendix E Sustainable and Equitable Communities," *Policy Framework to Advance Sustainable Communities,* November 2022, 4, https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-appendix-e-sustainable-and-equitable-communities.pdf.

the underlying roadways and right-of-way on which they operate. The mandated transition to zero-emission vehicles poses additional operational and financial challenges for agencies. Within the context of the Transportation Development Act (TDA), Task Force members indicated that agencies have struggled to meet farebox recovery and State Transit Assistance (STA) efficiency requirements under current State law. Since full usage of transit funding for both operating and capital is tied to meeting these requirements, agencies may be disincentivized to provide service at times or in areas that are more costly, which ultimately reduces accessibility for transit-dependent riders. Transit agencies lack (in almost all circumstances) control over infrastructure and are instead reliant on processes that may or may not be aligned with serving riders and California's goals. Thankfully, in recent years, significant headway has been made on these issues, but Task Force members indicated that more action is desired. Additionally, Task Force members indicated that budget and funding challenges have presented significant challenges in the context of variable federal, state, and local investments into transit over the years.

- **Administrative, regulatory and policy barriers increase project costs and construction timelines**, hindering transit projects and service delivery. This has made capital projects costlier with negative outcomes on the transit services they enable. In the past, a number of State and local statutes, administrative requirements, and policy decisions (e.g., CEQA, permitting processes, project betterments and mitigations, and land use or housing policies) have impeded transit project and service delivery by inflating project budgets, prolonging delivery schedules, and reducing overall effectiveness. However, in recent years transit agencies, advocates, and California pursued and secured legislation to break through these barriers, demonstrating a shared commitment to reform. Recent legislation has helped speed up project delivery by exempting sustainable transportation projects from CEQA review, increased transit speed and reliability by empowering transit operators to use bus-mounted cameras to keep bus lanes and stops clear, and required Caltrans to set measurable goals for adding complete streets and transit priority facilities on State highways.[4] Together, these bills remove procedural barriers, enforce transit priority,

[4] These include the CEQA Exemption for Sustainable Transit Projects (S.B. 288, 2020 and S.B. 922, 2022), the Video Imaging of Parking Violations Bill (A.B. 917, 2021), and the Complete Streets Bill (S.B. 960, 2024).

and embed walking, biking, and transit into State infrastructure, making California's transit system faster, safer, and more attractive for riders. However, more action is needed, and this report lays out a roadmap for additional reform.

- **Transit ridership has been declining over time,** and this decline accelerated during the COVID-19 pandemic. Transit ridership in California had already started to decline in the 2010s when ridership fell by approximately 11% from 2010 to 2019.[5] There are many drivers of transit ridership decline. Recent research from UC ITS[6] demonstrates that the drivers include sprawl due to housing costs, the availability of drivers' licenses for undocumented people, and the emergence of TNCs. Other key drivers include transit speed, as bus speeds declined 7% from 2002 to 2019 in California, [7] as well as a subprime auto loan market that made it easier for Californians to afford cars. California transit ridership reached its low in April 2020 during the pandemic, with bus boardings down by 73% and rail boardings down by 84% compared with the previous year.[8] This required transit agencies to rethink routes and frequencies and shift policies to meet demand in a post-COVID environment, often determining how to most efficiently allocate service. While ridership has improved following the pandemic, the number of unlinked passenger trips in 2024 was still approximately ~23% lower than 2019 (or pre-COVID) levels, and ~35% below the 2008 peak levels. However, this recovery is uneven, with high performing transit, such as the Van Ness Bus Rapid Transit (BRT), increasing ridership to 130% of pre-pandemic levels on the route.[9] In short, stronger services result in stronger ridership outcomes.
- **COVID-19 changed the way in which riders use transit.** Before the pandemic, transit services typically followed a traditional commuting

[5] During this same time period, passenger miles traveled on transit were still increasing in many regions and Statewide, as longer trips were made by the smaller number of riders.
[6] Brian Taylor, et.al., "Transit Blues in the Golden State: Analyzing Recent California Ridership Trends," *UCLA: Institute of Transportation Studies* (June 2020), xv-xvi, https://escholarship.org/uc/item/32j5j0hb.
[7] U.S. Department of Transportation, "TS2.1 - Service Data and Operating Expenses Time Series by Mode," *National Transit Database*, Accessed June 1, 2024, https://www.transit.dot.gov/ntd/data-product/ts21-service-data-and-operating-expenses-time-series-mode-2.
[8] Brian Taylor, et.al., "Transit Blues in the Golden State: Analyzing Recent California Ridership Trends," *UCLA: Institute of Transportation Studies* (June 2020), ix, https://escholarship.org/uc/item/32j5j0hb.
[9] California State Transportation Agency, "Transit Transformation Task Force Meeting #4 (San Francisco): June 17, 2024 Meeting Presentation," Accessed October 16, 2025, https://calsta.ca.gov/-/media/calsta-media/documents/calsta_tttf4_final_06-17-2024-a11y.pdf. Original data provided by San Francisco Municipal Transportation Authority.

pattern—services were designed for riders coming into a central business district in the morning and leaving in the evening during the workweek. However, after the pandemic travel patterns became less predictable, with more riders traveling during the day to different locations for a variety of reasons. This increase in "anywhere-to-anywhere, all-day travel" represented a departure from the traditional commuter pattern. However, serving these trips is key to making transit work for all, as the historical Central Business District (CBD) oriented systems failed to meet the needs of many Californians.

- **Transit fleet reliability has declined.** Despite transit agencies spending more on operating expenses, transit vehicle reliability generally deteriorated, falling by about 18% across all modes from 2013-2023.[10] While some transit agencies have improved reliability by adopting newer fleets and preventative maintenance practices, others have faced unexpected operational challenges that have led to less reliable service.[11] Additionally, early rollout of zero-emission vehicle (ZEV) buses caused operational and reliability challenges for those agencies, as new battery-electric and hydrogen vehicles have been significantly less reliable than diesel or compressed natural gas (CNG) fleets. For instance, the replacement schedule to transition to ZEV fleets has been delayed due to the inability of manufacturers to keep pace with demand. As a result, some transit agencies must operate older buses that are not as reliable as new buses, while others have ZEV fleets that have been out of service for months at a time.

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[10] Analysis is based on the National Transit Database's annual Breakdowns data reports on vehicle mechanical failures (e.g., "2023 Breakdowns," "2022 Breakdowns," etc.) Data was manually aggregated from these Breakdown data reports for the years 2023-2015. For the years 2013 and 2014, annual NTD Breakdown data reports were not available, so the failure rate and total mileage was calculated by merging 2013 Table 16: Revenue Vehicle Maintenance Performance Directly Operated Service (https://www.transit.dot.gov/ntd/data-product/2013-table-16-revenue-vehicle-maintenance-performance-directly-operated-service) with 2014 Table 16: Revenue Vehicle Maintenance Performance Directly Operated Service (https://www.transit.dot.gov/ntd/data-product/2014-table-16-revenue-vehicle-maintenance-performance-directly-operated-service), and merging 2013 Table 19: Transit Operating Statistics Service Supplied and Consumed (https://www.transit.dot.gov/ntd/data-product/2013-table-19-transit-operating-statistics-service-supplied-and-consumed) with 2014 Table 19: Transit Operating Statistics: Service Supplied and Consumed (https://www.transit.dot.gov/ntd/data-product/2014-table-19-transit-operating-statistics-service-supplied-and-consumed).

[11] Jeremy Epstein et.al., "Changing Transit Ridership and Service During the COVID-19 Pandemic," *University of California Institute of Transportation Studies* (October 2022):1-4, https://doi.org/10.17610/T6FC7J.

- **Safety is a growing concern.** The number of assaults on California public transit doubled between 2013 and 2023.[12] To address this, agencies such as BART and LA Metro increased police and community support officers on their systems, which has begun to reverse the trend. Agencies reported challenges in managing homelessness on their system, and operators have begun to dedicate resources to outreach teams, support services, and more to directly address homelessness on system. While the optics around safety present challenges in attracting riders, transit remains the safest way to travel on a per mile basis.
- **Costs have increased, contributing to near-term funding challenges along with variability in funding streams.** Transit agencies in California are facing increasing financial pressures as costs rise faster than inflation. Over the past decade, operating expenses grew approximately 13-18% above inflation, and capital costs increased about 2-6% above inflation.[13] A significant portion of transit agencies' budgets is devoted to insurance and fuel, costs that are largely outside the control of the agencies. In comparison, transit agencies' revenues grew by about 18% for this same time period.[14]
- **Some transit agencies are facing a near-term funding shortfall.**[15] Agencies that relied heavily on passenger fares pre-COVID, such as BART, Metrolink, and Caltrain, face fiscal shortfalls due to decreased ridership and increased operating costs. Additionally, agencies like the San Francisco Municipal Transportation Agency (SFMTA) lost revenue from other sources such as parking fees, which dropped about 30% during the pandemic

[12] Jeremy Epstein et.al., "Changing Transit Ridership and Service During the COVID-19 Pandemic," *University of California Institute of Transportation Studies* (October 2022):1-4, https://doi.org/10.17610/T6FC7J.
[13] National Transit Database data on operating expenditures and capital costs. The range reflects two different methods for the inflation adjustment to go from nominal to real prices. The first method uses the GDP Implicit Price Deflator from the Federal Reserve Bank in St. Louis (FRED) database that is a broad-based measure of inflation across the economy (https://fred.stlouisfed.org/series/GDPDEF). The second method uses the Employment Cost Index from the Bureau of Labor Statistics given the largest cost base at transit agencies is salaries (https://www.bls.gov/eci/). Operating expenses have been normalized by inflation but have not been normalized by changes in VRH/VRM, as the intent of the analysis is to demonstrate growth of total costs (not efficiency measures). Capital expenses have been normalized for inflation and includes all capital expenses (existing and growth) as catalogued in the NTD.
[14] Growth in funding from 2013 to 2023 based on raw data from: U.S. Department of Transportation, "TS1.1 Total Funding Time Series," *National Transit Database*, Accessed January 27, 2025, https://www.transit.dot.gov/ntd/data-product/ts11-total-funding-time-series-2
[15] California Transit Association, "Transit Funding Crisis," March 24, 2023, https://caltransit.org/News/News-Announcements/Newsroom/transit-funding-crisis

and are still below pre-pandemic levels.[16] Temporary federal relief funds, such as those from the Coronavirus Aid, Relief, and Economic Security (CARES) Act and the Coronavirus Response and Relief Supplemental Appropriations (CCRSA) Act, helped mitigate these shortfalls but are now either depleted or nearing exhaustion.[17] Additionally, California made a $5.1 billion dollar investment in transit through SB125 (Chapter 52, Statutes of 2023) that could be used for either operating or capital costs, as well as an additional $3.63 billion of general fund monies (AB 180, Chapters 21, 69 and 240 of the Statutes of 2021) for high-priority rail and transit capital projects statewide.

- **Looking ahead, broader transit funding may face further risks due to shifting economic trends.** The rise in zero-emission vehicle sales and greater fuel efficiency is expected to reduce fuel tax revenues, which support the State Transit Assistance (STA) program. According to the Legislative Analyst's Office, STA funding could decline by approximately $300 million—about one-third of total funding—by 2035.[18] Other funding sources, such as sales tax revenues and diesel sales and use tax, are subject to economic fluctuations, making future revenue streams uncertain. This uncertainty makes it hard for transit agencies to plan for growth and build a robust, reliable system.
- **When transit agencies experience revenue losses, they may resort to service cuts to maintain financial stability.** This can trigger an operational spiral in which reduced service discourages ridership, further eroding revenue, and necessitating additional cuts. Moreover, capital projects such as fleet upgrades, maintenance, and infrastructure improvements will be delayed or downsized, further discouraging ridership. Task Force

[16] San Francisco Public Works, "South of Market Citizen's Advisory Committee," *San Francisco Planning Department*, September 14, 2021, https://sfplanning.org/sites/default/files/documents/cac/SOMACAC_Presentation01-091421.pdf; and San Francisco Municipal Transportation Agency, "Parking Optimization" Presentation, March 18, 2025, https://www.sfmta.com/media/41904/download?inline=

[17] Michael Pimentel, "California transit agencies need more state support," *Capital Weekly*, February 2, 2023, https://capitolweekly.net/california-transit-agencies-need-more-state-support/

[18] Gabriel Petek, "Assessing California's Climate Policies – Implications for State Transit Funding and Programs," *Legislative Analyst's Office*, December 2023, 16., https://lao.ca.gov/reports/2023/4821/ZEV-Impacts-on-Transportation-121323.pdf.

members noted that this can create a downward spiral for ridership and revenues.

- **The mandated transition to zero-emission buses (ZEBs) may result in higher costs for transit agencies.** Under CARB's Innovative Clean Transit (ICT) regulation, all California public transit agencies must shift their bus fleets to ZEBs in phases, with a requirement to achieve 100% fully ZEB transit fleets by 2040. California has made significant investments and programs available to the agencies to support the ZEV transition, including CARB's Clean Truck and Bus Vouchers (HVIP) program, technical assistance, and more. The costs associated with the ZEB transition have strained transit agencies' ability to maintain reliable service while meeting the regulatory requirements. Agencies face higher costs not only for vehicle procurement, but also for charging and fueling infrastructure, maintenance facility expansion and modernization, and workforce retraining. ZEB procurement and maintenance have proven especially challenging for transit agencies. Due to the still-developing nature of the ZEB market, manufacturer-level challenges, and supply-chain constraints, initial purchase costs increased. Challenges with obtaining timely repairs and maintenance often leave vehicles inoperable for lengths of time. Without coordinated investment and comprehensive planning, agencies risk falling behind on zero-emission goals while shouldering significant financial and operational pressures.

2.1 Transformational services and outcomes

This report lays out a pathway that would lead to an increase in transit ridership, ideally in line with California's climate goals. This shift would not only reduce VMT and emissions, but also redefine the way people move, live, and experience their communities statewide.

To achieve this, public transit must become a viable and competitive alternative to driving, especially in urban areas. This means reducing travel times so that a transit trip is fast, frequent, and reliable while providing competitive travel to alternatives. Just as critically, the user experience must be elevated, making transit comfortable, safe, clean, reliable, and seamless for riders. In less urban areas, preserving access to the network and broader destinations are a critical lifeline for communities and should be preserved and strengthened.

Developing housing and mixed-use spaces near high-quality transit must be accelerated to meet California's goal of 1.4 to 2.4 million transit-supportive homes across statewide.[19] By aligning land use policies with transit, California could make a decisive impact on its housing crisis—creating vibrant, walkable communities where people can live affordably and access opportunities without depending on a car. Additionally, without supportive transit, additional density leads to additional congestion, risking the viability of cities across California.

Financially, a thriving transit system must be operationally sustainable. This requires increased, predictable, and flexible funding streams, greater cost efficiency in capital and operational spending, and diversified revenue sources—including fares, real estate assets, toll revenues, and innovative funding mechanisms.

2.2 Accelerating progress on CalSTA's Core Four Priorities

Public transit will be the backbone of future mobility options in California. By addressing its transit challenges, increasing transit ridership, and improving the overall transit experience, California will also be supporting CalSTA's "Core Four" priorities.

- **Safety**: On average, 12 people are killed every day on California roads, and traffic deaths are at a 16-year high.[20] Transit offers a safe alternative to driving, boasting lower crash rates than vehicle travel and lower crime rates than vehicle crimes.[21] A robust public transit network will support California's effort to provide safe mobility options and reduce traffic fatalities and serious injuries to zero.
- **Equity:** CalSTA aims to create an equitable and accessible transportation network for all Californians. Today, over half of California's public transit riders are low-income and non-white. According to 2021 U.S. Census data, almost 60% of California residents who commute via public transit have a

[19] Joe Distefano et.al., "Can commercial corridors solve California's housing crisis?", *Urban Footprint*, August 3, 2022, https://urbanfootprint.com/blog/policy/ab2011-analysis/.
[20] California State Transportation Agency, "CalSTA 2024-2026 Strategic Plan," April 2024, 8. https://calsta.ca.gov/-/media/calsta-media/documents/2024-2026_calsta_strategic_plan-v10-a11y.pdf.
[21] Todd Litman, "Safer than You Think!: Revisiting the Transit Safety Narrative," *Victoria Transport Policy Institute*, September 18, 2025, 26., https://www.vtpi.org/safer.pdf.

household income below $35,000.[22] In San Francisco, 57% of Muni riders are people of color and 70% of riders earn less than $50,000 a year.[23] Additionally, many Californians cannot drive due to their age, abilities, or other factors. According to 2023 statistics, approximately 30% of Californians (including children) do not have a driver's license.[24] A robust public transit network supports California's commitment to transportation equity.

- **Climate Action:** Nearly 50% of all greenhouse gas (GHG) emissions in California come from the transportation sector, and this demands action for a cleaner California. As part of California's plan to reach its carbon neutrality by 2045, CARB targets a reduction in VMT of approximately 30% by 2045.[25] California remains committed to climate action, despite challenges posed by the federal government's recent revocation of CARB waivers for advanced clean trucks (ACT) and advance clean fleets (ACF).
- **Economic Prosperity**: Transportation policy done right creates well-paying jobs, provides affordable options, and powers California's economy. According to the American Public Transportation Association (APTA), transit investments have a 5:1 economic return. These benefits arise through a few different channels including direct time and cost savings from users, concentration of economic and recreational hubs around transit, and stimulus from capital investment.[26]

In addition to supporting these Core Four priorities, transforming transit is also aligned with California's housing and land use goals. California has a goal of building 2.5 million new homes by 2030, with no less than one million units for

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[22] Laura Tolkoff, et. al., "How California Can Help Transit Survive — and Thrive," *SPUR*, March 17, 2023, https://www.spur.org/news/2023-03-17/how-california-can-help-transit-survive-and-thrive#:~:text=According%20to%202021%20U.S.%20Census,do%20not%20own%20a%20car.

[23] Jeffrey Tumlin, "Press Statement – Muni's Impending Fiscal Cliff," *San Francisco Municipal Transit Authority*, May 26, 2023, https://www.sfmta.com/press-releases/press-statement-munis-impending-fiscal-cliff.

[24] U.S. Department of Transportation Federal Highway Administration, "Office of Highway Policy Information - Statistics Series 2023," Accessed June 2023, https://www.fhwa.dot.gov/policyinformation/statistics/2023/dl201.cfm. This is percentage may in fact be higher, because not all people who have licenses can afford to drive or have access to a vehicle at a given time.

[25] California Air Resource Board, "2022 Scoping Plan for Achieving Carbon Neutrality," December 2022, 175 https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf.

[26] American Public Transportation Associate, "Economic Impact of Public Transportation Investment: 2020 Update," April 2020, 1-7, https://www.apta.com/wp-content/uploads/APTA-Economic-Impact-Public-Transit-2020.pdf.

lower-income households.[27] Access to high-quality transit is needed to support higher density land-use both around where people live and their destinations. In turn, higher-density land-use also supports future growth in ridership, which becomes the virtuous cycle we need to transform transit.

[27] California Department of Housing and Community Development, "A Home for Every Californian: 2022 Statewide Housing Plan," March 2022, https://storymaps.arcgis.com/stories/94729ab1648d43b1811c1698a748c136.

3.0 Guiding Principles to Transform Transit in California

TTTF members' guiding principles identify how an increase in ridership and user experience could be achieved.

- **Principle: Transit should be operationally and financially sustainable**

Achieving a more efficient and fiscally sustainable transit system is essential to delivering reliable, high-quality service now and into the future. To support long-term sustainability, California and its transit agencies can take a multi-faceted approach that increases short-term funding flexibility, improves cost efficiency, and maximizes revenue opportunities by strategically leveraging existing assets while pursuing additional funding sources and revenues. Operational improvements such as strengthening workforce opportunities, optimizing fleet and asset management, and modifying the implementation of Innovative Clean Transit (ICT) requirements will be critical to maintaining service levels and meeting evolving demands. By prioritizing financial resilience, transit systems can continue to serve communities effectively and equitably for years to come.

- **Principle: Safety is fundamental**

Safety and cleanliness are essential for a well-functioning public transit network, directly impacting both riders and operators. In California, some transit systems face significant challenges, including assaults on workers and passengers, other crimes, inadequate security presence, poor lighting, and issues related to mental health and homelessness. If riders do not feel safe, other aspects of transit service become irrelevant, making security and cleanliness top priorities. A safe and clean transit environment fosters trust, encourages ridership, and promotes equitable access. Key strategies to enhance safety include strengthening physical security, increasing coordination between transit agencies and social services, standardizing safety policies statewide, and securing dedicated funding for long-term improvements. By addressing these challenges holistically, transit systems can create a more secure and welcoming experience for all.

- **Principle: Provide fast, reliable, connected, and convenient transit services.**

Providing fast, reliable, connected, and convenient public transit services is essential to making transit a competitive, preferred alternative to car travel. Making public transit faster, more frequent, and more reliable would

persuade more Californians to choose transit over car travel while also delivering direct benefits to existing riders and indirect benefits to drivers by reducing congestion.

Improving transit speed, frequency, and reliability requires a multi-pronged approach. Implementing transit prioritization strategies, such as dedicated bus lanes and traffic signal priority, can significantly reduce delays, increase ridership, and improve operational efficiency. In addition, improving transit scheduling, mapping, and wayfinding can help reduce transfer times and improve inter-regional travel. Lastly, improving first- and last-mile access to transit (by reducing the time it takes for riders to get to and from stations) can also reduce total travel times.

- **Principle: Provide transit that is accessible and easy to use for all**

An equitable transit system must be designed to serve everyone—regardless of age, ability, language, or familiarity with transit. Yet for too many Californians, transit remains physically inaccessible, operationally inflexible, or simply too confusing to use. Paratransit and dial-a-ride services, while mandated as critical complements to fixed-route transit, are often costly, difficult to navigate, and limited in availability, creating barriers for seniors and people with disabilities. At the same time, the broader transit network can be unintuitive for riders, with complex wayfinding, inconsistent signage, and confusing booking systems. Improving accessibility and ease of use requires both targeted and network-wide changes. Enhancing coordination across paratransit providers, modernizing booking and dispatch systems, and integrating accessible planning into broader transit investments will expand access while controlling costs. Improving transit accessibility also requires enhancing the passenger boarding and alighting process, such as designating no-parking zones to facilitate bus maneuvering and upgrading bicycle and pedestrian facilities to ensure safe connections to transit. At the system level, ensuring intuitive wayfinding, multilingual information, and simplified fare and service structures will create a more seamless and welcoming rider experience. Ultimately, designing for accessibility and ease of use supports not only those who need it most, but improves transit for everyone—making it a more viable, dependable, and inclusive option across California.

- **Principle: Develop high quality public transit systems to support complete communities**

Transit and land use in California are deeply linked, with higher-density areas generating greater ridership, fueling economic growth, and supporting more destinations near transit. This reciprocal relationship goes both ways: building high-quality transit supports complete communities, and building complete communities supports high-quality transit. Increasing the density of housing, jobs, and services near high-quality transit would make public transportation more accessible, convenient, and successful. In California, population and job density around major transit hubs remains below levels that correspond to higher ridership systems elsewhere, limiting transit's effectiveness and increasing costs.

Significant progress has been made in recent years—and further strengthened through newly-enacted legislation, most notably SB 79 (Wiener, Chapter 512, Statutes of 2025)—which expands opportunities for multifamily, transit-oriented development near major transit stations across California. The law streamlines housing development within designated areas surrounding qualifying transit stations, generally allowing building heights from four to nine stories. Overall density is determined by both proximity to the station—with higher densities permitted closer to the stop—and the type of transit service, with Tier 1 heavy rail stations allowing greater density than Tier 2 light rail stations. Together with local transit-oriented development (TOD) policies already in place, these measures can foster vibrant, connected communities with built-in ridership bases that strengthen the effectiveness and fiscal sustainability of transit systems. By encouraging housing and mixed-use development near stations, the law helps maximize the value of existing transit investments, improve access, reduce travel costs, and enhance quality of life for Californians. Additionally, strengthening partnerships with developers and improving planning processes can help create walkable, transit-oriented communities that reduce car dependence and deliver significant economic and environmental benefits. Beyond enhancing accessibility and livability, TOD offers meaningful financial opportunities. Both international and domestic examples—such as the Mass Transit Railway Corporation in Hong Kong, the Paris Transport Authority (RATP) in Paris, and the Hudson Yards redevelopment in New York City—demonstrate how strategic real estate and joint development can generate substantial long-term revenue to support transit operations. Expanding similar

models in California could improve the fiscal sustainability of transit systems while advancing broader economic, environmental, and equity goals.

4.0 Principles, Strategies, and Recommendations

Throughout this report, the principles, strategies, and recommendations are presented as initial or guiding concepts rather than specific statutory or budgetary proposals. These recommendations would need substantial refinement, and it is the intent of CalSTA that this report serves as a starting point for long-term considerations of transit transformation.

Principle: Transit should be operationally and financially sustainable

Overview: Funding Transit Transformation

As discussed in Sections 1.0 and 2.0 of this report, California's transit agencies face mounting fiscal pressures. Decreases in ridership and corresponding fare revenues, coupled with expensive capital projects (with costs rising faster than inflation), resulted in fiscal difficulty for some systems. Agencies risk cutting service to balance operating and capital budgets, a move that would undermine ridership, reliability, and public confidence, and lead to further budget, service, and ridership reductions. Costs are rising due to several factors outside of typical transit agency control, including broader inflation, lack of control of underlying infrastructure, and land-use patterns. Looking ahead, broader transit funding also faces challenges tied to shifting economic conditions and the transition to zero-emission vehicles, underscoring the urgency of finding solutions that stabilize operations, both now and in the future. Achieving financial sustainability is essential not only to maintain service but also to ensure that transit remains a cornerstone of California's mobility, equity, climate, and economic goals.

However, finding a sustainable path forward will require a multifaceted approach. Transit agencies seek increased, flexible, and dedicated operating funds; greater efficiency in both capital and operational spending; and new, diversified revenue streams—from fares and real estate development to toll revenues and innovative funding mechanisms—to ensure transit transformation. Task Force members emphasized that shifting existing dollars alone will not solve the crisis, and that new, dedicated funding for operations is particularly critical. Task Force members noted that long-term sustainability will depend on empowering agencies to reduce costs and capture and create value from their existing assets, or from those developed in partnership with others—changes

that may require future statutory changes to achieve. While some agencies face a near-term fiscal cliff, longer-term reforms and broader systemic changes are required to ensure transit can not only survive but thrive to help California meet its long-term policy goals. (For a more detailed analysis of transit funding, see Appendix A of this report.)

Over the course of its meetings, the Task Force discussed the need to identify new revenue sources for transit. Three main methods to increase agency revenue emerged:

- **Reprogram Existing Revenue:** There are numerous existing revenue sources (at the local/regional, State, and federal level) that could potentially be reprogrammed or flexed to transit. Additionally, current revenues programmed for or dedicated to capital expenses could be swapped to operating expenses in some cases (however, not without tradeoffs and/or statutory changes).
- **Generate New Value:** While some transit agencies currently pursue joint development and other revenue-generating activities, additional authority could be granted to further the ability to capture the value created by transit service—such as through the strategic use of air rights, tax-increment financing, and long-term development partnerships. Additionally, savings derived from more efficient operations (for example, through bus-only lanes that increase speed or signal priority) can support higher ridership and more cost-effective service. Aligning such policies to ensure that such efficiencies translate into reinvestment in transit operations would further enhance long-term financial sustainability.
- **Raise New Revenue:** New public revenue approaches could be considered—such as optimizing existing public revenue sources or, if warranted, considering new mechanisms within the broader context of current revenue structures and overall fiscal conditions.

The remainder of this Overview discusses these three options in greater detail.

- Reprogram Existing Revenues

One option to increase transit funding is to reprogram existing revenues at the local, regional, or State level. During TTTF Meeting #4, Task Force members discussed potentially reprogramming funds from capital expenses to operations. Some Task Force members supported this idea, with others noting that reprogramming funds from capital expenses to operating

expenses could jeopardize long-term service sustainability. However, reprogramming could provide a short-term approach for increasing transit agency funding available to support service.

Additionally, there are several Federal and State infrastructure funds that today are largely used for roads that could also be eligible for transit. The largest of these funds include the Federal Surface Transportation Block Grants (STBG) and the Federal Congestion Mitigation and Air Quality Improvement Program (CMAQ). However, for every dollar flexed to transit, a corresponding dollar must be removed from funding other transportation programs, creating difficult tradeoffs that must be assessed and weighed before these concepts are further developed. To help deal with the near-term transit fiscal cliff, the Metropolitan Transportation Commission (MTC) chose to flex $101 million of locally allocated STBG/CMAQ funds to FTA for programming to Bay Area transit operators for preventative maintenance in federal fiscal years (FY) 2024-25 and 2025-26.

Exhibit 1 depicts information on California's largest transit government funding sources, including the entity (federal, regional, or State) empowered to make decisions regarding the funding.

Exhibit 1: Largest California Transit Government Funding Sources in 2023

Local funding ■ Federal funding ■ State funding

Type	Funding source	Amount of funding, $B	Primary source of funds	Funding decision-making entity	Enabling mechanism
Federal	5309 - FTA Capital Program Funds	1.6	Federal Highway Trust Fund	Federal	Infrastructure Investment and Jobs Act (IIJA)
Local	Local tax measures in addition to the Local Transportation Fund	1.5	Sales tax	Regions	Various
State	Local Transportation Fund (LTF)	1.2	Sales tax	Regions	TDA
Federal	5307+5340 - Urbanized Area Formula Program	1.2	Federal Highway Trust Fund	Regions	IIJA
State	State Transit Assistance + State of Good Repair	1.1	Diesel tax and transportation improvement fee	Regions	TDA (STA), SB1 (SOGR)
Local	Taxes raised directly by transit agencies	0.8	Sales taxes, highway tolls, vehicle licensing fees	Regions	Agency-specific legislation
State	Transit and Intercity Rail Capital Program (TIRCP)	0.7	Vehicle Registration Fees, Cap-and-invest proceeds	California State	GGRF, Senate Bill 1
Federal	5337 - State of Good Repair Grants (SOGR)	0.6	Federal Highway Trust Fund	Regions	IIJA
Local	Local funds from bridges, tunnels, tolls	0.3	Bridge and tunnel tolls	Regions	Region-specific legislation
State	Affordable Housing and Sustainable Communities Program (e.g., Transit-Oriented Development)	0.2	Cap-and-invest proceeds	California State	GGRF

During Task Force meetings, some members advocated for transit agencies' "ability to compete for State homelessness and public safety funding"—

sources that transit has not traditionally been allowed to access. Some recommendations address this topic. Other members suggested exploring "formal agreements between health plans and transit agencies to redirect Medi-Cal managed care funds," which are currently used for private transportation services, to instead support public transit.

- Generate New Value

Expanding the ability of California's transit agencies to capture the value created by transit-oriented development and economic activity is an important strategy for long-term financial sustainability. While many agencies already engage in limited joint development or related efforts, these tools remain modest compared with international models (e.g., Paris, Hong Kong) and domestic examples such as New York City's Hudson Yards, where transit investments are directly linked to development-driven revenue that supports ongoing service and system growth.

The Task Force identified opportunities to build on existing practices by enabling agencies to more fully leverage their assets and station areas. Strategies such as development on agency-owned land, expanded tax-increment financing tools, station-area commercial and retail uses, air-rights development, and aligning revenue from managed lanes or congestion pricing with transit can generate recurring revenue, diversify funding, and reduce reliance on traditional public sources. These approaches also stimulate housing, commercial, and mixed-use development, attract private investment, create jobs, and position transit as a long-term economic catalyst.

Better coordination between transit agencies and infrastructure owners—particularly to implement transit-priority projects—can further increase efficiency, ridership, and system value. While revenues may grow gradually, expanding and modernizing value-generation tools over time can significantly strengthen the fiscal resilience of California's transit systems while supporting housing, climate, economic, and equity goals.

Transit agencies operating in larger metropolitan areas, with significant station footprints and development potential, may be especially well-positioned to expand revenue generated directly from their assets and surrounding land uses. While these revenue streams typically start modestly, scaling value-capture strategies and development authority over time could contribute to a more stable foundation for long-term financial health.

- Raise New Revenue

Another method to generate additional revenue for transit agencies is to adjust existing public revenue sources or consider establishing new ones. During Task Force Meetings #8 and #10, the Task Force discussed taxes that are current sources of transit funding, including sales tax, fuel tax, and cap-and-invest, and the longer-term implications for the revenue generated by those sources. There are significant challenges with raising new revenues, as evidenced by Task Force discussions and challenges in finding alignment during Task Force meetings. Other new revenue sources mentioned by Task Force members include road user charges and congestion pricing. During Task Force meetings, members suggested and supported several potential funding concepts for consideration, such as:

- Implement new State funding mechanisms to stabilize transit agencies in the near-term, increase and enhance transit service in the mid-term, and deliver transit service that aligns with the goals of the report over the long-term.
- Implement new State funding mechanisms for transit capital projects that increase, enhance, and maintain transit service and deliver transit service that aligns with the goals of this report and other State mandates.
- Consider funding alternatives to replace fuel taxes, including allowing transit operations and capital as eligible expenses (among other expenses) for funds raised from both passenger and commercial vehicles.
- Evaluate means to allow maximum flexibility to transit agencies when expending State transportation funds (e.g., Article 19).

While there are a wide range of potential revenue sources, they all come with potential limitations and trade-offs. Considerations of revenue approaches should be grounded in long-term fiscal sustainability and affordability, sequenced in a way that first prioritizes operational efficiencies and maximizes revenue from existing assets before evaluating additional public revenue options. Such considerations would also need to reflect existing operational needs and current public revenue sources that sustain transit systems, as well as the broader economic conditions of individual systems and the communities and regions that support them.

Topic Area: New Options for Revenue Sources (1.f.6)

In the long term, transit funding can be increased and diversified by reshaping existing resources and creating new revenue opportunities.

Key strategies and recommendations related to new options for revenue sources are listed below. As noted earlier, these recommendations are intended as a starting point for future consideration, and not as a menu of fiscal or policy options for immediate implementation.

Strategy 1: Reprogram and re-focus existing revenues.

Recommendations

- 1.A. Identify opportunities to support regions that reprogram Federal Highway Administration formula funds for transit uses as allowable by law.

Strategy 2: Support local communities in raising revenues.

Recommendations

- 2.A. Consider additional flexibility for transit agencies, regions, or voters to place measures on the ballot by allowing transit agencies and regions to have authority to place measures on the ballot for portions of their service areas or entire service area, similar to how cities can place taxes on the ballot without enabling legislation.

Strategy 3: Generate new revenue through value-capture.

Recommendations

- 3.A. Give transit and other government agencies the ability to sell air rights or other development incentives to create development opportunities above and near transit stations and facilities to generate additional revenue via sale and/or investment. This has been partially achieved by recent legislation, including SB 79, but could be formalized and expanded.
- 3.B. Explore opportunities to allocate revenue from managed lanes and other forms of pricing in California's most congested regions to fund transit service, giving travelers reliable alternatives to driving alone.
- 3.C. Update increment financing tools to make it easier for transit agencies to capture value and establish districts, with a specific focus on removing the number of bodies and approvals needed to create a tax increment financing (TIF) district.

Topic Area: Reforming the Transportation Development Act (1.f.4)

The Transportation Development Act was established in the 1970s during the transition from private to publicly operated transit systems to ensure a stable and continuous funding source to develop, maintain, and operate public transit. The TDA consists of two primary funds: the Local Transportation Fund (LTF) and State Transit Assistance (STA), each with specific qualifying requirements.

The TDA uses outdated performance metrics such as the farebox recovery ratio (FRR) and operating cost per hour requirements for both LTF and STA funding. Task Force members indicated that these metrics discourage service expansion and innovation, and that alternative performance measures would more accurately assess transit service effectiveness. For example, a UCLA Institute of Transportation Studies report cited several alternative performance goals, including maximizing cost efficiency, increasing service, increasing accessibility, increasing access to destinations, improving reliability, and maximizing ridership.[28] The Task Force identified the development of alternative performance metrics as an area in need of more thorough investigation and legislation.

Lastly, Task Force members identified several strategies and recommendations to reform the TDA, including simplifying reporting requirements, alleviating the burden caused by existing penalty structures, improving funding predictability, and aligning incentives across funding programs. Task Force members expressed support for eliminating the unmet transit needs process altogether to require money to be spent on transit, and if there is no transit system in an area, the money could be flexibly redirected to other transit needs. While discussed, these concepts are not included in the recommendations related to TDA reform.

Key strategies and recommendations related to TDA reform are listed below. As noted earlier, these recommendations are intended as a starting point for future consideration, and not as a menu of fiscal or policy options for immediate implementation.

[28] John Gahbauer et. al., "An Assessment of Performance Measures in the Transportation Development Act," *UCLA Institute of Transportation Studies (*August 28, 2019):1-109, https://escholarship.org/uc/item/0dk5g542.

Strategy 4: Improve predictability of long-term funding.

Recommendations

- 4.A. Remove farebox recovery penalty, require agencies to establish plans and use future TDA funding to address deficiencies identified in audit process if not meeting targets. Establish a working group with statutory deadlines for developing draft and final metrics and performance measures—bringing together regions, transit agencies, and state entities. Update performance measures on a recurring basis and replace the existing farebox recovery and cost-inflation penalties.

Strategy 5: Align incentives.

Recommendations

- 5.A. Use TDA working group to develop accountability mechanisms for when infrastructure owners are driving challenges for transit agencies by leveraging other sources of funds. Leverage the triennial audit process to do so.
- 5.B. Update other formulaic funding programs (i.e., LCTOP, SGR) to align with revisions to TDA reporting requirements and incentives.
- 5.C. Update TDA to better align with criteria in State discretionary investment programs.
- 5.D. Establish clear, peer-based performance metrics for agencies to follow. Account for sectorial issues (i.e., recessions, loss of sales tax revenue) inside the performance measures and inside TDA accountability process.

Strategy 6: Simplify reporting requirements for funding and increase transparency to the public.

Recommendations

- 6.A. Identify opportunities to provide additional technical assistance to agencies to meet reporting requirements and aim to shift reporting to use existing NTD and GTFS data.

Topic Area: Oversight and Reporting (1.f.5)

California's transit sector relies on multiple funding sources, with at least 35 different funding programs contributing to transit operations. Transit agencies in California receive 90% of government funding through formula programs, and approximately 90% of funds are primarily allocated by Regional Transportation Planning Agencies (RTPAs) and Metropolitan

Planning Organizations (MPOs) together with transit agencies.[29] This includes most of the formula funding (e.g. Federal 5307 Urban Area Program Funds, State Transit Assistance, Local Transportation Funds, Low Carbon Transit Operations Program) as well as revenues raised directly by transit agencies through fares, sales taxes, or property taxes. Federal funds for transportation in California are allocated by a mix of the State and regions. While this approach effectively funds regional priorities, it also creates complexities in oversight and reporting.

The numerous funding agencies results in overlapping reporting requirements for both federal and State programs. This redundancy increases administrative burdens on transit agencies, requiring significant staff time and resources while also raising the risk of reporting inconsistencies. Discretionary grant programs tend to have even more demanding administrative requirements, further complicating compliance efforts.

The TDA compounds these challenges with additional administrative requirements. As noted in the previous section, TDA funding has many of the most onerous reporting obligations, making it ripe to streamline administrative processes. Finally, Task Force members recommended "encouraging the consolidation of grant programs across State agencies to reduce duplication." While exploring this idea is worthwhile, it is not included in this report as a formal recommendation from CalSTA, as it would require extensive discussions with other stakeholders.

Key strategies and recommendations related to transit oversight and reporting are listed below. As noted earlier, these recommendations are intended as a starting point for future consideration, and not as a menu of fiscal or policy options for immediate implementation.

Strategy 7: Reduce administrative burden.

Recommendations

- 7.A. Streamline grant and TDA reporting processes to a single report, determine a single California State agency to manage reporting across all

[29] Revenue sources compiled from raw data including: California State Controller's Office, "Revenues broken down by Transit Operator, "*Transit Operators Financial Data,* Accessed January 27, 2025, https://transit.bythenumbers.sco.ca.gov/#!/year/2024/revenue/0/entity_name and U.S. Department of Transportation, "Funding Sources," *National Transit Database,* Accessed January 27, 2025, *https://www.transit.dot.gov/ntd/data-product/2023-funding-sources*. Programs classified based on individual program funding guidelines on allocation and governance.

programs, grants, on a unified application. Align this report to information already collected in the NTD reporting process.

- 7.B. Create a statewide, publicly accessible dashboard allowing members of the public and agencies to view the data collected and performance information for each agency.
- 7.C. Reduce the timeline for distribution of funds and allow flexibility and guarantees where possible inside each grant program.
- 7.D. Build capacity at the statewide level to manage and distribute funds effectively and within clearly defined KPIs and time limits.

Strategy 8: Simplify grants.

Recommendations

- 8.A. Consolidate, standardize, digitize, and streamline State grant applications to reduce administrative requirements and decision and distribution timeline. Allow one State grant application to be used for multiple grant programs or funding types.
- 8.B. Create and maintain a master agreement between each applicant agency and the granting agency so that repetitive terms and boilerplate for all grants are in a single document rather than executed ad hoc with each grant.
- 8.C. Organize the grant administration system around the recipient and not around the project so that grantors and recipients can see their historical grants and track their progress.
- 8.D. Create an opt-in capacity for rural and small agencies to receive assistance with grant applications, compliance, and reporting requirements, recognizing that they may lack sufficient staff to understand their eligibility, compete effectively or ensure full compliance.
- 8.E. Offer rural and small agencies technical assistance in initiating their projects so that preliminary engineering and project costs are known in advance of applying for funding.

Topic Area: Capital Construction Costs and Timelines

Transit capital construction costs in California are among the highest in the world, with U.S. rail expansion projects averaging nearly twice the global cost of $456 million per mile.[30] Between 2018 and 2023, California transit agencies spent approximately $30 billion on capital expenditures, with the

[30] Marron Institute, "What the data is telling us," *Transit Costs Project*, Updated May 8, 2025, https://transitcosts.com/new-data/

majority directed toward rail projects.[31] While these high costs pose significant challenges, some agencies have successfully reduced expenses. For example, BART's *Fleet of the Future* project replaced 775 train cars over six years and came in 15% under budget, saving $394 million through strategies such as in-house engineering and faster delivery timelines.

The Task Force identified reducing capital construction costs and timelines as a key strategy to deliver more efficient and higher ridership transit services faster. Strategies to support this goal include strengthening public-sector capacity for project delivery through technical guidance, training, and new procurement tools, while also addressing regulatory delays by streamlining permitting processes, expediting environmental reviews, and granting broader master permitting authority. Together, these measures can improve cost efficiency, accelerate project delivery, and enable agencies to better meet California's growing transit infrastructure needs. The Task Force highlighted that several of these recommendations would drive certainty on scope, cost, and schedule earlier in a project, but may not result in absolute declines in project costs (notably, the contracting method recommendation 9.E. below).

Key strategies and recommendations related to reducing capital construction costs and timelines are included below. As noted earlier, these recommendations are intended as a starting point for future consideration, and not as a menu of fiscal or policy options for immediate implementation.

Strategy 9: Reduce timelines to deliver capital projects.

Recommendations

- 9.A. Use NEPA oversight delegation authority at Caltrans or CHSRA to complete NEPA in an expedited manner.
- 9.B. Consider, in order to limit delays and change orders, requiring that stakeholders waive rights and limit design changes beyond certain phases for high priority and complex transit and rail projects, to ensure that scope does not change.
- 9.C. Consider legislation to limit timelines for permitting agencies to engage or risk waive rights to future legal objections to project if they do not engage in the earlier phases.

[31] U.S. Department of Transportation, "TS3.1 Capital Expenditures Time Series, 2018–2023," *National Transit Database,* Accessed January 27, 2025, https://data.transportation.gov/Public-Transit/NTD-Annual-Data-View-Capital-Expenses-by-Mode-/2667-vitc

- 9.D. Formalize service-led planning to reduce construction costs and develop clear roles and responsibilities between State, regional agencies, transit agencies, or local jurisdictions.
- 9.E. Explore ways to allow alternative procurement methods, such as Construction Manager/ General Contractor (CMGC) or Construction Manager at Risk (CMAR), statewide, rather than just at certain agencies, per current law.
- 9.F. Consider allowing infrastructure owners (including transit agencies) to have master permitting authority for priority rail projects to reduce delays and costs. Alternatively, allow for by-right permitting of certain types of transit projects to prevent extractive permitting processes by infrastructure owners. Additionally, give transit agencies franchise rights with utilities, similar to cities, to reduce the cost of utility relocations.
- 9.G. Consider streamlining certain types of permits, while making other permits by right for high priority transit projects.
- 9.H. Establish opt-in statewide design guidelines for transit and rail projects interaction with the public right of way. Ensure that public agencies that do not use them are not penalized on the funding of their projects.

Strategy 10: Grow public-sector capacity.

Recommendations

- 10.A. Develop guidance for development of business cases and enhance benefit cost analysis, including project scope, cost, schedule, risks, and technical assistance, for various funding programs and grant applications with a goal of more robust decision making to support federal investment.
- 10.B. Procure project delivery software that can be used by transit agencies, local jurisdictions, and regional agencies.
- 10.C. Develop an inventory of standard materials costs, and lower cost of materials with volume buying.
- 10.D. Consider authorizing regional collaboratives to develop institutional expertise, available for project consultation along with a statewide center of excellence to aid with hiring. Consider possible new models for project delivery that rely on larger organizations to deliver megaprojects, such as a shared single project delivery organization per region.

Topic Area: Transit Fleet and Asset Management (1.f.1.F)

California's transit systems face mounting financial and operational challenges tied to fleet and asset management. Rising costs, driven by fixed

expenses, declining fare revenue as a percentage of costs, and higher insurance premiums, have left agencies vulnerable to further service degradation and financial instability. Additionally, there is CARB's Innovative Clean Transit regulation, which requires all fleets to be zero emissions (ZE) by 2040. While critical to meeting climate goals, the transition is financially and operationally complex, requiring agencies to absorb higher upfront vehicle costs for a greater number of vehicles (in general, more than one ZE vehicle is needed for each non-ZE vehicle replaced), expand electrical capacity, build charging and fueling infrastructure, and adapt maintenance protocols and routing strategies, all while securing the technical expertise and workforce needed to implement these changes. While this has raised costs for transit agencies, as mentioned above, California has provided significant financial and technical support to transit agencies to help execute on the transition to zero emission vehicles.

Despite these challenges, improvements in fleet and asset management offer a path to greater resilience. Modernizing transit systems can strengthen service reliability, reduce long-term operating costs, and provide cleaner, more efficient transportation. A well-planned transition to ZE fleets will significantly cut greenhouse gas emissions, improve air quality, and advance California's climate commitments. Ensuring agencies have the financial resources and operational support to manage this transition will be essential to maintaining high-quality, accessible service for communities across California.

Finally, Task Force members recommend that we should "encourage transit agencies to consider shared training programs, and for California to invest in apprenticeship programs (e.g., on vehicle maintenance)." While this is a potentially valuable topic for further exploration, further development of this concept would require additional discussion with stakeholders.

Key strategies and recommendations that support improved fleet and asset management are listed below. As noted earlier, these recommendations are intended as a starting point for future consideration, and not as a menu of fiscal or policy options for immediate implementation.

Strategy 11: Encourage review and discussion of ICT requirements and solutions.

- 11.A. Perform a comprehensive review of ICT requirements, potential solutions, and associated impacts focused on identifying strategies that

help transit agencies meet zero-emission fleet mandates in a financially sustainable and operationally feasible way while maintaining reliable, high-quality service. This could be carried out by a separate dedicated task force with recommendations to the administration and Legislature.

Strategy 12: Coordinate with and incentivize manufacturers to collaborate on zero-emission bus and paratransit vehicle fleet.

Recommendations

- 12.A. Collaborate on creating and purchasing standardized specifications of zero-emission buses and paratransit vehicles to allow suppliers to scale production.

Strategy 13: Streamline procurement requirements and timelines.

Recommendations

- 13.A. Allow agencies to opt-in to regional or statewide joint procurement contracts to aggregate demand, and reduce costs for buses, parts, components, energy (e.g., with utilities, hydrogen providers), and other technologies expanding upon the Department of General Services (DGS) existing fleet procurement infrastructure.
- 13.B. Authorize grantee agencies to use job order contracting authority (JOC) to streamline maintenance and reduce project costs, avoiding the need for continuous procurement for routine work.
- 13.C. Expand Master Service Agreements (MSAs) for rolling stock and transit technology purposes to be administered through DGS or California Association of Coordinated Transportation (CalACT).

Strategy 14: Encourage shared maintenance and infrastructure support.

Recommendations

- 14.A. Consider building out or facilitating the creation of shared facilities at known sites, allow legislatively for easier interagency agreements, procurements, and ownership.
- 14.B. Amend California's rules and procedures to allow for co-location of charging and fueling as an opportunity to partner with schools and Caltrans, and to charge private freight to use charging facilities.

Strategy 15: Advise State to provide opt-in technical assistance for asset management capabilities.

Recommendations

- 15.A. Develop opt-in Statewide capacities to assist transit agencies with project delivery and asset management.
- 15.B. Provide technical assistance for agencies that request it in identifying and prioritizing routes for fleet transitions that are most suitable for either electric or hydrogen buses.

Strategy 16: Procure or create software and digital tools for asset management.

Recommendations

- 16.A. Procure centralized software for asset management tools and predictive maintenance (or adding to California's Software Licensing Program) and make it available to all agencies, with their oversight and input.
- 16.B. Create life-cycle cost assessment tools under a similar, shared services model.

Topic Area: Workforce Recruitment, Retention, and Development (1.f.3)

While California's bus and rail transit systems employ approximately 33,000 people, they face persistent workforce challenges that threaten service reliability and long-term sustainability. Recruitment remains a critical issue, with national vacancy rates for bus operators and mechanics reaching 17% and 10% respectively in 2022. Retention has also worsened, as turnover in California's transit sector has risen by 40% since 2010, reaching 9% in 2022. Compounding these issues, 38% of employees in California's urban transit systems are aged 55 or older—far higher than the 24% average across other sectors—underscoring the urgency of developing the next generation of transit workers. Barriers such as complex certification processes, unaffordable housing near jobs, and fragmented workforce development efforts further strain recruitment and retention, highlighting the need for coordinated strategies and stronger partnerships.

Task Force members emphasized that meeting these challenges will require innovative solutions, increased funding, and collaboration with labor and educational institutions. Promising models already exist in California and across the country: Golden Gate Transit provides pre-application support

English classes to ease entry barriers;[32] the Central Ohio Transit Authority offers higher pay for less desirable shifts to improve retention;[33] and LA Metro has partnered with community colleges to create a Career Pathways Program that builds structured opportunities for workforce development.[34] Expanding these kinds of initiatives, supported by State and federal investment, will be essential to cultivating a stable and skilled workforce capable of sustaining California's transit systems into the future.

Key strategies and recommendations that support improved workforce recruitment, retention, and development are listed below. As noted earlier, these recommendations are intended as a starting point for future consideration, and not as a menu of fiscal or policy options for immediate implementation.

Strategy 17: Expand candidate pool and reduce barriers to entry for transit roles.

Recommendations

- 17.A. Expand partnerships with K-12 education, community colleges, trade schools, and re-entry programs and other programs to increase size of candidate pool and train potential candidates.
- 17.B. Create a centralized job board for transit agencies that are in the same transit region to advertise vacancies, share a talent pool, and better match candidates to positions.
- 17.C. Create a Statewide campaign to increase interest in careers in public transportation.
- 17.D. Re-evaluate age requirements for bus operators.
- 17.E. Align Federal and State regulations around drug tests, particularly as it relates to cannabis.
- 17.F. Create an on-the-spot in-person interview and hiring process, and provide on-site examination for operators rather than requiring applicants to go test at the DMV.

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[32] *Transit Workforce Center*, "Case Study: Golden Gate Transit and Amalgamated Transit Union Local 1575," Accessed October 14, 2025, https://www.transitworkforce.org/case-study-win-partnership-ca/.
[33] American Public Transportation Association, "Transit Workforce Shortage Synthesis Report," March 2023, 25, https://www.apta.com/wp-content/uploads/APTA-Workforce-Shortage-Synthesis-Report-03.2023.pdf.
[34] Los Angeles County Metropolitan Transportation Authority, "Metro Career Pathways," September 2017, https://libraryarchives.metro.net/BOD/191218-Career-Pathways-Brochure.pdf.

- 17.G. Allow in-house examiners to fulfil the certification requirements through tests administered to multiple transit agencies within a region (i.e., instead of current 10-test requirement).
- 17.H. Establish a shared pool of vehicle simulators distributed across agencies within a region to expedite the certification process, especially for smaller transit agencies.

Strategy 18: Expand training and mentorship programs for agencies to ensure employees have required skills and visibility into career pathways.

Recommendations

- 18.A. Create centralized training programs that can be used by agencies in the same transit area in coordination through labor partners (e.g., through trade schools and fund placements).
- 18.B. Standardize credentials, curriculums, and onboarding materials that can be recognized across transit agencies.
- 18.C. Connect transit agencies to academic institutions (e.g., community colleges) or other entities to train employees for emerging skill requirements (e.g., maintenance of electric vehicles and autonomous vehicles).
- 18.D. Encourage transit agencies to establish formal mentorship, apprenticeship, or shadow programs to provide new employees with visibility into roles a few levels above.

Principle: Safety is fundamental

Topic Area: Safe and Clean Environment for Passengers and Operators (1.f.1.C)

Safety and security challenges within transit systems impact both transit workers and riders. Research has shown that the rates of fatal crashes and crime are both lower on public transportation than on roadways, that safety risks on public transit are relatively low, and transit travel is significantly safer than vehicle travel.[35] Yet many public transit systems in California face safety and cleanliness challenges, including assaults on transit workers and riders,

[35] Todd Litman, "Safer than You Think!: Revisiting the Transit Safety Narrative," *Victoria Transport Policy Institute*, September 18, 2025, 26., https://www.vtpi.org/safer.pdf.

crime, inadequate security presence, poor lighting, and issues related to mental health and homelessness. Safety is a fundamental requirement for effective transit service—and if riders do not feel safe, other aspects of the system become irrelevant, making safety and cleanliness top priorities. Ensuring a secure and clean environment fosters trust, encourages higher ridership, and promotes equitable access to transit. Additionally, safety concerns are closely tied to ridership levels, as greater passenger presence can contribute to a perception of increased security, while cleanliness enhances the overall sense of safety. Task Force members expressed support for allowing transit agencies to be eligible for homelessness funding programs. While discussed, these concepts are not included here as CalSTA-specific recommendations, as this concept would require additional discussion and coordination with stakeholders in the housing and homelessness space.

Key strategies and recommendations that support providing a safe and clean riding experience for riders and operators include the following. As noted earlier, these recommendations are intended as a starting point for future consideration, and not as a menu of fiscal or policy options for immediate implementation.

Strategy 19: Allocate dedicated safety and security funding.

Recommendations

- 19.A. Allocate dedicated funding for improving safety infrastructure (e.g., protective barriers, lighting) at transit stations and bus stops, and employing safety-related personnel.
- 19.B. Allocate dedicated funding for de-escalation and violence mitigation training specific to transit employees.

Strategy 20: Ensure coordination at the Statewide level between agencies.

Recommendations

- 20.A. Develop Statewide safety and security standards (e.g., guidance on directing individuals to wraparound services, addressing mental health and substance abuse challenges).
- 20.B. Examine opportunities to regionalize prohibition orders within the existing legal framework.
- 20.C. Encourage commercial development (e.g., platform kiosks, station stalls, exterior shops) at stations to improve perceived safety.

- 20.D. Implement surveys for priority populations (e.g., seniors, women) to monitor safety of transit systems.

Strategy 21: Improve coordination with Health & Human Services Agencies to ensure comprehensive health-related safety and security responses.

Recommendations

- 21.A. Increase presence of safety professionals on transit systems through safety ambassadors, crisis intervention specialists, and/or uniformed officers, leveraging coordination with local police departments.
- 21.B. Coordinate with health and human services agencies to implement services for unhoused people on and around transit systems.

Strategy 22: Implement physical security measures for frontline transit workers and riders.

Recommendations

- 22.A. Install protective doors for bus operators consistent with safety operations and per union agreement.
- 22.B. Improve surveillance and response capabilities by constructing emergency communications equipment and systems, increasing security cameras, and quality of cameras, and implementing technology to identify prohibited individuals.
- 22.C. Update signage in and around stations for better navigation and safety, including reducing speed limits around transit stops.
- 22.D. Increase lighting and other safety features in the areas surrounding transit stations to ensure safety on a first/last mile trip.

Principle: Provide fast, reliable, connected, and convenient transit services

Topic Area: Transit Prioritization (1.f.1.D)

Transit prioritization refers to the strategies and infrastructure improvements that enhance the speed, frequency, reliability, and efficiency of bus and light rail transit by reducing delays caused by general traffic congestion. Transit prioritization is needed when buses and light rail vehicles operate in mixed right-of-way scenarios with vehicle traffic. As congestion increases in areas where transit does not have traffic priority measures, transit service becomes slower and more expensive to provide, as depicted in **Exhibit 2**.

Exhibit 2: Cost to Provide 10-Minute Bus Frequency for SFMTA, 6 AM – 12 AM, daily[36]

Travel time and cost increase together

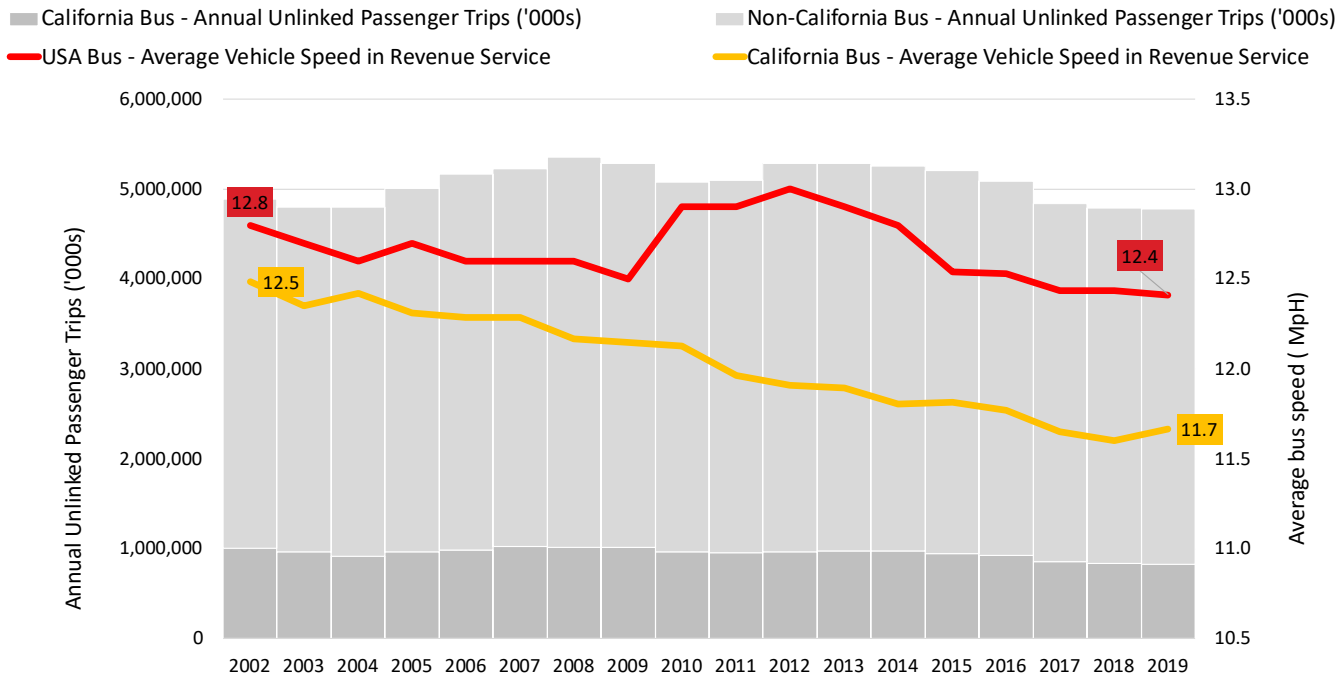
Travel Time	Buses Required	Annual Cost
30 minutes		$4 million
45		$6 million
60		$8 million
75		$10 million

Assumes operating cost of $200/hour per vehicle for example purposes only. Actual costs vary by mode.

Over the past 25 years, average bus speeds have declined markedly in both the U.S. and California among agencies, as depicted in **Exhibit 3.** This decline leads to increased costs and decreased ridership.

[36] California State Transportation Agency, "Transit Transformation Task Force Meeting #4 (San Francisco): June 17, 2024 Meeting Presentation," Accessed October 16, 2025, https://calsta.ca.gov/-/media/calsta-media/documents/calsta_tttf4_final_06-17-2024-a11y.pdf. Original data provided by San Francisco Municipal Transportation Authority.

Exhibit 3: Average U.S. and California Bus Speeds[37]



Transit prioritization strategies and infrastructure include dedicated bus lanes, Transit Signal Priority (TSP) for buses, and transit stops that are strategically placed and designed to minimize delays and allow passengers to board and alight efficiently. Enhancing the reliability and speed of bus services through transit prioritization can improve ridership, revenue, and operational efficiency by delivering better service with fewer resources.

However, scaling these initiatives is challenged by the high costs and lengthy timelines associated with road modifications, including planning, design, environmental reviews, community input, permitting, and construction. For instance, the Van Ness BRT project in San Francisco

[37] https://calsta.ca.gov/-/media/calsta-media/documents/calsta_tttf4_final_06-17-2024-a11y.pdf U.S. Department of Transportation, "TS2.1 - Service Data and Operating Expenses Time Series by Mode," *National Transit Database*, Accessed June 1, 2024, https://www.transit.dot.gov/ntd/data-product/ts21-service-data-and-operating-expenses-time-series-mode-2.

increased bus speeds between 25% - 36%, and ridership reached 130% of pre-pandemic levels. Despite these benefits, the project took nearly 20 years to complete.

Finally, TTTF members noted that to achieve successful BRT and transit priority implementation at scale, it would help to "fund planning and engineering resources at the State level for easier implementation of transit priority infrastructure at the local level."

Key strategies and recommendations to accelerate and reduce the cost of delivering transit priority infrastructure at scale include the below. As noted earlier, these recommendations are intended as a starting point for future consideration, and not as a menu of fiscal or policy options for immediate implementation.

Strategy 23: Standardize, support, and scale transit priority infrastructure.

Recommendations

- 23.A. Establish Statewide procurements for technology, equipment, and materials that are needed for Transit Signal Priority (TSP), preemption, and other infrastructure that can be leveraged to lower costs and encourage standardization.
- 23.B. Update the California Manual on Uniform Traffic Control Devices (CA MUTCD) to include TSP and preemption for transit routes where applicable. Create TSP guidelines & standards that can be leveraged in any jurisdiction. Work to encourage collaboration between cities and agencies to enable TSP at scale.
- 23.C Encourage implementation of transit priority and bus rapid transit features on the State right of way, such as bus-only lanes or queue jumps and ensure that the State Highway Network can be used by Transit riders.
- 23.D. Make permanent the authorization for transit agencies to use readily available camera technology to discourage illegal parking in transit-only lanes and at transit stops where parking is already prohibited under existing law, as well as other violations.

Strategy 24: Expedite delivery of transit-supportive infrastructure and strategies.

Recommendations

- 24.A. Allow for exemption or preemption of local permitting requirements on identified priority transit routes.

- 24.B. Establish a by-right permitting mechanism for transit infrastructure – bus shelters, transit priority, TSP, etc. inside each city and on the State right of way.
- 24.C. Establish a Statewide TIGER team to assist with the implementation of BRT and Bus Only lanes Statewide to assist with planning, engineering and implementation in all jurisdictions.
- 24.D. Establish a streamlined process for adding stops and stations, and a process that involves members of the transit riding community before a stop or station can be removed.

Strategy 25: Coordinate and collaborate to deliver infrastructure across jurisdictions.

Recommendations

- 25.A. Develop a framework on roles and responsibilities for TSP and BRT implementation for use Statewide.
- 25.B. Convene a Statewide working group for local jurisdictions, regional agencies, and transit agencies to discuss and solve common issues in implementing TSP.

Strategy 26: Establish flexibility with State funding sources.

Recommendations

- 26.A. Update State funding programs and guidelines to encourage the delivery of transit priority infrastructure.

Topic Area: Service and Fare Coordination or Integration (1.f.1.A) and Coordinated Scheduling, Mapping, and Wayfinding (1.f.1.B)

When transit riders take trips that cross agency boundaries, many face higher costs and added hassle; riders may have to pay multiple fares, navigate different payment systems, or go through multiple eligibility checks for youth or senior discounts. Service and fare coordination can ease these challenges through standardized regional fare systems, common discount verification, and Statewide or regional support for integration. For transit agencies, fare and service integration raises challenges including potential revenue losses associated with transfers as well as technology hurdles. Overcoming these challenges requires a collaborative approach, leveraging policy, funding, and technological solutions to create a more seamless transit experience.

Equally important is coordination of scheduling, mapping, and wayfinding across transit agencies. Currently, California transit riders often need to transfer between transit operators due to service area boundaries and journey distances. Coordination between transit agencies occurs inconsistently, varying by region and agency, with no standardized approach. Regional transit agencies have an opportunity to enable regions to improve coordinated scheduling, mapping, and wayfinding—and to empower and resource regional agencies to designate key transit hubs and stations, in consultation with cities, counties and transit agencies, where clear standards and wayfinding will apply. Throughout the Task Force process, CalSTA staff brought several sets of draft recommendations on scheduling, mapping, and wayfinding to the Task Force. The Task Force discussed the draft recommendations at three separate meetings and the discussion was extremely robust. However, ultimately few recommendations on scheduling, mapping, and wayfinding were approved by the Task Force for inclusion in this report.

Key strategies and recommendations on this topic area include the following. As noted earlier, these recommendations are intended as a starting point for future consideration, and not as a menu of fiscal or policy options for immediate implementation.

Strategy 27: State Coordination.

- 27.A. Provide technical assistance to transit agencies that request it through a Statewide identity verification program that transit agencies can use to verify discounted fares.
- 27.B. Develop tools and technical assistance and funding to help incentivize inter-operability between payments systems Statewide.
- 27.C. Recommend opt-in common data collection, analysis, and publication standards across agencies to improve interoperability (e.g., General Transit Feed Specification, Operational Data Standard, TIDES) to local and regional agencies.
- 27.D. Develop tools and provide opt-in support for regions and agencies for service planning to support other recommendations and help facilitate interregional planning.

Topic Area: First- and Last-Mile Access to Transit (1.f.1.E)

First- and last-mile access in transit refers to the connections that enable passengers to travel from their starting location to a transit station (first mile) and from a transit station to their final destination (last mile). These connections may include walking, biking, and micro-mobility options (such as e-scooters, bike-share, and ride-share programs). Ensuring that riders have first- and last- mile access is essential, as transit use declines by 90% when riders must walk more than a half mile. For California transit riders, a significant portion of overall travel time is spent getting to and from transit services, which can contribute to longer total trip times.

The most effective way to improve first- and last-mile access to transit is to increase the density of housing, jobs, recreational facilities, and healthcare services around high-quality transit infrastructure. By ensuring that essential destinations are located closer to transit, communities can improve accessibility, enhance transit efficiency, and encourage greater ridership.

Key strategies and recommendations to improve first- and last-mile access to transit are listed below. As noted earlier, these recommendations are intended as a starting point for future consideration, and not as a menu of fiscal or policy options for immediate implementation.

Strategy 28: Ensure consistent and flexible funding for active transportation and first- and last- mile access to transit.

Recommendations

- 28.A. Increase funding for active transportation projects with reduced variability from year-to-year, to increase first and last mile access to transit.
- 28.B. Reduce administrative burden to improve the use of funding for active transportation projects.

Strategy 29: Reform planning process to improve access to transit.

Recommendations

- 29.A. Empower and resource regional agencies to designate key transit hubs and stations, in consultation with cities, counties and transit agencies, where clear standards, wayfinding, and rules will apply.

- 29.B Streamline permitting processes and timelines for delivering active transportation projects near transit hubs and stations.
- 29.C. Assess conditions and collect data on sidewalks, mobility lanes, and transit hubs and create GIS maps highlighting existing accessibility infrastructure, including sidewalk quality and continuity, street furniture such as benches and lighting, and transit hub features such as signage and shelter to identify and address locations.
- 29.D Create a Statewide registry of bus stops, each with a unique ID, and include stop amenity information.

Strategy 30: Coordinate and collaborate to provide first- and last- mile access to transit across jurisdictions.

Recommendations

- 30.A. Encourage interagency coordination on first- and last- mile planning, implementation, and maintenance between Caltrans, regional agencies, local jurisdictions, CBOs, and transit agencies.
- 30.B. Create opt-in State Purchasing Schedule agreements for bikeshare infrastructure, service providers, and participants in California e-bike incentives and bike lending programs.

Principle: Provide transit that is accessible and easy to use for all

Topic: Accessible Transportation and the Transit Needs of Older Adults and Persons with Disabilities

Accessible transportation services, including paratransit and dial-a-ride, face growing challenges for both operators and riders. While federal law mandates paratransit as a complement to fixed-route transit, these services are operationally complex, costly to operate, and require significant subsidies. Since 2010, paratransit costs have risen sharply, outpacing the growth of the populations that depend on them, straining financial and operational resources. Although the costs to deliver paratransit services are high, the quality of the services varies, and barriers to paratransit use (such as requiring 24-hour reservations) limit the mobility and access of people with disabilities.

Addressing these challenges requires a multi-pronged approach to improving service coordination, quality, efficiency, and accessibility. For paratransit and dial-a-ride services, enhanced coordination between providers could streamline operations, reduce redundancies, and improve ride availability. Improving booking and dispatch systems, potentially through technology-driven solutions, can enhance efficiency and minimize delays for users. Cross-cutting strategies such as better integration of planning and funding could support long-term sustainability, ensuring that accessible transportation services keep pace with rising demand while remaining financially viable. A proactive approach will be essential in meeting the mobility needs of seniors and people with disabilities while maintaining operational feasibility for transit agencies. Finally, the Task Force members recommended the following:

- Change Medi-Cal managed care reimbursements to a per capita payment model per trip (rather than per medical recipient). Use ongoing revenue streams to subsidize and reimburse transit agencies that provide micro transit and paratransit services.
- Conduct a needs assessment for accessible transportation in CA, covering the following topics: funding for paratransit due to increased demand of paratransit and service improvements, including in areas not

currently covered by paratransit. Align needs assessment with the goals listed in the Master Plan for Aging Initiatives and address concerns, with robust public engagement with people with lived experience.

- Encourage cost sharing agreements between transportation providers and healthcare providers, including improving Medi-Cal cost recovery programs for operators.
- Conduct inventories of transit stop accessibility (e.g., ramps, wayfinding/signage, audio announcements) in line with the Master Plan for Aging initiatives, and explore Statewide standards and guidelines for access to transit information.

While these concepts are worth exploring in more detail, further development would require significant input from and coordination with the California Health and Human Services Agency (CalHHS) departments and other stakeholders. As a result, these concepts are not included as CalSTA-specific recommendations.

Key strategies and recommendations that support accessible transit and meeting the needs of older adults and individuals with disabilities include the following. As noted earlier, these recommendations are intended as a starting point for future consideration, and not as a menu of fiscal or policy options for immediate implementation.

Strategy 31: Coordinate paratransit services efficiently between transit agencies and non-profit, private, and healthcare providers.

Recommendations

- 31.A. Empower transit agencies to provide more 'one-seat ride' services, or services to limit the number of transfers when services originate and/or end within an agreed upon expanded service area by creating frameworks for revenue sharing and paratransit service coordination.
- 31.B. Encourage healthcare providers and social service providers to engage in strategic planning with transit operators to better plan and coordinate public and private transport to healthcare in jurisdictions, to identify optimal times for healthcare appointments, allowing for shared rides.

Strategy 32: Develop customer-facing and backend tools to improve the process of booking and dispatch of rides.

Recommendations

- 32.A. Encourage transit operators to improve information describing paratransit services and required eligibility documentation to use paratransit services and the ride request process.
- 32.B. Create an ADA accessible Statewide eligibility verification service for transit agencies that provides information on service eligibility and Medi-Cal/Medicaid enrollment.
- 32.C. Provide opt-in software services to transit operators to optimize digital booking, dispatch and/or routing to increase operational efficiency and reduce wait and trip times.

Strategy 33: Reform planning process for paratransit.

Recommendations

- 33.A. Use ADA transition plans to guide spending, including identifying accessibility barriers, outlining methods for modifications, scheduling of improvements, and assigning responsibilities for implementation.
- 33.B. Prioritize expanding subsidized housing near transit for seniors and people with disabilities to increase their access to transportation.
- 33.C. Explore options to better serve ADA needs including discounted or free travel on fixed route or discounted taxis rides.
- 33.D. Identify partners to enhance information on public and private paratransit service offerings to make it easier for users to book rides and compare trip options, cost, and accessibility features.
- 33.E. Provide technical assistance to transit operators that either do not provide paratransit services, or use their own certification process, in conjunction with Statewide guidelines.

Strategy 34: Explore options to improve funding mechanisms for paratransit.

Recommendations

- 34.A. Review and reconsider ICT requirements for paratransit vehicles.
- 34.B. Provide greater flexibility to regional agencies to determine priorities for Section 5310 funds.

Principle: Develop high quality public transit systems to support complete communities

Topic Area: Changes to Land Use, Housing, and Pricing Policies (1.f.2)

As discussed earlier in this report, California's housing shortage and transportation crises are linked. California has a goal of building 2.5 million new homes by 2030, with no less than one million homes for lower-income households. Today, many areas around major transit stops do not have sufficient density to support strong ridership or fully realize the value of California's transit investments. Strengthening land use and housing policies around transit can change that, as concentrating homes, jobs, and essential services near reliable transit can boost ridership, improve the return on transit investments, and advance California's housing, climate, equity, and mobility goals.

This work builds on recent State actions—such as reducing minimum parking requirements near transit and enabling higher-density housing—to further support transit-oriented development and create complete, walkable neighborhoods. But policy change alone is not enough. Success also depends on targeted infrastructure improvements, including upgraded utilities, safe walking and biking networks, and inviting station-area public spaces, implemented in partnership with local and regional partners.

Together, these efforts can create vibrant communities where daily needs are within walking or transit distance, expanding access to opportunity, lowering household transportation costs, and delivering healthier, more sustainable neighborhoods that are well-connected to high-quality transit.

Lastly, the Task Force identified several strategies and recommendations to strengthen land use and transit planning. Task Force members expressed support to encourage the California Department of Housing and Community Development (HCD) to include additional transit-supportive land use policies in the qualifications for pro-housing designation, as well as ensuring State agencies coordinate land use and transportation planning, permitting regulation, and guidance to reduce contradicting policies and complete projects with sufficient housing and transportation. Another possible recommendation the Task Force discussed was the need to "provide incentives or funding to support transit agencies, MPOs, and/or

cities that meet TOD objectives and other mandates (e.g. decarbonization)." Additionally, the Task Force discussed the need to "identify all land around transit stations open to joint development, including land owned by transit agencies and Caltrans that is eligible for TOD." While discussed, these concepts are not included in the recommendations related to land use, housing, and pricing policies, as further development would require significant discussion and coordination with housing and land use agencies and stakeholders.

Key strategies and recommendations regarding land use, housing, and pricing policy include the list below. As noted earlier, these recommendations are intended as a starting point for future consideration, and not as a menu of fiscal or policy options for immediate implementation.

Strategy 35: Encourage transit-supportive land uses.

Recommendations

- 35.A. Examine opportunities to price on-street parking and unbundle new off-street parking from residential and commercial developments within 0.5 mile of transit.
- 35.B. Create the ability to allow transit agencies to sell air rights to create development opportunities above transit stations and facilities.
- 35.C. Create bench of pre-vetted TOD property developers for use by transit agencies Statewide to pursue joint development opportunities

Strategy 36: Strengthen transit and land use planning.

Recommendations

- 36.A. Support the Statewide strategy for transit-supportive land use to address both transit and housing objectives, including setting out Transit Oriented Development (TOD)-specific objectives and guidelines that consider potential social equity impacts and interests of private developers to increase housing near transit.
- 36B. Give transit agencies the ability to review and comment on City Transportation Demand Management (TDM) plans.
- 36.C. Encourage transit agencies to include analysis and evaluation of land use and value capture opportunities into their transit enhancement and expansion plans.
- 36.D. Leverage, where possible, Caltrans-owned and other State-owned land to reduce upfront land costs to jumpstart TOD projects.

Strategy 37: Expand education, incentives, and funding to advance TOD.

Recommendations

- 37.A. Explore State agency support provide loans with lower interest rates to developers for qualifying TOD projects.
- 37.B. Engage pension funds to explore investment opportunities to support qualifying TOD projects (e.g., for direct land acquisition by transit agencies and/or local jurisdictions).
- 37.C. Where possible, create pre-permitted project opportunities to encourage public-private partnerships.
- 37.D. Set up State team to provide support on TOD to local jurisdictions and transit agencies.

Topic Area: Transit-Oriented Development and Value Capture of Property (1.f.7)

Fostering denser development around transit hubs through TOD provides multiple benefits, including opportunities for transit agencies to unlock both direct and indirect revenue streams. Higher housing and job density around stations increases transit use, which can boost ridership and fare revenue. Beyond these direct benefits, developing land or property near transit can increase its value and create additional revenue opportunities through value capture.

While real estate revenues alone will not replace existing federal, State, and local transit funding, TOD can serve as a long-term strategy to supplement public funding and strengthen financial sustainability. Policy changes that make it easier for transit agencies to pursue TOD and capture the full value of station-area assets can help unlock new, more self-sustaining revenue sources.

Additionally, the Task Force discussed clarifying Surplus Lands Act (SLA) to prioritize affordable housing and commercial development on land owned by public agencies near major transit hubs, as well as streamlining the SLA to increase its effectiveness in delivering homes and communities near transit. The Task Force also suggested creating a new dedicated entity to reform redevelopment to meet current needs for transit and housing, while also avoiding pitfalls that have formerly affected redevelopment. While discussed, further developing these concepts would require significant

discussion and coordination with housing and land use stakeholders, and are not included in the CalSTA-specific recommendations below.

Key strategies and recommendations to support TOD and value capture of property around transit include the following. As noted earlier, these recommendations are intended as a starting point for future consideration, and not as a menu of fiscal or policy options for immediate implementation.

Strategy 38: Create Statewide conditions for greater value capture from transit.

Recommendations

- 38.A. Assess the multiplier effect of public transit investments and create mechanisms that could allow transit agencies to become an equity partner and/or capture this value (e.g., through taxes, transit passes).
- 38.B. Create a tax increment financing tool specifically for transit-oriented development or modify an existing one (e.g. NIFTIs) to enable transit agencies with more effective value capture options.
- 38.C. Establish supplemental funding sources through value capture strategies.

Strategy 39: Provide State incentives and technical assistance to support transit agencies on value capture.

Recommendations

- 39.A. Provide funding and/or technical assistance to agencies to support value capture opportunities (e.g., grants to hire specialists for in-sourced opportunities such as advertising, joint development, and install EV chargers and hydrogen re-fueling facilities on agency-owned parking areas).
- 39.B. Create State Purchasing Schedules to make expertise in revenue generation opportunities available to transit agencies to lower costs (e.g., California tourism passes, professional sports teams.)
- 39.C. Invest in transportation projects that have a value capture strategy, when practical.

Appendix A: Detailed analysis requested under SB125 1.E

[See Attachment]

Appendix B: Table of all strategies and recommendations under SB125 (1)(f) as approved by the Task Force

[See Attachment]

Executive Summary

Transit is more than just a way to get from place to place—it is a vital component of California's vision for a more equitable, prosperous, and environmentally sustainable future. Forward-thinking legislation laid a powerful foundation by recognizing transit as a cornerstone of California's ambitious climate goals. For example, over the past two decades, California passed laws to encourage transit-oriented development and funding for transit improvements to reduce car dependency, and positioned transit as a key solution to reduce greenhouse gas emissions.[1] These laws elevate public transit not only as a solution to meeting California's climate goals, but also as a catalyst for reimagining how Californians live, move, and connect. From integrated, regional planning and transit-oriented development to clean energy innovation, California is charting a path where transit drives progress across every corner statewide.

California's recent housing legislation underscores a growing commitment to building vibrant, transit-connected communities where people can thrive without needing to rely on a car. Recent legislation enabled affordable and mixed-income housing to be built along transit-friendly commercial corridors, and expedited approval processes for urban infill projects, including many near transit.[2] These laws are paving the way for walkable neighborhoods that are affordable, accessible, and sustainable—and they accelerate the creation of homes in the very places where transit can offer the greatest benefit. However, for these laws to work, we need robust, reliable public transportation to serve Californians.

Across California, transit agencies are already proving what is possible when we invest in people, safety, and community. For example, Bay Area Rapid Transit's (BART) Ambassador Program has redefined the rider experience by fostering a sense of presence and care on the system, helping restore trust and safety for thousands of daily riders. In Los Angeles, a groundbreaking, collaborative approach to Measure M united communities and secured transformative, long-term funding to reshape regional mobility. And when

[1] These include the California Green Tariff Shared Renewables Program (S.B. 43, 2014) the California Sustainable Communities and Climate Protection Act (S.B. 375, 2008) and the California Global Warming (A.B. 32, 2006).
[2] These include the California Affordable Housing and High Road Jobs Act (A.B. 2011, 2022); the California Middle Class Housing Act (S.B. 6, 2022); and the California Streamlined Multifamily Housing Approval Act (S.B. 423, 2023).

disaster strikes, transit acts as a lifeline, playing a critical role in mass evacuations and emergency response, such as during California's recent wildfires. These successes show that transit can be an engine for resilience, equity, and shared prosperity.

Transit in California is at a pivotal moment—facing real challenges yet holding immense promise. Declining ridership and revenues and rising costs test the resilience of our systems, even as operators navigate the effects of complex social issues such as the effect of homelessness, the opioid crisis, and more. Still, transit remains essential to achieving a livable climate, equitable access to opportunity, vibrant communities, and a thriving economy.

Transit reduces traffic congestion and greenhouse gas emissions by moving people with fewer vehicles and it supports economic activity by enabling access to jobs, education, healthcare, and commerce—greatly improving quality of life, particularly for those who cannot drive to due to age, ability, or income. California's population is aging, and transit connects elderly or disabled riders to vital accessible services. Additionally, transit fosters more livable, inclusive communities by reducing the need for extensive parking and encouraging walkable neighborhoods. For individual users, public transit can offer an affordable, convenient alternative to car ownership, and transit increases mobility and independence for society at large.

California's transit agencies face challenges driven by falling ridership, declining revenues, and rising costs from inflation, infrastructure needs, land-use patterns, and the transition to zero-emission fleets. Together, these factors threaten transit service reliability and financial stability. Task Force members noted that addressing these challenges requires more than reallocating existing dollars—it could be addressed through increased, flexible, and dedicated revenues and funding, efficiencies in capital and operating spending, and diversified revenue streams such as real estate development, toll revenues, and innovative financing tools. Task Force members also noted that legislative changes that reduce costs and expand agencies' authority to capture value from their assets will advance these goals.

With leadership and smart policy, we can transform public transit into a fast, reliable, and dignified alternative to driving—one that connects millions

more people to what matters most. Going forward, California can lead the nation in creating a transportation system that is truly built for the future.

This report is intended as a starting point for future conversations, and not as a menu of ready-made policy or fiscal proposals. Implementation of the recommendations found within this report will require additional development to determine the necessary resources, statutory changes, or other programmatic changes that would be needed before they can be implemented. This additional detail is beyond the scope of this report.

The Task Force's vision is that public transit is the backbone of a prosperous, affordable, climate-resilient, and equitable California—empowering Californians to move freely, reliably, and sustainably.

View the full report on the CalSTA webpage

SB 125 Transit Transformation Task Force Final Report

Appendix A: Detailed Analysis Requested Under SB125 1.E

Acknowledgements

The California State Transportation Agency (CalSTA) extends our sincere appreciation to the dedicated Technical Working Group members for their participation in the Task Force process and their work on this report.

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APPENDIX A: Detailed Analysis Requested Under SB125 1.E

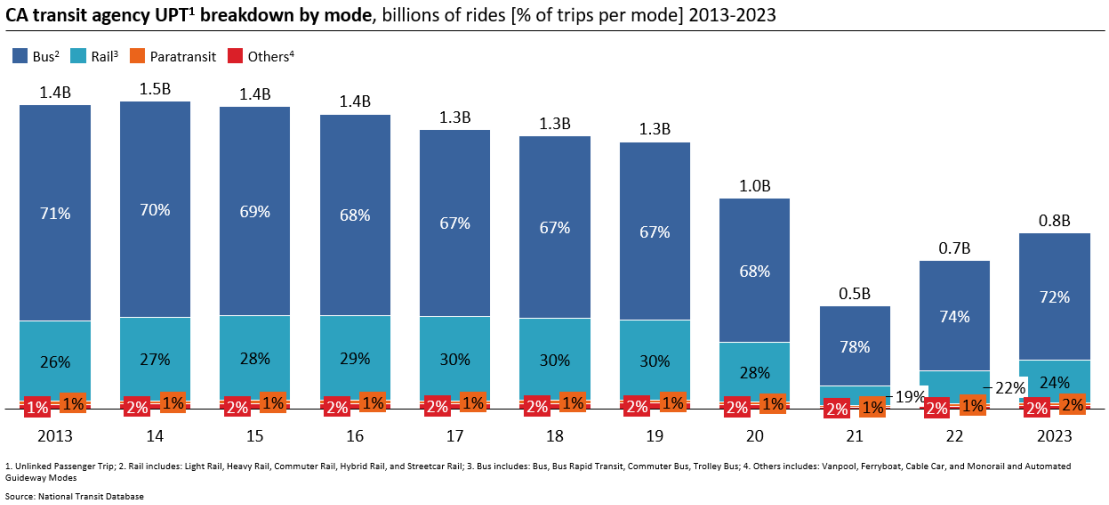
In addition to a series of recommendations, SB 125 asked for a set of analyses to help inform those recommendations. Specifically, SB 125 asked for analyses that include: a description of transit service today, details around existing and potential future funding needs of the transit system, options for transit governance (including performance management and oversight), the impact of COVID-19 on the system, a description of workforce challenges, and an examination of State and local policies that may impact transit service (e.g., transit prioritization, land use). Much of this analysis was presented to the Transit Transformation Task Force throughout 2024 and 2025 to inform deliberations on the recommendations made in the main report.

1. The services provided by transit agencies and the demographics of transit ridership, with detail on services provided, including persons with disabilities, or specific populations like low-income individuals and students (SB125 1.E.1)

Overall services and ridership

There are over 200 public transit agencies in California that provide a variety of services, including buses, light/heavy rail, paratransit, ferries and more.[1] As shown in Exhibit 1, pre-COVID-19 pandemic, State transit agencies provided an average of around 1.3-1.5 billion unlinked passenger trips (UPT) across all modes of transit per year.[2] UPT however, is an imperfect metric. Projects such as LA Metro's Regional Connector, for example, eliminated 2 transfers for rail riders in the heart of Downtown LA, resulting in a single trip going from 3 unlinked passenger trips to 1. Thus, "trips" are down, but the passenger experience is vastly improved.

Exhibit 1: UPT breakdown by mode 2013-2023[3]

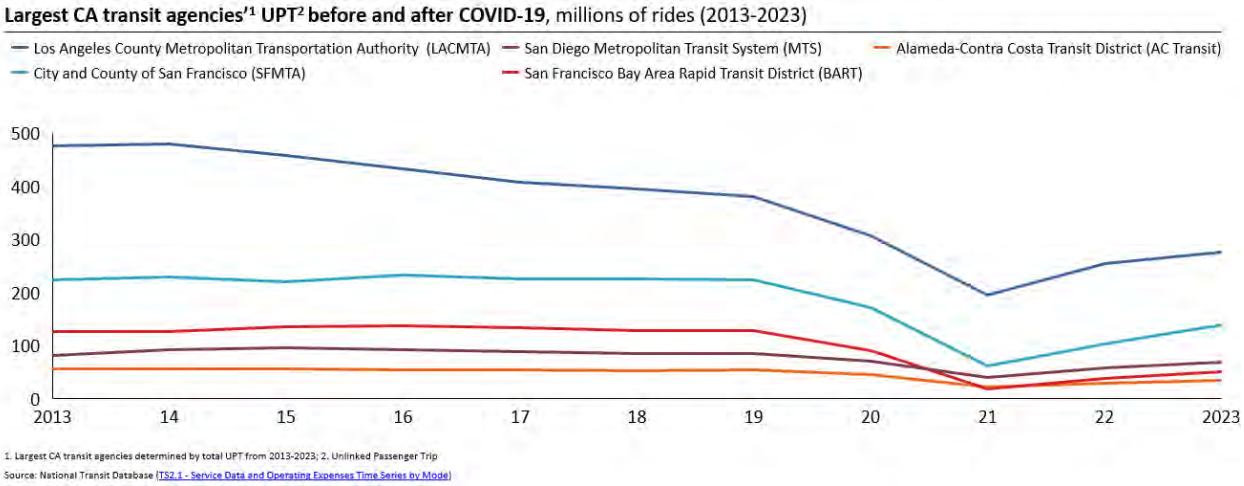


Since the COVID-19 pandemic, transit agencies have begun to rebound, providing over 800 million unlinked passenger trips in 2023.[4] However, the extent to which ridership has returned to pre-pandemic levels has been

[1] California transit agencies also provide services using trolleybuses, commuter rail, vanpools, bus rapid transit, commuter buses, ferryboats, streetcar rail, hybrid rail, cable cars, and monorail/automated guideway modes.
[2] National Transit Database (TS2.1 - Service Data and Operating Expenses Time Series by Mode)
[3] National Transit Database (TS2.1 - Service Data and Operating Expenses Time Series by Mode)
[4] National Transit Database (TS2.1 - Service Data and Operating Expenses Time Series by Mode)

mixed, with some of the largest transit agencies in the State seeing ridership more fully rebound (such as San Diego Metropolitan Transit System), while others (such as Bay Area Rapid Transit) have rebounded more slowly.[5]

Exhibit 2: Largest CA transit agencies' UPT before and after COVID-19

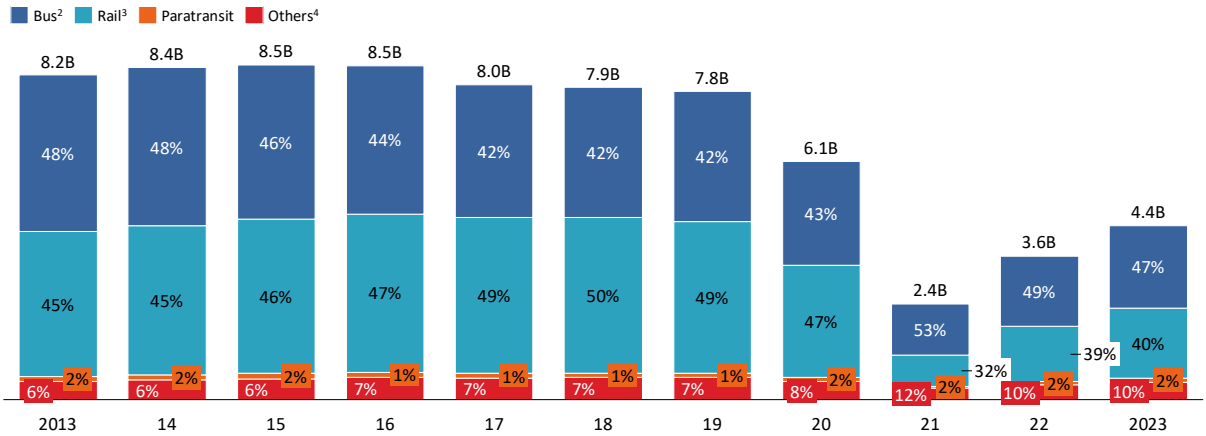


Passenger Miles Traveled (PMT) show a similar trajectory to UPT, but a different modal breakdown. Like UPT, PMT in aggregate have been in a slow decline from 2015 – 2019, and then suffered a large downturn associated with the COVID-19 pandemic, before beginning a partial recovery in the years that followed. Because rail trips, on average, are longer than bus trips, rail trips are nearly half of total passenger miles traveled in most years, despite being only 25-30% of unlinked passenger trips.

[5] National Transit Database (TS2.1 - Service Data and Operating Expenses Time Series by Mode)

Exhibit 3: Passenger Miles Traveled (PMT) breakdown by mode 2013-2023[6]

CA transit agency PMT[1] breakdown by mode, billions of rides [% of trips per mode] 2013-2023



1. Passenger Miles Traveled ; 2. Rail includes: Light Rail, Heavy Rail, Commuter Rail, Hybrid Rail, and Streetcar Rail; 3. Bus includes: Bus, Bus Rapid Transit, Commuter Bus, Trolley Bus; 4. Others includes: Vanpool, Ferryboat, Cable Car, and Monorail and Automated Guideway Modes

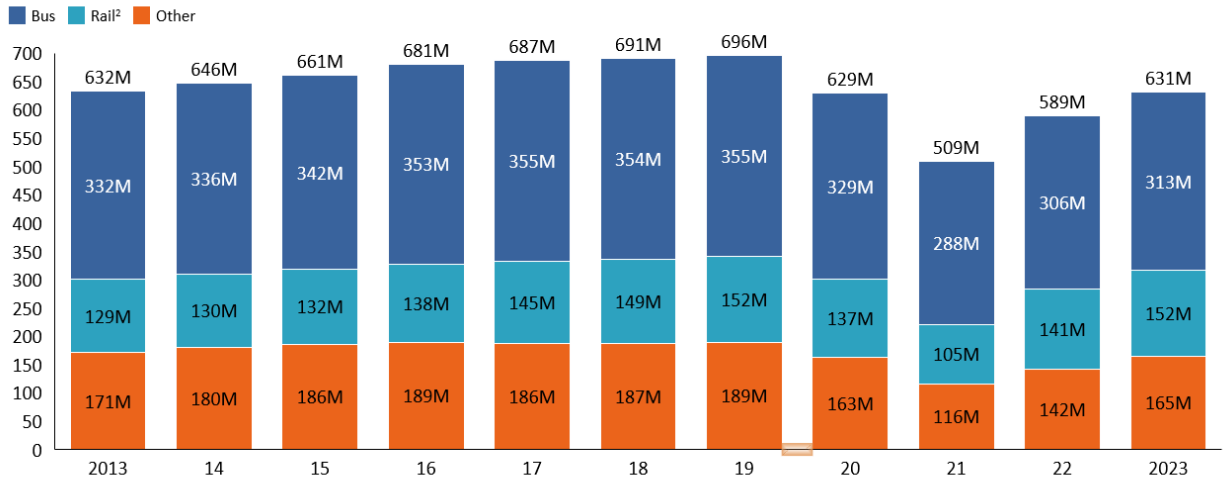
Source: National Transit Database

In comparison to UPT, service levels as measured by both Vehicle Revenue Miles (VRM) and Vehicle Revenue Hours (VRH) are closer to pre-pandemic levels. VRM in 2023 was about 631 million miles vs. 696 million in 2023, and VRH was 41k hours in 2023 vs. 46k hours in 2019. Between modes, bus VRH and VRM have been slower to recover than rail equivalents. While these metrics provide a useful measure of how overall service levels are changing, they do not provide a full picture for the State and alternative metrics, like the share of population that can access destinations via public transit, may better capture how well public transit is serving its riders.

[6] National Transit Database (TS2.1 - Service Data and Operating Expenses Time Series by Mode)

Exhibit 4: VRM across CA transit agencies by mode from 2013 to 2023 (millions of miles)[7]

VRM[1] across CA transit agencies by mode from 2013 to 2023 (millions of miles)

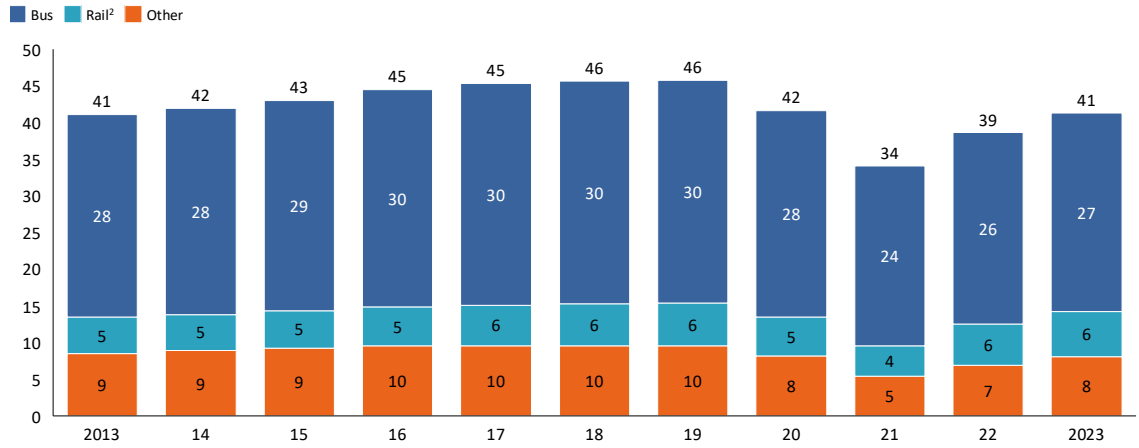


1. Vehicle Revenue Miles; 2. Rail includes Commuter Rail, Heavy Rail, and Light Rail

Source: National Transit Database (TS2.1 - Service Data and Operating Expenses Time Series by Mode)

Exhibit 5: VRH across CA transit agencies by mode from 2013 to 2023 (thousands of hours)[8]

VRH[1] across CA transit agencies by mode from 2013 to 2023(millions of hours)



1. Vehicle Revenue Hours; 2. Rail includes Commuter Rail, Heavy Rail, and Light Rail

Source: National Transit Database (TS2.1 - Service Data and Operating Expenses Time Series by Mode)

[7] National Transit Database (TS2.1 - Service Data and Operating Expenses Time Series by Mode)
[8] National Transit Database (TS2.1 - Service Data and Operating Expenses Time Series by Mode)

Nearly half of transit route miles and more than half of the number of routes are in two Metropolitan Planning Organizations (MPOs): the Southern California Association of Governments (SCAG) and the Metropolitan Transportation Commission (MTC) in the Bay Area. These two regions also have the largest number of square miles near a high-quality transit corridor or a major stop. The largest 5 regions make up about 65% of route miles and 80% of routes.

Exhibit 6: Overview of routes by Metropolitan Planning Organization, 2025[9]

MPO	Total route miles	# Routes	Square miles near high-quality transit or major transit stop
Southern California Association of Governments	37,070	933	753
Metropolitan Transportation Commission	18,040	585	352
Sacramento Area Council of Governments	11,114	217	10
San Diego Association of Governments	5,630	159	69
Santa Barbara County Association of Governments	5,175	82	169
Kern Council of Governments	5,150	41	2
San Joaquin Council of Governments	4,585	69	24
Fresno Council of Governments	4,376	35	1
Merced County Association of Governments	4,012	34	1
Tulare County Association of Governments	3,965	49	0
Stanislaus Council of Governments	3,884	41	3
Madera County Transportation Commission	3,557	15	31
San Luis Obispo Council of Governments	3,283	37	6
Association of Monterey Bay Area Governments	3,167	64	4
Shasta Regional Transportation Agency	3,086	18	8
Butte County Association of Governments	2,957	23	0
Kings County Association of Governments	662	15	0
Tahoe Regional Planning Agency	155	6	3

[9] GTFS, June 2025 (routes and stops), May 2025 (high quality transit and major transit stops). Route-miles are per direction. Routes and stops methodology: https://github.com/cal-itp/data-analyses/blob/main/sb125_analyses/quick_gtfs_stats.ipynb High-quality Transit Corridors and Major Transit Stops methodology: https://github.com/cal-itp/data-analyses/tree/main/high_quality_transit_areas

Demographics of ridership

Although there is no comprehensive Statewide survey of the demographics of ridership, reviewing a sample of transit agency surveys can reveal details on the demographics of transit ridership, including on persons with disabilities, or specific populations like low-income individuals and students. Other sources of data are incomplete. For example, the American Community Survey, only surveys commuters and has gaps in information on transit trips due to only including commute only trips, and the National Household Travel Survey was last completed in 2022 and lacks a large enough sample size among transit riders in California for reliable reporting.

Reviewing the results of the 2023-2024 MTC Snapshot Survey of the Bay Area transit services, LA Metro's 2022 Customer Experience Survey, and Monterey-Salinas Transit (MST) 2023 Onboard Survey, can show point-in-time demographics in both Northern and Southern California, as well as in both larger and smaller agencies. Demographic information from those surveys show:

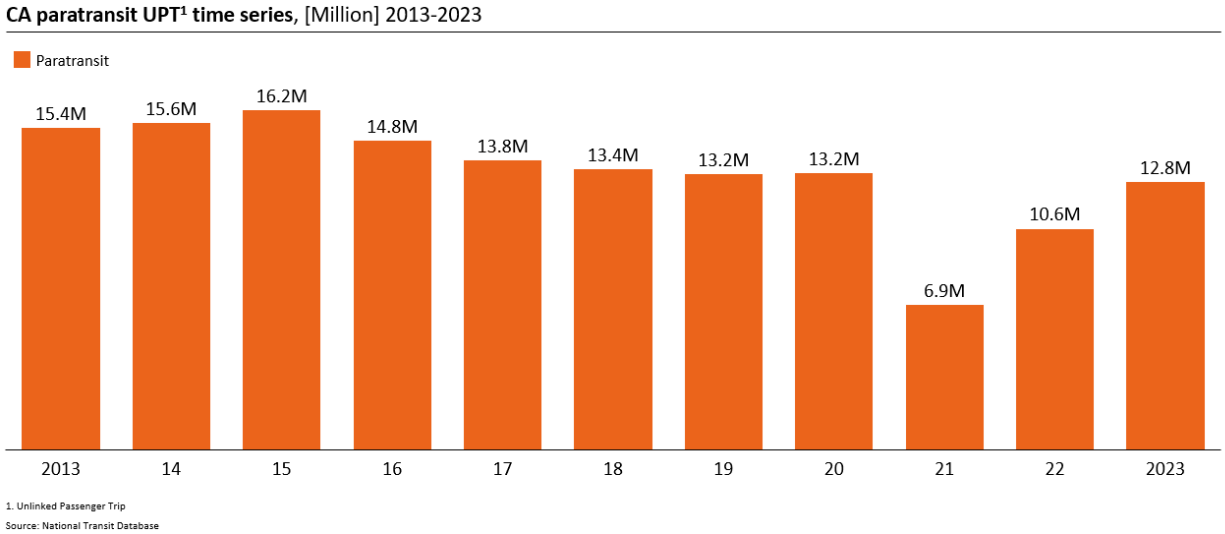
- MTC 2023-2024 Transit Snapshot Survey:[10]
    - Larger shares of riders are low-income compared to pre-pandemic, with 44% of riders having a household income below $50,000
    - 8% of riders have a disability that limits ability to travel
    - There has been a decline in work related travel as work trips are still 50% of total trips and 17% of trips are to school, likely trips done by students
- LA Metro 2022 Metro Customer Experience Survey:[11]
    - 89% of bus riders and 72% of rail riders make a household income less than $50,000
- MST 2023 Onboard Survey:[12]
    - ~ 20% of riders that provided disability information, identified themselves as having a physical disability that causes them to be dependent on others for transportation

[10] MTC (MTC 2023-2024 Transit Snapshot Survey)
[11] LA Metro (LA Metro 2022 Metro Customer Experience Survey)
[12] MST (2023 Onboard Survey)

- ~75% of riders that provided income information have household incomes under $40,000 and almost ~90% have annual household income under $60,000
- 13% of riders use MST to get to/from school (college/university) and another 13% use MST to get to/from school (K-12); 18% of riders describe their employment status as being students

California transit agencies provide paratransit services for persons with disabilities (and older persons) who are unable to use fixed route bus services and whose destinations and trip origins are within ¾ of a mile of a bus route (minimum requirement), however, many agencies choose to offer service within their entire service area. Paratransit ridership fell during COVID-19, but has since rebounded to nearly 13 million riders per year.[13] This is closer to pre-pandemic levels than ridership on fixed route services.

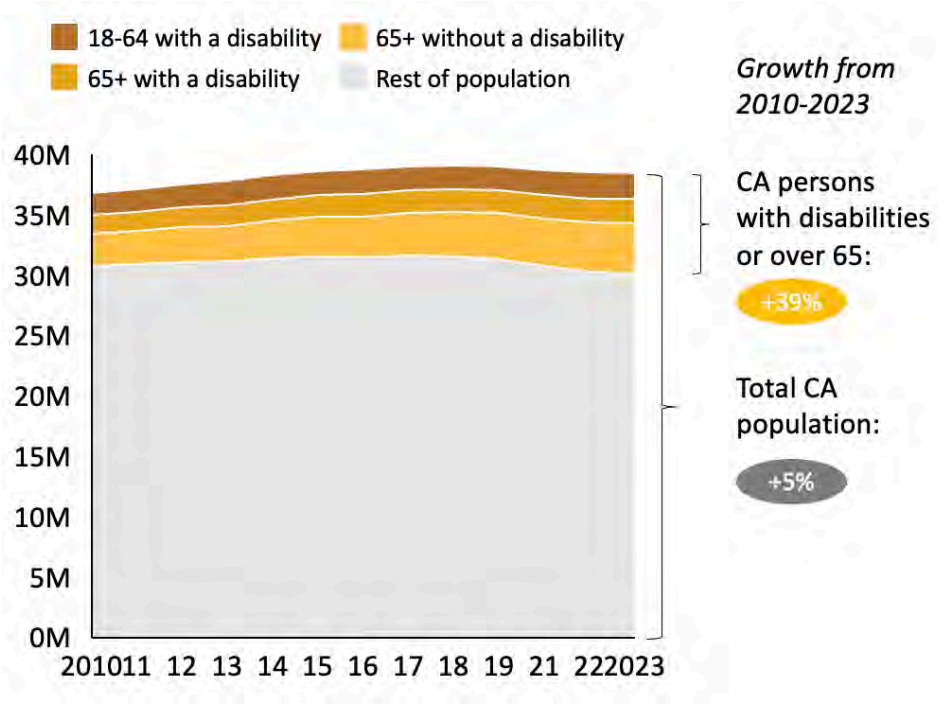
Exhibit 7: Paratransit UPT, 2013-2023[14]



The segment of the California population that uses these paratransit services has grown faster than the population at large. Additionally, the number of Californians with disabilities or over 65 increased 39% between 2010 and 2023, compared to an average of 5% across the California total population at large.

[13] National Transit Database (TS2.1 - Service Data and Operating Expenses Time Series by Mode)
[14] National Transit Database (TS2.1 - Service Data and Operating Expenses Time Series by Mode)

Exhibit 8: California population by age and disability status, million

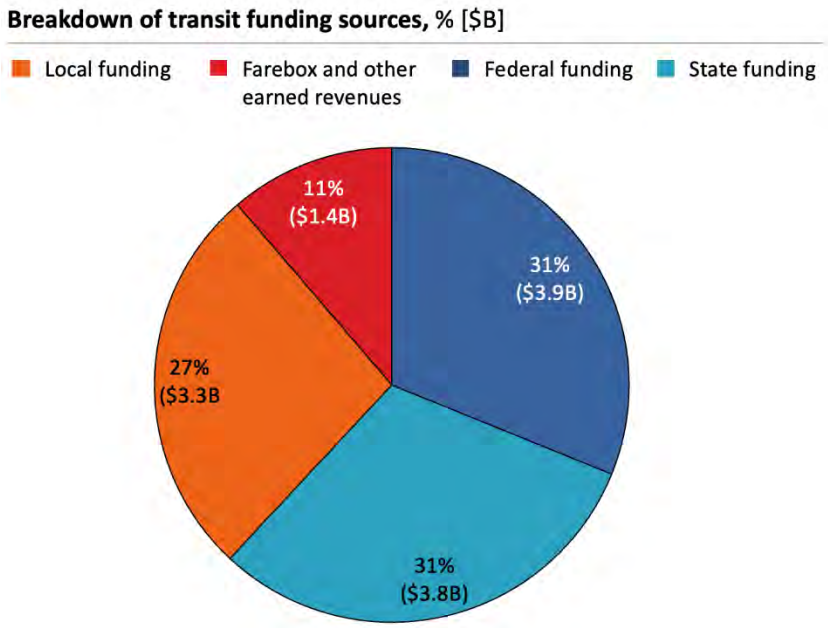


2. Existing funding sources for transit with a breakdown of funding available for capital and operations, including any constitutional and statutory limitations on these existing funding sources (SB125 1.E.2)

In FY2022-23, transit agencies in California had approximately $12.5 billion in revenues across a diverse array of funding sources to run, maintain, and expand transit systems.[15] These revenues grew by about 5% per year from 2013 to 2023 in nominal terms and about 2% per year in real terms.[16] California transit dollars in FY 2022-23 are primarily split across federal (~$3.9B), State (~$3.8B), local (~$3.3B), and farebox revenue (~$1.4B).[17] Note that this analysis is completed for one fiscal year, this particular fiscal year was selected due to data availability at the time of report preparation, and since both operating and capital funds are included in this, the totals will vary year to year given what sources agencies are using to complete projects. Additionally, it is not possible, without analyzing all agency budgets, to definitively know which sources went to operating vs capital. Some of the largest sources of funding for transit are detailed below. Although much of the federal funding (e.g. Capital Investment Grants), and some of the local tax measures listed are predominantly spent on capital uses, most of the other funding sources are generally used for both capital or operating purposes (e.g., Urbanized Area Formula Grants at the Federal level, and large State sources such as Local Transportation Fund (LTF), Low Carbon Transit Operations Program (LCTOP) and State Transit Assistance (STA). Additionally, local and State monies are often used to serve as local match for federal requirements, which makes reallocating those funds away from capital and towards operating challenges as they jeopardize federal funding. For the purposes of this analysis, the Local Transportation Fund is classified as a State source, as it was enabled by State law, however, all funds are raised and returned to source by county. Additionally, SB 125 (2023) provided 5.1B over 5 years that is not accounted for in these statistics, as the base year of the analysis was prior to the passage.

[15] State Controller's Office, USDOT / Federal Transit Administration, National Transit Database (farebox revenue)
[16] National Transit Database growth in total funding from 2013 to 2023
[17] State Controller's Office, USDOT / Federal Transit Administration, National Transit Database (farebox revenue)

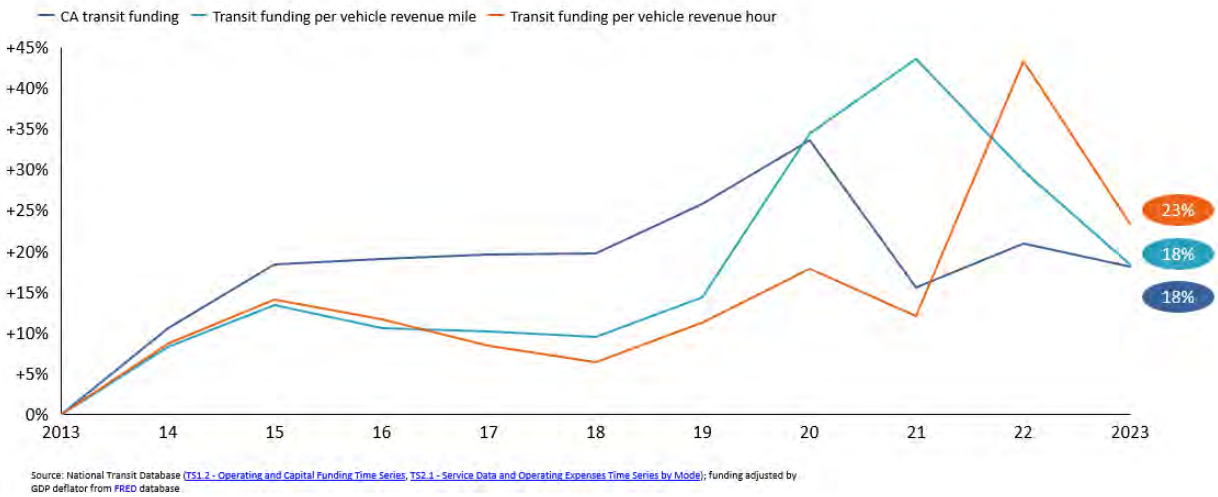
Exhibit 9: Breakdown of transit funding sources in California: FY22-23, % [$B][18]



Over the past decade, total transit agency revenues as measured by the National Transit Database (NTD) have increased around 20% in inflation adjusted terms but with a high level of variability around COVID-19, with large changes in fare revenues and relief funds.[19] Some of the highest growth in cost items have included operator wages, purchased transportation and utilities.[20] The exhibit below shows the percentage increase in funding over the period across a number of metrics including total funding, funding per vehicle revenue mile, and funding per vehicle revenue hour (all inflation adjusted). All metrics have increased by at about the same rate when compared to service levels, given service levels have remained relatively flat over the period.[21]

[18] State Controller's Office, USDOT / Federal Transit Administration, National Transit Database (farebox revenue) (FY 22/23 data only)
[19] National Transit Database (TS1.2 - Operating and Capital Funding Time Series, TS2.1 - Service Data and Operating Expenses Time Series by Mode); funding adjusted by GDP deflator from FRED database
[20] National Transit Database 2023
[21] National Transit Database (TS1.2 - Operating and Capital Funding Time Series, TS2.1 - Service Data and Operating Expenses Time Series by Mode); funding adjusted by GDP deflator from FRED database

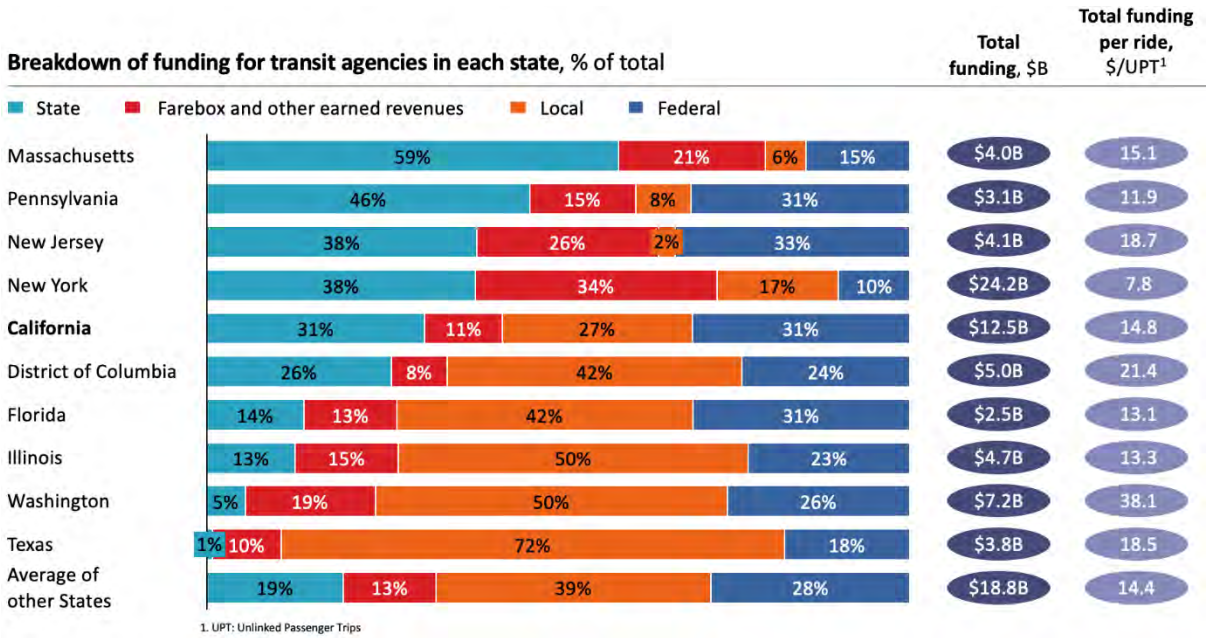
Exhibit 10: CA transit funding growth compared to transit funding per VRM and VRH (cumulative percentage increase since 2013)[22]



Transit agencies in California receive a significant share of their funding from State sources. Approximately $3.8B or 31% of the funding is from State programs, most of which comes through the Local Transportation Fund (~$1.2B), State Transit Assistance and State of Good Repair (~1.1B) and Transit and Intercity Rail Capital Program (~$0.7B).[23] State programs are funded through three main mechanisms: Transportation Development Act (from sales taxes, diesel taxes), Senate Bill 1 (vehicle registration fees) and the Greenhouse Gas Reduction Fund (from cap-and-invest auction fees).[24] Among states with significant transit usage in the US, California has the 5th highest share of State funding in total funding (12th when compared to across all States and Territories).[25]

[22] National Transit Database (TS1.2 - Operating and Capital Funding Time Series, TS2.1 - Service Data and Operating Expenses Time Series by Mode); funding adjusted by GDP deflator from FRED database
[23] See Exhibit 9: Breakdown of transit funding sources in California: FY22-23, % [$B]
[24] Road Repair and Accountability Act (SB 1), Transportation Development Act (TDA), California Air Resources Board
[25] California data is based on State Controller's Office, USDOT / Federal Transit Administration, National Transit Database (farebox revenue). National Transit Database is used for all other States

Exhibit 11: Transit funding source breakdown across largest 10 states by total revenue (2023)[26]



There are also some additional Federal and State funds for infrastructure, that today are largely used for roads, that may also be eligible to be used for transit. Some of the largest include the Federal Surface Transportation Block Grants (STBG)($1.2B to CA per annum), the Federal Congestion Mitigation and Air Quality Improvement Program (CMAQ) ($0.5B) and State Transportation Improvement Program (STIP) ($0.5B). Although STIP and CMAQ funds are primarily directed toward roadway expansion, rehabilitation, and traffic flow improvements, they are eligible to support certain transit projects (e.g., new bus purchases, signal priority), and currently, some of these funds are spent on transit projects, at the discretion of the allocating agency (either the State of CA or regional entities). Shifting more of these funds toward transit could accelerate sustainable mobility goals but may require trade-offs, such as delaying highway resurfacing or other road projects. The total amount of funding inside the Infrastructure, Investment and Jobs Act (IIJA) Federal Highway Administration (FHWA) formula programs to California is ~$5.5B a year.

[26] California data is based on State Controller's Office, USDOT / Federal Transit Administration, National Transit Database (farebox revenue). National Transit Database is used for all other States.

Exhibit 12: Largest 10 individual government funding programs (excl. fares and other revenues)

Local funding ■ Federal funding ■ State funding

Type	Funding source	Amount of funding, $B	Primary source of funds	Funding decision-making entity	Enabling mechanism
Federal	5309 - FTA Capital Program Funds	1.6	Federal Highway Trust Fund	Federal	Infrastructure Investment and Jobs Act (IIJA)
Local	Local tax measures in addition to the Local Transportation Fund	1.5	Sales tax	Regions	Various
State	Local Transportation Fund (LTF)	1.2	Sales tax	Regions	TDA
Federal	5307+5340 - Urbanized Area Formula Program	1.2	Federal Highway Trust Fund	Regions	IIJA
State	State Transit Assistance + State of Good Repair	1.1	Diesel tax and transportation improvement fee	Regions	TDA (STA), SB1 (SOGR)
Local	Taxes raised directly by transit agencies	0.8	Sales taxes, highway tolls, vehicle licensing fees	Regions	Agency-specific legislation
State	Transit and Intercity Rail Capital Program (TIRCP)	0.7	Vehicle Registration Fees, Cap-and-invest proceeds	California State	GGRF, Senate Bill 1
Federal	5337 - State of Good Repair Grants (SOGR)	0.6	Federal Highway Trust Fund	Regions	IIJA
Local	Local funds from bridges, tunnels, tolls	0.3	Bridge and tunnel tolls	Regions	Region-specific legislation
State	Affordable Housing and Sustainable Communities Program (e.g., Transit-Oriented Development)	0.2	Cap-and-invest proceeds	California State	GGRF

Transit agencies in California receive 90% of government funding through formula programs.[27] Some of the largest sources include State funding under the Transportation Development Act (e.g., LTF, STA) and Federal 5307 Urbanized Area and State of Good Repair Programs. These are distributed based on metrics such as population and transit service levels. The remaining 10% of funds are discretionary grants that require transit agencies, Caltrans and/or their Metropolitan Planning Organizations (MPOs)/Regional Transportation Planning Agencies (RTPAs) to apply. Examples include the Transit and Intercity Rail Capital Program (TIRCP) at the State level and Strengthening Mobility and Revolutionizing Transportation (SMART) at the federal level.

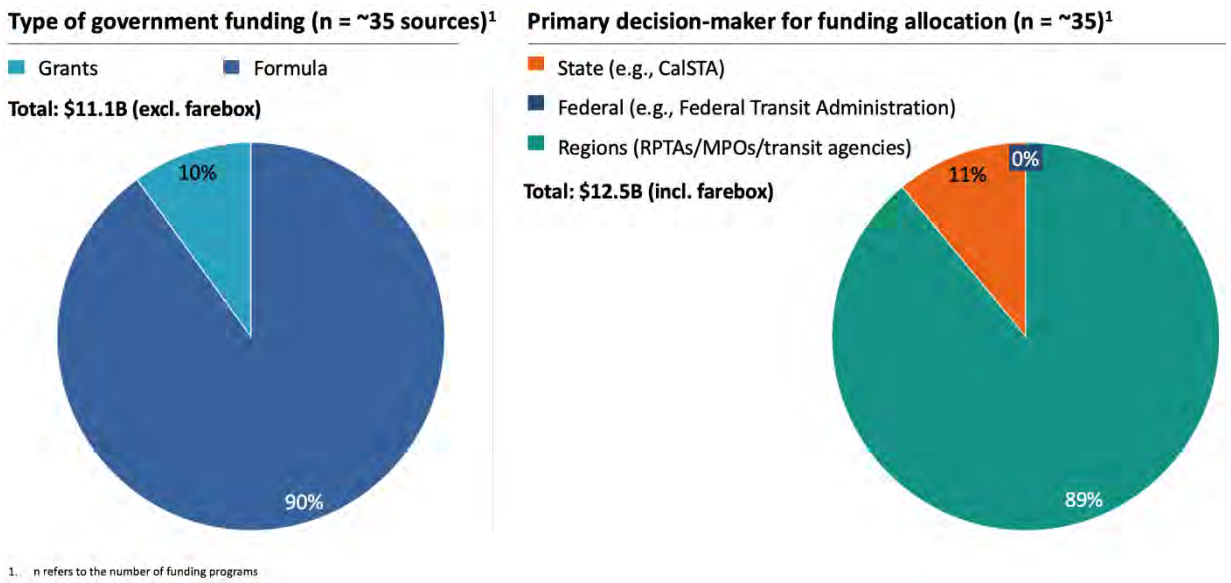
Approximately 90% of funds are primarily allocated by RTPAs and MPOs together with transit agencies.[28] This includes most of the formula funding (e.g. Federal 5307 Urban Area Program Funds, STA, LTF, Low Carbon Transit Operations Program) as well as revenues raised directly by transit agencies through fares, sales taxes or property taxes. Federal funds for transportation in California are allocated by a mix of the State and regions. For example,

[27] State Controller's Office, USDOT / Federal Transit Administration, National Transit Database (farebox revenue). Program definitions taken from government funding program websites

[28] State Controller's Office, USDOT / Federal Transit Administration, National Transit Database (farebox revenue). Primary decision-maker is the entity with the largest amount of discretion in how funds are allocated

60% of FHWA Formula funds are allocated by the State with the other 40% allocated by the regions, which may in some cases go to transit, including a recent flex action from the MTC.

Exhibit 13: California transit funding from all government sources (Local, State, Federal) across funding type and primary decision-making entity[29]



Some of these funding sources may face headwinds in the medium term. Due to the rising sales of zero emission vehicles and increasing fuel efficiency, fuel tax funding is expected to decrease, with the Legislative Analyst's Office[30] indicating STA program funding could decline by up to ~$300 million, roughly a third of total STA funding,[31] by 2035. Gas taxes are also a source of SB1 funded programs.[32] The Technical Working Group also noted that the cyclicality of funding from other sources such as sales taxes and cap-and-trade auction proceeds also makes it difficult to predict funding availability in the medium term.[33]

[29] State Controller's Office, USDOT / Federal Transit Administration, National Transit Database (farebox revenue)
[30] Decrease relative to 2023 revenue; scenario assumes emissions reduction goals following the California Air Resources Board Scoping Plan
[31] State Transit Assistance (STA) provides discretionary funding that is apportioned to transit agencies considering their population and operating revenue
[32] Road Repair and Accountability Act (SB 1)
[33] Summary of discussion at Technical Working Group Meeting #7 on January 14, 2025. This was prior to Cap-and-Invest.

Constitutional, Statutory and other limitations on how funds are used

Article XIX of the California Constitution, along with its companion articles XIX A and XIX B, establish how revenues from specific taxes like per-unit wholesale fuel excise and retail diesel sales taxes as well as vehicle fees are used for transportation. For example, retail diesel sales taxes may be used for development, construction, and improvement of public mass transit guideways, but not maintenance and operating costs.[34] In contrast, the State Transit Assistance fund (STA), is derived from the Statewide sales tax on diesel fuel, which can be used for transportation planning and mass transportation purposes, including operations.[35]

Transit operators must therefore use alternative sources of revenue for operations like Transportation Development Act (TDA), LTF funds, or STA funds. These funding sources also have some requirements and limitations:

- **Claimant order:** The TDA creates a specific 'claimant order' for how LTF funds are allocated. Funds must be allocated within the following order (Public Utilities Code (PUC) 99230-99251)

Claim	Amount
Transportation Planning and Programming Purposes (PUC 99233.2)	3%, some variation in SCAG region to account for CTC structure.
Counties and Cities for Bike and Ped (PUC 99233.3)	2% unless finding made showing that the money could be better used for public transportation or local streets and roads.
Passenger Rail service operations and capital improvements (PUC 99233.4)	Funds needed pursuant to PUC Section 99234.5 (Metrolink Service between San Bernadino, LA), 99234.7 (Caltrain), or 99234.9 (Passenger Rail in general).

[34] California Department of Tax and Fee Administration, "MOTOR VEHICLE TAXATION AND REVENUES"
[35] Caltrans, "Transportation Development Act (TDA) Statutes and California Code of Regulations"

Claim	Amount
Transit Development Board and Transportation Planning Agency Administration, Planning, Construction, Acquisitions (PUC 99233.5)	Up to 10%
Cities, counties, and operators for consolidated transportation service agencies (PUC 99233.7)	Up to 5%
Transit Operators for support of public transit systems, aid to public transportation R&D Projects, Grade Separations (PUC Article 4 – 99260)	Remainder
Cities, Counties and transit districts for a wider array of purposes, including local streets and roads, paratransit services, passenger rail, vanpool, and more (PUC Article 8 – 99400)	Remainder after Article 4 claims exhausted

- **Unmet transit needs process:** Before LTF funds can be allocated towards streets and roads, the RTPA must conduct a public 'unmet needs process' to determine if there are any "reasonable to meet' transit needs. Funds can be spent on streets and roads only if no reasonable transit needs are identified.
- **Farebox recovery ratios (FRR):** Transit operators must meet a minimum FRR to use LTF funds for operations. The thresholds are set differently for urbanized areas (20% minimum FRR) and non-urbanized areas (10% minimum FRR). If these standards are not met for consecutive years, and the agency does not receive an exemption, funding is reduced equal to the revenue shortfall needed to meet the required FRR.
- **Efficiency standards:** To use STA funds for operations, an agency must meet operating cost-efficiency tests (e.g., cost growth not exceeding CPI over a three-year period) unless the increase is due to service expansion, or the agency qualifies for an exemption (PUC §99314.6)

- **Audits:** Transit agencies must undergo regular fiscal and compliance audits and report to the State Controller

3. The use of moneys from local transportation funds established pursuant to Section 29530 for other modes, such as streets and roads (SB125 1.E.3)

Individual Regional Transportation Planning Agencies (RTPAs) are required under the Transportation Development Act to hold at least one public hearing for the purpose of soliciting comments on the unmet transit needs that may exist within the jurisdiction and that might be reasonable to meet by establishing or contracting for new public transportation or specialized transportation services or by expanding existing services.[36] The outcome of the unmet needs determination is generally available in RTPA Board or Audit reports, but not the actual amount of funding that was allocated to streets and roads.

Transit agencies that wish to use moneys for local streets and roads, are required under the Transportation Development Act to document to the Department of Transportation the resolution of findings from the unmet needs process. However, there is no explicit requirement for this documentation to include the amount of money being allocated to local streets and roads.[37] The State Controller's Office also confirmed that they do not separately receive this data.

Generally, only counties with a population under 500,000 (according to the 1970 federal census) may also use parts of the LTF element of the TDA for purposes other than transit (e.g., local streets and roads, construction and maintenance)[38]. However, if it is determined that no unmet needs are found that are reasonable to meet, entities can allocate LTF under Article 8 for local streets and roads, as well, even in a county with over 500,000 in population (according to the 1970 census). This has been done in non-transit operating cities of larger counties, for streets and roads, after working through the unmet needs process.[39]

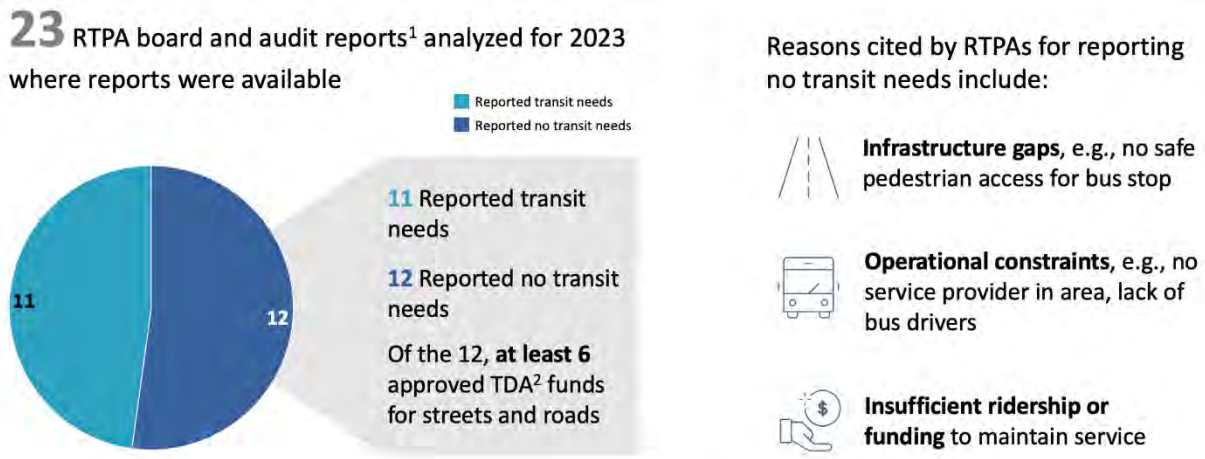
CalSTA staff analyzed approximately half of the RTPA audit and board reports for FY23 and reviewed the resolutions they made for the unmet needs process. Of the 23 regions reviewed:

[36] Caltrans, Transportation Development Act
[37] California PUC § 99401.6 – Unmet Transit Needs Finding Documentation
[38] Caltrans, Transportation Development Act
[39] Caltrans, DOTP

- 11 resolved that there were unmet transit needs. This included large jurisdictions such as the Sacramento Area Council of Governments, the Merced County Association of Governments, and the Santa Cruz County Regional Transportation Commission. These agencies therefore spent 100% of their TDA funding on transit.[40]
- 12 of the regions resolved that there were no unmet transit needs. At least 6 of the 12 resolutions explicitly approved funds for streets and roads, while the others were unclear if funds were finally allocated to these purposes.[41]

The majority of the 12 cases had a resolution of no unmet transit needs; however, the public did submit suggestions for improvements to transit, but they were further resolved to be 'unreasonable to meet.'[42] Some of the common reasons cited included infrastructure gaps (e.g., no safe pedestrian access), operational constraints (e.g., lack of bus drivers or no service providers), or insufficient ridership or funding levels to maintain a service.[43]

Exhibit 14: Analysis of RTPA board and audit reports on unmet transit needs[44]



[40] SACOG: Board of Directors Meeting Minutes; MCAG: FY 2023-24 Unmet Transit Needs SCCRTC: 2023 Unmet Transit and Paratransit Needs List
[41] See Exhibit: Analysis of RTPA board and audit reports on unmet transit needs footnotes
[42] See Exhibit: Analysis of RTPA board and audit reports on unmet transit needs footnotes
[43] See Exhibit: Analysis of RTPA board and audit reports on unmet transit needs footnotes
[44] 1. Regional Transportation Planning Agencies (RTPA) analyzed include, among others, Kern COG, Mendocino COG , Modoc County Transportation Commission, Placer County Transportation Planning Agency, Sacramento Area COG, San Joaquin COG, Santa Cruz County Regional Transportation Commission, Tahoe Regional Planning Agency, Transportation Agency for Monterey County, Inyo County Local Transportation Commission, Humboldt County Association of Governments , Amador County Transportation Commission, Calaveras COG, Council of San Benito County Governments, Del Norte Local Transportation Commission, Fresno COG, Glenn County Transportation Commission, Madera County Transportation Commission, Merced County Association of Governments, Stanislaus COG 2. Transportation Development Act

Exhibit 15: Unmet needs determinations across RTPAs

Unmet needs determination in 2023-24	RTPA
Transit needs identified	• Amador County Transportation Commission • Council of San Benito County Governments • Del Norte Local Transportation Commission • Humboldt County Association of Governments • Inyo County Local Transportation Commission • Mendocino Council of Governments • Merced County Association of Governments • Modoc County Transportation Commission • Sacramento Area Council of Governments • Santa Cruz County Regional Transportation Commission • Tahoe Regional Planning Agency
No unmet transit needs that are reasonable to meet	• Butte County Association of Governments • Calaveras Council of Governments • Fresno Council of Governments • Glenn County Transportation Commission • Kern Council of Governments • Madera County Transportation Commission • Placer County Transportation Planning Agency • San Joaquin Council of Governments • San Luis Obispo Council of Governments • Stanislaus Council of Governments • Transportation Agency for Monterey County

Unmet needs determination in 2023-24	RTPA
	• Tulare County Association of Governments
RTPA's not reviewed	• Alpine County Local Transportation Commission • Colusa County Transportation Commission • El Dorado County Transportation Commission • Kings County Association of Governments • Lake County/City Area Planning Council • Lassen County Transportation Commission • Mariposa County Local Transportation Commission • Metropolitan Transportation Commission • Mono County Local Transportation Commission • Nevada County Transportation Commission • Plumas County Transportation Commission • San Diego Association of Governments • Shasta Regional Transportation Agency • Sierra County Local Transportation Commission • Siskiyou County Local Transportation Commission • Southern California Association of Governments • Tehama County Transportation Commission • Trinity County Transportation Commission • Tuolumne County Transportation Council

4. The cost to operate, maintain, and provide for the future growth of transit systems for the next 10 years (SB125 1.E.4)

At present, certain transit agencies in California face near-term funding challenges. Bay Area Rapid Transit (BART), Metrolink, and Caltrain, had a higher farebox recovery ratio pre-COVID, and now face funding gaps due to a reduction in post-pandemic ridership. In 2024, BART, for example, had only 47% of pre-pandemic ridership.[45] These and other transit agencies received short-term Federal funding relief under the CARES[46] Act and CRRSA[47] to address this shortfall, but these funds have already been exhausted or may soon be exhausted, depending on the transit agency.

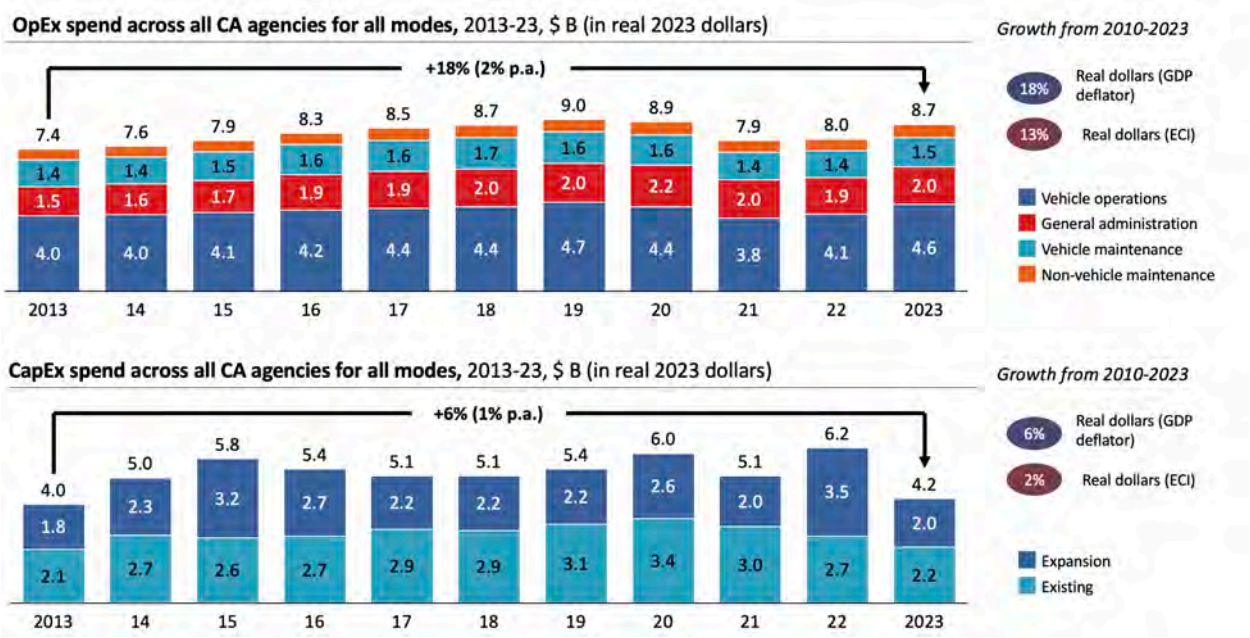
The San Francisco Municipal Transportation Agency (SFMTA) faces funding gaps due to low parking revenue relative to pre-pandemic levels.[48] The SFMTA is projected to be in a $15 million deficit in FY2025-2026, which could increase to over $320 million in FY2026-2027.[49] While SF MUNI ridership has only slightly declined, parking revenues are roughly 30% lower compared to pre-COVID levels.[50,51]

Looking over the longer term, while farebox revenues have fallen for some transit agencies, costs have increased faster than inflation over the past decade. Operating expenses have grown about 13-18% above inflation in the last ten years and capital costs have increased 2-6% above inflation, as measured by the Employment Cost Index (ECI). Given the uneven timing of spend, the choice of starting and ending year can also impact these growth rate estimates.[52] In the future, transit agencies could also have to contend with the costs of replacing increasingly aging systems, that can create a steep change in costs when technology or other components become obsolete. Additional uncertainty in longer term revenue exists with gas tax funded fuel sources, which may decline by 30% by 2030 per the Legislative Analyst's Office (LAO) and create significant revenue uncertainty for transit agencies, making it hard to plan for investment and growth. More stable

[45] Bay Area Ridership Data
[46] Coronavirus Aid, Relief, and Economic Security
[47] Coronavirus Response and Relief Supplemental Appropriations
[48] BART Financial Crisis; SF Muni's Impending Fiscal Cliff ; Metrolink: Tracking Ridership, Revenue, And Cares Act Funding
[49] San Francisco transit: Muni is in a furious race to save itself; SFMTA, San Francisco Controller's Office create Muni Funding Working Group
[50] San Francisco transit: Muni is in a furious race to save itself
[51] San Francisco transit: Muni is in a furious race to save itself
[52] National Transit Database data on operating expenditures and capital costs

sources would result in substantially less uncertainty for operators, allowing consistent investment.

Exhibit 16: CA transit operating and capital expenditure growth over the past decade[53]



Given current trends, operating expenditures could increase up to twice today's levels by 2035 (i.e., from ~$9 billion today up to $19 billion in 2035). A range of potential outcomes are shown based on analysis of NTD data and assumptions around service levels and cost efficiency. The higher end of this range assumes transit agencies invest in improved service levels to achieve VMT reduction goals and costs continue to increase in line with recent trends.[54] For example, in the 2010s, transit agencies in Canada and Australia (e.g., TransLink, Transport for NSW) made significant increases to service levels, that saw ridership increase by roughly double the increases in Vehicle Revenue Miles that the agencies delivered.

On the other hand, costs could remain flat if service levels remain at similar levels and transit agencies invest in measures to improve cost efficiency over

[53] National Transit Database, U.S. Bureau of Economic Analysis
[54] Analysis from the National Transit Database data on revenues, operating expenditures and capital costs assuming cost trends continue into the future

time to keep costs from increasing. For example, agencies could invest further in predictive maintenance regimes, increase the speed of buses through transit prioritization and road improvement projects, and increase fuel efficiency of fleets. Since speed improvements have a direct relationship to Vehicle Revenue Miles delivered per Vehicle Revenue Hour, a given increase in speed should reduce costs that scale per hour of service by a similar amount.

An example of how agencies can invest in ways that increase cost efficiency, is SFMTA's buildout of the Van Ness BRT project. By increasing the speed of buses, SFMTA can meet more frequent headways, with fewer buses, and lower costs.[55]

Exhibit 17: As congestion increases in areas where transit does not have traffic priority measures, transit service becomes slower and more expensive to provide.

EXAMPLE: Cost to Provide 10-Minute Bus Frequency, 6 AM – 12 AM, daily

Travel time and cost increase together

Travel Time	Buses Required	Annual Cost
30 minutes		$4 million
45		$6 million
60		$8 million
75		$10 million

Assumes operating cost of $200/hour per vehicle for example purposes only. Actual costs vary by mode.

Over the past 25 years, we've seen a noted decline in average speeds among agencies. This is a significant driver in increased costs to the State and local agencies, as well as a driver of the decline in ridership.

[55] Transit Transformation Task Force Meeting #4 (San Francisco): June 17, 2024

Exhibit 18: Average US and CA Bus Speeds

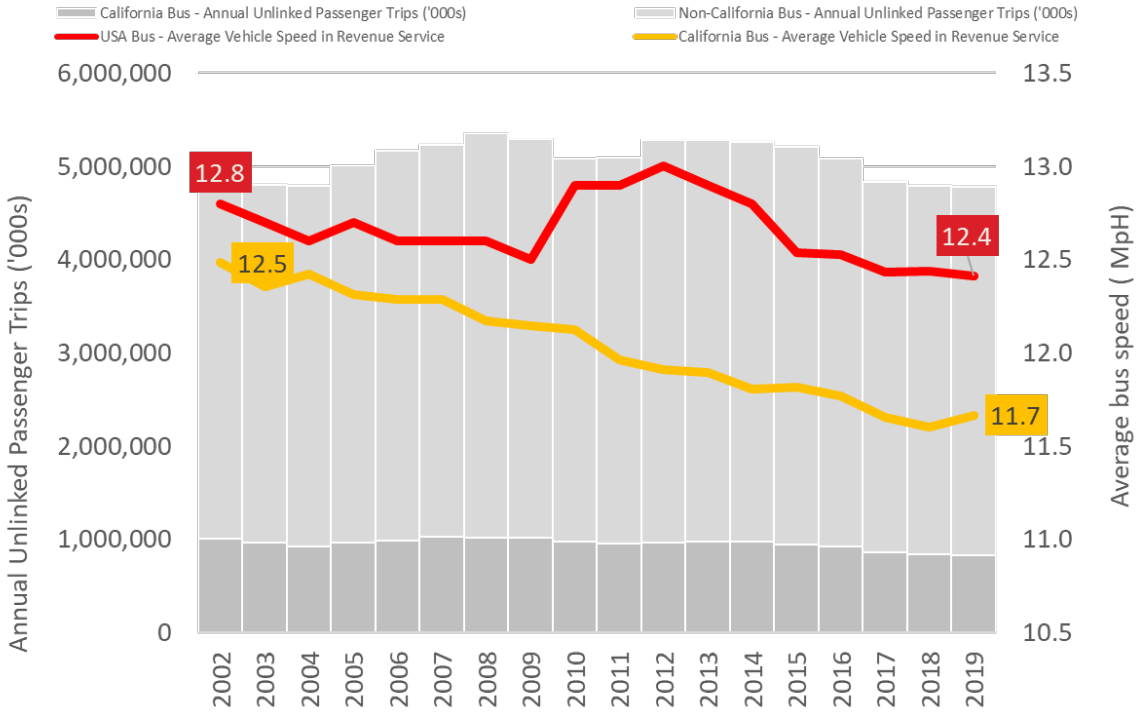
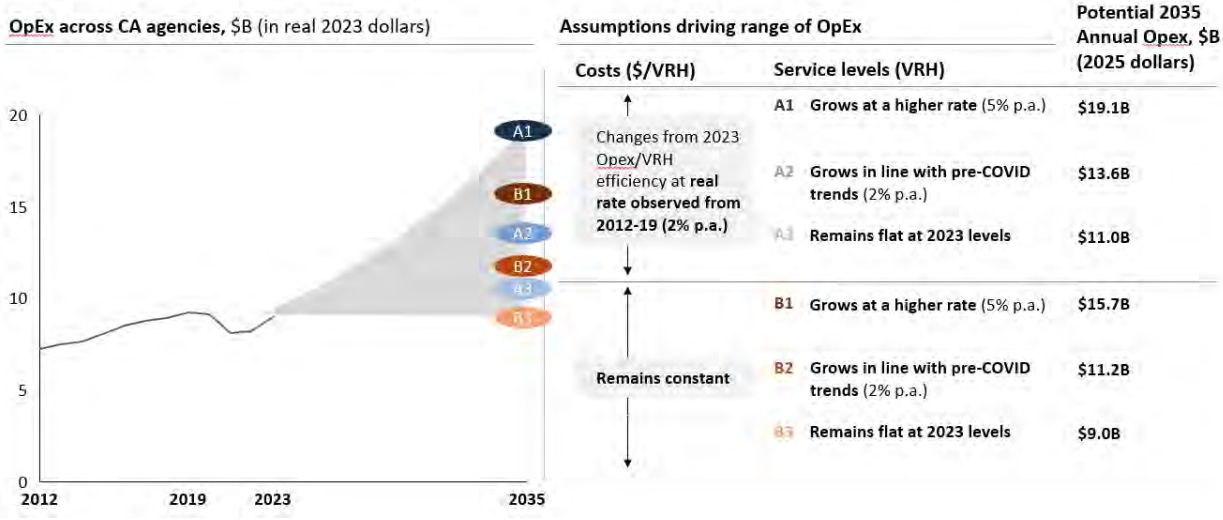


Exhibit 19: Potential operating expenditures across California transit agencies to 2035[56]



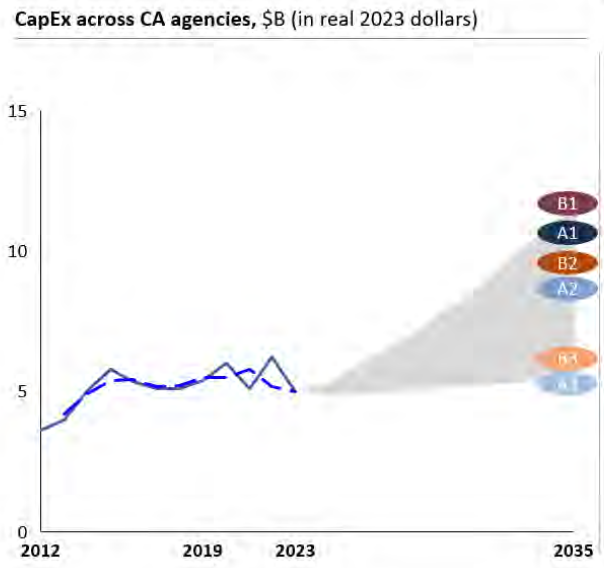
Capital costs tend to be more variable, and highly dependent on how much funding is available, but could also double if recent trends continue (i.e. from ~$5 billion to ~$12 billion).[57] Over the past five years, capital expenditures have grown 2 to 11 percent, depending on the transit mode (and 4.3% across all modes), for both expansion projects and state of good repair projects. This has been partly driven by a growth in the number of new projects, as well as rising per project costs, particularly for heavy and commuter rail.[58] In the future, transit agencies could also have to contend with the costs of replacing increasingly aging systems, which could create a step change in costs when technology or other components become obsolete.

The exhibits below shows an analysis of how capital costs could evolve based on NTD data and assumptions around the levels of capex activity, unit costs and the potential costs of implementing Innovative Clean Transit plans. The high end of the estimated range assumes transit agencies increase capex activity to support service expansion to achieve VMT reduction goals and unit costs continue to increase in line with recent

[56] Includes 261 transit agencies in CA with reported data to the National Transit Database; Scenario A is based on the assumption that ridership increases by 5X from 2019 – 2045 (from TTTF 2 analysis) to achieve 30% reduction in vehicle miles traveled and service level will change at half the rate based on ridership trends observed in Vancouver from 2015 – 2019 (link) and New South Wales from 2010 – 2016 (link); 25% improvement in cost efficiency is based on estimates provided by Center for Urban Transportation Research, University of South Florida (link), other figures from National Transit Database, U.S. Bureau of Economic Analysis
[57] Analysis from the National Transit Database data on revenues, operating expenditures and capital costs assuming cost trends continue into the future
[58] Analysis from the National Transit Database data on revenues, operating expenditures and capital costs assuming cost trends continue into the future

trends.[59] However, costs could remain relatively flat if improvements are made to agencies' portfolios, project delivery is expedited and the cost of procuring ZEBs reaches parity with existing fleets.

Exhibit 20: Potential capital expenditures across California transit agencies to 2035[60]

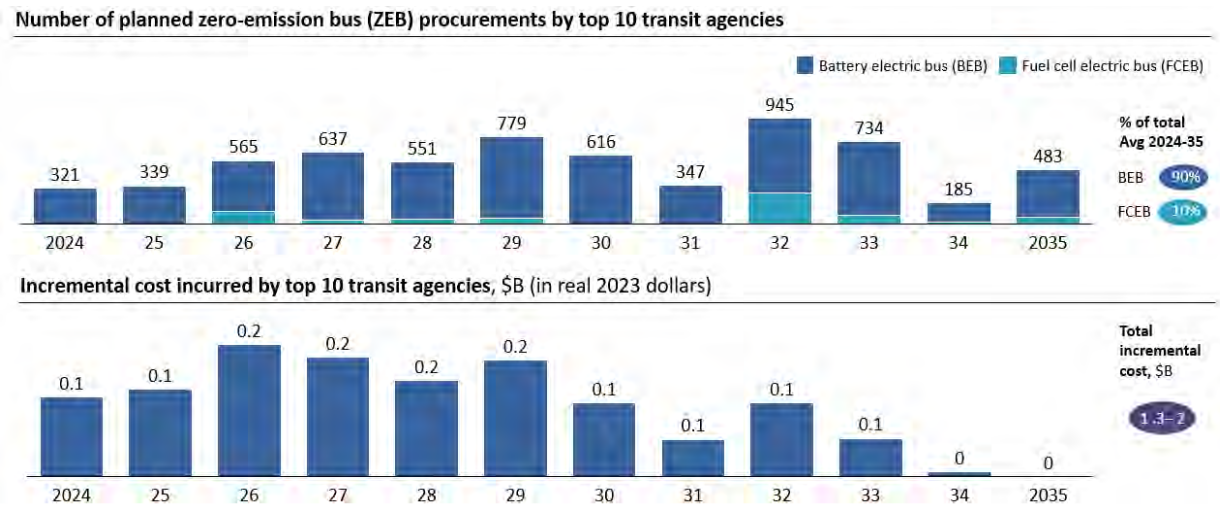


Assumptions driving range of CapEx			Potential 2035 Annual Capex, $B (2025 dollars)
Cost of new mandates (ICT)		Capital expenditure (excl. ICT)	
Incremental ZEB costs **reduce by 50%** by 2035	A1	**Grows at a higher rate** (6.1% p.a.)	**$ 10.7B**
	A2	**Grows in line with pre-COVID trends** (4.3% p.a.)	**$8.8B**
	A3	**Remains flat**	**$5.4B**
ZEB costs reduce and reach **cost parity** with existing fleets	B1	**Grows at a higher rate** (6.1% p.a.)	**$11.7B**
	B2	**Grows in line with pre-COVID trends** (4.3% p.a.)	**$9.7B**
	B3	**Remains flat**	**$6.1B**

[59] Analysis from the National Transit Database data on revenues, operating expenditures and capital costs assuming cost trends continue into the future

[60] Includes 261 transit agencies in CA with reported data to the National Transit Database; ICT: Innovative Clean Transit; CapEx to service miles relationship based on historical trends observed in Vancouver from 2016 (link) to 2018 (link); Decrease in capital expenditures based on estimates provided by Center for Urban Transportation Research, University of South Florida (link); ZEB: Zero-emission bus, other figures from National Transit Database, U.S. Bureau of Economic Analysis

Exhibit 21: Zero emission bus procurements and associated costs[61]



The increase in CapEx above associated with rolling out Innovative Clean Transit was estimated through analysis of transit agency rollout plans. The total incremental, over non-ZEV baseline procurement cost for the 10 largest agencies in California could be between $1.3 and $2 billion based on how incremental costs for ZEBs evolve over time.[62] At present, each ZEB costs between $410,000 to $730,000 more than purchasing an internal combustion engine alternative.[63] Changes in the number of ZEVs needed to replace existing services could substantially change this number.

If operating and capital costs continue to rise, a funding gap may emerge unless new revenue sources are identified. This gap could be filled in various ways, and a combination of solutions will be needed. According to the National Transit Database and Legislative Analyst's Office, funding sources have grown for transit in California from ~$9 billion in 2013 to ~$14 billion in 2022.

In calculating the total OpEx and CapEx needs, it is possible that many OpEx scenarios could be paired with many capex scenarios, leading to a wide

[61] Top 10 agencies account for 57% of total bus count in CA based on size of bus fleets reported to the National Transit Database in 2023 and they are AC Transit, LA Metro, MTS, SFMTA, OCTA, LADOT, SacRT, VTA, Foothill Transit and SamTrans. ZEB for VTA is assumed to be BEB as agency indicated TBC in roll out plan; FCEB: Fuel cell electric bus, BEB: battery electric bus | Comprehensive Review of California's Innovative Clean Transit Regulation: Phase I Summary Report (NREL), ICT roll out plans of LA Metro (link), SFMTA (link), MTS (link), AC Transit (link), LADOT (link), OCTA (link), SacRT (link), VTA (link), Foothill Transit (link) and SamTrans (link)
[62] Capital costs in ICT roll out plans of LA Metro (link), SFMTA (link), MTS (link), AC Transit (link), LADOT (link), OCTA (link), SacRT (link), VTA (link), Foothill Transit (link) and SamTrans (link); subtracting average cost of internal combustion engine buses
[63] ICT roll out plans of LA Metro (link), SFMTA (link), MTS (link), AC Transit (link), LADOT (link), OCTA (link), SacRT (link), VTA (link), Foothill Transit (link) and SamTrans (link)

range of total outcomes. In general, those scenarios that have higher levels of OpEx, may need to be paired with scenarios that have higher levels of CapEx; additional investment (CapEx) may be required to ensure the provisioning of more service (OpEx).

Additionally, potential future year capital Investment will increase or decrease based on allocations and revenue to programs, such additional or less GGRF revenue, or changes in federal investment decisions via the Capital Investment Grants (CIG) program. In short, more money will result in more projects, less money will result in fewer projects. The fiscally constrained RTPs contain some key projects for investment purposes, but not all.

There are substantial investments needed in the capital side that may result in a rise in total cost due to the ambition of projects in the pipeline. For example, currently there is $33,707,732,314 in total project costs in the active and (partially) committed projects in the TIRCP program including the Southeast Gateway Line, Gold Line Extension to Montclair, BART to Silicon Valley, Metrolink SCORE, Valley Rail, Transbay Corridor Core Capacity Program, DTX Downtown Rail Extension, LOSSAN Rail Corridor Improvements and more.

5. The costs and operational impacts associated with federal, state, and local mandates, including, but not limited to, the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12132) and the State Air Resources Board's Innovative Clean Transit regulations (Article 4.3 (commencing with Section 2023) of Chapter 1 of Division 3 of Title 13 of the California Code of Regulations), to the extent feasible. (SB125 1.E.5)

Americans with Disabilities Act

Under the Americans with Disabilities Act of 1990, the government must provide ADA complementary paratransit services.[64] To qualify, users must demonstrate that they are unable to use fixed-route buses. Additionally, both the trip origin and destination must be within ¾ of a mile of an existing bus route (minimum requirement).[65]

Since 2010, paratransit ride costs have increased by at least ~50%, while the number of persons with a disability or over the age of 65 has increased by ~40%.[66] These cost increases have been driven by:

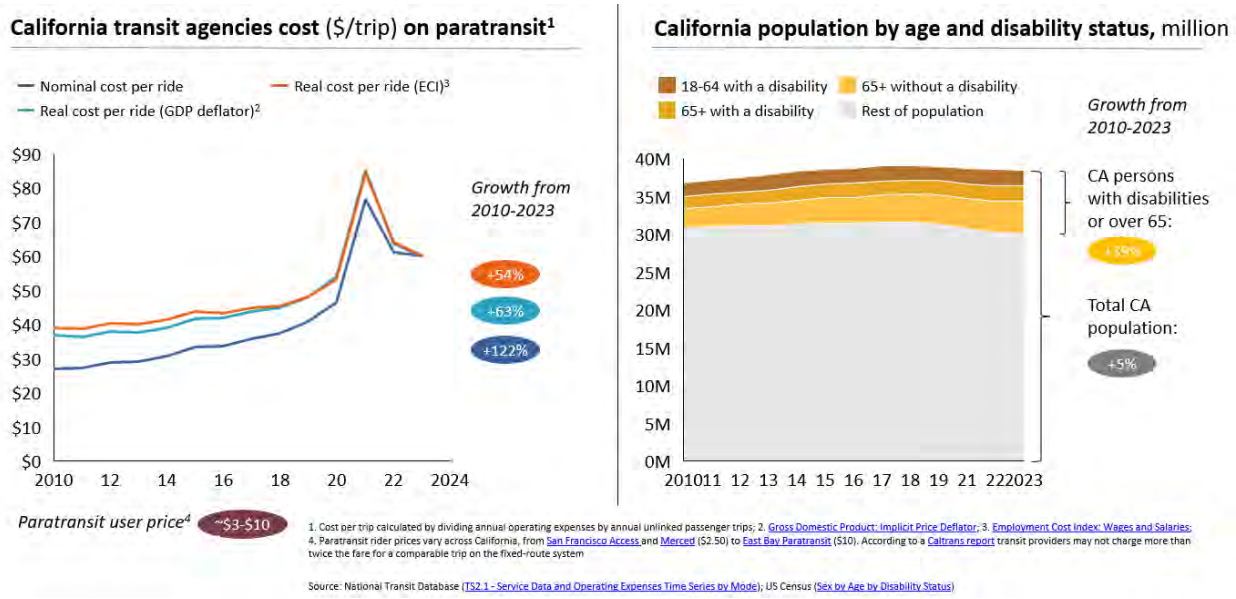
- **Limited supply of paratransit drivers**: Unlike traditional on-demand ride services, many operators require paratransit drivers to be credentialed through training programs and may expect drivers to be certificated in CPR and first aid as well as help clients into vehicles.[67] In addition, training requirements vary by location, limiting the ability of drivers to serve a trip across multiple locations in a contiguous region.[68] Other factors impact the ability to provide one-seat rides across a region as well, including, but not limited to, a lack of coordination agreements between different service operators within a region, a lack of coordination with health care providers, and differing insurance, and other rules that vary across jurisdictions.[69] Further, paratransit drivers have historically been paid less than fixed route drivers, even when paratransit drivers are unionized, potentially limiting supply.

[64] U.S. Equal Employment Opportunity Commission
[65] Department of Transportation
[66] National Transit Database (TS2.1 - Service Data and Operating Expenses Time Series by Mode); funding adjusted by GDP deflator from FRED database, U.S. Bureau of Economic Analysis and by Employment Cost Index (ECI) from FRED database US Census (Sex by Age by Disability Status)
[67] Transit Transformation Task Force Meeting #9 (Sacramento): March 11, 2025; Paratransit Rider's Guide
[68] Transit Transformation Task Force Meeting #9 (Sacramento): March 11, 2025
[69] Transit Transformation Task Force Meeting #9 (Sacramento): March 11, 2025

- **Vehicle insurance:** Paratransit vehicles are often required to be highly insured, making services costly to provide.[70] In addition, insurance policies may differ across the regions in which paratransit operators serve, which can limit operators' coverage and supply of vehicles in each region.[71]
- **Low vehicle utilization:** Unlike fixed routes where many passengers can be picked up along a single route, paratransit often involves picking up only one passenger at a time from different locations, leading to many empty seats on each trip.[72] Over the last ten years, passengers per vehicle revenue mile has decreased 12%, suggesting fewer passengers are being transported for each mile a paratransit vehicle operates in revenue service.[73]
- **Inefficient scheduling and coordination:** As paratransit demand has risen, existing software and scheduling tools may not have been adequate, potentially leading to longer wait times for customers and less efficient vehicle routing.[74] In addition, paratransit services may not have arrangements to operate across different service boundaries, raising costs for both riders, as they may pay for multiple rides, and likely for operators in the aggregate as well, given multiple vehicles and operators are serving what could be a single trip.[75]

[70] Transit Transformation Task Force Meeting #9 (Sacramento): March 11, 2025
[71] Transit Transformation Task Force Meeting #9 (Sacramento): March 11, 2025
[72] Okeenea
[73] National Transit Database (TS2.1 - Service Data and Operating Expenses Time Series by Mode)
[74] Transit Transformation Task Force Meeting #9 (Sacramento): March 11, 2025; Paratransit Fleet Configurations
[75] Transit Transformation Task Force Meeting #9 (Sacramento): March 11, 2025

Exhibit 22: California transit agencies cost per paratransit trip and California population by age and disability status[76]



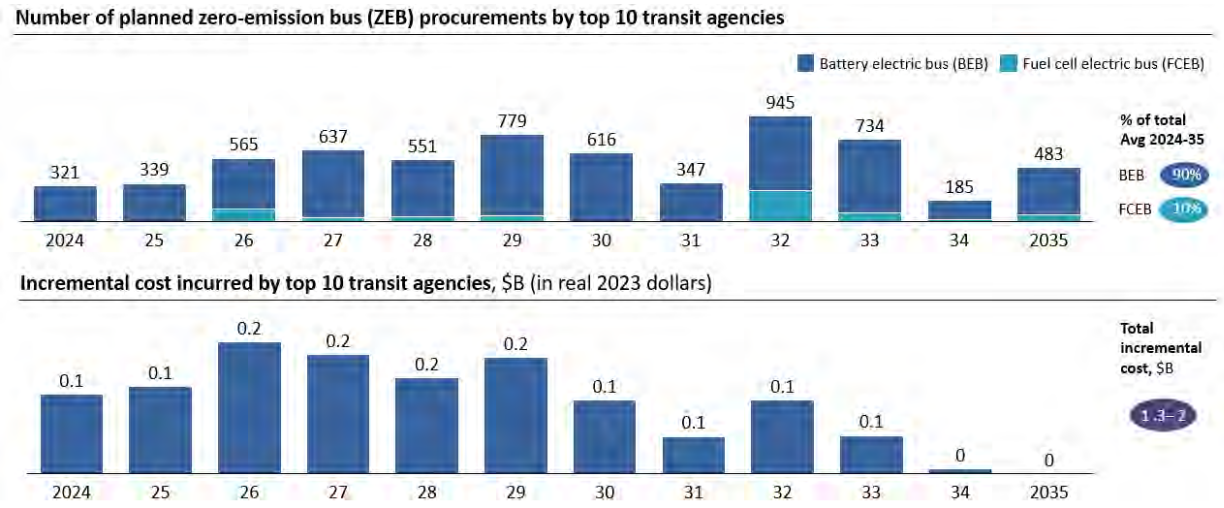
Innovative Clean Transit regulations

The increase in CapEx described in the previous analysis associated with rolling out Innovative Clean Transit was estimated through analysis of transit agency rollout plans. The total incremental procurement cost for the largest 10 agencies in California could be between $1.3 and $2 billion based on how incremental costs for ZEBs evolve over time.[77] At present, each ZEB costs between $410,000 to $730,000 more than purchasing an internal combustion engine alternative.[78] In addition to higher costs, the TTTF identified other issues in ZEB conversion, including difficulties procuring ZEBs (e.g., limited number of suppliers eligible for federal funds), that ZEBs require operational changes that may increase operating costs (e.g., routing, facilities, maintenance) and that agencies may need technical, staff and other

[76] National Transit Database (TS2.1 - Service Data and Operating Expenses Time Series by Mode); funding adjusted by GDP deflator from FRED database, U.S. Bureau of Economic Analysis and by Employment Cost Index (ECI) from FRED database US Census (Sex by Age by Disability Status)
[77] Capital costs in ICT roll out plans of LA Metro (link), SFMTA (link), MTS (link), AC Transit (link), LADOT (link), OCTA (link), SacRT (link), VTA (link), Foothill Transit (link) and SamTrans (link); subtracting average cost of internal combustion engine buses
[78] ICT roll out plans of LA Metro (link), SFMTA (link), MTS (link), AC Transit (link), LADOT (link), OCTA (link), SacRT (link), VTA (link), Foothill Transit (link) and SamTrans (link)

support to successfully implement the ZEB transition.[79] Currently, CalSTA is engaged with CARB, Go-Biz, and other groups on a new ICT Working Group.

Exhibit 23: Zero emission bus procurements and associated costs[80]



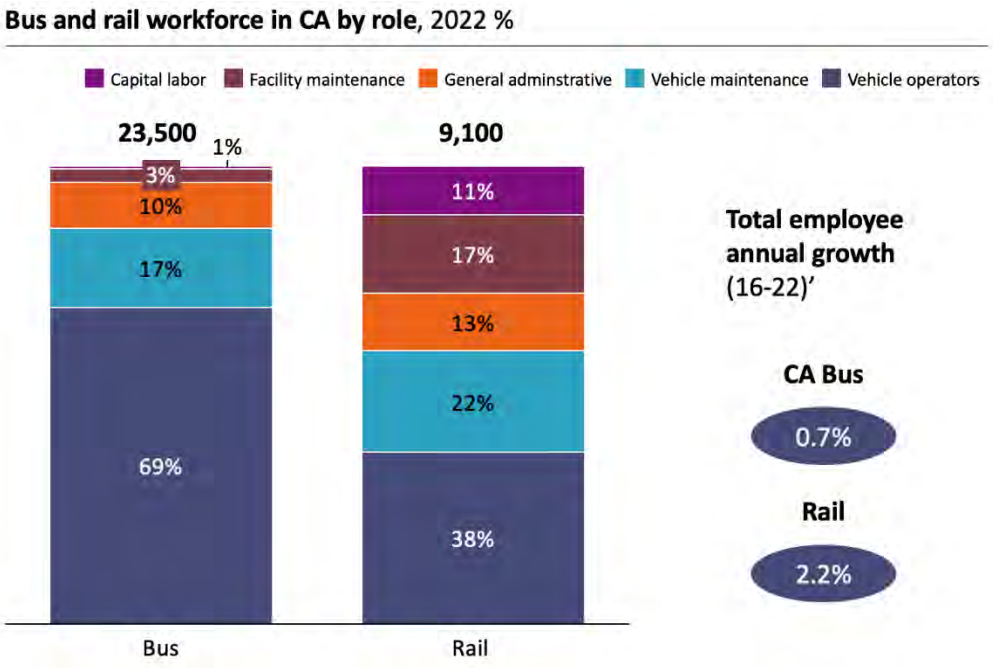
[79] Transit Transformation Task Force Meeting #7 (Clovis): December 10, 2024

[80] Top 10 agencies account for 57% of total bus count in CA based on size of bus fleets reported to the National Transit Database in 2023 and they are AC Transit, LA Metro, MTS, SFMTA, OCTA, LADOT, SacRT, VTA, Foothill Transit and SamTrans. ZEB for VTA is assumed to be BEB as agency indicated TBC in roll out plan; FCEB: Fuel cell electric bus, BEB: battery electric bus | Source: Comprehensive Review of California's Innovative Clean Transit Regulation: Phase I Summary Report (NREL), ICT roll out plans of LA Metro (link), SFMTA (link), MTS (link), AC Transit (link), LADOT (link), OCTA (link), SacRT (link), VTA (link), Foothill Transit (link) and SamTrans (link)

6. Recruitment, retention, and development challenges, impacting transit service (SB125 1.E.6)

California transit agencies employ approximately ~32,600 people, as of 2022, across bus and rail, and has been growing.[81] Total employee count grew by 0.7% for bus and 2.2% for rail across NTD reporting California transit agencies each year from 2016-22.[82] Approximately 70% of roles for buses are related to vehicle operations in positions operations.[83] Roles across rail are more evenly split across vehicle operations, maintenance, administration, and capital projects.[84]

Exhibit 24: Bus and rail workforce in California by role[85]

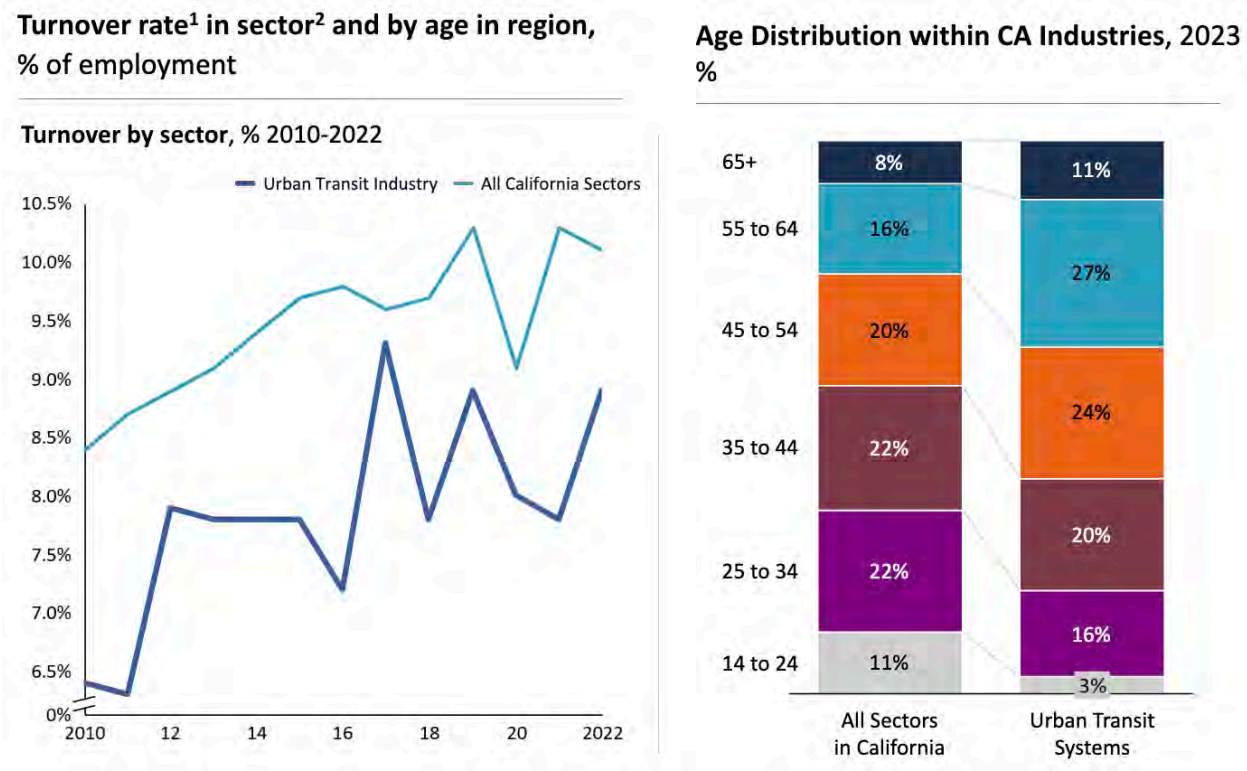


The turnover rate has been increasing in California transit, however, this is in line with trends experienced across other sectors of the economy and is not specific to the transit agencies.[86] It has increased from approximately 6.5% in

[81] Transit Transformation Task Force Meeting #5 (Los Angeles): August 29, 2024
[82] Transit Transformation Task Force Meeting #5 (Los Angeles): August 29, 2024; National Transit Database (Annual Database Transit Agency Employees)
[83] Transit Transformation Task Force Meeting #5 (Los Angeles): August 29, 2024
[84] Transit Transformation Task Force Meeting #5 (Los Angeles): August 29, 2024
[85] US Department of Transportation – Federal Transit Administration, National Transit Database, Employees for reporting entities
[86] Transit Transformation Task Force Meeting #5 (Los Angeles): August 29, 2024 (Census QWI)

2010 to 8.5% in 2022, although there is a degree of year-to-year variability.[87] An aging workforce may continue to put pressure on attrition rates in the future, as a comparatively older transit workforce begins to retire.

Exhibit 25: Turnover and age distribution of transit workers in California[88]



Analysis of separation rates (i.e., the percentage of employees that left during the reporting period) shows that separation rates are 2-3x higher for workers 18-34 compared to workers 35 and above.[89] They are also slightly higher for African Americans.[90] There is no difference in separation rates across different education levels.

[87] Transit Transformation Task Force Meeting #5 (Los Angeles): August 29, 2024 (Census QWI)
[88] Transit Transformation Task Force Meeting #5 (Los Angeles): August 29, 2024 (Census QWI)
[89] Transit Transformation Task Force Meeting #5 (Los Angeles): August 29, 2024 (Census QWI)
[90] Transit Transformation Task Force Meeting #5 (Los Angeles): August 29, 2024 (Census QWI)

Exhibit 26: Separation rates across different demographics of transit workers[91]

Recent Separation Rates for Urban Transit Agencies in California, % of employment 2022			Percentage point difference, 2022-2019
Race	White	13%	1.9%
	African American	21%	3.9%
	American Indian	14%	-1.2%
	Asian	14%	-3.4%
	Native Hawaiian	19%	-3.3%
	Two or more	14%	4.1%
Age Groups	19-21	34%	0.9%
	22-24	28%	11.2%
	25-34	21%	4.4%
	35-44	16%	1.4%
	45-54	12%	3.5%
	55-64	11%	0.0%
	65+	14%	-0.3%
Education	<High School	14%	1.5%
	High School Graduate	14%	1.8%
	Associate Degree	14%	2.1%
	>Bachelor degree	15%	0.7%

1. Separation Rate measures the percentage of employees who left the organization during the reporting period. These are the average of four quarters of payroll separations divided by the average quarterly employment. The data is focused on workers who were employed for 3 consecutive quarters (so have a longer-term relationship with employer).
2. The Urban Transit Systems industry was the one taken into consideration and was broken down to 6-digit NAICS codes defined by the Bureau of Labor Statistics

In discussion, the Technical Working Group and TTTF identified several possible drivers of workforce challenges across the hiring lifecycle (recruitment, retention, and development):[92]

Recruitment:

- Mismatch between job characteristics and preferences of current pool of job seekers (e.g., inflexible schedules, skills required)
- High barriers to entry (e.g., licensing, drug testing requirements)
- Compensation packages do not cover housing in high cost of living locations, resulting in long commutes – results in workers selecting higher paying jobs or jobs closer to where they live

[91] Transit Transformation Task Force Meeting #5 (Los Angeles): August 29, 2024 (Census QWI)
[92] Transit Transformation Task Force Meeting #5 (Los Angeles): August 29, 2024

Retention:

- Poor on-the-job experience (e.g., perceived or actual safety issues, lack of critical amenities such as bathrooms in layover locations)
- High cost of living (e.g., for childcare, affordable housing) relative to pay
- Roles are not tailored to different demographics (e.g., younger drivers may desire flexibility, older drivers may want for more hours or higher pay)
- Development:
  - Training programs for new workers are well-developed, but are costly and not standardized
  - Lack of mentorship for workers on long-term career pathways
  - Changing workforce needs in response to emerging technological trends (e.g., transition to zero-emission vehicles, connected vehicles)

7. Existing policies on state and local metrics to measure transit performance (SB125 1.E.7)

Transportation Development Act (TDA)

As public transit transitioned from private to public ownership in the 1970s, California passed the TDA to provide operating funds to run new, publicly funded transit services.[93] After the TDA was passed, concerns arose over publicly owned transit agencies' "financial discipline," prompting the State to implement farebox recovery ratios (FRR), mandating transit agencies to cover a portion of their operating expenses through passenger fares to encourage financial responsibility to receive TDA-related funding among other restriction.[94]

Today, the TDA is the main way the State funds transit, providing 18% of all transit operators' revenues, and comprises of two funds:[95]

- LTF - $1.3B revenue generated in FY2023 (13% of total transit operator revenue from all sources)[96]
- STA - $0.4B revenue generated in FY2023 (4% of total transit operator revenue from all sources)[97]

For LTF funding, transit operators' FRR (fare revenue to operating cost) must be:

- > 20% if the agency is in an urbanized area[98]
- > 15% if the agency is in a low population county with urbanized areas[99]
- > 10% if the agency is outside an urbanized area[100]

In addition, to qualify for STA funds, total operating cost per revenue vehicle revenue hour (VRH) must be less than or equal to that of the previous year.[101] Failure to comply with these standards may result in reduced allocations.

[93] UCLA Institute of Transportation Studies: An Assessment of Performance Measures in the Transportation Development Act
[94] UCLA Institute of Transportation Studies: An Assessment of Performance Measures in the Transportation Development Act
[95] UCLA Institute of Transportation Studies: An Assessment of Performance Measures in the Transportation Development Act
[96] State Controller's Office Transit By the Numbers 2023
[97] State Controller's Office Transit By the Numbers 2023
[98] UCLA Institute of Transportation Studies: An Assessment of Performance Measures in the Transportation Development Act
[99] UCLA Institute of Transportation Studies: An Assessment of Performance Measures in the Transportation Development Act
[100] UCLA Institute of Transportation Studies: An Assessment of Performance Measures in the Transportation Development Act
[101] UCLA Institute of Transportation Studies: An Assessment of Performance Measures in the Transportation Development Act

"True" FRR is a measure that blends two concepts – cost effectiveness and service effectiveness. It is therefore possible to meet FRR goals by reducing service or not expanding service.[102] Further it does not give agencies credit for increases in non-farebox revenues (e.g., real estate, advertising, concessions) that may be important as part of a comprehensive growth strategy. Additionally, California has made many changes to the definition of farebox revenue, including items such as local option sales taxes, certain partnership programs that makes the definition of FRR different from just revenue received at the farebox. Alternative performance goals to FRR exist (e.g. cost efficiency and service effectiveness), and is discussed in the body of the main report.

Requirements from other transit funding programs (e.g., TIRCP)

Other transit funding programs outside of the TDA also have specific reporting requirements attached to funding to track performance against the stated goals of the project. For example, the TIRCP program carries reporting requirements on:[103]

- **Project progress:** with percent completion for the overall project and each phase of each project component
- **Performance outcomes:** based on the original targeted outcomes of the project application which could relate to ridership/service levels, GHG emissions reductions, benefits to disadvantaged communities, other co-benefits etc.
- Changes in scope, timetables, or costs that are actual or anticipated

Examples of data that must be reported on an ongoing basis for 36 months after project completion include:

Project type	Metrics
Capital Improvements that Result in New or Expanded Transit Service or Increase Mode Share on Existing Transit Service	• Days of operation per year • Average daily ridership

[102] UCLA Institute of Transportation Studies: An Assessment of Performance Measures in the Transportation Development Act
[103] TIRCP Cycle 7 Guidelines

Project type	Metrics
New Vehicle(s) for Existing Transit Service	• Fuel/energy consumption or vehicle miles traveled • Range in fuel/energy consumption or annual vehicle miles traveled

The Low Carbon Transit Operations Program (LCTOP) provides funding for operating and capital assistance for transit agencies to reduce GHG emissions and improve mobility, with a priority on serving disadvantaged communities. Major reporting requirements for LCTOP recipients include:

- Project Activity Reporting (PAR) including project status (e.g., progress against scope, schedule, cost)
- Jobs Reporting, or tracking jobs created, particularly those for priority populations
- Project Outcome Reporting of "operational" project outcomes including program successes in facilitating the achievement of GHG reductions and maximizing economic, environmental, and public health benefits to the State

Intercity Rail Uniform Performance Standards (UPS)

The Intercity Passenger Rail Act required CalSTA to establish a set of uniform performance standards for all corridors and operators to measure and monitor performance of State-supported intercity passenger rail service. These do not apply to other transit operations, like light rail or bus, but are examples of other metrics that could be explored. Metrics cover three categories (usage, cost efficiency, and service quality.)

Exhibit 27: Intercity Rail Uniform Performance Standards Adopted Metrics

Category	Metrics
Usage	• **Passenger miles** relative to growth in total corridor population and year-over-year • **Ridership** relative to growth in total corridor population and year-over-year
Cost efficiency	• **Farebox recovery** i.e., total revenue / total operating expense • **Total operating cost per passenger mile** i.e., corridor passenger miles / total operating expense
Service quality	• **Endpoint on-time performance** i.e., % of trains that arrive at their final destination within a specified time frame of scheduled arrival • **All-station on-time performance** i.e., % of train times (departure from origin station and arrivals at all other stations) within 15 minutes of schedule • **Operator responsible delays per 10,000 train miles** i.e., average minutes trains are delayed due to causes attributed to the operator (e.g., mechanical issues, crew availability, operational decisions) for every 10,000 miles traveled

Source: Intercity Passenger Rail Act of 2012 Establishment of Uniform Performance Standards (2014)

8. State and local policies that impact service efficiency and transit ridership, including, but not limited to, transit prioritization on roads, land use, housing, and pricing policies (SB125 1.E.8)

Transit prioritization

Current State and local policies on transit prioritization can allow local cities to block the full implementation of transit prioritization across a corridor. Local cities may reduce the effectiveness of transit-priority projects by asserting control over curb space and lane configurations, insisting on "mixed-flow" operations to preserve parking or car capacity, which dilutes the speed and reliability benefits of transit prioritization projects. On LA Metro's North Hollywood–Pasadena BRT, for example, Burbank's council directed Metro to run buses in mixed traffic on Olive Ave (rejecting a dedicated bus lane), citing parking and congestion concerns, a formal position the city has reiterated in project materials and council actions.[104]

At the State level, Senate Bill 960 (2024) mandates that Caltrans integrate transit priority facilities into State highway projects, develop design guidance by 2028, and streamline approvals for pedestrian, bicycle, and transit improvements.[105] As discussed in Section 4, transit priority projects not only improve transit service, but may ultimately lower the operating expenses needed to deliver that service, all else being equal.

This builds on Assembly Bill 917 (2022), which authorized automated camera enforcement of bus lanes and stops Statewide, directly addressing delays caused by illegal parking.[106]

Complementing these policies, Senate Bill 288 (2020) created critical California Environmental Quality Act (CEQA) exemptions for transit priority projects in existing rights-of-way, accelerating delivery of bus lanes and signal upgrades.[107]

To implement transit prioritization projects on roads, transit agencies may need to obtain an encroachment permit from Caltrans when the project involves the State Highway System.[108] Coordination with local city or county

[104] City Council Tells Metro They are Staying With the Mixed Use Option on Olive Avenue, Metro NoHo-Pasadena Corridor Bus Rapid Transit Project
[105] Scott Weiner: Governor Newsom Signs Senator Wiener's Safe Streets Bill Into Law
[106] Conduent: Legislation Paves the Way for Bus Lane Enforcement in California
[107] Meyers Nave: New Two-Year CEQA Exemption Aims To Fast Track Transportation Projects
[108] Caltrans: Encroachment Permits

transportation departments is also needed for projects affecting local roadways, as they may have additional permitting requirements or design standards.[109] Furthermore, collaboration with public utility companies is necessary if the project impacts existing utilities, to address potential relocations or modifications.[110]

Local jurisdictions control critical levers for transit prioritization through permitting processes and street design standards. Some agencies in California have begun to use "quick build" permitting processes, which allow temporary transit lanes through paint and signage changes.[111] For example, AC Transit created a dedicated transit lane on a portion of Durant Avenue in Berkeley, CA through red paint and other improvements (e.g., traffic signals give buses queue jumps, shelter upgrades) for $2.1M, and was able to implement the project between Summer and Fall 2024. While still early, evidence has shown that speed, reliability and safety have all improved across the corridor.[112] However, transit agencies report that local control and local policies on the public-right of way remain obstacles for transit prioritization.

Land use and housing policies

Industry researchers estimate transit-supportive land uses and housing in California could provide 1.6 to 2.4 million new homes, increase net local and State tax revenues, and reduce VMT[113] emissions by 33% and greenhouse gas emissions by 45%.[114] Simply put, the land surrounding high quality transit in California could be better utilized to address California's housing shortage and course-correct its jobs/housing imbalance.

For example, in the DC metro area, stations with transit supportive land use have been shown to yield greater ridership than other stations. For example, the Ballston-MU station has 9,600 average weekday riders and ~10,900 people per square mile, as compared to West Falls Church station, which has 2,500 average weekday riders and only ~33,360 people per square mile, as seen in the exhibit below. Near high quality transit, the number one determinant of ridership is the density of land use near the station.

[109] Caltrans: Transit Initiative Program Guidelines
[110] Mass Transit: Keys to Successful Utility Work
[111] SPUR: Making Roads Work for Transit
[112] AC Transit, Berkeleyside
[113] Vehicle Miles Traveled
[114] Research collaboration by UrbanFootprint, HDR, Mapcraft Labs, and Economic & Planning Systems (link)

Exhibit 28: Ballston-MU station vs. West Falls Church station

Design and impact comparison between two suburban DC Metro stations[1]

Ballston-MU station

9,600 avg weekday riders (5,900 post-Covid)[2]

~10,900 people per square mile

Image Caption: Ballston-MU Station (USGS Earth Explorer)

Land use elements: high-density and mixed-use developments, high intersection density, and walkable design

Development and design completed alongside Arlington County to align zoning and density requirements and gain community support

West Falls Church

2,500 avg weekday riders (1,200 post-Covid)[2]

~3,360 people per square mile

Image Caption: Ballston-MU Station (USGS Earth Explorer)

Land use elements: auto-orientation (e.g., part-and-ride), single-use of land, station location in highway median

Limited engagement with Fairfax county in original land use development

Redevelopment approved in 2023 (shown in blue area above) aims to build 700+ multifamily units and 110,000 sq ft and 10,000 sq ft of office and retail space, respectively

1. Ballston-MU is ~8 miles from Capital Hill in DC whereas West Falls Church is ~12 miles
2. Pre-Covid ridership shown is 2019 data; post-Covid ridership shown is 2024 data

Source: Washington Metropolitan Area Transit Authority Metrorail Ridership Summary, US 2020 Census, Land Lawyers

Land use and housing in California is governed by a wide range of policies including for the initial planning of a project, zoning, entitlements, construction and permits being issued. In recent years, several State-led initiatives and legislative changes have sought to accelerate housing production and better integrate transit with land use planning. The California Housing and Community Development Department administers an incentive program, where local jurisdictions with a Pro-housing Designation may receive priority processing or funding points when applying for several funding programs, including Affordable Housing and Sustainable Communities (AHSC), Infill Infrastructure Grant (IIG), Transformative Climate Communities (TCC), Solutions for Congested Corridors (SCCP), Local Partnership Program (LPP), TIRCP, and Sustainable Transportation Planning Grant Program (STPG). Building upon past legislative and funding reforms, the Newsom Administration continues to champion lowering costs and increasing transit-supportive infill housing options with the actions called for in the Governor's Executive Order N-2-24 to transform underutilized infill sites to help meet State climate, housing and transportation needs. Actions include the development of a framework for a Statewide Mitigation Bank to provide flexibility in the use of infill housing as a mitigation strategy for transportation and housing projects with significant environmental impacts under CEQA. In 2024, over 60 housing and land use related bills were signed into California law that will shape community outcomes to accelerate

housing production and strengthen accountability, including upzoning reforms, elimination of minimum parking requirements for transit-oriented developments, deferring upfront development costs, and adjustments to the entitlements process, among other solutions.[115]

Pricing policies

Statewide, California transit agencies use or are considering using a variety of pricing policies, including congestion pricing and all-lane tolling, HOV lanes, street parking, and road pricing, to encourage use of public transit, reduce congestion, as well as generate revenue for transit projects:

Congestion pricing, all-lane tolling

In San Francisco, a Traffic Congestion Mitigation Tax charges transportation network companies (TNCs) fees to fund transit improvements.[116] Enacted through a 2019 ballot measure requiring two-thirds voter approval, this tax on Uber and Lyft fares directs revenues (between $30 million to $35 million annually) specifically toward Muni service expansions and pedestrian safety infrastructure.[117] If this were expanded to other dense, congested cities (e.g., core parts of Los Angeles, San Diego) aggregate revenues could be potentially be increased 5x or more.

The Bay Area Metropolitan Transportation Commission (MTC) has also proposed in recent years for all-lane tolling on freeways, where drivers might be charged ~10 cents per mile, reducing emissions and generating funds that could be invested in public transit projects.[118] The MTC estimates that if all-lane tolling is implemented, it could generate approximately $1 billion annually, a portion of which could would be allocated to invest in public transit projects.[119]

In addition to raising funds, road pricing can have other benefits; this has been displayed in New York City based on their recent experience with congestion pricing. Beginning on January 5th, 2025, a $9 toll has been charged on most vehicles (with different rates for trucks, taxis, etc.) to enter the most congested part of Manhattan south of 60th Street, for most of the day. In March 2025 the tolls raised $45 million, putting the program on track to generate roughly $500 million in its first year, there have been other

[115] California Housing Laws That Go into Effect in 2025 - Terner Center
[116] SF Traffic Congestion Mitigation Tax
[117] SF Traffic Congestion Mitigation Tax, SF Treasurer and Tax Collector: Traffic Congestion Mitigation Tax (TCM)
[118] Roads & Bridges: Bay Area Officials Push for All-Lane Freeway Tolls
[119] Roads & Bridges: Bay Area Officials Push for All-Lane Freeway Tolls

benefits as well. Car traffic in Lower Manhattan has been reduced by about 12% relative to historical trends, this decrease in car traffic has increased travel speeds, and lowered trip times for cars and buses, particularly along the river crossings into Manhattan. In parallel, transit trips have increased (with bus ridership growing 13%, subway growing 8%, Long Island Rail Road growing 11% and Metro North Railroad growing 8% as compared to a similar period in 2024), car crashes and injuries have declined (down 14% in the tolled zone), noise violations are down 45% in the tolled zone, and early evidence points to economic activity being unharmed with restaurant reservations up 7%, Broadway bookings being flat, and overall credit card expenses being slightly positive when comparing year to date 2025 with a similar period in 2024.[120]

High occupancy tolling (HOT) lanes

In addition, metropolitan planning organizations (MPOs) are implementing hybrid HOV/High-Occupancy Toll (HOT) lane configurations to manage traffic flow effectively. For example, the I-110 express lanes in Los Angeles allow single-occupancy vehicles to access carpool lanes for variable tolls (as of May 2019, SOVs were charged between $0.10 and $2.10 per mile, depending on congestion levels).[121] From 2012 to 2022, the I-100 and I-10 express lanes have generated more than $100 million that has been invested in various multimodal transportation improvements to improve regional mobility and grow transit ridership.[122] For example, $6.9 million in toll revenue is provided annually to help fund the Metro Silver Line as well as Torrance, Gardena, and Foothill Transit services operating on the ExpressLanes.[123] This has helped increase ridership on the Silver Line by 50% from 10,600 average weekday boardings in 2012 to 15,400 in 2016.[124]

On-street parking

In San Francisco, the SFMTA implemented a demand-responsive pricing program for all 28,000 on-street parking meters and SFMTA-managed surface parking lots in the city.[125] This program, which builds upon the SFpark pilot initiated in 2011, adjusts parking rates based on real-time occupancy data to balance supply and demand.[126] The SFpark pilot demonstrated

[120] New York Times (Here Is Everything That Has Changed Since Congestion Pricing Started in New York)
[121] Metro ExpressLane Fact Sheet
[122] LA Metro: L.A. Metro Celebrates ExpressLanes 10th Anniversary
[123] LA County MTA: Countywide ExpressLanes Strategic Plan
[124] LA County MTA: Countywide ExpressLanes Strategic Plan
[125] SFMTA: San Francisco Adopts Demand-Responsive Pricing Program to Make Parking Easier
[126] SFMTA: San Francisco Adopts Demand-Responsive Pricing Program to Make Parking Easier

significant benefits, including a 43% reduction in parking search time, reducing congestion, and a 30% decrease in vehicle miles traveled in pilot areas, leading to improved parking availability and reduced congestion.[127] Street parking programs may also lead to increased transit ridership, with one study finding a correlation between SFpark and increases in transit bus usage of about 21% and reductions in lane occupancy of 5 percentage points per census block.[128]

Los Angeles Department of Transportation (LADOT) also implemented a similar program called LA Express Park, which reduces congestion through a demand-based mechanism. Launched in May 2012, The system utilizes real-time data from in-ground sensors and smart parking meters to adjust hourly rates based on occupancy, aiming to maintain 10-30% availability on each block.[129] LA Express Park's strategies have led to a 10% reduction in congested city parking and increased parking turnover, with more vehicles parking for shorter durations, improving traffic flow for transit services.[130]

Road user charge

As California seeks to move away from the gas tax as a source of transit funding, SB339 requires California to study a "Road Charge" program as a potential alternative funding source, which issues fees to drivers based on how many miles they drive per month.[131] Depending on pricing levels and purpose of a road charge, studies have shown that road user pricing can lead to a reduction in traffic volume, with elasticity estimates ranging from -0.1 to -0.45, meaning a 1% increase in driving costs could result in a 0.1% to 0.45% decrease in traffic volume, thereby potentially reducing VMT.[132]

Across all pricing programs, the impacts of reduced congestion can help speed buses, and pricing may provide additional funds for transit services. The combination of better and more service may in turn increase ridership.

Tax-Increment-Financing Districts

Tax Increment Financing districts (TIFs) are a financial mechanism to share value created by those that improve the value of land. As an example, if a transit agency builds a line, or provides a new service to an area, property values (and thus property and other taxes generated) would go up. A TIF, in

[127] SFMTA: San Francisco Adopts Demand-Responsive Pricing Program to Make Parking Easier
[128] Parking, Transit and Traffic: Evidence From SFpark
[129] LA Express Park
[130] Trellint: LA Express Park: Parking Smarter with Demand Pricing
[131] NBC: Road Charge Program, NBC Gas Tax Alternative
[132] CARB: Impacts of Road User Pricing on Passenger Vehicle Use and Greenhouse Gas Emissions

principle, would share with the transit agency some portion of this incremental value of taxes that are generated. TIFs can be a mechanism for transit agencies to obtain some of the value that it is generated through their investments, that often goes to other parties. California has several types of TIF, and TIF-like mechanisms today include:

- Infrastructure Financing Districts (IFDs, that focus on public works/facilities and projects
- Enhanced Infrastructure Financing Districts (EIFDs) that focus on Infrastructure projects with community-wide benefits
- Infrastructure and Revitalization Financing Districts (IRFDs) that focus on housing development and other development projects
- Community Revitalization and Investment Authorities (CRIAs) that focus on low-income or disadvantaged communities
- Neighborhood Infill Finance and Transit Districts (NIFTI-1, NIFTI-2) that focus on Affordable housing in infill locations; development within 0.5 mile of transit (NIFTI-2)

Only 12 TIF districts were approved and/or proposed in CA over the past 20 years, though more are being considered. Based on a study by the Governor's Office of Land Use and Climate Innovation, use of post-redevelopment TIF tools has been limited due to:

- Limited revenue, given property tax shares are often too low to justify creation of a TIF without other entities' help.
- The need for voluntary involvement from multiple taxing entities needed.
- Technical challenges and lack of widespread understanding of how to use TIFs.

Prior to 2012, the most common form of TIF in California was a Redevelopment agency. Transit Agencies and other SME reported that the end of redevelopment had a significant impact on the ability of agencies to use TIFs, as the legal rights granted to redevelopment agencies, including shares of taxable revenue, far exceeded those granted to any successor TIF type agency or district.

9. Identification of state departments and agencies that have responsibility for transit system oversight, grant administration, and reporting (SB125 1.E.9)

Several different State departments and agencies may be involved in setting the overall policies/requirements (system oversight), distribution decisions, program administration, and reporting of transit funding. Transit has a diverse range of funding sources and enabling legislation, and therefore there are many different State entities / departments involved in system oversight, grant administration and reporting. System oversight (program administration and compliance) for many programs is mainly managed by Caltrans, including funding under the TDA (e.g., LTF, STA) and other transportation funding programs under SB1(e.g., Active Transportation Program, Solutions for Congested Corridors Program) and the Greenhouse Gas Reduction Fund (e.g. Low Carbon Transit Operations Program, Transit and Intercity Rail Capital Program), while a diverse array of other agencies are responsible for oversight, grant-making, administration, and reporting for other funding sources. See the Exhibits below for additional details.

Exhibit 29: State agencies involved in transit agency oversight and reporting

State Agency	Agency Responsibilities
California State Transportation Agency (CalSTA)	Oversees planning, coordination, and funding of California's transportation system, ensuring integration across all modes and agencies
California Department of Transportation (Caltrans)	Plans, builds, operates, and maintains California's State highway system and supports local and regional transportation infrastructure
California Transportation Commission (CTC)	Programs and allocates funds for the construction of highway, passenger rail and transit improvements throughout California.
California Air Resources Board (CARB)	Regulates air quality and vehicle emissions Statewide, advancing California's climate goals through policy, enforcement, and innovation in clean air technologies
Strategic Growth Council (SGC)	Coordinates work between public agencies, communities, and stakeholders to achieve sustainability and economic prosperity in California. The Affordable Housing and Sustainable Communities (AHSC) programs helps integrate affordable housing with sustainable transportation.

State Agency	Agency Responsibilities
California Department of Housing and Community Development (HCD)	Develops housing policy and allocates State and federal funds to support affordable housing and community development. HCD aims to implement the AHSC program through providing funding for new construction and infrastructure improvements, prioritizing projects that are located in disadvantaged communities and reduce GHG, and collaborating with developers, local governments, and transportation agencies, prioritizing projects that are located in disadvantaged communities and reduce GHG, and collaborating with developers, local governments, and transportation agencies.
California Energy Commission (CEC)	Leads California's energy policy and planning, including advancing renewable energy, improving energy efficiency, and overseeing energy system reliability. This includes clean transportation energy infrastructure, including EV Charging and hydrogen fuelling stations, as well as research and deployment of zero-emission transit technologies.
California Public Utilities Commission (CPUC)	Regulates privately owned utilities to ensure safe, reliable service at reasonable rates, including those that power transit agencies electrification efforts, and provides oversight of TNCs, and safety regulations for rail transit systems.
Governor's Office of Business and Economic Development (Go-Biz)	Offers consultation services to businesses including, but not limited to site-selection, permit assistance, and assistance with State government, and coordinates economic development related to clean transportation industries, including public transit.

Exhibit 30: Transit-related programs and grants with State agency oversight and reporting

	Agency Responsible for:			
Program/ Grant Name	**System Oversight (including setting policy and requirements)**	**Grant/ Project Selection (if applicable)**	**Program Administration**	**Reporting and Compliance**
Transit and Intercity Rail Program (TIRCP)	CalSTA/ CARB	CalSTA	Caltrans	Caltrans
State Rail Assistance Program (SRA)	CalSTA	CalSTA	Caltrans	Caltrans
Low Carbon Transit Operations Program (LCTOP)	Caltrans/ CARB	Caltrans/ CARB	Caltrans/ CARB/ SCO	Caltrans
Local Transportation Fund (LTF)	SCO		County Transportation Commissions/ Regional Transportation Planning Agencies (RTPAs)	Caltrans/ SCO

	Agency Responsible for:			
Program/ Grant Name	**System Oversight (including setting policy and requirements)**	**Grant/ Project Selection (if applicable)**	**Program Administration**	**Reporting and Compliance**
State Transit Assistance	SCO		County Transportation Commissions/ RTPAs	Caltrans/ SCO
State Transit Improvement Program (STIP)	CTC	CTC	Caltrans	Caltrans
Active Transportation Program	CTC	CTC	Caltrans	Caltrans
State of Good Repairs Program	CTC	CTC	Caltrans	Caltrans
Solutions for Congested Corridors (SCCP)	CTC	CTC	Caltrans	Caltrans
Trade Corridor Enhancement Program (TCEP)	CTC	CTC	Caltrans	Caltrans
Local Partnership Program (LPP)	CTC	CTC	Caltrans	Caltrans
Affordable Housing and Sustainable Communities Program	SGC/ CARB	HCD/ SGC	HCD	HCD/ SGC

	Agency Responsible for:			
Program/ Grant Name	**System Oversight (including setting policy and requirements)**	**Grant/ Project Selection (if applicable)**	**Program Administration**	**Reporting and Compliance**
Clean Truck and Bus Vouchers (HVIP)	CARB	CARB	CARB	CARB
Clean Transportation Program	CEC	CEC	CEC	CEC
EnergIIZE Commercial Vehicles – Transit Set Aside	CARB	CEC	CALSTART	CEC
Section 130 Rail Crossing Program	FHWA/ Caltrans	CPUC	Caltrans	CPUC/ Caltrans
Section 190 Grade Separation Program	FHWA/ Caltrans	CPUC	Caltrans	CPUC/ Caltrans
CalJOBS	EDD		EDD	EDD
Employment Training Panel (ETP)	EDD/ Go-Biz		ETP	ETP

10. Information on how transit agencies modified their services in response to the COVID-19 pandemic and resulting drop in ridership and revenue (SB125 1.E.10)

After the COVID-19 pandemic, service, as measured by VRM for rail and VRH for bus, varied depending on the transit agency, as shown in the exhibit below.[133] For some agencies, like San Diego Metropolitan Transit System (MTS), rail VRM grew throughout the pandemic into 2023.[134] However, most agencies experienced a downturn in rail VRM and bus VRH in 2021, followed by rebounds across agencies, though most large agencies were delivering less service in 2023, than they were in 2019.[135]

Exhibit 31: Share of 2019 service levels across largest agency bus and rail modes[136]

Rail: Share of 2019 VRM across 10 largest CA rail agencies by vehicle revenue miles (as measured by 2019 VRM) before and after COVID-19 (% of 2019 VRM)[137]

Agency	2019	2020	2021	2022	2023
San Francisco Bay Area Rapid Transit District (BART)	100%	90%	63%	99%	107%
Los Angeles County Metropolitan Transportation Authority (LACMTA)	100%	91%	76%	79%	84%
Southern California Regional Rail Authority (Metrolink)	100%	96%	80%	79%	82%
San Diego Metropolitan Transit System (MTS)	100%	104%	114%	132%	144%
Peninsula Corridor Joint Powers Board (PCJPB)	100%	90%	78%	96%	94%
City and County of San Francisco (SFMTA)	100%	82%	14%	74%	83%
Sacramento Regional Transit District	100%	83%	82%	83%	83%
Santa Clara Valley Transportation Authority (VTA)	100%	82%	80%	45%	90%
North County Transit District (NCTD)	100%	93%	79%	120%	115%
Altamont Corridor Express (ACE)	100%	90%	43%	77%	88%
Sonoma-Marin Area Rail Transit District (SMART)	100%	89%	43%	74%	106%

[133] National Transit Database (TS2.1 - Service Data and Operating Expenses Time Series by Mode)
[134] National Transit Database (TS2.1 - Service Data and Operating Expenses Time Series by Mode)
[135] National Transit Database (TS2.1 - Service Data and Operating Expenses Time Series by Mode)
[136] National Transit Database (TS2.1 - Service Data and Operating Expenses Time Series by Mode)
[137] SFMTA Rail VRM performance decline from 2020-2021 may be partially due to replacement of rail service with bus service to expedite infrastructure enhancements and reduce operating costs; BART VRM performance from 2020-2021 may have been impacted by Berryessa service expansion

Bus: Share of 2019 VRH across 10 largest CA bus agencies by bus vehicle hours traveled (as measured by 2019 VRH) before and after COVID-19 (% of 2019 VRH)

Agency	2019	2020	2021	2022	2023
Los Angeles County Metropolitan Transportation Authority (LACMTA)	100%	91%	77%	88%	94%
City and County of San Francisco (SFMTA) - Transit Division	100%	94%	83%	89%	97%
Alameda-Contra Costa Transit District	100%	91%	82%	80%	84%
San Diego Metropolitan Transit System (MTS)	100%	98%	101%	100%	93%
Orange County Transportation Authority (OCTA)	100%	89%	74%	85%	89%
Santa Clara Valley Transportation Authority (VTA)	100%	91%	77%	88%	94%
Foothill Transit	100%	99%	98%	93%	91%
Long Beach Transit (LBT)	100%	86%	69%	81%	89%
City of Los Angeles (LADOT) - City of Los Angeles Department of Transportat	100%	102%	101%	101%	102%
Riverside Transit Agency (RTA)	100%	94%	68%	69%	72%

In terms of ridership and fare revenues, the COVID-19 pandemic caused ridership to decrease for all agencies by an average of 20% from 2019 to 2020, and a further 50% decrease (on average) from 2020 to 2021.[138] However, in 2021, ridership began to rebound, growing, on average, 54% from 2021 to 2022. As of 2023, no large agencies have reached pre-pandemic levels of ridership.[139] The recovery has also been uneven with some agencies, like OCTA and San Diego MTS, at nearly 80% of pre-COVID ridership in 2023, while agencies like BART are at only ~40% of 2019 ridership.

Exhibit 32: Share of 2019 UPT across largest CA transit agencies (as measured by 2019 UPT) before and after COVID-19, (% of 2019 UPT)[140]

[138] National Transit Database (TS2.1 - Service Data and Operating Expenses Time Series by Mode)
[139] National Transit Database (TS2.1 - Service Data and Operating Expenses Time Series by Mode)
[140] National Transit Database (TS2.1 - Service Data and Operating Expenses Time Series by Mode)

Agency	2019	2020	2021	2022	2023
Los Angeles County Metropolitan Transportation Authority (LACMTA)	100%	81%	51%	67%	73%
City and County of San Francisco (SFMTA) - Transit Division	100%	76%	28%	46%	62%
San Francisco Bay Area Rapid Transit District (BART)	100%	71%	14%	30%	40%
San Diego Metropolitan Transit System (MTS)	100%	83%	46%	68%	80%
Alameda-Contra Costa Transit District	100%	84%	40%	54%	65%
Orange County Transportation Authority (OCTA)	100%	81%	51%	68%	80%
Santa Clara Valley Transportation Authority (VTA)	100%	79%	33%	49%	65%
Long Beach Transit (LBT)	100%	79%	61%	75%	72%
Sacramento Regional Transit District	100%	88%	40%	57%	72%
City of Los Angeles (LADOT) - City of Los Angeles Department of Transportation	100%	74%	49%	70%	80%

Over the course of the pandemic and through the recovery period, fare revenues fell and then recovered, mirroring trends in ridership, though for many agencies (e.g., LA Metro), farebox revenue has recovered more slowly than ridership. Many of the higher farebox agencies pre-COVID (e.g., BART, Metrolink) have also had slower recoveries. [141] In general, ridership was ~65% of 2019 ridership in 2023, while fare revenues were only ~50% of 2019 fare revenues in 2019.

Exhibit 33: Share of 2019 revenue across 10 largest CA transit agencies (as defined by 2019 revenue) before and after COVID-19, (% of 2019 revenue)[142]

Agency	2019	2020	2021	2022	2023
San Francisco Bay Area Rapid Transit District (BART)	100%	71%	13%	28%	39%
Los Angeles County Metropolitan Transportation Authority (LACMTA)	100%	71%	11%	26%	45%
City and County of San Francisco (SFMTA)	100%	78%	9%	31%	45%
Peninsula Corridor Joint Powers Board (PCJPB)	100%	74%	32%	32%	42%
San Diego Metropolitan Transit System (MTS)	100%	85%	52%	61%	73%
Southern California Regional Rail Authority (Metrolink)	100%	77%	20%	34%	42%
Alameda-Contra Costa Transit District (AC Transit)	100%	91%	34%	49%	59%
Orange County Transportation Authority (OCTA)	100%	78%	30%	50%	58%
Santa Clara Valley Transportation Authority (VTA)	100%	76%	36%	58%	72%
Golden Gate Bridge, Highway and Transportation District (GGBHTD)	100%	75%	14%	39%	52%

[141] National Transit Database (TS2.1 - Service Data and Operating Expenses Time Series by Mode, TS1.2 - Operating and Capital Funding Time Series)
[142] National Transit Database (TS2.1 - Service Data and Operating Expenses Time Series by Mode, TS1.2 - Operating and Capital Funding Time Series)

11. The division of transit funding between capital and operations (SB125 1.E.11)

According to the National Transit Database, between 2013 and 2023, transit funding across sources was, on average, allocated as 37% for capital projects and 63% for operations.[143] From 2013 to 2023, the ratio of funds allocated to capital and operations stayed relatively consistent (within 10% margin), even as funding fluctuated over the decade.[144]

Exhibit 34: Division of total transit funding (federal, state, local, and other) applied to capital and operations[145]

Examining the division of funding between capital and operations in FY2022-23 across the ten largest sources of funding ($9.2 billion), funding allocated to capital expenses accounts for $4.2 billion (46% of ten largest funding sources), while the remaining $5 billion is allocated to both capital and operations expenses (see exhibit below).[146]

Between 2013 and 2023, 62% of transit funds were applied to operations, while the remaining 38% were applied to capital projects.[147] Of the 38% of

[143] National Transit Database (TS1.2 - Operating and Capital Funding Time Series, TS2.1 - Service Data and Operating Expenses Time Series by Mode)
[144] National Transit Database (TS1.2 - Operating and Capital Funding Time Series, TS2.1 - Service Data and Operating Expenses Time Series by Mode)
[145] National Transit Database (TS1.2 - Operating and Capital Funding Time Series, TS2.1 - Service Data and Operating Expenses Time Series by Mode); funding adjusted by GDP deflator from FRED database and by Employment Cost Index (ECI) from FRED database
[146] Fact Sheet: Capital Investment Grants Program, SCO: Transit Operator Financial Transactions Report Instructions, 5307 and 5340 Urbanized Area Formula Appropriations, FY 2023 Section 5337 State of Good Repair; Institute for Local Government; Urbanized Area Formula Grants – 5307; STA and State of Good Repair; TIRCP
[147] Transit Transformation Task Force Meeting #7 (Clovis): December 10, 2024

funds applied to capital projects, 20% were applied toward existing operations (e.g., state of good repair work), and 18% were used for capital expansion.[148] Transit agencies in other states applied more funding to operations on average over the past 10 years, than California (71% in other states, as compared to 62% in California due to the number of large capital investments being made to grow transit in the State).[149]

The largest source of funding (5309 - FTA Capital Program Funds) was allocated to capital purposes, while the next three largest funding sources (local tax measures in addition to LTF,[150] LTF, and 5307+5340 - Urbanized Area Formula Program) were allocated to both capital and operations expenses.[151]

[148] Transit Transformation Task Force Meeting #7 (Clovis): December 10, 2024
[149] National Transit Database Funding Applied to Capital and Operations
[150] Local Transportation Fund
[151] Fact Sheet: Capital Investment Grants Program, SCO: Transit Operator Financial Transactions Report Instructions, 5307 and 5340 Urbanized Area Formula Appropriations, FY 2023 Section 5337 State of Good Repair; Institute for Local Government; Urbanized Area Formula Grants – 5307; STA and State of Good Repair; TIRCP

APPENDIX B: Table of all strategies and recommendations under SB125 (1)(f) as approved by the Task Force

This table is organized into three levels–principles, strategies, and policy recommendations—to best support the overall TTTF Report. **Principles** are high-level value statements that express what is needed to achieve our goals. The principles help group the other strategies, policy recommendations, and actions. **Strategies** represent the "issue areas," often drawn from SB 125 enabling legislation. Strategies are used to group the individual policy recommendations into an issue area. Lastly, **policy recommendations** are specific steps and initiatives that can be considered by stakeholders, such as the Legislature, State or local jurisdictions, or transit agencies.

The TTTF was subject to the Bagley-Keene Open Meeting Act, which requires State bodies to conduct their meetings in public and adhere to specific procedures, including issuing advance notice of the meetings to the public and allowing members of the public to comment during the meetings. The TTTF included a robust public comment process. Numerous public comments were provided during the meetings, and many written comments were submitted to the SB 125 email box and posted on the project webpage.

Task Force meetings were conducted according to Rosenberg's Rules of Order. During the TTTF meetings, Task Force members reviewed the draft findings prepared by project staff and voted to approve, reject, or modify the draft strategies and policy recommendations (also prepared by staff). The TTTF Chair facilitated discussion amongst Task Force members and multiple public comment periods prior to calling for a motion. Any Task Force member could make a motion to approve, amend, or reject a recommendation, which required a second from another member. A motion passed with a majority vote of all 25 Task Force members (meaning 13 votes were needed for a motion to pass). **The principles, strategies, and policy recommendations below are written as voted on and approved by the Task Force.**

Note that references to regional agencies include metropolitan planning organizations (MPOs), regional transportation planning agencies (RTPAs), and county transportation commissions.

Principle	Legislative Section	Strategy	Policy Recommendation
Transit should be operationally and financially sustainable	New Options for Revenue Sources (1.f.6)	1. Reprogram and re-focus existing revenues	Identify opportunities to support regions that reprogram FHWA formula funds for transit uses as allowable by law, by matching with State share dollars with a specific focus on helping eliminate the backlog and the Statewide unobligated balance to maximize overall revenue to the State via the August redistribution process.
Transit should be operationally and financially sustainable	New Options for Revenue Sources (1.f.6)	2. Support local communities in raising revenues	Consider additional flexibility in the ability for transit agencies, regions, or voters to place measures on the ballot by allowing transit agencies and regions to have authority to place measures on the ballot for portions of their service areas or entire service area, similar to how cities can place taxes on the ballot without enabling legislation.
Transit should be operationally and financially sustainable	New Options for Revenue Sources (1.f.6)	3. Generate new revenue through value-capture	Give transit and other government agencies the ability to sell air rights or other development incentives to create development opportunities above and near transit stations and facilities to generate additional revenue via sale and/or investment.

Principle	Legislative Section	Strategy	Policy Recommendation
Transit should be operationally and financially sustainable	New Options for Revenue Sources (1.f.6)	3. Generate new revenue through value-capture	Explore opportunities to allocate revenue from managed lanes and other forms of pricing in California's most congested regions to fund transit service, giving travelers reliable alternatives to driving alone.
Transit should be operationally and financially sustainable	New Options for Revenue Sources (1.f.6)	3. Generate new revenue through value-capture	Update increment financing tools to make it easier for transit agencies to capture value and establish districts, with a specific focus on removing the number of bodies and votes that need to approve the creation of a TIF district.
Transit should be operationally and financially sustainable	New Options for Revenue Sources (1.f.6)		Implement new State funding mechanisms to stabilize transit agencies in the near-term, increase and enhance transit service in the mid-term, and deliver transit service that aligns with the goals of the report over the long-term.
Transit should be operationally and financially sustainable	New Options for Revenue Sources (1.f.6)		Implement new State funding mechanisms for transit capital projects that increase, enhance, and maintain transit service and delivers transit service that aligns with the goals of this report and other State mandates.
Transit should be operationally and financially sustainable	New Options for Revenue Sources (1.f.6)		Create funding alternatives to replace fuel taxes, should include allowing transit operations and capital as an eligible expense (among other expenses) for funds raised from both passenger and commercial vehicles.

Principle	Legislative Section	Strategy	Policy Recommendation
Transit should be operationally and financially sustainable	New Options for Revenue Sources (1.f.6)		Evaluate means to allow maximum flexibility to transit agencies when expending State transportation funds (e.g., Article 19).
Transit should be operationally and financially sustainable	Reforming the Transportation Development Act (1.f.4)	4. Improve predictability of long-term funding	Remove farebox recovery penalty, require agencies establish plans and use future TDA funding to address deficiencies identified in audit process if not meeting goals.
Transit should be operationally and financially sustainable	Reforming the Transportation Development Act (1.f.4)	5. Align Incentives	Use TDA working group to develop accountability mechanisms for when infrastructure owners are driving challenges for transit agencies by leveraging other sources of State funds. Leverage the triennial audit process to do so.
Transit should be operationally and financially sustainable	Reforming the Transportation Development Act (1.f.4)	5. Align Incentives	Update other formulaic funding programs (i.e., LCTOP, SGR) to align with revisions to TDA reporting requirements and incentives.
Transit should be operationally and financially sustainable	Reforming the Transportation Development Act (1.f.4)	5. Align Incentives	Update TDA to better align to criteria in State discretionary investment programs.

Principle	Legislative Section	Strategy	Policy Recommendation
Transit should be operationally and financially sustainable	Reforming the Transportation Development Act (1.f.4)	5. Align Incentives	Establish clear, peer-based performance metrics for agencies to follow. Account for sectorial issues (i.e., recessions, loss of sales tax revenue) inside the performance measures and inside TDA accountability process.
Transit should be operationally and financially sustainable	Reforming the Transportation Development Act (1.f.4)	6. Simplify reporting requirements for funding & increase transparency to the public	Establish a working group with statutory deadlines for draft and final metrics & performance measures that includes regions, transit agencies, State agencies to be updated every 4 years in lieu of farebox recovery and cost inflation penalties.
Transit should be operationally and financially sustainable	Reforming the Transportation Development Act (1.f.4)	6. Simplify reporting requirements for funding & increase transparency to the public	Provide additional technical assistance to agencies to meet reporting requirements, aim to shift reporting burden to the State based on existing NTD and GTFS data.
Transit should be operationally and financially sustainable	Oversight and Reporting (1.f.5)	7. Reduce administrative burden	Streamline grant and TDA reporting processes to a single report, determine a single California State agency to manage reporting across all programs, grants, on a unified application. Align this report to information already collected in the NTD reporting process.
Transit should be operationally and financially sustainable	Oversight and Reporting (1.f.5)	7. Reduce administrative burden	Create a Statewide, publicly accessible dashboard allowing members of the public and agencies to view the data collected and performance information for each agency.

Principle	Legislative Section	Strategy	Policy Recommendation
Transit should be operationally and financially sustainable	Oversight and Reporting (1.f.5)	7. Reduce administrative burden	Reduce the timeline for distribution of funds and allow flexibility and guarantees where possible inside each grant program.
Transit should be operationally and financially sustainable	Oversight and Reporting (1.f.5)	7. Reduce administrative burden	Build capacity at the Statewide level to manage and distribute funds effectively and within clearly defined KPIs and time limits.
Transit should be operationally and financially sustainable	Oversight and Reporting (1.f.5)	8. Simplify granting	Consolidate, standardize, digitize, and streamline State grant applications to reduce administrative requirements and decision and distribution timeline. Allow one State grant application to be used for multiple grant programs or funding types.
Transit should be operationally and financially sustainable	Oversight and Reporting (1.f.5)	8. Simplify granting	Create and maintain a master agreement between each applicant agency and the granting agency so that repetitive terms and boilerplate for all grants are in a single document rather than executed ad hoc with each grant.
Transit should be operationally and financially sustainable	Oversight and Reporting (1.f.5)	8. Simplify granting	Encourage consolidation of grant programs across State agencies to reduce duplication.

Principle	Legislative Section	Strategy	Policy Recommendation
Transit should be operationally and financially sustainable	Oversight and Reporting (1.f.5)	8. Simplify granting	Organize the grant administration system around the recipient and not around the project so that grantors and recipients can see their historical grants and track their progress.
Transit should be operationally and financially sustainable	Oversight and Reporting (1.f.5)	8. Simplify granting	Create an opt-in capacity for rural and small agencies to receive assistance with grant applications, compliance, and reporting requirements, recognizing that they may lack sufficient staff to understand their eligibility, compete effectively or ensure full compliance.
Transit should be operationally and financially sustainable	Oversight and Reporting (1.f.5)	8. Simplify granting	Offer rural and small agencies technical assistance in initiating their projects so that preliminary engineering and project costs are known in advance of applying for funding.
Transit should be operationally and financially sustainable	Capital Construction Costs and Timelines	9. Reduce timelines to deliver capital projects	Utilize NEPA oversight delegation authority at Caltrans or CAHSR to complete NEPA in an expedited manner.
Transit should be operationally and financially sustainable	Capital Construction Costs and Timelines	9. Reduce timelines to deliver capital projects	The Legislature could consider, in order to limit delays and change orders, require that stakeholders waive rights and limit design changes beyond certain phases for high priority and complex transit and rail projects, to ensure that scope doesn't change.

Principle	Legislative Section	Strategy	Policy Recommendation
Transit should be operationally and financially sustainable	Capital Construction Costs and Timelines	9. Reduce timelines to deliver capital projects	Consider legislation to limit timelines for permitting agencies to engage or risk waive rights to future legal objections to project if they do not engage in the earlier phases.
Transit should be operationally and financially sustainable	Capital Construction Costs and Timelines	9. Reduce timelines to deliver capital projects	Formalize service-led planning to reduce construction costs and develop clear roles and responsibilities between State, regional agencies, transit agencies, or local jurisdictions.
Transit should be operationally and financially sustainable	Capital Construction Costs and Timelines	9. Reduce timelines to deliver capital projects	Explore ways to allow alternative procurement methods, such as Construction Manager/ General Contractor (CMGC) or Construction Manager at Risk (CMAR), Statewide, rather than just at certain agencies, per current law.
Transit should be operationally and financially sustainable	Capital Construction Costs and Timelines	9. Reduce timelines to deliver capital projects	The Legislature could consider allowing infrastructure owners (inc. transit agencies) to have master permitting authority for priority rail projects to reduce delays and costs. Alternatively allow for by-right permitting of certain types of transit projects to prevent extractive permitting processes by infrastructure owners. Additionally, give Transit agencies franchise rights with utilities, similar to cities, to reduce the cost of utility relocations.

Principle	Legislative Section	Strategy	Policy Recommendation
Transit should be operationally and financially sustainable	Capital Construction Costs and Timelines	9. Reduce timelines to deliver capital projects	The Legislature could consider streamlining certain types of permits, while making other permits by right for high priority transit projects.
Transit should be operationally and financially sustainable	Capital Construction Costs and Timelines	9. Reduce timelines to deliver capital projects	Establish opt-in Statewide design guidelines for transit and rail projects interaction with the public right of way. Ensure that public agencies that do not use them don't affect the funding of projects.
Transit should be operationally and financially sustainable	Capital Construction Costs and Timelines	10. Grow public-sector capacity	Develop guidance for development of business cases and enhance benefit cost analysis, including project scope, cost, schedule, risks, and technical assistance, for various funding programs and grant applications with a goal of more robust decision making and supporting federal investment.
Transit should be operationally and financially sustainable	Capital Construction Costs and Timelines	10. Grow public-sector capacity	Procure project delivery software that can be used by transit agencies, local jurisdictions, and regional agencies.
Transit should be operationally and financially sustainable	Capital Construction Costs and Timelines	10. Grow public-sector capacity	Develop an inventory of standard materials costs, and lower cost of materials with volume buying.

Principle	Legislative Section	Strategy	Policy Recommendation
Transit should be operationally and financially sustainable	Capital Construction Costs and Timelines	10. Grow public-sector capacity	The Legislature could consider authorizing regional collaboratives to develop institutional expertise, available for project consultation along with a Statewide center of excellence to aid with hiring. Consider possible new models for project delivery that rely on larger organizations to deliver megaprojects, such as a shared single project delivery organization per region.
Transit should be operationally and financially sustainable	Transit Fleet and Asset Management (1.f.1.F)	11. Encourage review and discussion of ICT requirements and solutions	Review and discuss ICT requirements, solutions, and impacts (such as service levels) in their entirety by a separate dedicated Statewide task force with recommendations to the administration and Legislature.
Transit should be operationally and financially sustainable	Transit Fleet and Asset Management (1.f.1.F)	12. Coordinate with and incentivize manufacturers to collaborate on zero-emission bus and paratransit vehicle fleet	Collaborate on creating and purchasing standardized specifications of zero-emission buses and paratransit vehicles to allow suppliers to scale production.
Transit should be operationally and financially sustainable	Transit Fleet and Asset Management (1.f.1.F)	13. Streamline procurement requirements and timelines	Allow agencies to opt-in to regional or Statewide joint procurement contracts to aggregate demand, and reduce costs for buses, parts, components, energy (e.g., with utilities, hydrogen providers), and other technologies expanding upon DGS' existing procurement.

Principle	Legislative Section	Strategy	Policy Recommendation
Transit should be operationally and financially sustainable	Transit Fleet and Asset Management (1.f.1.F)	13. Streamline procurement requirements and timelines	Authorize grantee agencies to use job order contracting (JOC) authority to streamline maintenance and reduce project costs, avoiding the need for continuous procurement for routine work.
Transit should be operationally and financially sustainable	Transit Fleet and Asset Management (1.f.1.F)	13. Streamline procurement requirements and timelines	Expand Master Service Agreements (MSAs) for rolling stock and transit technology purposes to be administered through DGS or California Association of Coordinated Transportation (CalACT).
Transit should be operationally and financially sustainable	Transit Fleet and Asset Management (1.f.1.F)	14. Encourage shared maintenance and infrastructure support	Consider building out or facilitating the creation of shared facilities at known sites, allow legislatively for easier interagency agreements, procurements, and ownership.
Transit should be operationally and financially sustainable	Transit Fleet and Asset Management (1.f.1.F)	14. Encourage shared maintenance and infrastructure support	Encourage transit agencies to consider shared training programs and for the State to invest in apprenticeship programs (e.g., on vehicle maintenance).
Transit should be operationally and financially sustainable	Transit Fleet and Asset Management (1.f.1.F)	14. Encourage shared maintenance and infrastructure support	Amend State rules and procedures to allow for co-location for charging and fueling, as an opportunity to partner with schools and Caltrans, and to charge private freight to use charging facilities.

Principle	Legislative Section	Strategy	Policy Recommendation
Transit should be operationally and financially sustainable	Transit Fleet and Asset Management (1.f.1.F)	15. Advise State to provide opt-in technical assistance for asset management capabilities	Develop opt-in Statewide capacities to assist transit agencies with project delivery and asset management.
Transit should be operationally and financially sustainable	Transit Fleet and Asset Management (1.f.1.F)	15. Advise State to provide opt-in technical assistance for asset management capabilities	Provide technical assistance for agencies that request it in identifying and prioritizing routes for fleet transitions that are most suitable for either electric or hydrogen buses.
Transit should be operationally and financially sustainable	Transit Fleet and Asset Management (1.f.1.F)	16. Procure or create software and digital tools for asset management	Procure centralized software for asset management tools and predictive maintenance (or adding to California's Software Licensing Program) and make it available to all agencies, with their oversight and input.
Transit should be operationally and financially sustainable	Transit Fleet and Asset Management (1.f.1.F)	16. Procure or create software and digital tools for asset management	Create life-cycle cost assessment tools under a similar, shared services model.
Transit should be operationally and financially sustainable	Workforce Recruitment, Retention, and Development (1.f.3)	17. Expand candidate pool and reduce barriers to entry for transit roles	Expand partnerships with K-12 education, community colleges, trade schools, and re-entry programs and other programs to increase size of candidate pool and train potential candidates.

Principle	Legislative Section	Strategy	Policy Recommendation
Transit should be operationally and financially sustainable	Workforce Recruitment, Retention, and Development (1.f.3)	17. Expand candidate pool and reduce barriers to entry for transit roles	Create a centralized job board for transit agencies that are in the same transit region to advertise vacancies, share a talent pool, and better match candidates to positions.
Transit should be operationally and financially sustainable	Workforce Recruitment, Retention, and Development (1.f.3)	17. Expand candidate pool and reduce barriers to entry for transit roles	Create a Statewide campaign to increase interest in careers in public transportation.
Transit should be operationally and financially sustainable	Workforce Recruitment, Retention, and Development (1.f.3)	17. Expand candidate pool and reduce barriers to entry for transit roles	Re-evaluate age requirements for bus operators.
Transit should be operationally and financially sustainable	Workforce Recruitment, Retention, and Development (1.f.3)	17. Expand candidate pool and reduce barriers to entry for transit roles	Align Federal and State regulations around drug tests, particularly as it relates to marijuana.
Transit should be operationally and financially sustainable	Workforce Recruitment, Retention, and Development (1.f.3)	17. Expand candidate pool and reduce barriers to entry for transit roles	Create an on-the-spot in-person interview and hiring process and provide on-site examination for operators rather than requiring applicants to go test at the DMV.

Principle	Legislative Section	Strategy	Policy Recommendation
Transit should be operationally and financially sustainable	Workforce Recruitment, Retention, and Development (1.f.3)	17. Expand candidate pool and reduce barriers to entry for transit roles	Allow in-house examiners to fulfil the certification requirements through tests administered to multiple transit agencies within a region (i.e., instead of current 10-test requirement).
Transit should be operationally and financially sustainable	Workforce Recruitment, Retention, and Development (1.f.3)	17. Expand candidate pool and reduce barriers to entry for transit roles	Establish a shared pool of vehicle simulators distributed across agencies within a region to expedite the certification process, especially for smaller transit agencies.
Transit should be operationally and financially sustainable	Workforce Recruitment, Retention, and Development (1.f.3)	18. Expand training and mentorship programs for agencies to ensure employees have required skills and visibility into career pathways	Create centralized training programs that can be used by agencies in the same transit area in coordination through labor partners (e.g., through trade schools and fund placements).
Transit should be operationally and financially sustainable	Workforce Recruitment, Retention, and Development (1.f.3)	18. Expand training and mentorship programs for agencies to ensure employees have required skills and visibility into career pathways	Standardize credentials, curriculums, and onboarding materials that can be recognized across transit agencies.

Principle	Legislative Section	Strategy	Policy Recommendation
Transit should be operationally and financially sustainable	Workforce Recruitment, Retention, and Development (1.f.3)	18. Expand training and mentorship programs for agencies to ensure employees have required skills and visibility into career pathways	Connect transit agencies to academic institutions (e.g., community colleges) or other entities to train employees for emerging skill requirements (e.g., maintenance of electric vehicles and autonomous vehicles).
Transit should be operationally and financially sustainable	Workforce Recruitment, Retention, and Development (1.f.3)	18. Expand training and mentorship programs for agencies to ensure employees have required skills and visibility into career pathways	Encourage transit agencies to establish formal mentorship, apprenticeship, or shadow programs to provide new employees with visibility into roles a few levels above.
Safety is fundamental	Safe and Clean Environment for Passengers and Operators (1.f.1.C)	19. Provide dedicated safety and security funding.	Provide dedicated funding for improving safety infrastructure (e.g., protective barriers, lighting) at transit stations and bus stops, and employing safety-related personnel.
Safety is fundamental	Safe and Clean Environment for Passengers and Operators (1.f.1.C)	19. Provide dedicated safety and security funding.	Provide dedicated funding for de-escalation and violence mitigation training specific to transit employees.
Safety is fundamental	Safe and Clean Environment for Passengers and Operators (1.f.1.C)	19. Provide dedicated safety and security funding.	Allow transit agencies to be eligible for homelessness funding programs.

Principle	Legislative Section	Strategy	Policy Recommendation
Safety is fundamental	Safe and Clean Environment for Passengers and Operators (1.f.1.C)	20. Ensure coordination at the Statewide level between agencies.	Develop Statewide safety and security standards (e.g., guidance on directing individuals to wraparound services, addressing mental health and substance abuse challenges).
Safety is fundamental	Safe and Clean Environment for Passengers and Operators (1.f.1.C)	20. Ensure coordination at the Statewide level between agencies.	Examine opportunities to regionalize prohibition orders within the existing legal framework.
Safety is fundamental	Safe and Clean Environment for Passengers and Operators (1.f.1.C)	20. Ensure coordination at the Statewide level between agencies.	Encourage commercial development (e.g., platform kiosks, station stalls, exterior shops) at stations to improve perceived safety.
Safety is fundamental	Safe and Clean Environment for Passengers and Operators (1.f.1.C)	20. Ensure coordination at the Statewide level between agencies.	Implement surveys for priority populations (e.g., seniors, women) to monitor safety of transit systems.
Safety is fundamental	Safe and Clean Environment for Passengers and Operators (1.f.1.C)	21. Improve coordination with H&HS Agencies to ensure comprehensive health-related safety and security responses.	Increase presence of safety professionals on transit systems through safety ambassadors, crisis intervention specialists, and/or uniformed officers, leveraging coordination with local police departments.

Principle	Legislative Section	Strategy	Policy Recommendation
Safety is fundamental	Safe and Clean Environment for Passengers and Operators (1.f.1.C)	21. Improve coordination with H&HS Agencies to ensure comprehensive health-related safety and security responses.	Coordinate with health and human services agencies to implement services for unhoused people on and around transit systems.
Safety is fundamental	Safe and Clean Environment for Passengers and Operators (1.f.1.C)	22. Implement physical security measures for frontline transit workers and riders.	Install protective doors for bus operators consistent with safety operations and per union agreement.
Safety is fundamental	Safe and Clean Environment for Passengers and Operators (1.f.1.C)	22. Implement physical security measures for frontline transit workers and riders.	Improve surveillance and response capabilities by constructing emergency communications equipment and systems, increasing security cameras, and quality of cameras and implementing technology to identify prohibited individuals.
Safety is fundamental	Safe and Clean Environment for Passengers and Operators (1.f.1.C)	22. Implement physical security measures for frontline transit workers and riders.	Update signage in and around stations for better navigation and safety, including reducing speed limits around transit stops.
Safety is fundamental	Safe and Clean Environment for Passengers and Operators (1.f.1.C)	22. Implement physical security measures for frontline transit workers and riders.	Increase lighting and other safety features in the areas surrounding transit stations to ensure safety on a first/last mile trip.

Principle	Legislative Section	Strategy	Policy Recommendation
Provide fast, reliable, connected, and convenient transit services	Transit Prioritization (1.f.1.D)	23. Standardize, support, and scale transit priority infrastructure.	Establish Statewide procurements for technology, equipment, and materials that are needed for Transit Signal Priority (TSP), preemption, and other infrastructure that can be leveraged to lower costs and encourage standardization.
Provide fast, reliable, connected, and convenient transit services	Transit Prioritization (1.f.1.D)	23. Standardize, support, and scale transit priority infrastructure.	Update the California Manual on Uniform Traffic Control Devices (CA MUTCD) to include TSP and preemption for transit routes where applicable. Create TSP guidelines & standards that can be leveraged in any jurisdiction. Work to encourage collaboration between cities and agencies to enable TSP at scale.
Provide fast, reliable, connected, and convenient transit services	Transit Prioritization (1.f.1.D)	23. Standardize, support, and scale transit priority infrastructure.	Encourage implementation of transit priority and bus rapid transit (BRT) features on the State right of way, such as bus-only lanes or queue jumps and ensure that the State Highway Network can be used by transit riders.
Provide fast, reliable, connected, and convenient transit services	Transit Prioritization (1.f.1.D)	23. Standardize, support, and scale transit priority infrastructure.	Make permanent the authorization for transit agencies to use readily available camera technology to discourage illegal parking in transit-only lanes and at transit stops where parking is already prohibited under existing law, as well as other violations.

Principle	Legislative Section	Strategy	Policy Recommendation
Provide fast, reliable, connected, and convenient transit services	Transit Prioritization (1.f.1.D)	24. Expedite delivery of transit-supportive infrastructure and strategies.	Allow for exemption or preemption of local and State permitting requirements on identified priority transit routes.
Provide fast, reliable, connected, and convenient transit services	Transit Prioritization (1.f.1.D)	24. Expedite delivery of transit-supportive infrastructure and strategies.	Make permanent SB 922 CEQA exemptions for transit prioritization projects, general purpose lane to bus-only lane conversions, highway shoulders to part-time transit lanes conversions.
Provide fast, reliable, connected, and convenient transit services	Transit Prioritization (1.f.1.D)	24. Expedite delivery of transit-supportive infrastructure and strategies.	Establish a by-right permitting mechanism for transit infrastructure – bus shelters, transit priority, TSP, etc. inside local jurisdictions and on the State right of way.
Provide fast, reliable, connected, and convenient transit services	Transit Prioritization (1.f.1.D)	24. Expedite delivery of transit-supportive infrastructure and strategies.	Establish a Statewide TIGER team to assist with the implementation of BRT and Bus Only lanes Statewide to assist with planning, engineering and implementation in all jurisdictions.
Provide fast, reliable, connected, and convenient transit services	Transit Prioritization (1.f.1.D)	24. Expedite delivery of transit-supportive infrastructure and strategies.	Establish a streamlined process for adding stops and stations, and a process that involves members of the transit riding community before a stop or station can be removed.

Principle	Legislative Section	Strategy	Policy Recommendation
Provide fast, reliable, connected, and convenient transit services	Transit Prioritization (1.f.1.D)	25. Coordinate and collaborate to deliver infrastructure across jurisdictions.	Develop a framework on roles and responsibilities for TSP and BRT implementation for use Statewide.
Provide fast, reliable, connected, and convenient transit services	Transit Prioritization (1.f.1.D)	25. Coordinate and collaborate to deliver infrastructure across jurisdictions.	Convene a Statewide working group for local jurisdictions, regional agencies, and transit agencies to discuss and solve common issues in implementing TSP.
Provide fast, reliable, connected, and convenient transit services	Transit Prioritization (1.f.1.D)	26. Establish flexibility with State funding sources.	Fund planning and engineering resources at the State level for easier implementation of transit priority infrastructure at the local level.
Provide fast, reliable, connected, and convenient transit services	Transit Prioritization (1.f.1.D)	26. Establish flexibility with State funding sources.	Update State funding programs and guidelines to encourage the delivery of transit priority infrastructure.

Principle	Legislative Section	Strategy	Policy Recommendation
Provide fast, reliable, connected, and convenient transit services	Service and Fare Coordination or Integration (1.f.1.A) and Coordinated Scheduling, Mapping, and Wayfinding (1.f.1.B) (1.f.1.A and 1.f.1.B)	27. Ensure State support	Provide technical assistance to transit agencies that request it through a Statewide identity verification program that transit agencies can use to verify discounted fares.
Provide fast, reliable, connected, and convenient transit services	Service and Fare Coordination or Integration (1.f.1.A) and Coordinated Scheduling, Mapping, and Wayfinding (1.f.1.B) (1.f.1.A and 1.f.1.B)	27. Ensure State support	Develop tools and technical assistance and funding to help incentivize inter-operability between payments systems Statewide.

Principle	Legislative Section	Strategy	Policy Recommendation
Provide fast, reliable, connected, and convenient transit services	Service and Fare Coordination or Integration (1.f.1.A) and Coordinated Scheduling, Mapping, and Wayfinding (1.f.1.B) (1.f.1.A and 1.f.1.B)	27. Ensure State support	Recommend opt-in common data collection, analysis, and publication standards across agencies to improve interoperability (e.g., General Transit Feed Specification, Operational Data Standard, TIDES) to local and regional agencies.
Provide fast, reliable, connected, and convenient transit services	Service and Fare Coordination or Integration (1.f.1.A) and Coordinated Scheduling, Mapping, and Wayfinding (1.f.1.B) (1.f.1.A and 1.f.1.B)	27. Ensure State support	Develop tools and provide opt-in support for regions and agencies for service planning to support other recommendations and help facilitate interregional planning.
Provide fast, reliable, connected, and convenient transit services	First- and Last-Mile Access to Transit (1.f.1.E)	28. Ensure consistent and flexible funding for active transportation and first- and last- mile access to transit	Increase funding for active transportation (e.g. Active Transportation Program funding) with reduced variability from year-to-year, to increase first and last mile access to transit.

Principle	Legislative Section	Strategy	Policy Recommendation
Provide fast, reliable, connected, and convenient transit services	First- and Last-Mile Access to Transit (1.f.1.E)	28. Ensure consistent and flexible funding for active transportation and first- and last- mile access to transit	Reduce administrative burden to improve the use of existing and new State funding for active transportation projects.
Provide fast, reliable, connected, and convenient transit services	First- and Last-Mile Access to Transit (1.f.1.E)	29. Reform planning process to improve access to transit	Empower and resource regional agencies to designate key transit hubs and stations, in consultation with cities, counties and transit agencies, where clear standards and wayfinding will apply.
Provide fast, reliable, connected, and convenient transit services	First- and Last-Mile Access to Transit (1.f.1.E)	29. Reform planning process to improve access to transit	Streamline permitting processes and timelines for delivering active transportation projects near transit hubs and stations.
Provide fast, reliable, connected, and convenient transit services	First- and Last-Mile Access to Transit (1.f.1.E)	29. Reform planning process to improve access to transit	Assess conditions and collect data on sidewalks, mobility lanes, and transit hubs and create GIS maps highlighting existing accessibility infrastructure, including sidewalk quality and continuity, street furniture such as benches and lighting, and transit hub features such as signage and shelter to identify and address locations.

Principle	Legislative Section	Strategy	Policy Recommendation
Provide fast, reliable, connected, and convenient transit services	First- and Last-Mile Access to Transit (1.f.1.E)	29. Reform planning process to improve access to transit	Create a Statewide registry of bus stops, each with a unique ID, and include stop amenity information.
Provide fast, reliable, connected, and convenient transit services	First- and Last-Mile Access to Transit (1.f.1.E)	30. Coordinate and collaborate to provide first- and last- mile access to transit across jurisdictions	Ensure interagency coordination on first- and last- mile planning, implementation, and maintenance between Caltrans, regional agencies, local jurisdictions, CBOs, and transit agencies.
Provide fast, reliable, connected, and convenient transit services	First- and Last-Mile Access to Transit (1.f.1.E)	30. Coordinate and collaborate to provide first- and last- mile access to transit across jurisdictions	Create opt-in State Purchasing Schedule agreements for bikeshare infrastructure, service providers, and participants in California e-bike incentives and bike lending programs.
Provide transit that is accessible and easy to use for all	Accessible Transportation and the Transit Needs of Older Adults and Persons with Disabilities	31. Coordinate paratransit services efficiently between transit agencies and non-profit, private, and healthcare providers	Empower transit agencies to provide more 'one-seat ride' services, or services to limit the number of transfers when services originate and/or end within an agreed upon expanded service area by creating frameworks for revenue sharing and paratransit service coordination.

Principle	Legislative Section	Strategy	Policy Recommendation
Provide transit that is accessible and easy to use for all	Accessible Transportation and the Transit Needs of Older Adults and Persons with Disabilities	31. Coordinate paratransit services efficiently between transit agencies and non-profit, private, and healthcare providers	Encourage healthcare providers and social service providers to engage in strategic planning with transit operators to better plan and coordinate public and private transport to healthcare in jurisdictions, to identify optimal times for healthcare appointments, allowing for shared rides.
Provide transit that is accessible and easy to use for all	Accessible Transportation and the Transit Needs of Older Adults and Persons with Disabilities	31. Coordinate paratransit services efficiently between transit agencies and non-profit, private, and healthcare providers	Change Medi-Cal managed care reimbursements to a per capita payment model per trip (rather than per medical recipient). Use ongoing revenue streams to subsidize and reimburse transit agencies that provide micro transit and paratransit services.
Provide transit that is accessible and easy to use for all	Accessible Transportation and the Transit Needs of Older Adults and Persons with Disabilities	32. Develop customer-facing and backend tools to improve the process of booking and dispatch of rides	Encourage transit operators to improve information describing paratransit services and required eligibility documentation to use paratransit services and the ride request process.
Provide transit that is accessible and easy to use for all	Accessible Transportation and the Transit Needs of Older Adults and Persons with Disabilities	32. Develop customer-facing and backend tools to improve the process of booking and dispatch of rides	Create an ADA accessible Statewide eligibility verification service for transit agencies that provides information on service eligibility and Medi-Cal/Medicaid enrollment.

Principle	Legislative Section	Strategy	Policy Recommendation
Provide transit that is accessible and easy to use for all	Accessible Transportation and the Transit Needs of Older Adults and Persons with Disabilities	32. Develop customer-facing and backend tools to improve the process of booking and dispatch of rides	Provide opt-in software services to transit operators to optimize digital booking, dispatch and/or routing to increase operational efficiency and reduce wait and trip times.
Provide transit that is accessible and easy to use for all	Accessible Transportation and the Transit Needs of Older Adults and Persons with Disabilities	Improve accessibility of transit stops for all riders	Conduct inventories of transit stop accessibility (e.g., ramps, wayfinding/signage, audio announcements) in line with the Master Plan for Aging initiatives, and explore Statewide standards and guidelines for access to transit information.
Provide transit that is accessible and easy to use for all	Accessible Transportation and the Transit Needs of Older Adults and Persons with Disabilities	33. Reform planning process for paratransit	Utilize ADA transition plans to guide spending, including identifying accessibility barriers, outlining methods for modifications, scheduling of improvements, and assigning responsibilities for implementation/
Provide transit that is accessible and easy to use for all	Accessible Transportation and the Transit Needs of Older Adults and Persons with Disabilities	33. Reform planning process for paratransit	Prioritize expanding subsidized housing near transit for seniors and people with disabilities to increase their access to transportation.

Principle	Legislative Section	Strategy	Policy Recommendation
Provide transit that is accessible and easy to use for all	Accessible Transportation and the Transit Needs of Older Adults and Persons with Disabilities	33. Reform planning process for paratransit	Explore options to better serve ADA needs including discounted or free travel on fixed route or discounted taxis rides.
Provide transit that is accessible and easy to use for all	Accessible Transportation and the Transit Needs of Older Adults and Persons with Disabilities	33. Reform planning process for paratransit	Identify partners to enhance information on public and private paratransit service offerings to make it easier for users to book rides and compare trip options, cost, and accessibility features.
Provide transit that is accessible and easy to use for all	Accessible Transportation and the Transit Needs of Older Adults and Persons with Disabilities	33. Reform planning process for paratransit	Provide technical assistance to transit operators without paratransit, or the transit providers that don't have a certification process for eligibility (and combine that with State guidelines for eligibility).

Principle	Legislative Section	Strategy	Policy Recommendation
Provide transit that is accessible and easy to use for all	Accessible Transportation and the Transit Needs of Older Adults and Persons with Disabilities	34. Explore options to improve funding mechanisms for paratransit	Conduct a needs assessment for accessible transportation in CA, covering the following topics: funding for paratransit due to increased demand of paratransit and service improvements, including in areas not currently covered by paratransit. Align needs assessment with the goals listed in the Master Plan for Aging Initiatives and address concerns, with robust public engagement with people with lived experience.
Provide transit that is accessible and easy to use for all	Accessible Transportation and the Transit Needs of Older Adults and Persons with Disabilities	34. Explore options to improve funding mechanisms for paratransit	Encourage cost sharing agreements between transportation providers and healthcare providers, including improving Medi-Cal cost recovery programs for operators.
Provide transit that is accessible and easy to use for all	Accessible Transportation and the Transit Needs of Older Adults and Persons with Disabilities	34. Explore options to improve funding mechanisms for paratransit	Review and reconsider ICT requirements for paratransit vehicles.

Principle	Legislative Section	Strategy	Policy Recommendation
Provide transit that is accessible and easy to use for all	Accessible Transportation and the Transit Needs of Older Adults and Persons with Disabilities	34. Explore options to improve funding mechanisms for paratransit	Provide greater flexibility to regional agencies to determine priorities for Section 5310 funds.
Develop high quality public transit systems to support complete communities	Changes to Land Use, Housing, and Pricing Policies (1.f.2)	35. Encourage transit-supportive land uses	Identify all land around transit stations open to joint development, including land owned by transit agencies and Caltrans that is eligible for TOD.
Develop high quality public transit systems to support complete communities	Changes to Land Use, Housing, and Pricing Policies (1.f.2)	35. Encourage transit-supportive land uses	Examine opportunities to price on-street parking and unbundle new off-street parking from residential and commercial developments within 0.5 mile of transit.
Develop high quality public transit systems to support complete communities	Changes to Land Use, Housing, and Pricing Policies (1.f.2)	35. Encourage transit-supportive land uses	Create the ability to allow transit agencies to sell air rights to create development opportunities above transit stations and facilities.
Develop high quality public transit systems to support complete communities	Changes to Land Use, Housing, and Pricing Policies (1.f.2)	35. Encourage transit-supportive land uses	Create bench of pre-vetted TOD property developers for use by transit agencies Statewide to pursue joint development abilities.

Principle	Legislative Section	Strategy	Policy Recommendation
Develop high quality public transit systems to support complete communities	Changes to Land Use, Housing, and Pricing Policies (1.f.2)	36. Coordinate transit and land use planning	Support the Statewide strategy for transit-supportive land use to address both transit and housing objectives, including setting out Transit Oriented Development (TOD)-specific objectives and guidelines that consider potential social equity impacts and interests of private developers to increase housing near transit.
Develop high quality public transit systems to support complete communities	Changes to Land Use, Housing, and Pricing Policies (1.f.2)	36. Coordinate transit and land use planning	Give transit agencies the ability to review and comment on City Transportation Demand Management (TDM) plans.
Develop high quality public transit systems to support complete communities	Changes to Land Use, Housing, and Pricing Policies (1.f.2)	36. Coordinate transit and land use planning	Encourage HCD to include additional transit-supportive land use policies in qualifying for pro-housing designation.
Develop high quality public transit systems to support complete communities	Changes to Land Use, Housing, and Pricing Policies (1.f.2)	36. Coordinate transit and land use planning	Encourage transit agencies to include analysis and evaluation of land use and value capture opportunities into their transit enhancement and expansion plans.

Principle	Legislative Section	Strategy	Policy Recommendation
Develop high quality public transit systems to support complete communities	Changes to Land Use, Housing, and Pricing Policies (1.f.2)	36. Coordinate transit and land use planning	Leverage, where possible, Caltrans-owned and other State-owned land to reduce upfront land costs to jumpstart TOD projects.
Develop high quality public transit systems to support complete communities	Changes to Land Use, Housing, and Pricing Policies (1.f.2)	37. Provide education, incentives, or funding to developers and agencies	Explore State agency support to provide loans with lower interest rates to developers for qualifying TOD projects.
Develop high quality public transit systems to support complete communities	Changes to Land Use, Housing, and Pricing Policies (1.f.2)	37. Provide education, incentives, or funding to developers and agencies	Engage pension funds to explore investment opportunities to support qualifying TOD projects (e.g., for direct land acquisition by transit agencies and/or local jurisdictions).
Develop high quality public transit systems to support complete communities	Changes to Land Use, Housing, and Pricing Policies (1.f.2)	37. Provide education, incentives, or funding to developers and agencies	Where possible, create pre-permitted project opportunities to encourage public-private partnerships.
Develop high quality public transit systems to support complete communities	Changes to Land Use, Housing, and Pricing Policies (1.f.2)	37. Provide education, incentives, or funding to developers and agencies	Provide incentives or funding to support transit agencies, MPOs, and/or cities that meet TOD objectives and other mandates (e.g. decarbonization).

Principle	Legislative Section	Strategy	Policy Recommendation
Develop high quality public transit systems to support complete communities	Changes to Land Use, Housing, and Pricing Policies (1.f.2)	37. Provide education, incentives, or funding to developers and agencies	Set up State team to provide support on TOD to local jurisdictions and transit agencies.
Develop high quality public transit systems to support complete communities	Changes to Land Use, Housing, and Pricing Policies (1.f.2)	37. Provide education, incentives, or funding to developers and agencies	Ensure State agencies coordinate land use and transportation planning and permitting regulation and guidance to reduce contradicting policies and complete projects with sufficient housing and transportation.
Develop high quality public transit systems to support complete communities	Transit-Oriented Development and Value Capture of Property (1.f.7)	38. Create Statewide conditions for greater value capture from transit	Clarify the Surplus Lands Act to prioritize affordable housing and commercial development on land owned by public agencies near major transit hubs.
Develop high quality public transit systems to support complete communities	Transit-Oriented Development and Value Capture of Property (1.f.7)	38. Create Statewide conditions for greater value capture from transit	Assess the multiplier effect of public transit investments and create mechanisms that could allow transit agencies to become an equity partner and/or capture this value (e.g., through taxes, transit passes).
Develop high quality public transit systems to support complete communities	Transit-Oriented Development and Value Capture of Property (1.f.7)	38. Create Statewide conditions for greater value capture from transit	Create a tax increment financing tool specifically for transit-oriented development or modify an existing one (e.g. NIFTIs) to enable transit agencies with more effective value capture options.

Principle	Legislative Section	Strategy	Policy Recommendation
Develop high quality public transit systems to support complete communities	Transit-Oriented Development and Value Capture of Property (1.f.7)	38. Create Statewide conditions for greater value capture from transit	Create a new dedicated entity to reform redevelopment to meet current needs for transit and housing but avoid pitfalls that affected redevelopment.
Develop high quality public transit systems to support complete communities	Transit-Oriented Development and Value Capture of Property (1.f.7)	38. Create Statewide conditions for greater value capture from transit	Streamline the Surplus Lands Act to increase effectiveness in delivering homes and communities near transit.
Develop high quality public transit systems to support complete communities	Transit-Oriented Development and Value Capture of Property (1.f.7)	38. Create Statewide conditions for greater value capture from transit	Establish supplemental funding sources through value capture strategies
Develop high quality public transit systems to support complete communities	Transit-Oriented Development and Value Capture of Property (1.f.7)	39. Provide State incentives and technical assistance to support transit agencies on value capture	Provide funding and/or technical assistance to agencies to support value capture opportunities (e.g., grants to hire specialists for in-sourced opportunities such as advertising, joint development, and install EV chargers and hydrogen re-fueling facilities on agency-owned parking areas).

Principle	Legislative Section	Strategy	Policy Recommendation
Develop high quality public transit systems to support complete communities	Transit-Oriented Development and Value Capture of Property (1.f.7)	39. Provide State incentives and technical assistance to support transit agencies on value capture	Create State Purchasing Schedules to make expertise in revenue generation opportunities available to transit agencies to lower costs (e.g., California tourism passes, professional sports teams).
Develop high quality public transit systems to support complete communities	Transit-Oriented Development and Value Capture of Property (1.f.7)	39. Provide State incentives and technical assistance to support transit agencies on value capture	Invest in transportation projects that have a value capture strategy, when practical.

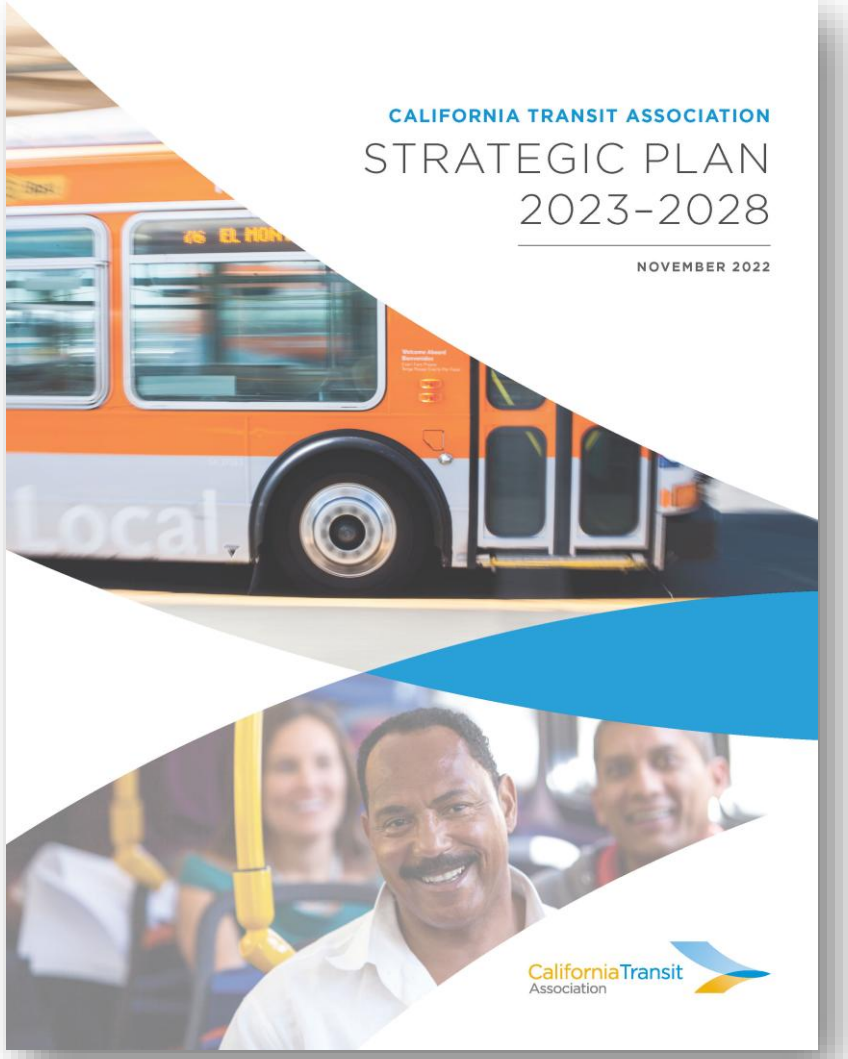
California Transit Association

Update on Transit Transformation Task Force

Prepared for Board of Directors, San Diego Metropolitan Transit System
February 12, 2026

California Transit Association

- Represents 220 transit-affiliated entities nationwide, including more than 85 transit agencies in CA
- Advocates for policies and funding solutions that support and advance public transit
- Major victories: Transportation Development Act (1971), Cap-and-Trade Expenditure Plan (2014), SB 1 (2017), SB 125 (2023), Cap-and-Invest Expenditure Plan (2025)



Transit Transformation Task Force

CaliforniaTransit Association

- Established in December 2023
- Charged with developing and submitting report of recommendations to the Governor and Legislature to grow transit ridership and improve the transit experience for all users
- Comprised of 25 members, including 12 from the Association
- Association approaching effort as a “break the glass” moment
  - Secure increased state support for transit – both funding and statutory
  - Eliminate regulatory and administrative burden, barriers to effective transit

Transit Transformation Task Force *(Cont.)*

CaliforniaTransit Association

Association's Advisory Committee

CaliforniaTransit Association

The Association established the Transit Transformation Advisory Committee to:

1. Establish the Association's legislative, budgetary, and regulatory priorities for the Transit Transformation Task Force
2. Review all legislative, budgetary, and regulatory proposals presented to the Task Force and/or its Technical Working Group to determine their impacts on Association members
3. Develop the Association's positions on all legislative, budgetary, and regulatory proposals presented to the Task Force and/or its Technical Working Group to inform the Executive Director's participation on the Task Force
4. Provide regular reports to the Association's Executive Committee through the committee's scheduled meetings and more frequently, as necessary

Association's Priorities *(Partial List)*

CaliforniaTransit Association

- **Funding:** Secure recommendations on new state transit funding to:
  - Establish new state funding to stabilize agencies in the near-term
  - Support transformation, increased service levels and capital needs in the mid-term
  - Deliver sustainable revenue models in the long-term
- **Performance Metrics:** Secure recommendations on Transportation Development Act reform to:
  - Eliminate outdated transit performance metrics as well associated penalties
  - Streamline and standardize reporting across programs

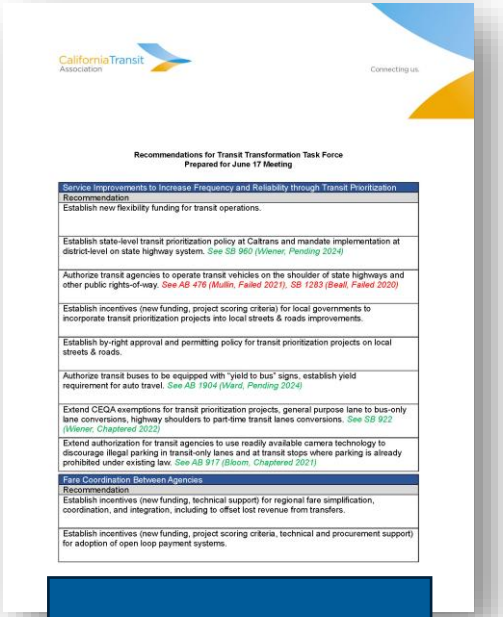
Association's Priorities *(Partial List, Cont.)*

CaliforniaTransit Association

- **ZEB Transition:** Secure recommendations on ZEB transition to:
  - Re-evaluate ICT regulation requirements
  - Maintain or establish necessary state funding and statutory support
  - Ensure "whole of government" approach to troubleshooting
- **Project and Service Delivery:** Secure recommendations on Project and Service to:
  - Streamline or remove state and local permitting processes
  - Support transit prioritization on state highway, streets, and roads

Association's Specific Priorities

CaliforniaTransit Association



Recommendations for Transit Transformation Task Force
Prepared for June 17 Meeting

Service Improvements to Increase Frequency and Reliability through Transit Prioritization
Recommendation
Establish new flexibility funding for transit operations.
Establish state-level transit prioritization policy at Caltrans and mandate implementation at district-level on state highway system. *See SB 960 (Wiener, Pending 2024)*
Authorize transit agencies to operate transit vehicles on the shoulder of state highways and other public rights-of-way. *See AB 476 (Mullin, Failed 2021), SB 1283 (Beall, Failed 2020)*
Establish incentives (new funding, project scoring criteria) for local governments to incorporate transit prioritization projects into local streets & roads improvements.
Establish by-right approval and permitting policy for transit prioritization projects on local streets & roads.
Authorize transit buses to be equipped with "yield to bus" signs, establish yield requirement for auto travel. *See AB 1904 (Ward, Pending 2024)*
Extend CEQA exemptions for transit prioritization projects, general purpose lane to bus-only lane conversions, highway shoulders to part-time transit lanes conversions. *See SB 922 (Wiener, Chaptered 2022)*
Extend authorization for transit agencies to use readily available camera technology to discourage illegal parking in transit-only lanes and at transit stops where parking is already prohibited under existing law. *See AB 917 (Bloom, Chaptered 2021)*

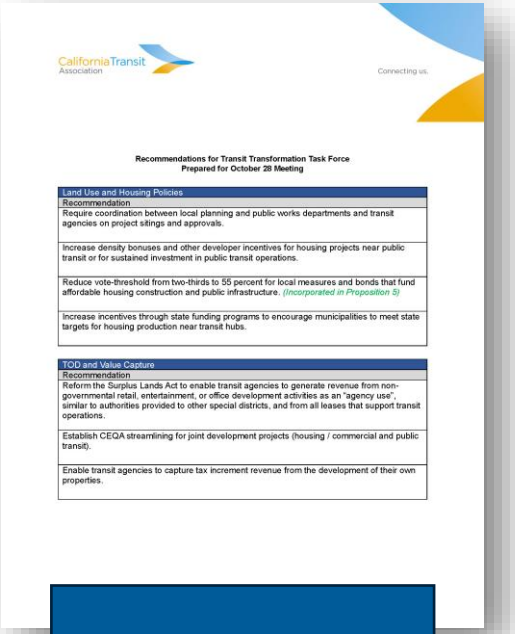
Fare Coordination Between Agencies
Recommendation
Establish incentives (new funding, technical support) for regional fare simplification, coordination, and integration, including to offset lost revenue from transfers.
Establish incentives (new funding, project scoring criteria, technical and procurement support) for adoption of open loop payment systems.

Service Improvement
Fare Coordination
Schedule Coordination
Safety and Cleanliness

Recommendations for Transit Transformation Task Force
Prepared for August 29 Meeting

Workforce Recruitment, Retention, and Development
Recommendation
Implement "Safety and Cleanliness On and Around Transit" recommendations submitted to the Transit Transformation Task Force by the Association on June 17.
Increase the California Department of Motor Vehicles' capacity to conduct driving and skills tests for commercial driver licenses by increasing the number of field offices that conduct these tests and increasing their hours of operations.
Enhance the California Department of Motor Vehicles' administration of the federally authorized Employer Testing Program by increasing the availability and accessibility of Examiner Certification classes; and supporting the maintenance of examiner certification by increasing the availability and accessibility of refresher training courses and providing resources for a State Examiner to participate in ride-a-longs to observe and administer a skills test for trainers at risk of losing their certification.
Clarify the California Department of Motor Vehicles' guidance for the federally authorized Employer Testing Program to clearly authorize transit agencies to share examiners under the program and/or create testing consortia.
Increase state funding for transit agencies to establish training and apprenticeship programs.

Workforce
TDA Reform

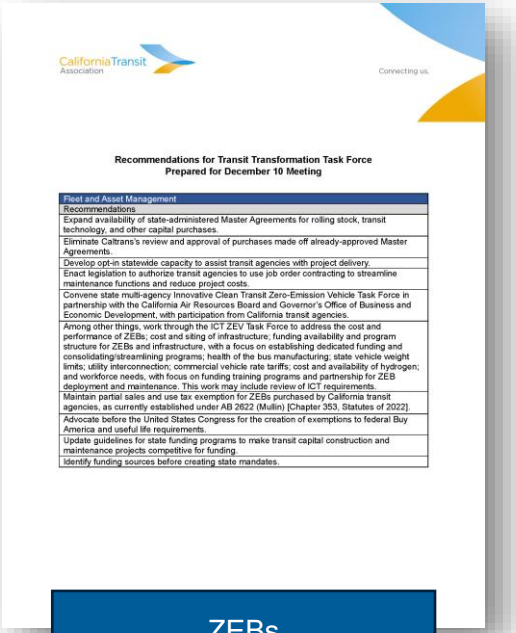


Recommendations for Transit Transformation Task Force
Prepared for October 28 Meeting

Land Use and Housing Policies
Recommendation
Require coordination between local planning and public works departments and transit agencies on project sitings and approvals.
Increase density bonuses and other developer incentives for housing projects near public transit or for sustained investment in public transit operations.
Reduce vote-threshold from two-thirds to 55 percent for local measures and bonds that fund affordable housing construction and public infrastructure. *(Incorporated in Proposition 5)*
Increase incentives through state funding programs to encourage municipalities to meet state targets for housing production near transit hubs.

TOD and Value Capture
Recommendation
Reform the Surplus Lands Act to enable transit agencies to generate revenue from non-governmental retail, entertainment, or office development activities as an "agency use", similar to authorities provided to other special districts, and from all leases that support transit operations.
Establish CEQA streamlining for joint development projects (housing / commercial and public transit).
Enable transit agencies to capture tax increment revenue from the development of their own properties.

Land Use and Housing
TOD and Value Capture
First-Mile / Last-Mile



Recommendations for Transit Transformation Task Force
Prepared for December 10 Meeting

Fleet and Asset Management
Recommendations
Expand availability of state-administered Master Agreements for rolling stock, transit technology, and other capital purchases.
Eliminate Caltrans's review and approval of purchases made off already-approved Master Agreements.
Develop opt-in statewide capacity to assist transit agencies with project delivery.
Enact legislation to authorize transit agencies to use job order contracting to streamline maintenance functions and reduce project costs.
Convene state multi-agency Innovative Clean Transit Zero-Emission Vehicle Task Force in partnership with the California Air Resources Board and Governor's Office of Business and Economic Development, with participation from California transit agencies.
Among other things, work through the ICT ZEV Task Force to address the cost and performance of ZEBs; cost and siting of infrastructure; funding availability and program structure for ZEBs and infrastructure, with a focus on establishing dedicated funding and consolidating/streamlining programs; health of the bus manufacturing; state vehicle weight limits; utility interconnection; commercial vehicle rate tariffs; cost and availability of hydrogen; and workforce needs, with focus on funding training programs and partnership for ZEB deployment and maintenance. This work may include review of ICT requirements.
Maintain partial sales and use tax exemption for ZEBs purchased by California transit agencies, as currently established under AB 2622 (Mullin) [Chapter 353, Statutes of 2022].
Advocate before the United States Congress for the creation of exemptions to federal Buy America and useful life requirements.
Update guidelines for state funding programs to make transit capital construction and maintenance projects competitive for funding.
Identify funding sources before creating state mandates.

ZEBs
Asset Management
Funding
Reporting and Oversight

Transit Transformation Task Force Report

CaliforniaTransit Association

- Released December 2025
- Comprised of two parts:
  - Analysis on challenges faced by transit operators, including funding levels and regulatory, administrative and policy barriers; external factors, impacting transit ridership; external drivers of cost increases
  - Recommendations on 12 topics, including funding, oversight, operations (safety, prioritization, coordination) and asset management
- **Final analysis is deficient in several topics, omits critical data**
- **Final recommendations are high-level and lack specificity in several topic areas**

Transit Transformation Task Force Report *(Cont.)*

CaliforniaTransit Association

Major Deficiencies

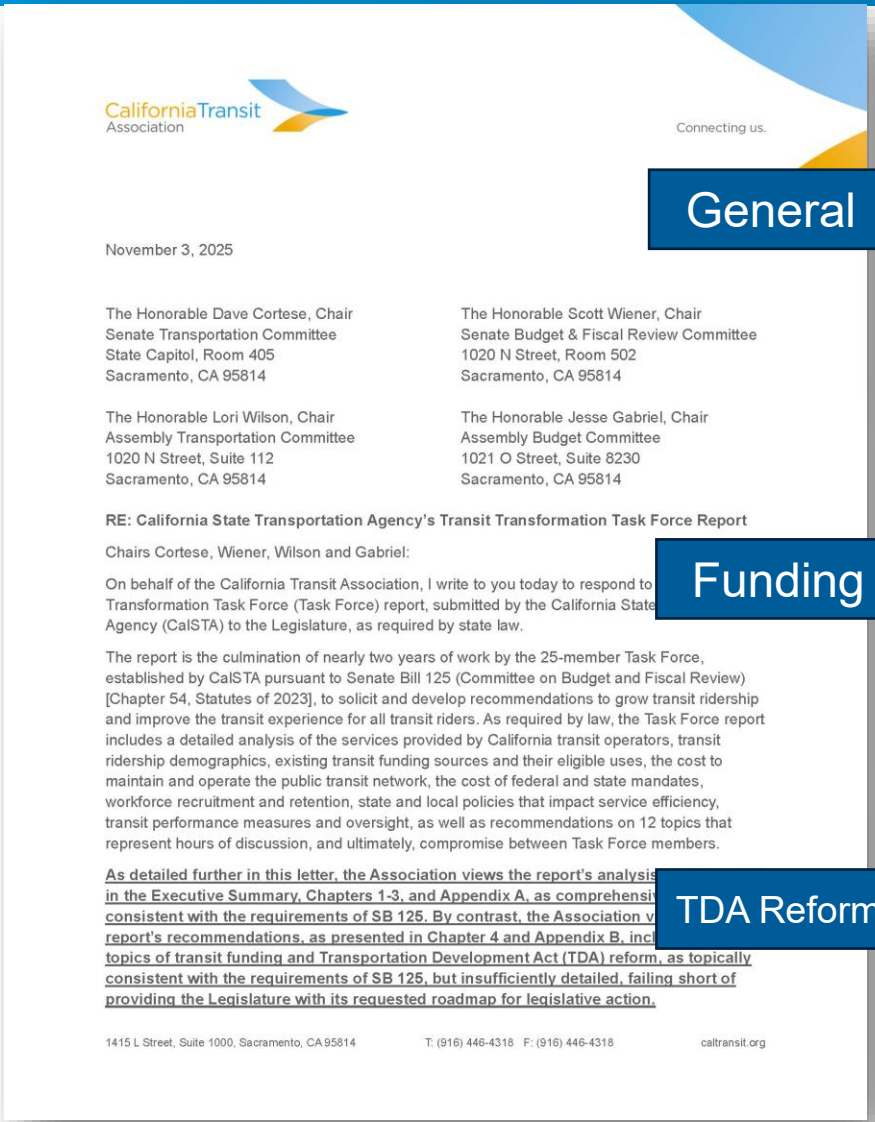
- **Funding:** Report focuses only reprogramming and refocusing existing revenues; supporting local communities in raising revenues; and generating revenues through value-capture

  Discussion on new funding relegated to background

- **Performance Metrics:** Report focuses only on removing penalties, establish new working group to draft and finalize metrics and performance measures

  Discussion on specific performance metrics punted to future

Association's Response



CaliforniaTransit Association

Connecting us.

November 3, 2025

The Honorable Dave Cortese, Chair
Senate Transportation Committee
State Capitol, Room 405
Sacramento, CA 95814

The Honorable Scott Wiener, Chair
Senate Budget & Fiscal Review Committee
1020 N Street, Room 502
Sacramento, CA 95814

The Honorable Lori Wilson, Chair
Assembly Transportation Committee
1020 N Street, Suite 112
Sacramento, CA 95814

The Honorable Jesse Gabriel, Chair
Assembly Budget Committee
1021 O Street, Suite 8230
Sacramento, CA 95814

RE: California State Transportation Agency's Transit Transformation Task Force Report

Chairs Cortese, Wiener, Wilson and Gabriel:

On behalf of the California Transit Association, I write to you today to respond to
Transformation Task Force (Task Force) report, submitted by the California State
Agency (CalSTA) to the Legislature, as required by state law.

The report is the culmination of nearly two years of work by the 25-member Task Force, established by CalSTA pursuant to Senate Bill 125 (Committee on Budget and Fiscal Review) [Chapter 54, Statutes of 2023], to solicit and develop recommendations to grow transit ridership and improve the transit experience for all transit riders. As required by law, the Task Force report includes a detailed analysis of the services provided by California transit operators, transit ridership demographics, existing transit funding sources and their eligible uses, the cost to maintain and operate the public transit network, the cost of federal and state mandates, workforce recruitment and retention, state and local policies that impact service efficiency, transit performance measures and oversight, as well as recommendations on 12 topics that represent hours of discussion, and ultimately, compromise between Task Force members.

As detailed further in this letter, the Association views the report's analysis
in the Executive Summary, Chapters 1-3, and Appendix A, as comprehensi
consistent with the requirements of SB 125. By contrast, the Association v
report's recommendations, as presented in Chapter 4 and Appendix B, incl
topics of transit funding and Transportation Development Act (TDA) reform, as topically
consistent with the requirements of SB 125, but insufficiently detailed, failing short of
providing the Legislature with its requested roadmap for legislative action.

1415 L Street, Suite 1000, Sacramento, CA 95814 T: (916) 446-4318 F: (916) 446-4318 caltransit.org

General

As detailed further in this letter, the Association views the report's analysis, as presented in the Executive Summary, Chapters 1-3, and Appendix A, as comprehensive and fully consistent with the requirements of SB 125. By contrast, the Association views the report's recommendations, as presented in Chapter 4 and Appendix B, including on the topics of transit funding and Transportation Development Act (TDA) reform, as topically consistent with the requirements of SB 125, but insufficiently detailed, failing short of providing the Legislature with its requested roadmap for legislative action.

Funding

The Association believes strongly, like other Task Force members, that reprogramming existing transportation revenue sources, supporting additional flexibility to achieve self-help, supporting value capture, and encouraging efficiencies will make only minor progress toward transit operators' short-to-long-term funding needs. We believe that the Legislature must continue to work with the Association to establish new state transit funding for transit operators.

TDA Reform

The Association believes strongly, like other Task Force members, that TDA reform, coupled with new funding, is essential to the long-term stability of public transit. We believe that the Legislature must continue to work with the Association to develop alternative performance measure to the FRR and operating cost per hour requirements in TDA.

Contact Us

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California Transit Association

Update on Transit Transformation Task Force

Prepared for Board of Directors, San Diego Metropolitan Transit System
February 12, 2026

Metropolitan Transit System

Agenda Item No. 16

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM
BOARD OF DIRECTORS

February 12, 2026

SUBJECT:

San Diego Transit Corporation (SDTC) Pension Investment Status (Erik Williams, with RVK Inc., and Mike Thompson)

INFORMATIONAL ONLY

Budget Impact

None at this time.

DISCUSSION:

San Diego Metropolitan Transit System (MTS) was created by state statute in 1975. Over the following two decades, MTS assumed responsibility for all public transit services within our jurisdictional area. This was achieved by MTS bringing three distinct entities under the MTS umbrella: MTS (administration employees such as Human Resources (HR), Finance, Planning, Marketing, Legal, Internal Audit, Information Technology (IT), Security, Capital Projects, and the Executive Office), San Diego Trolley, Inc. (SDTI) (employees operating and maintaining the Trolley System), and SDTC (employees operating and maintaining the bus system). Members of the MTS Board also serve as members of the governing boards for SDTI and SDTC. MTS Board meetings are considered consolidated meetings of all three entities.

MTS and SDTI employees participate in the statewide California Public Employee Retirement System (CalPERS). However, legacy SDTC employees participate in a private retirement plan that was created before the City of San Diego transferred the SDTC entity to MTS.

Today's presentation will relate to the private SDTC Employee Retirement Plan (Plan) that MTS is responsible for. The Plan has a pool of investments to fund the current and future pension benefit of the Plan members. In 2012, following negotiations during the collective bargaining process, the Plan was closed to new represented members.

The Plan's investment advisor, Jeremy Miller from RVK, will provide the Board of Directors with an update as to the performance of the Plan as well as general capital market performance. RVK's pension investment performance analysis (Attachment A) for the Plan as of June 30, 2025, includes assets with a market value of $208.4 million. During fiscal year 2025, the Plan's assets increased by approximately $9.3 million, primarily due to positive market investment performance partially offset by benefit payments to retirees.

The Plan's nine products achieved a combined investment return of 10.2% for the year. The Plan's returns over the past five and ten years were 6.7% and 5.4% respectively. Since inception (10/1/1982), the Plan's investments have returned 8.5%. The current actuarial target for the Plan is 6.0%.

/s/ Sharon Cooney
Sharon Cooney
Chief Executive Officer

Key Staff Contact: Julia Tuer, 619.557.4515, Julia.Tuer@sdmts.com

Attachment: A. RVK Pension Investment Performance Analysis

RVK

Monthly Performance Report

San Diego Transit Corporation Employees Retirement Plan

June 30, 2025

PORTLAND BOISE CHICAGO NEW YORK

Capital Markets Review

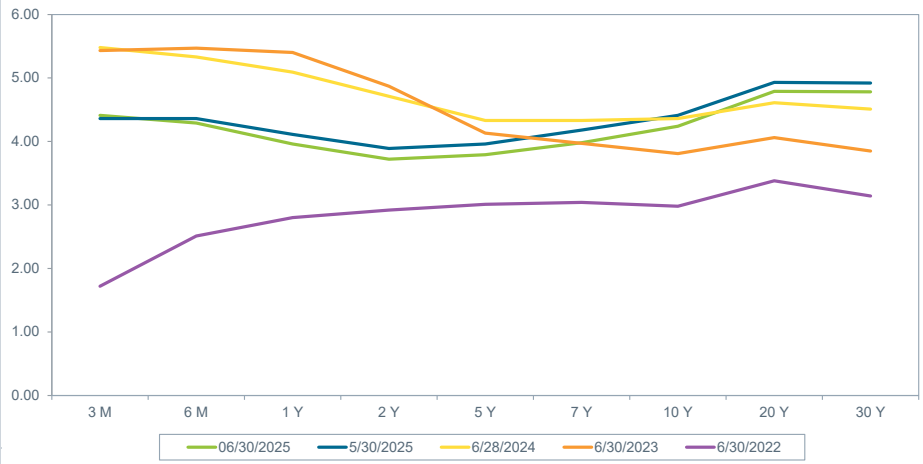
As of June 30, 2025

General Market Commentary

- Global equity markets experienced material gains in June, continuing to trade higher upon news of easing trade tensions. Both domestically and abroad, growth stocks outperformed their value counterparts, as technology names led the way due to increased artificial intelligence (AI) optimism.
- At the June 2025 Federal Open Market Committee (FOMC) meeting, the Fed left interest rates unchanged for a fourth consecutive meeting. However, rates decreased across the yield curve during the month, pushing bond prices up due to increased expectations for rate cuts to occur during 2025.
- Inflation ticked up slightly in May, resulting in a 2.4% year-over-year increase, as measured by the Consumer Price Index (CPI), although the impact of tariffs on prices has been relatively muted to this point.
- Equity markets posted positive returns in June as the S&P 500 (Cap Wtd) Index returned 5.09% and the MSCI EAFE (Net) Index returned 2.20%. Emerging markets returned 6.01%, as measured by the MSCI EM (Net) Index.
- The Bloomberg US Aggregate Bond Index returned 1.54% in June, outperforming the 0.95% return by the Bloomberg US Treasury Intermediate Term Index. International fixed income markets returned 2.29%, as measured by the FTSE Non-US World Gov't Bond Index.
- Public real estate returned -0.54% in June and 8.63% over the trailing five-year period, as measured by the FTSE NAREIT Eq REITs Index (TR).
- The Cambridge US Private Equity Index returned 7.89% for the trailing one-year period and 17.94% for the trailing five-year period ending March 2025.
- Absolute return strategies returned 1.70% for the month and 7.15% over the trailing one-year period, as measured by the HFRI FOF Comp Index.
- The price of crude oil increased by 7.11% during the month but has decreased by 20.15% YoY.

Economic Indicators	Jun-25		May-25	Jun-24	10 Yr	20 Yr
Federal Funds Rate (%)	4.33	—	4.33	5.33	1.97	1.72
Breakeven Inflation - 5 Year (%)	2.31	▼	2.39	2.24	2.00	1.92
Breakeven Inflation - 10 Year (%)	2.28	▼	2.33	2.27	2.02	2.08
Breakeven Inflation - 30 Year (%)	2.26	▼	2.30	2.29	2.05	2.21
Bloomberg US Agg Bond Index - Yield (%)	4.51	▼	4.71	5.00	3.04	3.28
Bloomberg US Agg Bond Index - OAS (%)	0.32	▼	0.34	0.39	0.46	0.59
Bloomberg US Agg Credit Index - OAS (%)	0.79	▼	0.83	0.88	1.13	1.38
Bloomberg US Corp: HY Index - OAS (%)	2.90	▼	3.14	3.09	4.10	4.90
Capacity Utilization (%)	77.64	▲	77.48	78.76	77.38	77.09
Unemployment Rate (%)	4.10	▼	4.20	4.10	4.60	5.77
PMI - Manufacturing (%)	49.00	▲	48.50	48.50	52.96	52.75
Baltic Dry Index - Shipping	1,489	▲	1,418	2,050	1,466	2,156
Consumer Conf (Conf Board)	93.00	▼	98.40	100.40	110.21	92.69
CPI YoY (Headline) (%)	2.70	▲	2.40	3.00	3.05	2.60
CPI YoY (Core) (%)	2.90	▲	2.80	3.30	3.05	2.48
PPI YoY (%)	2.30	▼	2.70	2.60	2.92	N/A
M2 YoY (%)	N/A	N/A	4.50	1.00	6.52	6.39
US Dollar Total Weighted Index	119.83	▼	122.11	124.52	116.14	104.92
WTI Crude Oil per Barrel ($)	65	▲	61	82	63	72
Gold Spot per Oz ($)	3,303	▲	3,289	2,337	1,691	1,400

Treasury Yield Curve (%)



Treasury Yield Curve (%)	Jun-25	May-25	Jun-24	Jun-23	Jun-22
3 Month	4.41	4.36	5.48	5.43	1.72
6 Month	4.29	4.36	5.33	5.47	2.51
1 Year	3.96	4.11	5.09	5.40	2.80
2 Year	3.72	3.89	4.71	4.87	2.92
5 Year	3.79	3.96	4.33	4.13	3.01
7 Year	3.98	4.18	4.33	3.97	3.04
10 Year	4.24	4.41	4.36	3.81	2.98
20 Year	4.79	4.93	4.61	4.06	3.38
30 Year	4.78	4.92	4.51	3.85	3.14

Market Performance (%)	MTD	QTD	CYTD	1 Yr	3 Yr	5 Yr	7 Yr	10 Yr
S&P 500 (Cap Wtd)	5.09	10.94	6.20	15.16	19.71	16.64	14.39	13.65
Russell 2000	5.44	8.50	-1.79	7.68	10.00	10.04	5.52	7.12
MSCI EAFE (Net)	2.20	11.78	19.45	17.73	15.97	11.16	7.21	6.51
MSCI EAFE SC (Net)	4.35	16.59	20.89	22.46	13.30	9.28	5.01	6.51
MSCI EM (Net)	6.01	11.99	15.27	15.29	9.70	6.81	4.48	4.81
Bloomberg US Agg Bond	1.54	1.21	4.02	6.08	2.55	-0.73	1.77	1.76
ICE BofA 3 Mo US T-Bill	0.33	1.04	2.07	4.68	4.56	2.76	2.54	1.97
NCREIF ODCE (Gross)	1.03	1.03	2.10	3.54	-5.43	3.43	3.67	5.35
FTSE NAREIT Eq REITs Index (TR)	-0.54	-1.16	-0.25	8.60	5.35	8.63	5.59	6.32
HFRI FOF Comp Index	1.70	3.33	2.93	7.15	6.50	6.19	4.62	3.81
Bloomberg Cmdty Index (TR)	2.41	-3.08	5.53	5.77	0.13	12.68	4.92	1.99

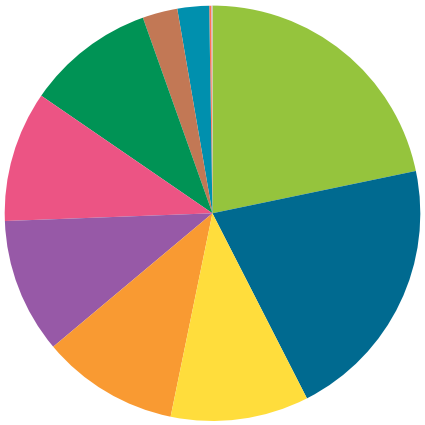
NCREIF performance is reported quarterly; MTD and QTD returns are shown as "N/A" on interim-quarter months and until available. Data shown is as of most recent quarter-end. Treasury data courtesy of the US Department of the Treasury. Economic data courtesy of Bloomberg Professional Service. The previous month's CPI YoY is used as a proxy for the current YoY return until it becomes available.

San Diego Transit Corporation Employees Retirement Plan
AA by Manager, AA vs. Target, and Schedule of Investable Assets

As of June 30, 2025

Asset Allocation by Manager

June 30, 2025 : $208,409,697

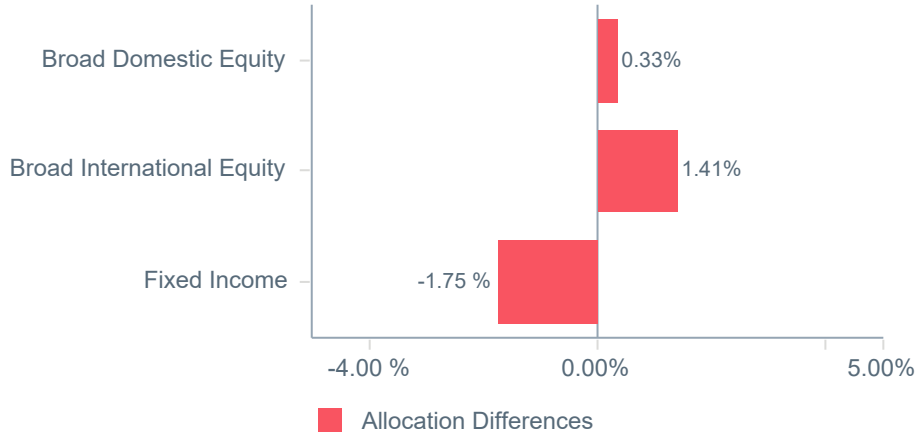


	Market Value ($)	Allocation (%)
Vanguard Trs MM;Inv (VUSXX)	45,285,532	21.73
Vanguard Lg-Tm Bd;Inst (VBLLX)	43,272,688	20.76
PIMCO:RAE GlxUS;Inst (PZRIX)	22,385,032	10.74
MFS International Growth 2 (CIT)	22,242,057	10.67
Vanguard Tot Bd;Inst (VBTIX)	21,891,923	10.50
BlackRock MSCI US Minimum Volatility (USMV)	21,208,330	10.18
Westwood Qual ACp;Ultra (WQAUX)	20,793,198	9.98
BNYM Newton PE NSL US SM MID Cap Grth Eq (CF)	5,664,796	2.72
Fidelity US Sustain Idx (FITLX)	5,134,098	2.46
Disbursement Account	324,731	0.16
Contribution Account	207,312	0.10

Asset Allocation vs. Target Allocation

	Market Value ($)	Allocation (%)	Target (%)
Broad Domestic Equity	52,800,422	25.33	25.00
Broad International Equity	44,627,089	21.41	20.00
Fixed Income	110,982,186	53.25	55.00
Total Fund	208,409,697	100.00	100.00

Asset Allocation vs. Target Allocation Differences



Schedule of Investable Assets

Periods Ending	Beginning Market Value ($)	Net Cash Flow ($)	Gain/Loss ($)	Ending Market Value ($)	% Return
FYTD	**193,671,130**	**-4,770,405**	**19,508,972**	**208,409,697**	**10.17**

Performance shown is gross of fees. Market values and performance are preliminary and subject to change. Allocations shown may not sum up to 100% exactly due to rounding. Fiscal year ends 06/30. During 06/2025, Allspring Systematic Edge US Low Volatility (CF) was fully liquidated, with proceeds being used to fund BlackRock MSCI US Minimum Volatility (USMV).

San Diego Transit Corporation Employees Retirement Plan
Asset Allocation & Performance

As of June 30, 2025

	Allocation		Performance (%)												
	Market Value ($)	%	MTD	QTD	CYTD	FYTD	1 Year	5 Years	10 Years	2024	2023	2022	2021	Since Incep.	Inception Date
San Diego Transit Total Fund	**208,409,697**	**100.00**	**2.15**	**3.94**	**6.82**	**10.17**	**10.17**	**6.69**	**5.42**	**6.58**	**10.12**	**-10.44**	**8.36**	**8.46**	**10/01/1982**
Policy Index			2.79	5.77	7.24	10.79	10.79	6.85	5.98	7.94	14.43	-15.80	8.87	8.74	
Difference			-0.65	-1.83	-0.41	-0.62	-0.62	-0.17	-0.56	-1.36	-4.31	5.36	-0.51	-0.28	
Domestic Equity	**52,800,422**	**25.33**	**2.80**	**5.81**	**6.44**	**13.24**	**13.24**	**11.84**	**9.40**	**13.17**	**9.72**	**-7.18**	**16.35**	**8.30**	**03/01/2005**
Russell 3000 Index			5.08	10.99	5.75	15.30	15.30	15.96	12.96	23.81	25.96	-19.21	25.66	10.38	
Difference			-2.28	-5.18	0.69	-2.06	-2.06	-4.13	-3.56	-10.63	-16.24	12.03	-9.31	-2.08	
International Equity	**44,627,089**	**21.41**	**2.89**	**10.50**	**17.03**	**18.93**	**18.93**	**12.80**	**8.45**	**7.06**	**18.03**	**-11.49**	**12.03**	**5.64**	**03/01/2005**
MSCI ACW Ex US Index (USD) (Net)			3.39	12.03	17.90	17.72	17.72	10.13	6.12	5.53	15.62	-16.00	7.82	5.58	
Difference			-0.50	-1.53	-0.87	1.21	1.21	2.67	2.33	1.52	2.42	4.51	4.21	0.06	
Fixed Income	**110,982,186**	**53.25**	**1.54**	**0.65**	**3.31**	**5.43**	**5.43**	**-0.61**	**1.56**	**2.37**	**5.33**	**-13.01**	**-1.42**	**3.75**	**03/01/2005**
Bloomberg US Agg Bond Index			1.54	1.21	4.02	6.08	6.08	-0.73	1.76	1.25	5.53	-13.01	-1.55	3.16	
Difference			0.01	-0.55	-0.71	-0.64	-0.64	0.11	-0.20	1.12	-0.20	0.00	0.13	0.59	

Performance shown is gross of fees. Market values and performance are preliminary and subject to change. Fiscal year ends 06/30. Inception dates shown represent the first full month following initial funding.

San Diego Transit Corporation Employees Retirement Plan
Comparative Performance

As of June 30, 2025

	MTD	QTD	CYTD	FYTD	1 Year	5 Years	10 Years	2024	2023	2022	2021	Since Incep.	Inception Date
San Diego Transit Total Fund	**2.15**	**3.94**	**6.82**	**10.17**	**10.17**	**6.69**	**5.42**	**6.58**	**10.12**	**-10.44**	**8.36**	**8.46**	**10/01/1982**
Policy Index	2.79	5.77	7.24	10.79	10.79	6.85	5.98	7.94	14.43	-15.80	8.87	8.74	
Difference	-0.65	-1.83	-0.41	-0.62	-0.62	-0.17	-0.56	-1.36	-4.31	5.36	-0.51	-0.28	
Westwood Qual ACp;Ultra (WQAUX) (1)	**4.03**	**5.85**	**6.91**	**12.97**	**12.97**	**14.22**	**9.51**	**10.96**	**10.04**	**-4.89**	**23.36**	**10.64**	**07/01/1986**
Russell 3000 Val Index (2)	3.49	3.84	5.55	13.30	13.30	13.87	9.04	13.98	11.66	-7.98	25.37	9.85	
Difference	0.54	2.01	1.36	-0.33	-0.33	0.34	0.47	-3.02	-1.62	3.09	-2.01	0.79	
BlackRock MSCI US Minimum Volatility (USMV)	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**07/01/2025**
MSCI US Min Vol Index (USD) (Net)	0.66	0.50	6.25	13.27	13.27	10.42	10.31	15.38	9.14	-9.67	20.43	N/A	
Difference	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Fidelity US Sustain Idx (FITLX)	**4.63**	**13.11**	**5.72**	**12.85**	**12.85**	**N/A**	**N/A**	**23.73**	**29.18**	**N/A**	**N/A**	**15.26**	**05/01/2022**
MSCI US ESG Leaders Index (USD) (Gross)	4.65	13.36	5.94	12.75	12.75	16.56	13.66	23.59	29.13	-20.21	31.73	15.28	
Difference	-0.02	-0.25	-0.22	0.10	0.10	N/A	N/A	0.14	0.04	N/A	N/A	-0.02	
BNYM Newton PE NSL US SM MID Cap Grth Eq (CF)	**7.17**	**17.06**	**6.34**	**18.50**	**18.50**	**3.92**	**10.49**	**11.08**	**15.97**	**-32.84**	**-3.24**	**14.58**	**04/01/2009**
Russell 2500 Grth Index	4.81	11.31	-0.71	8.81	8.81	7.50	8.53	13.90	18.93	-26.21	5.04	13.81	
Difference	2.37	5.76	7.05	9.69	9.69	-3.57	1.97	-2.82	-2.96	-6.63	-8.29	0.76	
PIMCO:RAE GlxUS;Inst (PZRIX)	**3.17**	**10.02**	**18.15**	**18.19**	**18.19**	**13.96**	**6.86**	**3.89**	**19.97**	**-8.72**	**12.77**	**7.07**	**03/01/2012**
FTSE RAFI Dvld Ex US 1000 Index	2.83	12.15	22.56	22.61	22.61	15.56	7.85	5.31	19.85	-8.43	16.13	7.88	
Difference	0.34	-2.13	-4.41	-4.42	-4.42	-1.61	-0.98	-1.42	0.11	-0.28	-3.36	-0.82	
MSCI ACW Ex US Val Index (USD) (Net)	2.80	10.42	19.90	21.42	21.42	13.15	5.70	6.04	17.30	-8.59	10.46	5.42	
Difference	0.37	-0.40	-1.74	-3.23	-3.23	0.81	1.16	-2.15	2.66	-0.13	2.32	1.65	
MFS International Growth 2 (CIT)	**2.68**	**11.02**	**16.01**	**19.75**	**19.75**	**11.46**	**9.89**	**10.33**	**15.85**	**-14.09**	**10.61**	**9.03**	**03/01/2013**
MSCI ACW Ex US Grth Index (USD) (Net)	3.97	13.67	15.90	14.15	14.15	7.10	6.35	5.07	14.03	-23.05	5.09	6.26	
Difference	-1.29	-2.64	0.11	5.60	5.60	4.35	3.54	5.26	1.82	8.96	5.52	2.76	
Vanguard Tot Bd;Inst (VBTIX)	**1.58**	**1.30**	**4.11**	**6.09**	**6.09**	**-0.71**	**N/A**	**1.29**	**5.76**	**-13.07**	**-1.77**	**1.33**	**07/01/2016**
Vanguard Spl B US Agg Flt Adj Index	1.51	1.22	4.00	6.07	6.07	-0.71	1.80	1.33	5.60	-13.07	-1.58	1.33	
Difference	0.07	0.08	0.11	0.02	0.02	0.00	N/A	-0.03	0.16	0.00	-0.20	0.00	

Performance shown is gross of fees, preliminary and subject to change. Manager inception dates shown represent the first full month following initial funding. Fiscal year ends 06/30. During 06/2025, Allspring Systematic Edge US Low Volatility (CF) was fully liquidated, with proceeds being used to fund BlackRock MSCI US Minimum Volatility (USMV).

San Diego Transit Corporation Employees Retirement Plan
Comparative Performance

As of June 30, 2025

	MTD	QTD	CYTD	FYTD	1 Year	5 Years	10 Years	2024	2023	2022	2021	Since Incep.	Inception Date
Vanguard Trs MM;Inv (VUSXX)	**0.35**	**1.07**	**2.16**	**4.76**	**4.76**	**N/A**	**N/A**	**5.32**	**N/A**	**N/A**	**N/A**	**5.00**	**01/01/2024**
ICE BofA 3 Mo US T-Bill Index	0.33	1.04	2.07	4.68	4.68	2.76	1.97	5.25	5.02	1.46	0.05	4.90	
Difference	0.02	0.03	0.08	0.08	0.08	N/A	N/A	0.06	N/A	N/A	N/A	0.10	
Vanguard Lg-Tm Bd;Inst (VBLLX)	**2.83**	**-0.12**	**3.54**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**0.48**	**11/01/2024**
Vanguard Spl B US Gov't/Crdt Flt Adj: Long Index	2.76	-0.18	3.38	3.32	3.32	-4.93	1.79	-4.15	7.13	-27.09	-2.52	0.41	
Difference	0.07	0.06	0.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.08	

Performance shown is gross of fees, preliminary and subject to change. Manager inception dates shown represent the first full month following initial funding. Fiscal year ends 06/30. During 06/2025, Allspring Systematic Edge US Low Volatility (CF) was fully liquidated, with proceeds being used to fund BlackRock MSCI US Minimum Volatility (USMV).

San Diego Transit Corporation Employees Retirement Plan
Fee Schedule

As of June 30, 2025

	Fee Schedule	Market Value As of 06/30/2025 ($)	Estimated Annual Fee ($)	Estimated Annual Fee (%)
Westwood Qual ACp;Ultra (WQAUX)	0.45 % of Assets	20,793,198	93,569	0.45
BlackRock MSCI US Minimum Volatility (USMV)	0.15 % of Assets	21,208,330	31,812	0.15
Fidelity US Sustain Idx (FITLX)	0.11 % of Assets	5,134,098	5,648	0.11
BNYM Newton PE NSL US SM MID Cap Grth Eq (CF)	0.90 % of First $25 M 0.75 % Thereafter	5,664,796	50,983	0.90
PIMCO:RAE GlxUS;Inst (PZRIX)	0.55 % of Assets	22,385,032	123,118	0.55
MFS International Growth 2 (CIT)	0.75 % of Assets	22,242,057	166,815	0.75
Vanguard Tot Bd;Inst (VBTIX)	0.03 % of Assets	21,891,923	5,473	0.03
Vanguard Trs MM;Inv (VUSXX)	0.07 % of Assets	45,285,532	31,700	0.07
Vanguard Lg-Tm Bd;Inst (VBLLX)	0.04 % of Assets	43,272,688	17,309	0.04
Contribution Account	0.18 % of Assets	207,312	373	0.18
Disbursement Account	0.18 % of Assets	324,731	585	0.18
San Diego Transit Total Fund		208,409,697	527,385	0.25

Mutual fund fees are sourced from Morningstar and/or the investment manager. The expense ratio for Vanguard Tot Bd;Inst (VBTIX) is 0.025%.

San Diego Transit Corporation Employees Retirement Plan **As of June 30, 2025**

Addendum

Performance Related and Miscellaneous Comments

- Performance is gross of fees.
- Performance is annualized for periods greater than one year.
- Manager inception dates shown represent the first full month following initial funding.
- Fiscal year ends 06/30.
- The Alternative Investment performance shown is a blend of gross and net of fees, due to gross of fees performance for PAAMCO Pacific Hedged Strategy (CF) being unavailable.
- PIMCO:RAE GlxUS;Inst (PZRIX) performance prior to 06/2015 is represented by Research Affiliates Global AC Ex-US, LP (CF).
- Effective 01/02/2019, The Boston Company was rebranded under the Mellon Corporation.
- Vanguard Infl-Prot;Adm (VAIPX) performance prior to 05/2019 is represented by Vanguard Infl-Prot;Inst (VIPIX). Prior to 06/2012, performance is represented by Vanguard Infl-Prot;Adm (VAIPX).
- During 02/2023, PAAMCO Pacific Hedged Strategy (CF) was fully liquidated.
- During 12/2023, PIMCO:All Ast Ath;Inst (PAUIX) was fully liquidated, with proceeds being used to fund Vanguard Trs MM;Inv (VUSXX).
- During 05/2024, GMO:Bchmk-Fr All;III (GBMFX) was fully liquidated.
- During 09/2024, Vanguard Lg-Tm Bd;Inst (VBLLX) was funded with proceeds from Vanguard:Tot Bd;Inst (VBTIX) and Vanguard Trs MM;Inv (VUSXX).
- During 03/2025, Vanguard Infl-Prot;Adm (VAIPX) was fully liquidated, with proceeds moved to Vanguard Trs MM;Inv (VUSXX).
- During 06/2025, Allspring Systematic Edge US Low Volatility (CF) was fully liquidated, with proceeds being used to fund BlackRock MSCI US Minimum Volatility (USMV).

Custom Hybrid Comments

- The Policy Index is calculated monthly and currently consists of 25% Russell 3000 Index, 20% MSCI ACW Ex US Index (USD) (Net) and 55% Bloomberg US Agg Bond Index. From 12/2023 through 04/2024, it consisted of 25% Russell 3000 Index, 20% MSCI ACW Ex US Index (USD) (Net), 45% Bloomberg US Agg Bond Index and 10% of the 60% MSCI ACW (Net)/40% Bbrg Gbl Agg Idx. From 05/2020 through 11/2023, it consisted of 25% Russell 3000 Index, 20% MSCI ACW Ex US Index (USD) (Net), 35% Bloomberg US Agg Bond Index and 20% of the 60% MSCI ACW (Net)/40% Bbrg Gbl Agg Idx. Prior to 05/2020, it consisted of 25% Russell 3000 Index, 20% MSCI ACW Ex US Index (USD) (Net), 32.50% Bloomberg US Agg Bond Index and 22.50% of the 60% MSCI ACW (Net)/40% Bbrg Gbl Agg Idx.
- Performance shown for Westwood Qual ACp;Ultra (WQAUX) **(1)** represents Westwood Qual ACp;Ultra (WQAUX) from 10/2021 through present; Westwood All Cap Val (CF) from 08/2011 through 09/2021; beginning of month market value weighted average of Westwood LargeCap Value (CF) and Westwood SMidCap Equity (CF) from 07/2008 through 07/2011; Westwood LargeCap Value (CF) from 10/2004 through 06/2008; beginning of month market value weighted average of Westwood LargeCap Value (CF) and Westwood SmallCap Growth (CF) from 01/1997 through 09/2004; and Westwood LargeCap Value (CF) from 07/1986 through 12/1996.
- Performance shown for Russell 3000 Val Index **(2)** represents Russell 3000 Val Index from 08/2011 through present; beginning of month market value weighted average of Westwood LargeCap Value (CF) and Westwood SMidCap Equity (CF) applied to the Russell 1000 Val Index and Russell 2500 Val Index, respectively, from 07/2008 through 07/2011; Russell 1000 Val Index from 10/2004 through 06/2008; beginning of month market value weighted average of Westwood LargeCap Value (CF) and Westwood SmallCap Growth (CF) applied to the Russell 1000 Val Index and Russell 2000 Grth Index, respectively, from 01/1997 through 09/2004; and Russell 1000 Val Index from 01/1986 through 12/1996.
- The Vanguard Spl B US Gov't/Crdt Flt Adj: Long Index consists of Bloomberg US Gov't Crdt Lng Trm Bond Index through 12/31/09; and Bloomberg US Gov't/Crdt Flt Adj Lng Index thereafter.

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Item No. 16, 02/12/2026

RVK

San Diego Transit Corporation

Investment Manager Fiscal Year 2025 Update

February 2026

PORTLAND BOISE CHICAGO NEW YORK

Investment Structure as of 6/30/2025

Asset Allocation vs. Target Allocation			
	Market Value ($)	Allocation (%)	Target (%)
Broad Domestic Equity	52,800,422	25.3	25
Broad International Equity	44,627,089	21.4	20
Fixed Income	110,982,186	53.3	55
Total Fund	**208,409,697**	**100**	**100**

- Objective: to maximize asset returns, while also assuming a prudent level of risk that is appropriately aligned with the liability profile
  - Liability Structure: mature Plan, closed in 2011 (non-management participants)
  - Asset Structure: risk profile has been reduced since the Plan closed
    - 6/30/2011: 3-Year Asset Risk = 16% Volatility
    - 6/30/2025: 3-Year Asset Risk = 10% Volatility (significant reduction in risk)
- The liability structure (mature and closed plan, with net outflows) would suggest an asset structure that is more conservative and liquid
  - Assets exist to satisfy Liabilities – thus capital preservation allocations become increasingly important for a mature plan, leading to less emphasis on equity allocations
  - Investment manager fees have also been meaningfully reduced through passive investing

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Investment Details as of 6/30/2025

Asset Allocation by Manager					
Fund	**Asset Class**	**Strategy**	**Market Value ($)**	**Allocation (%)**	**Target (%)**
Westwood All Cap Value	US Equity	Active	20,793,198	10.0	
Fidelity US Sustainability Index	US Equity	Passive	5,134,098	2.5	
BlackRock MSCI Minimum Volatility	US Equity	Active	21,208,330	10.2	
BNYM Newton US SMID Growth	US Equity	Active	5,664,796	2.7	
Total US Equity			**52,800,422**	**25.3**	**25**
PIMCO RAE	Int'l Equity	Active	22,385,032	10.7	
MFS Int'l Growth	Int'l Equity	Active	22,242,057	10.7	
Total International Equity			**44,627,089**	**21.4**	**20**
Vanguard Total Bond	Fixed Income	Passive	21,891,923	10.5	
Vanguard Long Term Bond	Fixed Income	Passive	43,272,688	20.8	
Vanguard Treasury Money Market	Fixed Income	Passive*	45,285,532	21.7	
Total Fixed Income[1]			**110,982,186**	**53.3**	**55**
TOTAL FUND			**208,409,697**	**100**	**100**

[1] Includes residual cash in the Contribution & Disbursement Accounts

*Vanguard Treasury Money Market is considered a quasi-passive investment, with the associated lower fee

- Assets are diversified across 9 different product strategies
  - In 2024, the Plan targets were updated to increase allocations to bonds given the improved incomes and lower fees – by removing alternative strategy allocations
- Allocation sizes for active managers are controlled, reducing concentration risks
- Product strategy diversification reduces overall portfolio risks as well

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FY 2025 Performance

- U.S. and International equities saw robust performance – led by strong economic growth, monetary easing, and significant gains in the technology sector.
- Bonds also saw strong returns as rates came down across yield curve

Schedule of Investable Assets				
Period Ending	Beginning Market Value ($)	Gain/Loss ($)	Ending Market Value ($)	Return (%)
FYTD	193,671,130	19,508,972	208,409,697	10.2

- Plan returned **10.2%** over the 2025 fiscal year
- Assumed Actuarial annual rate of return is 6.0%
- Outperformed the Actuarial rate by 4.2% in fiscal year 2025

RVK

Long Term Performance Details

As of 6/30/2025

	Allocation		Performance (%)				
	Market Value ($)	%	1 Year	5 Years	10 Years	43 Year	Inception Date
San Diego Transit Total Fund	208,409,697	100%	10.2	6.7	5.4	8.5	10/01/1982
Domestic Equity	52,800,422	25.3%	13.2	11.8	9.4		
International Equity	44,627,089	21.4%	18.9	12.8	8.5		
Fixed Income	110,982,186	53.3%	5.4	-0.6	1.6		

- Year-to-year returns will fluctuate significantly, with some years above and other years below the Actuarial rate of return, but ***over both the short-run and long-run the SDTC portfolio has outperformed the 6.0% Actuarial return hurdle***

- Fiscal Year 2026 return for the Plan is 4.6% through 12/31/2025

RVK

Investment Structure Summary

- Plan is well diversified across a variety of strategies and broad asset classes
- Asset Allocation is more conservative by design, given that the Plan is closed and mature
  - Align the asset allocation with the liability profile
  - Higher emphasis on capital preservation, balancing the need for capital appreciation
- Investment manager fees are lowered with the use of passive investments
- Portfolio is well positioned for the future, given the liability profile of the Plan

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Metropolitan Transit System

Agenda Item No. 17

MEETING OF THE SAN DIEGO METROPOLITAN TRANSIT SYSTEM
BOARD OF DIRECTORS

February 12, 2026

SUBJECT:

San Diego Transit Corporation (SDTC) Employee Retirement Plan's Actuarial Valuation as of July 1, 2025 (Anne Harper and Alice Alsberghe with Cheiron Inc., and Mike Thompson)

RECOMMENDATION:

That the San Diego Metropolitan Transit System (MTS) Board of Directors:

1) Receive the SDTC Employee Retirement Plan's (Plan) Actuarial Valuation as of July 1, 2025 (Attachment A and B);

2) Adopt the staff recommended Unfunded Actuarial Liability (UAL) amortization from the current 12-year remaining term to a recalibrated 20-year amortization; and

3) Adopt the resulting pension contribution amount of $16,470,975 for Fiscal Year (FY) 2027 (Attachment B – Page B-9).

Executive Committee Recommendation

At its February 5, 2026 (Agenda Item (AI) 5), the Executive Committee voted 4 to 0 (Board Members Whitburn, Goble, Dillard, and Fernandez in favor, with Board Members Elo-Rivera, Montgomery Steppe, and Moreno absent) to recommend that the Board of Directors approve staff's recommendation.

Budget Impact

Board adoption would result in the annual pension contribution of $16,470,975 for FY 2027, consisting of both employer and employee contributions. This contribution total is approximately $5.4 million lower than keeping the existing UAL amortization schedule. MTS's contribution will be partially offset by the "employee share" paid by individual active employees in the Plan.

DISCUSSION:

The Actuarial Valuation of the Plan as of July 1, 2025, was completed in December 2025 by Cheiron, Inc. The report, using the current amortization schedule of 12-years, is included as Attachment A. The purpose of the actuarial valuation is to measure, describe, and identify the following as of the valuation date:

- The financial condition of the Plan,
- Past and expected trends in the financial progress of the Plan, and
- Compute the total annual pension contribution amount.

The Plan's funding policy is to contribute an amount equal to the sum of:

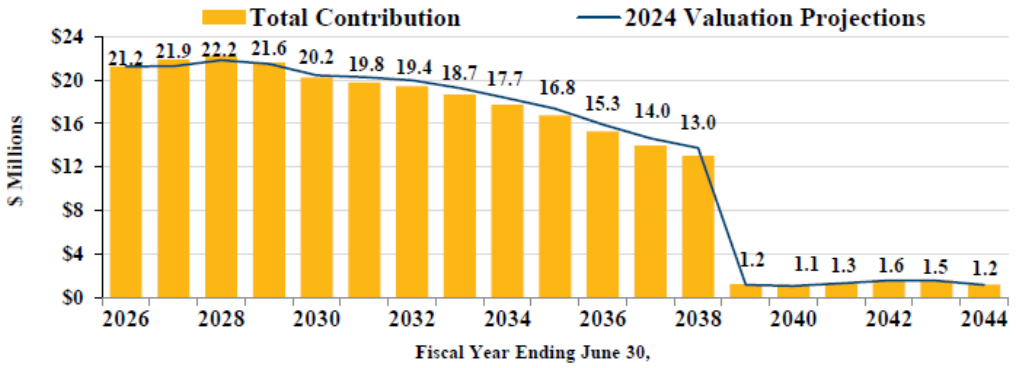
- The normal cost,
- Expected administrative expenses, and
- Amortization of the UAL. Under the current amortization policy, the UAL was amortized over a series of layers with each layer amortized over a closed period no longer than 12 years, in order to achieve full funding by 2037.

This valuation has calculated a total contribution of $21,854,839, an increase of 2.9% from FY 2026, which would be used for the FY 2027 operating budget.

As reflected in the following table, contributions are increasing year over year by approximately $623,374.

Total Contribution Reconciliation	
Fiscal Year 2026	**$ 21,231,465**
Change due to actuarial investment experience	34,835
Change due to liability experience	628,049
Change due to other miscellaneous factors	(39,510)
Fiscal Year 2027	**$ 21,854,839**

Based on the projected rates of return and the closed nature of the Plan, the Plan contributions are projected to continue to stabilize over the next few years, and the UAL will be fully paid off by FY 2038.

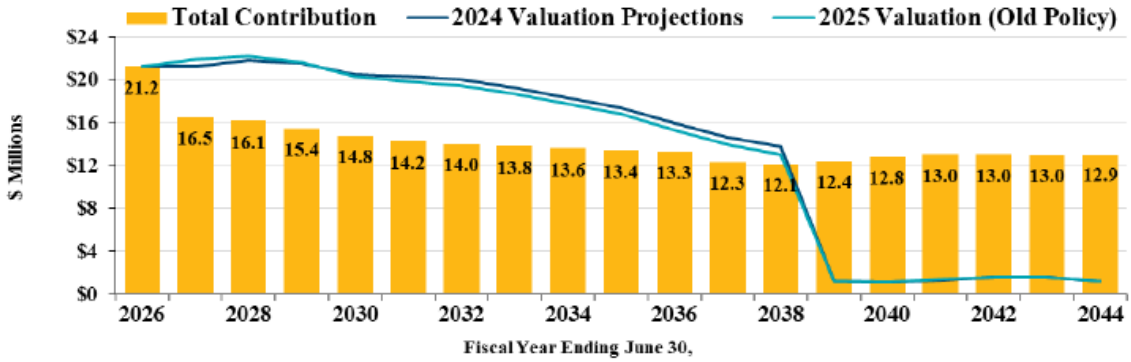


Given the financial position of MTS in the short and longer term, staff worked with the actuaries on solutions that would reduce the annual contribution required by actuarial valuation (Attachment C - Amortization Policy Study). The actuaries proposed various options, including changing the amortization policy to combine all the UAL layers from the July 1, 2024 actuarial valuation into one consolidated layer with a closed 20-year period, versus the 12-year period assumption currently in place. As part of this review process, Cheiron prepared a second Actuarial Valuation Report as of July 1, 2025 using the proposed 20-year amortization policy. That report is in Attachment B, the amortization table change is on page B-34.

This proposed assumption change would reduce the actuarial-required contribution by approximately $5.4 million for FY 2027:

Total Contribution Reconciliation	
Fiscal Year 2026	**$ 21,231,465**
Change due to amortization policy	(5,383,864)
Change due to actuarial investment experience	34,835
Change due to liability experience	628,049
Change due to other miscellaneous factors	(39,510)
Fiscal Year 2027	**$ 16,470,975**

The revised Plan contributions are projected to continue to be over $5 million lower than the original projections for the next seven (7) years but would result in an increase in the contributions for the FY 2039 through 2045. Also, the UAL will no longer be fully paid off by FY 2038, the extended amortization period would now have the UAL fully paid off by FY 2045.



Anne Harper and Alice Alsberghe of Cheiron, Inc. will provide an overview of the report in more detail and be available for any questions.

Therefore, staff recommends that the MTS Board of Directors:

1) Receive the SDTC Plan's Actuarial Valuation as of July 1, 2025 (Attachment A and B);

2) Adopt the staff recommended UAL amortization from the current 12-year remaining term to a recalibrated 20-year amortization; and

3) Adopt the resulting pension contribution amount of $16,470,975 for FY 2027 (Attachment B – Page B-9).

/s/ Sharon Cooney
Sharon Cooney
Chief Executive Officer

Key Staff Contact: Julia Tuer, 619.557.4515, Julia.Tuer@sdmts.com

Attachments: A. Actuarial Valuation Report as of July 1, 2025 (Current Amortization Policy)
B. Actuarial Valuation Report as of July 1, 2025 (Revised Amortization Policy)
C. Amortization Policy Study

CHEIRON Classic Values, Innovative Advice

Retirement Plans of San Diego Transit Corporation

Actuarial Valuation Report as of July 1, 2025 (Current Amortization Policy)

Produced by Cheiron

December 2025

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Via Electronic Mail

December 9, 2025

Mr. Larry Marinesi
San Diego Transit Corporation
1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490

Dear Mr. Marinesi,

At your request, we have conducted an actuarial valuation of the Retirement Plans of San Diego Transit Corporation ("Plan," "SDTC") as of July 1, 2025. This report contains information on the Plan's assets, liabilities, and contribution levels. It also contains an assessment and disclosures of the Plan's risks. In the Foreword, we refer to the general approach employed in the preparation of this report.

The purpose of this report is to present the results of the annual actuarial valuation of the Plans. This report is for the use of the Retirement Board and the San Diego Metropolitan Transit System ("MTS") Board and its auditors in preparing financial reports in accordance with applicable law and accounting requirements.

In preparing our report, we relied on information (some oral and some written) supplied by the plan administrator. This information includes, but is not limited to, the Plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

The assumptions used in calculating the liabilities found in this report reflect the results of an Experience Study approved by the Budget Development Committee in October 2021 and the San Diego Metropolitan Transit System's (MTS) Board of Directors in November 2021.

Future results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the assumptions; changes in assumptions; changes in methods; and, changes in plan provisions or applicable law.

This report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable law and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

This report was prepared exclusively for the Retirement Board and MTS Board for the purposes described herein. Other users of this valuation report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any other user.

Sincerely,
Cheiron

Anne D. Harper, FSA, EA, MAAA
Principal Consulting Actuary

Alice I. Alsberghe, ASA, EA, MAAA
Consulting Actuary

FOREWORD

Cheiron has performed the actuarial valuation of the Retirement Plans of San Diego Transit Corporation as of July 1, 2025. The valuation report is organized as follows:

- In Section I, the **Executive Summary,** we describe the purpose of an actuarial valuation, summarize the key results found in this valuation, and disclose important trends.

- The **Main Body** of the report presents details on the Plan's:

  - Section II – Assessment and Disclosure of Risk
  - Section III – Assets
  - Section IV – Liabilities
  - Section V – Contributions

- In the **Appendices,** we conclude our report with detailed information describing plan membership (Appendix A), actuarial assumptions and methods employed in the valuation (Appendix B), a summary of pertinent plan provisions (Appendix C), and a glossary of key actuarial terms (Appendix D).

Cheiron utilizes ProVal, an actuarial valuation application leased from Winklevoss Technologies (WinTech), to calculate liabilities and project benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this report. The deterministic and stochastic projections shown in this report were developed using R-Scan, our proprietary stochastic projection tool for assessing probabilities of different outcomes. We have relied on Cheiron colleagues who developed the tool, and we have used the tool in accordance with its purpose.

SECTION I – EXECUTIVE SUMMARY

The primary purpose of the actuarial valuation and this report is to measure, describe, and identify the following as of the valuation date:

- The financial condition of the Plan,
- Past and expected trends in the financial progress of the Plan, and
- The total contribution amount (employer and employee) to be made during Fiscal Year 2026-2027.

In the balance of this Executive Summary, we present (A) the basis upon which this year's valuation was completed, (B) the key results of this valuation including a summary of all key financial results, (C) changes in Plan cost, (D) an examination of historical trends, and (E) the future expected financial trends for the Plan.

A. Valuation Basis

This valuation determines total employer and employee contributions for the fiscal year 2026-2027.

The Plan's funding policy is to contribute an amount equal to the sum of:

- The normal cost under the Entry Age Normal Cost Method,
- Expected administrative expenses, and
- Amortization of the Unfunded Actuarial Liability (UAL) based on level dollar payments.

The employee will contribute according to the Plan schedules below. Member contribution rates in the future may change in response to collective bargaining. It will be the responsibility of the employer to contribute the remaining portion of the total contribution determined in this report.

- IBEW members contribute 8% of compensation (since April 2016)

- ATU drivers and clerical members contribute 8% of compensation (since December 2017)

- Non-Contract members hired before January 1, 2013, contribute 8% of compensation (since January 2017)

- PEPRA members, Non-Contract members hired after on or January 1, 2013 are required to contribute half of the normal cost of the PEPRA member benefits, rounded to the nearest 0.25% of pay. The PEPRA member contribution rate, calculated in the July 1, 2025 actuarial valuation and effective during FY 2026-2027, will remain at 9.00% of pay. The development of the PEPRA member contribution rate can be found in Section V in the body of this report.

SECTION I – EXECUTIVE SUMMARY

The SDTC Plans are closed to new entrants, except for Non-Contract members. A closed plan has very different dynamics as active plan membership declines and grows older and a larger portion of the Plan's liability shifts to payees. This dynamic shortens the investment horizon thus mitigating investment risk becomes more important. If the asset mix changes to reflect the expected pattern of benefit payments, it may become more conservative and the expected return on plan assets could change. Thus, continuing to monitor the impact of changes to the Plan's asset allocation on expected future asset returns is important.

The true cost of the Plan is a function of actual Plan experience, not the actuarial assumptions. It is important to set realistic assumptions to mitigate the risk of Plan contribution volatility. In Section II of this report, we provide a detailed assessment and disclosure of the Plan's risks.

This valuation was prepared based on the Plan provisions as summarized in Appendix C. There have been no changes in plan provisions since the prior valuation. The results of this valuation do not include members participating in the defined contribution plans.

B. Key Results of this Valuation

The key results of the July 1, 2025 actuarial valuation are as follows:

- The actuarially determined contribution shown in this report is the total contribution required from both the employer and the employees. The total contribution increased from $21.2 million to $21.9 million, an increase of about $0.6 million from the July 1, 2024 valuation. This increase is primarily due to the recognition of the prior years' net asset losses as well as unfavorable liability experience.

  Based on the July 1, 2024 actuarial valuation, the contribution was expected to increase to approximately $21.3 million. See Table I-2 for a reconciliation of the contribution cost from last year to this year that includes all components of the change.

- During the plan year ending June 30, 2025, the return on Plan assets was 9.9% based on the Market Value of Assets (MVA) compared to the 6.0% assumed rate of return. A return over 6.0% would result in an actuarial gain, and a return lower than 6.0% would result in an actuarial loss. The favorable investment experience resulted in an actuarial gain on the Market Value of Assets of $7.4 million.

- The Actuarial Value of Assets (AVA) recognizes 20% of the difference between the expected and actual return, referred to as "Unexpected Earnings," on the Market Value of Assets (MVA) for each of the prior five years. The return on the AVA was 5.8% for June 30, 2025 which is slightly less than the 6.0% assumed rate of return. The asset experience resulted in an actuarial loss of $0.3 million.

  There are $1.4 million in net deferred asset gains in the July 1, 2025 actuarial valuation compared to $6.0 million in net deferred asset losses in the previous valuation. See Tables III-3 and III-4 for the detailed calculations.

- The Actuarial Liability was more than expected by $4.4 million, primarily due to active member salary increases that were higher than expected by about 3.7%.

- The Plan's funded ratio, the ratio of actuarial (smoothed) assets over the Actuarial Liability, increased from 57.2% last year to 58.6% as of July 1, 2025. The funded ratio based on the Market Value of Assets also increased significantly from 55.5% to 59.1%, because the asset gains for FYE 2025 are recognized immediately in the MVA.

- The Unfunded Actuarial Liability (UAL) is the excess of the Plan's Actuarial Liability over the Actuarial Value of Assets. The Plan's UAL decreased from $148.7 million to $145.6 million as of July 1, 2025.

SECTION I – EXECUTIVE SUMMARY

Below we present Table I-1, which summarizes all the key results of the valuation with respect to membership, assets and liabilities, and contributions. The results are presented and compared for both the current and prior plan year.

Table I-1
Summary of Principal Plan Results

		July 1, 2024		July 1, 2025	% Change
Participant Counts					
Active Participants		289		268	-7.3%
Participants Receiving a Benefit		1,064		1,067	0.3%
Inactive Participants		172		169	-1.7%
Total		1,525		1,504	-1.4%
Projected Plan Member Payroll [1] for Fiscal Year 2025 and 2026	$	22,601,625	$	22,531,987	-0.3%
Assets and Liabilities					
Actuarial Liability (AL)	$	347,621,403	$	352,007,494	1.3%
Actuarial Value of Assets (AVA)		198,907,997		206,451,763	3.8%
Unfunded Actuarial Liability (UAL)	$	148,713,406	$	145,555,731	-2.1%
Market Value of Assets (MVA)	$	192,944,763	$	207,876,069	7.7%
Funded Ratio (AVA)		57.2%		58.6%	1.4%
Funded Ratio (MVA)		55.5%		59.1%	3.6%
Contributions		**FY 2025-2026**		**FY 2026-2027**	
Total Normal Cost [2]	$	3,915,835	$	3,873,399	-1.1%
Total UAL Contribution		17,315,630		17,981,440	3.8%
Total Contribution (middle of year)	$	21,231,465	$	21,854,839	2.9%

[1] *Based on valuation data projected using half-year of salary increases but excludes payroll for members expected to leave employment or retire during the year.*

[2] *Includes assumed administrative expenses as of the beginning of the valuation year of $296,276 and $303,683 for both July 1, 2024 and July 1, 2025, respectively.*

C. Changes in Plan Cost

Table I-2 below summarizes the impact of actuarial experience on Plan cost.

Table I-2
Total Contribution Reconciliation

Fiscal Year 2025-2026, middle of year		**$**	**21,231,465**
Total Change due to actuarial investment experience			34,835
Investment experience from FYE 2025	(172,496)		
Increase from deferred investment losses 2021-2024	207,331		
Change due to liability experience			628,049
Change due to effect of closed plan on benefits earned			(168,857)
Change due to other miscellaneous factors			129,347
Fiscal Year 2026-2027, middle of year		**$**	**21,854,839**

An analysis of the cost **changes from the prior valuation** reveals the following:

- The Actuarial Value of Assets recognizes unexpected gains or losses on the Market Value of Assets over a five-year period. Actuarial gains and losses are based on the assumed rate of return. The actual return on Actuarial Value of Assets (AVA) was 5.8%, compared to the expected return of 6.00%, resulting in an actuarial loss of $300,689 which is paid over a 12-year period. The actuarial asset experience increased the total contribution by $34,835.

  The asset gain on the Market Value of Assets for the plan year ending June 30, 2025 was $7,444,645 and resulted in a $172,496 decrease to the total contribution but was offset by the partial recognition of previous years' net deferred assets losses of $207,331.

- Actual demographic experience will always differ from the actuarial assumptions. The liability experience of the Plan increased the total contribution by $628,049. The liability experience loss was primarily driven by salary increases for active members which increased the contribution by about $509,000 and the changing demographics of the active membership (including new entrants) which increased the contribution by about $119,000.

- Closing the Plan to most new entrants decreased the total amount of benefits that are being earned each year as members continue to leave employment through retirements, terminations, disabilities, and death, and thus cease to earn additional benefits. This decreased the Plan contribution by $168,857.

- The net effect of other miscellaneous factors mostly due to the contribution timing lag slightly offset by administrative expense experience increased the Plan contributions by $129,347.

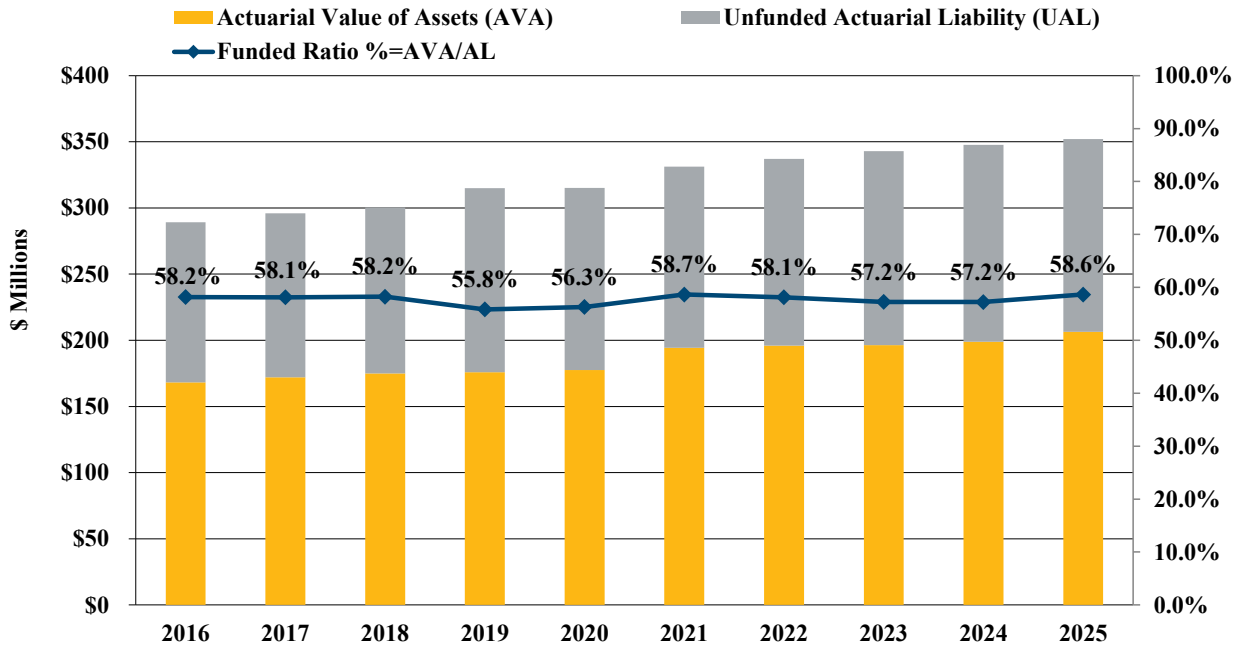
D. Historical Trends

For most retirement plans the greatest attention is given to the current valuation results – in particular, the size of the current Unfunded Actuarial Liability (UAL) and the total contribution; however, it is important to remember that each valuation is merely a snapshot in the long-term progress of a pension fund. It is important to judge a current year's valuation results relative to historical trends, as well as trends expected into the future.

Assets and Liabilities

The chart below presents the Actuarial Value of Assets (gold bars), Unfunded Actuarial Liability (gray bars), and Funded Ratio (navy line). The top of the bars (sum of gold and gray bars) depicts the total Actuarial Liability. Over the 10-year period shown, both the Actuarial Liability and Actuarial Value of Assets have been increasing at a similar pace. It is important to note that the assumed rate of return at the beginning of the period was 7.00% and had been gradually reduced over the 10-year period to 6.00% as of July 1, 2021, which has been a major source of the decrease in the funded ratio.

In 2019, the funded ratio decreased from 58.2% to 55.8% due to a reduction to 6.75% in the assumed rate of return. There was an increase in the funded ratio in 2021 even though the assumed rate of return was reduced from 6.75% to 6.00%. The significant return on assets as of June 30, 2021, and an additional $7.8 million contribution from the CARES Act, more than offset the impact of the assumption changes. From 2021 to 2024, the funded ratio declined due to both liability experience (mostly salary increases in excess of the assumptions) and the 2022 asset losses. The funded ratio increased in 2025 given that the increase on the Actuarial Value of Assets outpaced the increase on the Actuarial Liability.



SECTION I – EXECUTIVE SUMMARY

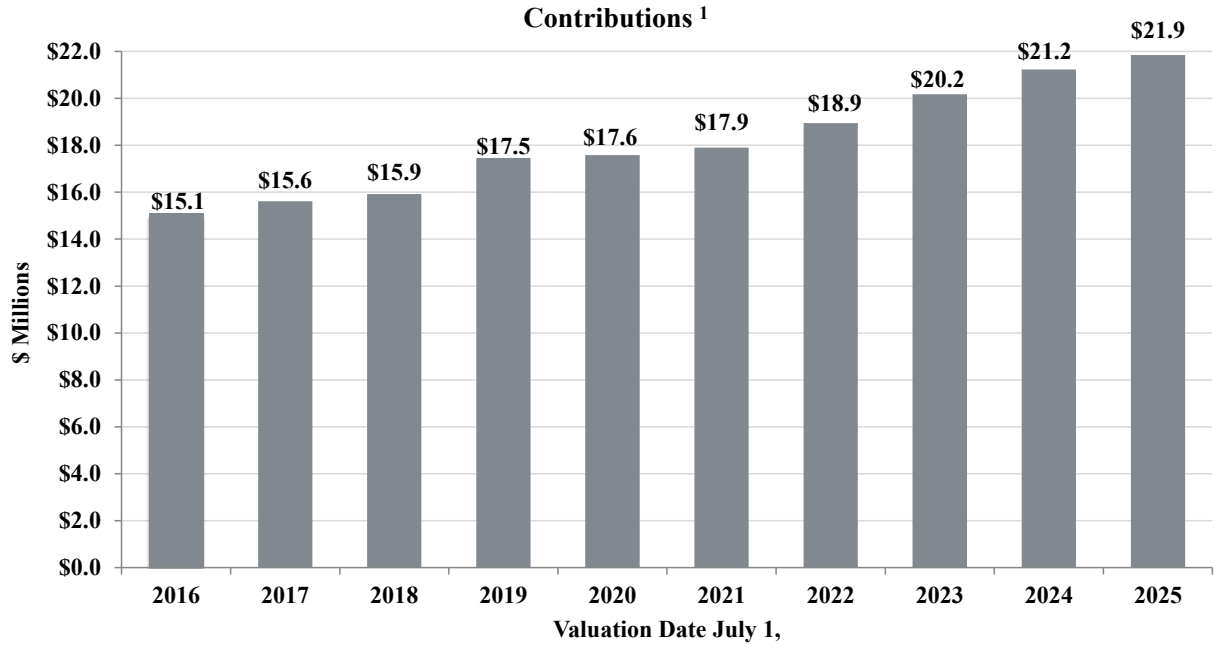
Contributions

The chart below shows a history of the Plan's actuarially determined total contribution for the upcoming fiscal year, reported by valuation date.

From 2016 to 2018, investment experience on the actuarial valuation of assets was the primary source of contribution increases. However, in 2019, there was a reduction in the assumed rate of return to from 7.00% to 6.75% which increased the contribution to $17.5 million.

In 2021, the assumption changes, including a reduction in the assumed rate of return to 6.00%, were the primary source for the increase in the total contribution, but were partially offset by the additional CARES Act contribution and favorable investment experience. From 2021 to 2024, the contributions continued to increase as the 2022 investment losses were recognized, in addition to liability losses. With the 2025 valuation, the required contributions increased to $21.9 million primarily due larger than expected salary increases during FYE 2025.

A reconciliation of the contributions from the 2024 to 2025 valuations can be found in Table I-2 of this report.

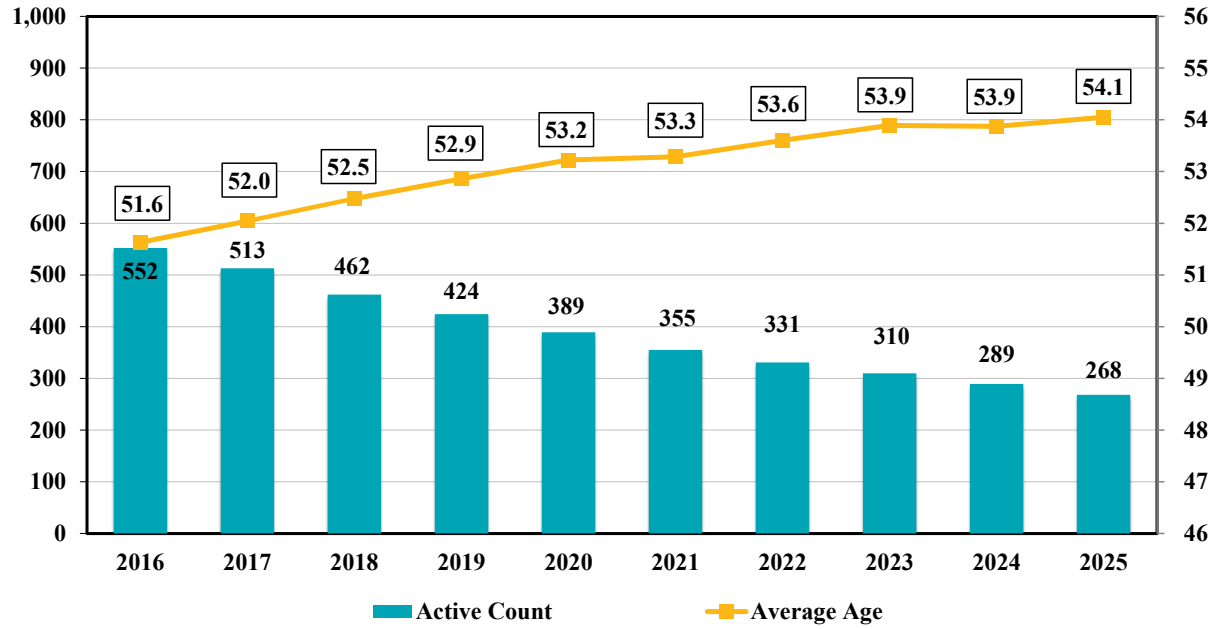


[1] *Contribution amounts reported by valuation date are mid-year values for the upcoming fiscal year.*

SECTION I – EXECUTIVE SUMMARY

Active Participant Trends

The number and average age of active Plan members for the last 10 years is shown in the chart below. Because the plan has been mostly closed to new entrants since 2012, the membership has declined by more than 50% from 552 to 268 actives over the period shown. In addition, the average age of an active member has increased by almost three years during the period shown. The trend of declining active membership is expected to continue, as new bargained employees participate in the defined contribution plan.

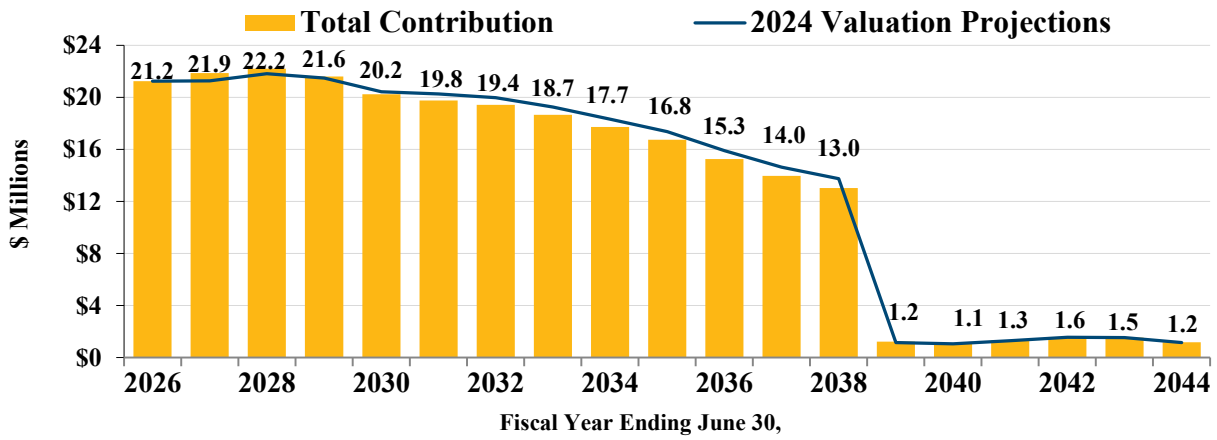


E. Future Expected Financial Trends

The analysis of projected financial trends is an important component of this valuation. In this section, we present our assessment of the implications of the July 1, 2025 valuation results in terms of benefit security (assets over liabilities) and contributions over the next 19 years.

The projections in this section assume that the Plan will achieve the 6.00% investment return assumption, and all other actuarial assumptions will be met each year, which is highly unlikely. We also assume the current funding method and amortization policy will remain in place throughout the projection period.

Contributions are shown for the Fiscal Year End that they are expected to be made. For example, the actuarially determined contribution from the July 1, 2025 valuation of $21.9 million is expected to be made during the period July 1, 2026 through June 30, 2027.



The Plan's projected contributions are very similar to those projected in the 2024 valuation, shown by the blue line. The graph shows that the Plan's contributions are expected to increase from $21.9 million to $22.2 million in fiscal year ending 2028 as the remaining 2022 deferred asset loss is recognized. The steady decline in the contributions thereafter is due to previous years' actuarial asset gains being fully recognized and the decrease in the annual benefits that are earned as the number of active members decline since the Plan is closed to most new entrants.

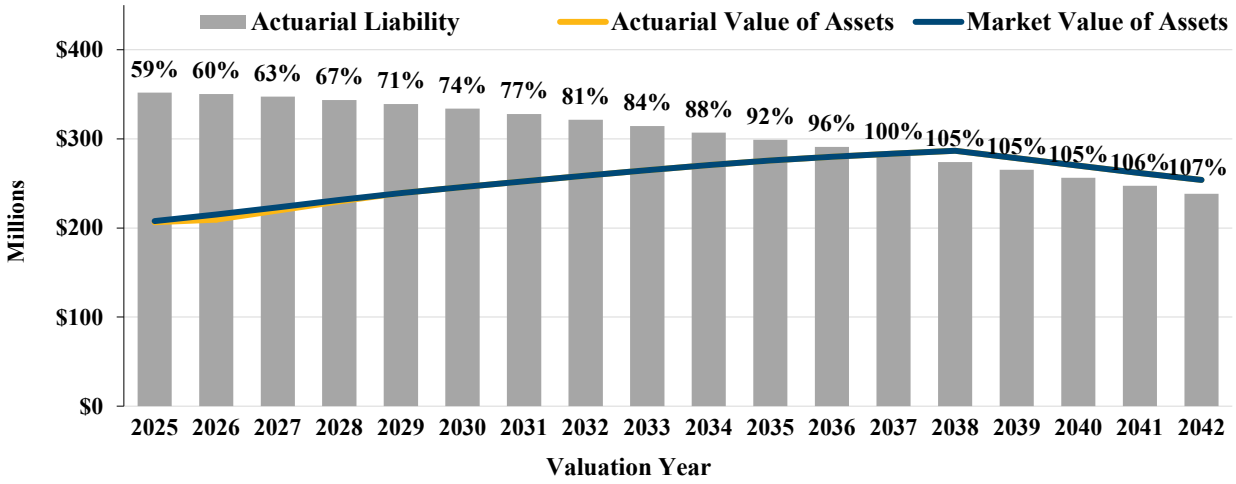
During fiscal year ending 2038 (which will be based on results from the July 1, 2036 valuation), the last payments for the Plan's expected UAL will be made. After that point, employer contributions are expected to stabilize and are based on the normal cost and expected administrative expense. However, as the targeted full funding date approaches, changes to the amortization policy may be made at the MTS Board's discretion to mitigate volatility or unsustainable increases in the UAL payment.

PEPRA mandates that employees and employers must continue to contribute at least the normal cost portion unless the plan is 120% funded and has met certain legal requirements as well.

SECTION I – EXECUTIVE SUMMARY

Asset and Liability Projections:

This graph shows the projection of assets and liabilities, assuming that assets will earn the 6.00% assumption each year during the projection period, as all other assumptions are met. The percentages at the top of the graph represent the funded ratio based on the Actuarial Value of Assets.



The funded status is expected to steadily increase over the projection period as the Actuarial Liability (gray bars) is expected to decrease while the Plan's assets are expected to increase (yellow and blue lines). The Plan is projected to be fully funded with the July 1, 2037 valuation, assuming the actuarial assumptions are achieved. The projected funded status increases over 100% funded to 107% because of the aforementioned minimum contribution requirement of the normal cost. However, it is the actual return on Plan assets that will determine the future funding status and contributions to the Plan.

SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Actuarial valuations are based on a set of assumptions about future economic and demographic experience. These assumptions represent a reasonable estimate of future experience, but actual future experience will undoubtedly be different and may be significantly different. This section of the report is intended to identify the primary risks to the plan, provide some background information about those risks, and provide an assessment of those risks.

Identification of Risks

The fundamental risk to a pension plan is that the contributions needed to pay the benefits become unaffordable. While we believe it is unlikely that the Plan by itself would become unaffordable, the contributions needed to support the Plan may differ significantly from expectations. While there are a number of factors that could lead to contribution amounts deviating from expectations, we believe the primary sources are:

- Investment risk,
- Inflation risk, and
- Contribution risk.

Other risks that we have not identified may also turn out to be important.

Investment Risk is the potential for investment returns to be different than expected. Lower investment returns than anticipated will increase the Unfunded Actuarial Liability (UAL) necessitating higher contributions in the future unless there are other gains that offset these investment losses. In contrast, higher investment returns than anticipated may create a potentially significant surplus that could be difficult to use until all benefits have been paid. Expected future investment returns and their potential volatility are determined by the Plan's asset allocation.

Inflation risk is the potential for actual inflation to be different than expected. Retirement benefits under the plan for the Non-Contract retirees who retired on or after June 30, 1999 are potentially increased annually for inflation with certain caps. Higher inflation than expected could result in the payment of greater benefits, and lower inflation than expected could result in the payment of lower benefits. Inflation can also potentially impact expected salary increases, but since the plan is closed to most new hires, this risk is diminishing.

Contribution risk is the potential for actual future actuarially determined contributions to deviate from expected future contributions to an extent that they become unaffordable. The Plan's funding policy is to determine an Actuarially Determined Contribution (ADC) equal to the sum of the normal cost, amortization of the UAL, and the Plan's expected administrative expenses. The UAL is amortized in level dollar payments with several layers with differing amortization periods. The UAL is currently expected to be fully paid for as of the July 1, 2037 actuarial valuation. However, as 2037 gets closer and the Plan's remaining amortization period shortens, a significant loss or change in assumption may cause a large increase in the ADC. While the funding policy can be changed when such a situation occurs, any reduction in the ADC will result in a slower recovery in funded status.

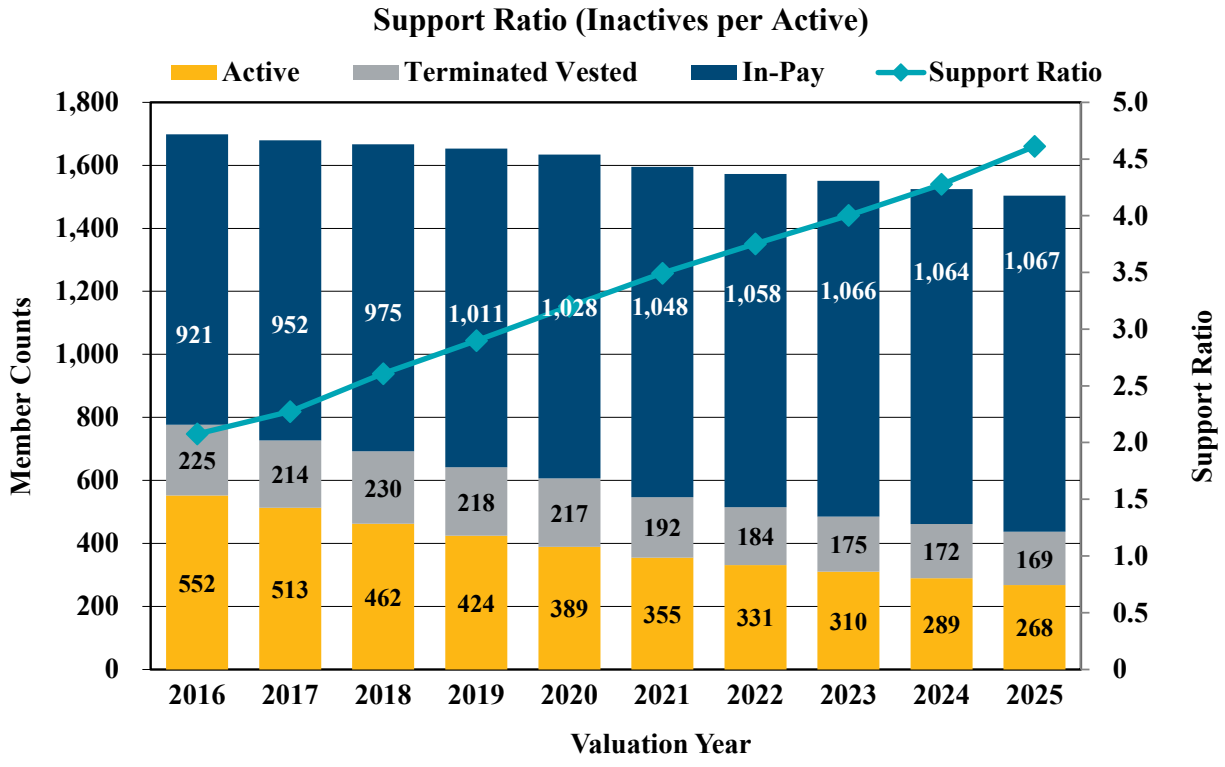
Plan Maturity Measures

The future financial condition of a mature pension plan is more sensitive to each of the risks identified above than a less mature plan. Before assessing each of these risks, it is important to understand the maturity of the plan.

Plan maturity can be measured in a variety of ways, but they all get at one basic dynamic – the larger the plan is compared to the contribution or revenue base that supports it, the more sensitive the plan will be to risk. Given that the Plan has been closed to most new entrants since 2012, measures specific to the Plan show significant increases in maturity and risk. However, for the Metropolitan Transit System, this risk is declining relative to the total employment base.

Support Ratio (Inactives per Active)

One simple measure of plan maturity is the ratio of the number of inactive members (those receiving benefits or entitled to a deferred benefit) to the number of active members. For a closed plan, the Support Ratio is expected to increase significantly as the active members retire or terminate and there are no new entrants replacing them. The chart below shows the growth in the Support Ratio for the Plan for the past 10 years.

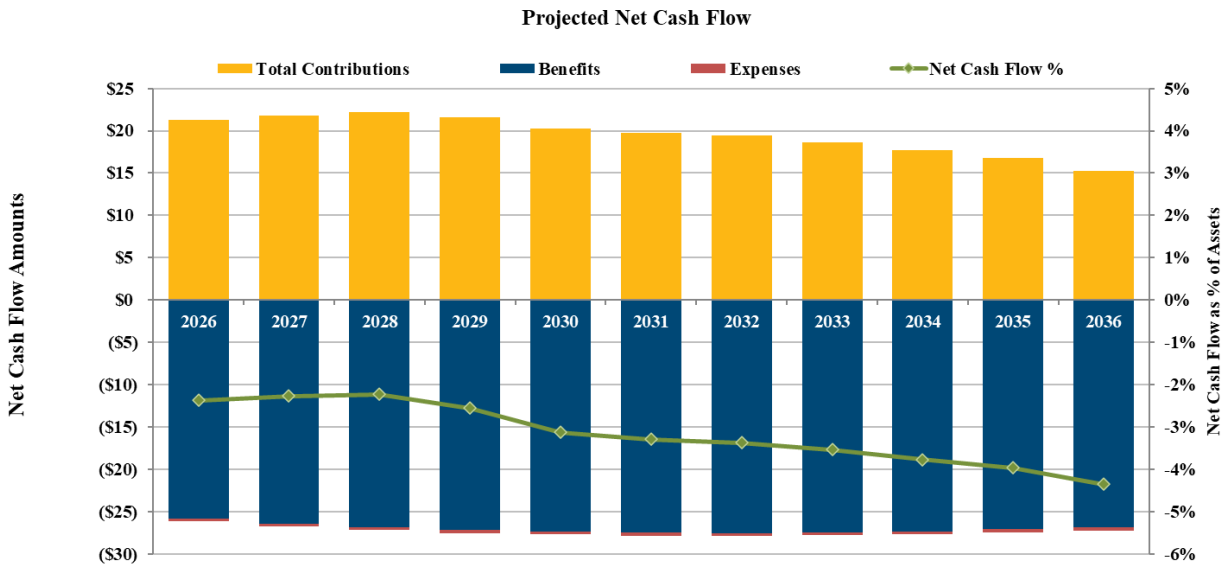


SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Net Cash Flow

The net cash flow of the plan as a percentage of the beginning of year assets indicates the sensitivity of the plan to short-term investment returns. Net cash flow is equal to contributions less benefit payments and administrative expenses. Mature plans can have large amounts of benefit payments compared to contributions, particularly if they are well funded.

The chart below shows the projected net cash flow for the next 10 fiscal years. The bars represent the dollar amounts of the different components of the projected net cash flow, and the line represents the net cash flow as a percentage of the assets as of the beginning of the fiscal year.



The net cash flow has been negative since at least 2013. The net cash flow is expected to be stable as contributions increase over the next three years. Then as the Plan becomes better funded, benefit payments increase and contributions slowly decline, the net cash flow starts to become increasingly negative.

The first issue the negative cash flow presents to the Plan is a need for liquidity in the investments so that benefits can be paid. When the cash flow was positive or close to neutral, benefits could be paid out of contributions without liquidating investments. As net cash flow becomes increasingly negative, the benefit payments will require liquidation of some investments (at least to the extent the bond portfolio does not generate sufficient cash income).

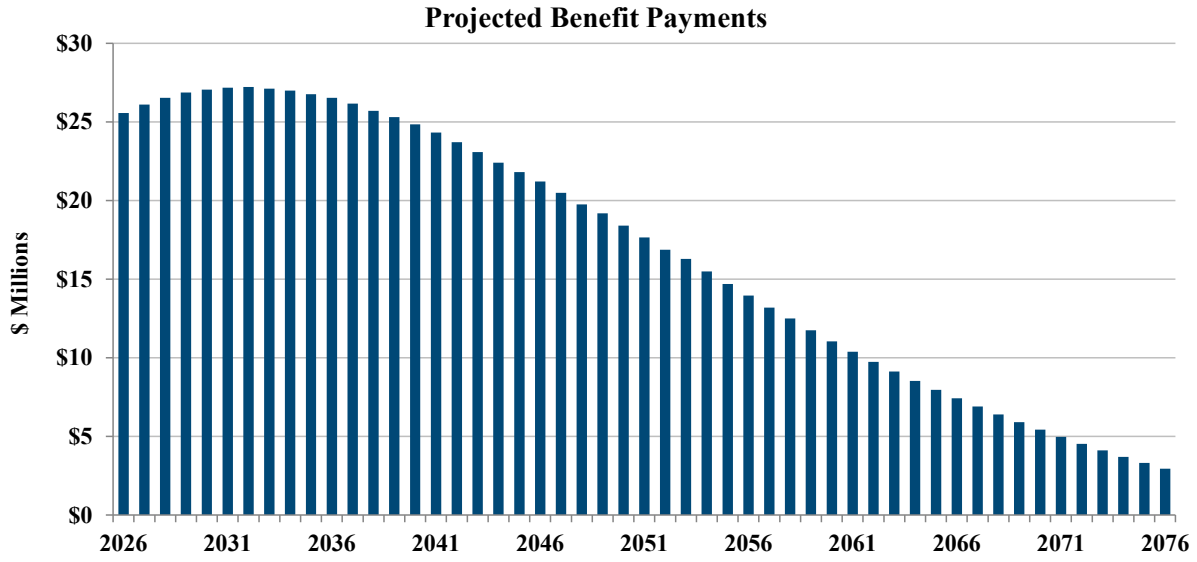
The other change of note is the sensitivity to short-term investment returns. Investment losses in the short term are compounded by the net withdrawal from the plan leaving a smaller asset base to recover from the investment losses. On the other hand, large investment gains in the short term also tend to have a longer beneficial effect as any future losses are relative to a smaller liability base due to the negative cash flow.

SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Assessing Costs and Risks

A closed pension plan will ultimately either end up with excess assets after all benefits have been paid or run out of assets before all benefits have been paid. If the Plan develops surplus assets, it may be able to reduce the risk in its investment portfolio, immunize investments, or purchase annuities to settle the remaining obligation. However, such an approach may not be the objective for MTS, and if the surplus assets exceed the additional amounts needed to purchase annuities or immunize the portfolio, it is not clear how they could be used once all benefits have been paid.

If the Plan, on the other hand, were to run out of assets, MTS would be forced to pay benefits directly on a pay-as-you-go basis. As long as MTS can afford the pay-as-you-go costs, benefits would remain secure. The chart below shows a projection of expected benefit payments for the closed plan.

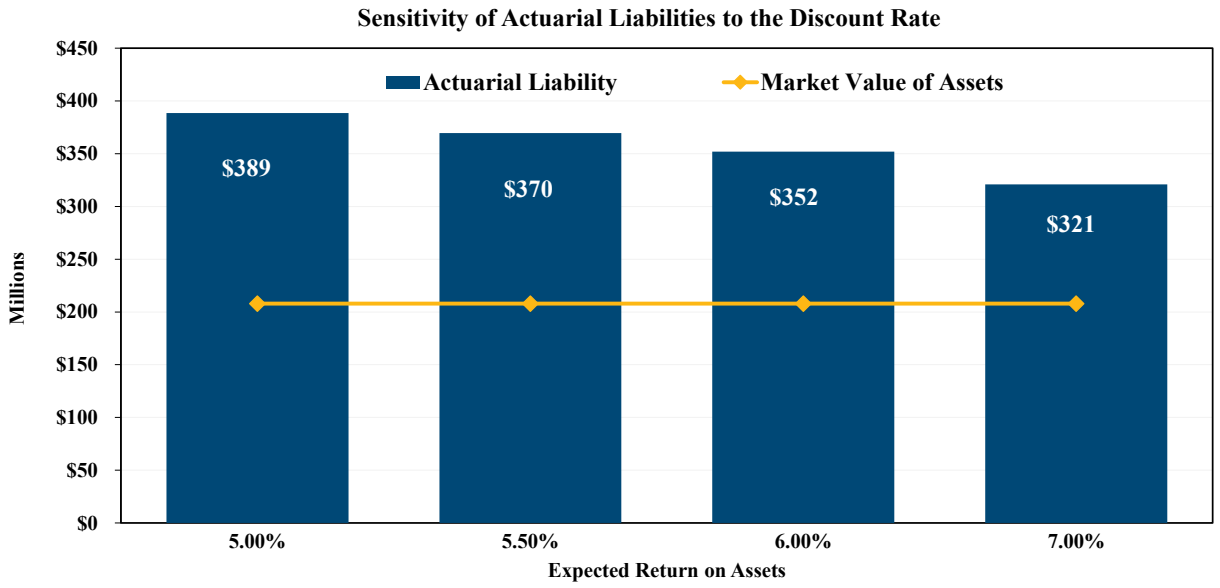


SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Sensitivity to Discount Rates (Investment Returns)

The chart below compares the Market Value of Assets (gold line) to the Actuarial Liability (blue bars) using the discount rates equal to the current expected rate of return, 6.00% and 100 basis points above and below the expected rate of return, as well as the LDROM rate of 5.50%. The low-default-risk obligation measure (LDROM) is the Actuarial Liability using a discount rate derived from low-default-risk fixed-income securities that approximately match the benefit payments of the plan. The revised Actuarial Standard of Practice No. 4 requires the disclosure of this measurement.

Present Value of Future Benefits versus Assets



The Plan invests in a diversified portfolio with the objective of maximizing investment returns at a reasonable level of risk. If investments return 6.00% annually, the Plan would need approximately $352 million in assets today to pay all benefits attributable to past service compared to current assets of $208 million. If investment returns are only 5.00%, the Plan would need approximately $389 million in assets today, and if investment returns are 7.00%, the Plan would only need $321 million in assets.

The lowest risk portfolio for a pension plan with fixed cash flows would be composed entirely of low-default-risk fixed-income securities whose cash flows match the benefit cash flows of the Plan. As of June 30, 2025 using the FTSE Pension Liability Index (rounded to the nearest 0.25%), we estimate that such a portfolio would have an expected return of 5.50% and the Plan would need $370 million to pay all benefits attributed to past service. This amount is the LDROM. The $18 million difference between the LDROM and the Actuarial Liability at 6.00% represents the expected savings from bearing the risk of investing in the Plan's diversified portfolio. Alternatively, it also represents the cost of significantly minimizing the investment risk.

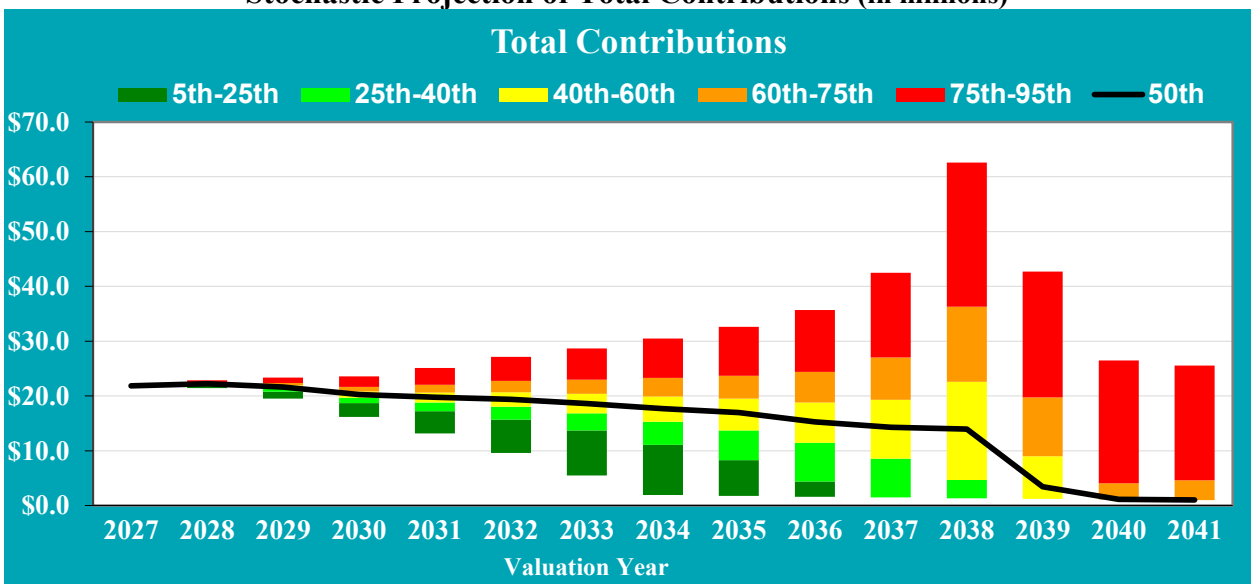
SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Because the Plan invests in a diversified portfolio and not the LDROM portfolio, the reported funded status is higher and expected employer contributions are lower. Benefit security for members of the Plan depends on a combination of the Plan's assets, the investment returns generated on those assets, and the ability of the Plan to make any needed future contributions. An LDROM portfolio would generate more predictable but lower expected investment returns, potentially changing the level of reliance on future MTS contributions to secure benefits.

Stochastic Projections

Stochastic projections show the range of probable outcomes of various measurements. The charts that follow show the projected range of the total contributions and of the funded ratio on an actuarial value of assets basis. The range in both scenarios is driven by the volatility of investment returns (8.7% standard deviation of annual returns from RVK's Asset Allocation Study dated March 2025). The stochastic projections of investment returns are based on an assumption that each future year's investment return is independent from all other years and is identically distributed according to a lognormal distribution. This assumption may result in an unrealistically wide range of compound investment returns over longer periods of time.

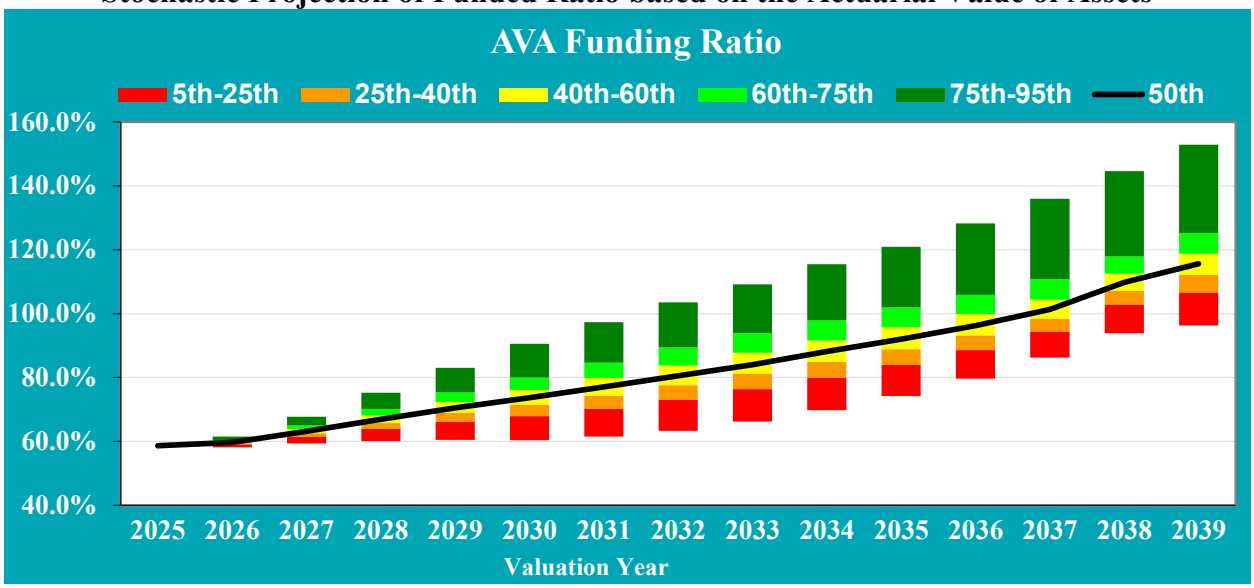
Stochastic Projection of Total Contributions (in millions)



The stochastic projection of contributions shows the probable range of future contributions. The baseline contributions (black line), which is based on the median simulations using an average return of 6.00%, aligns with the projections discussed in Subsection E (page 9) of the Executive Summary of this report. In the most pessimistic scenario shown, the 95th percentile, the projected contributions are slightly over $60 million in FYE 2038. The large range of contributions in FYE 2038 is due to the current funding policy where any actuarial losses occurring with the July 1, 2036 valuation are recognized immediately. However, in the most optimistic scenario shown, the 5th percentile, the projected contribution amount declines to about $1 million in FYE 2037.

SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Stochastic Projection of Funded Ratio based on the Actuarial Value of Assets



While the baseline funded ratio (black line) is projected to be around 100% at the end of the 15-year period shown here, there is a wide range of potential outcomes. Good investment returns have the likelihood of bringing the funded ratio well over 100%. Due to the sound funding policy of the Plan, even in scenarios with unfavorable investment returns, the Plan is projected to remain above 60% funded after 2027, as long as actuarially determined contributions continue to be made.

SECTION III – ASSETS

Pension Plan assets play a key role in the financial operation of the Plan and in the decisions the Board may make with respect to future deployment of those assets. The level of assets, the allocation of assets among asset classes, and the methodology used to measure assets will likely impact benefit levels, contributions, and the ultimate security of participants' benefits.

In this section, we present detailed information on Plan assets including:

- **Disclosure** of Plan assets as of June 30, 2024 and June 30, 2025,
- Statement of the **changes** in market values during the year,
- Development of the **Actuarial Value of Assets**.

Disclosure

There are two types of asset values disclosed in the valuation, the Market Value of Assets and the Actuarial Value of Assets. The market value represents a snapshot value that provides the principal basis for measuring financial performance from one year to the next. Market values, however, can fluctuate widely with corresponding swings in the marketplace. As a result, market values are usually not as suitable for long-range planning as are the Actuarial Value of Assets that reflect smoothing of annual investment returns.

SECTION III – ASSETS

Table III-1 discloses and compares each component of the Market Value of Assets as of June, 30, 2024 and June 30, 2025.

Table III-1
Statement of Assets at Market Value

	June 30, 2024	June 30, 2025
Investments		
Common Stock	$ 66,949,764	$ 50,287,539
Mutual Funds	45,478,416	62,827,350
Corporate Debt / Bond Funds	53,838,498	64,979,272
US Treasury Obligations	9,607,283	0
Short-Term Investments	17,671,846	30,205,749
Total Investments	$ 193,545,807	$ 208,299,910
Receivables		
Dividends and Interest	$ 78,434	$ 109,710
Other Reveivables	27,842	5,379
Total Receivables	$ 106,276	$ 115,089
Payables		
Due to Plan Sponsor	$ 600,842	$ 450,085
Other Payables	106,478	88,845
Total Payables	$ 707,320	$ 538,930
Market Value of Assets	**$ 192,944,763**	**$ 207,876,069**

Changes in Market Value

The components of asset change are:

- Contributions (employer and employee)
- Investment income (realized and unrealized), net of investment expenses
- Benefit payments
- Administrative Expenses

Table III-2 shows the components of a change in the Market Value of Assets during FYE 2024 and FYE 2025.

Table III-2
Changes in Market Values

	June 30, 2024	June 30, 2025
Contributions		
Employer's Contribution	17,213,854	18,430,690
Members' Contributions	1,712,165	1,740,617
Total Contributions	18,926,019	20,171,307
Investment Income		
Interest	128,205	1,168,511
Dividends	5,187,711	4,914,600
Realized & Unrealized Gain/(Loss)	9,207,890	13,036,554
Investment Expenses	(219,026)	(215,776)
Net Investment Income	14,304,780	18,903,889
Disbursements		
Benefit Payments	(23,302,300)	(23,878,520)
Administrative Expenses	(156,428)	(265,370)
Total Disbursments	(23,458,728)	(24,143,890)
Net Increase (Decrease)	9,772,071	14,931,306
Net Assets Held in Trust for Benefits		
Beginning of Year	183,172,692	192,944,763
End of Year	192,944,763	207,876,069
Approximate Return	7.9%	9.9%

SECTION III – ASSETS

Actuarial Value of Assets (AVA)

The Actuarial Value of Assets represents a "smoothed" value developed by the actuary to reduce the volatile results, which could develop due to short-term fluctuations in the Market Value of Assets. For this Plan, the Actuarial Value of Assets is calculated on a modified market-related value. The Market Value of Assets is adjusted to recognize, over a five-year period, investment earnings which are greater than (or less than) the assumed investment return. The actuarial value is constrained to fall within 20% of the market value.

Table III-3
Development of Actuarial Value of Assets
as of June 30, 2025

Plan Year	(a) Expected Earnings	(b) Actual Earnings	(c) = (b) – (a) Unexpected Earnings	(d) Phase-In Factor	(c) x (d) Phase-In Adjustment
2020 -21	11,328,702	34,664,950	23,336,248	0%	0
2021 -22	12,125,387	(22,759,878)	(34,885,265)	20%	(6,977,053)
2022 -23	10,461,642	11,403,121	941,479	40%	376,592
2023 -24	10,856,361	14,304,780	3,448,419	60%	2,069,051
2024 -25	11,459,244	18,903,889	7,444,645	80%	5,955,716
1. Total Unrecognized Asset Gains/(Losses)					1,424,306
2. Market Value of Assets as of June 30, 2025					207,876,069
3. Actuarial Value of Assets as of June 30, 2025: [(2) - (1)]					206,451,763
4. Ratio of Actuarial Value to Market Value [(3) ÷ (2)]					99%

Investment Performance

The following table calculates the investment related gain/loss for the plan year on both a market value and an actuarial value basis. The market value gain/loss is an appropriate measure for comparing the actual asset performance to the valuation's long-term assumption. The rate of return assumption was 6.00% for FY 2024-25 based on the July 1, 2024 actuarial valuation.

Table III-4
Asset Gain/(Loss)

		Market Value		Actuarial Value
As of June 30, 2024	**$**	**192,944,763**	**$**	**198,907,997**
Employer Contributions		18,430,690		18,430,690
Employee Contributions		1,740,617		1,740,617
Benefit Payments		(23,878,520)		(23,878,520)
Administrative Expenses		(265,370)		(265,370)
Expected Investment Earnings at 6.00%		11,459,244		11,817,038
Expected Value as of June 30, 2025	**$**	**200,431,424**	**$**	**206,752,452**
Actuarial Gain/(Loss) on Assets		7,444,645		(300,689)
Actual Value as of June 30, 2025	**$**	**207,876,069**	**$**	**206,451,763**
Return		9.9%		5.8%
Variance from Expected Return of 6.00%		3.9%		-0.2%

SECTION IV – LIABILITIES

In this section, we present detailed information on Plan liabilities including:

- **Disclosure** of Plan liabilities at July 1, 2024 and July 1, 2025,
- Statement of **changes** in these liabilities during the year.

Disclosure

Several types of liabilities are calculated and presented in this report. Each type is distinguished by the people ultimately using the figures and the purpose for which they are using them. Note that these liabilities are not appropriate for settlement purposes, including the purchase of annuities and the payment of lump sums.

- **Present Value of Future Benefits:** Used for measuring all future Plan obligations; the obligations of the Plan earned as of the valuation date and those to be earned in the future by current Plan participants, under the current Plan provisions.

- **Actuarial Liability:** Used for funding calculations, this liability is calculated taking the total Present Value of Future Benefits and subtracting all future normal costs. The method used for this Plan is called the Entry Age Normal (EAN) Funding Method.

- **Unfunded Actuarial Liability:** The excess of the Actuarial Liability over the Actuarial Value of Assets.

SECTION IV – LIABILITIES

Table IV-1 discloses each of these liabilities for the current and prior valuations.

Table IV-1
Liabilities and Unfunded Actuarial Liability

		July 1, 2024		July 1, 2025
1. Present Value of Future Benefits				
Active Participant Benefits				
ATU/Drivers	$	54,621,376	$	54,640,681
IBEW/Mechanics		27,953,569		27,677,842
ATU/Clerical		1,798,906		1,836,984
Non-Contract/Admin [1]		31,546,117		34,695,036
Total	**$**	**115,919,968**	**$**	**118,850,543**
2. Inactive Actuarial Liability				
ATU/Drivers	$	129,053,590	$	129,111,399
IBEW/Mechanics		34,959,383		37,518,395
ATU/Clerical		5,272,084		4,916,089
Non-Contract/Admin [1]		85,149,192		83,970,601
Total	**$**	**254,434,249**	**$**	**255,516,484**
3. Active Actuarial Liability				
ATU/Drivers	$	44,640,491	$	45,354,710
IBEW/Mechanics		23,728,949		23,748,851
ATU/Clerical		1,514,519		1,547,553
Non-Contract/Admin [1]		23,303,195		25,839,896
Total	**$**	**93,187,154**	**$**	**96,491,010**
4. Total Actuarial Liability, [(2) + (3)]	$	347,621,403	$	352,007,494
5. Plan Assets (Actuarial Value)		198,907,997		206,451,763
6. Unfunded Actuarial Liability (UAL), [(4) - (5)]	**$**	**148,713,406**	**$**	**145,555,731**

[1] *Includes PEPRA members.*

SECTION IV – LIABILITIES

Table IV-2 below analyzes the increases or decreases in the liabilities since the last valuation.

Changes in Liabilities

Each of the liabilities disclosed in the prior table are expected to change at each valuation. The components of that change (as shown in Table IV-2 below), depending upon which liability is analyzed, can include:

- Benefits accrued since the last valuation
- Plan amendments changing benefits
- Passage of time which adds interest to the prior liability
- Benefits paid to retirees since the last valuation
- Actuarial gains or losses from participants retiring, terminating, or dying at rates different than expected
- A change in actuarial assumptions
- A change in the actuarial funding method or software

Table IV-2
Changes in Actuarial Liability

Actuarial Liability at July 1, 2025	$	352,007,494
Actuarial Liability at July 1, 2024	$	347,621,403
Liability Increase (Decrease)	$	4,386,091
Change due to:		
Assumption Changes		0
Accrual of Benefits		3,507,119
Actual Benefit Payments		(23,878,520)
Interest		20,361,790
Actuarial (Gain)/Loss		4,395,702
Liability Increase (Decrease)	$	4,386,091

SECTION IV – LIABILITIES

Unfunded liabilities will change (as shown in Table IV-3 below) because of the changes in liabilities on the previous page, and also due to changes in Plan assets resulting from:

- Contributions different than expected
- Investment earnings different than expected
- Expenses different than expected

Table IV-3
Development of Actuarial Gain / (Loss)

1. Unfunded Actuarial Liability (UAL) at Start of Year (not less than zero)	$	148,713,406
2. Expected UAL Payment		(16,818,427)
3. Interest on (1) and (2) to End of Year		7,913,699
4. Increase in UAL due to Assumption Change		0
5. Expected Unfunded Actuarial Liability at End of Year, [(1) + (2) + (3) + (4)]	$	139,808,678
6. Actual Unfunded Actuarial Liability at End of Year (not less than zero)	$	145,555,731
7. **Actuarial Gain/(Loss), [(5) – (6)]**	$	**(5,747,053)**
(a) Liability Gain/(Loss)		(4,395,702)
(b) Asset Gain/(Loss) on Actuarial Value		(300,689)
(c) Contribution Timing Delay Gain/(Loss)		(1,091,499)
(d) Administrative Expenses Less than Expected		40,837

SECTION V – CONTRIBUTIONS

In the process of evaluating the financial condition of any pension plan, the actuary analyzes the assets and liabilities to determine what level (if any) of contributions are needed to properly maintain the funding status of the Plan. Typically, the actuarial process will use a funding technique that will result in a pattern of contributions that are both stable and predictable.

Based on the assumptions and cost method, Plan assets are currently below the target level of assets determined by the cost method; consequently, there is an Unfunded Actuarial Liability. As a result, the required Plan contribution consists of three components: The normal cost, the amortization of the Unfunded Actuarial Liability (UAL), and assumed administrative expenses.

The normal cost represents the cost of the additional benefits earned during the plan year by active Plan members. The amortization of the unfunded liability represents a payment designed to bring the Plan's assets up to the target level set by the actuarial cost method. Currently, the amortization of UAL represents about three-fourths of the total contribution.

As the UAL is paid over time, the Plan contribution is expected to decrease to a level near the normal cost plus administrative expenses. The normal cost itself will be changing since the Plan is closed to new members other than Non-Contract employees.

The table below presents the total Plan contributions (both employer and employee) for the current and prior valuations.

Table V-1
Development of Annual Contribution

	Valuation Date		**July 1, 2024**		**July 1, 2025**
	Effective Date		FY 2025-2026		FY 2026-2027
1.	Total Actuarial Liability	$	347,621,403	$	352,007,494
2.	Plan Assets (Actuarial Value)		198,907,997		206,451,763
3.	Unfunded Actuarial Liability (UAL), [(1) - (2)]	$	148,713,406	$	145,555,731
4.	UAL Amortization Payment	$	16,818,427	$	17,465,118
5.	Total Plan Normal Cost		3,507,119		3,458,495
6.	Expected Administrative Expenses		296,276		303,683
7.	Total Cost (beginning of year), [(4) + (5) + (6)]	$	20,621,822	$	21,227,296
8.	Total Cost (interest adjusted to middle of year)	$	21,231,465	$	21,854,838

SECTION V – CONTRIBUTIONS

Table V-2 presents the calculation of the UAL payments for the Plan under the amortization policy adopted in 2012.

Table V-2
Development of the Amortization Payment (BOY) as of July 1, 2025

	Type of Base	Date Established	Initial Balance	Initial Amortization	Outstanding Balance	Remaining Amortization	Amortization Amount
	Initial Unfunded						
1.	Actuarial Liability	7/1/2012	$ 87,613,245	25	$ 59,109,476	12	$ 6,651,323
2.	Actuarial Loss	7/1/2013	6,555,553	15	1,862,833	3	657,457
3.	Actuarial Gain	7/1/2014	(2,132,368)	15	(781,124)	4	(212,666)
4.	Actuarial Loss	7/1/2015	740,624	15	328,023	5	73,464
5.	Assumption Changes	7/1/2016	29,699,872	21	21,448,744	12	2,413,531
6.	Actuarial Loss	7/1/2016	4,978,340	15	2,560,342	6	491,206
7.	Actuarial Loss	7/1/2017	5,880,935	15	3,421,175	7	578,162
8.	Method Changes	7/1/2018	(640,322)	19	(484,797)	12	(54,552)
9.	Actuarial Loss	7/1/2018	5,453,907	15	3,516,898	8	534,290
10.	Assumption Changes	7/1/2019	7,536,766	18	5,863,053	12	659,743
11.	Actuarial Loss	7/1/2019	9,988,472	15	7,030,672	9	975,156
12.	Actuarial Loss	7/1/2020	3,425,437	15	2,602,345	10	333,562
13.	Assumption Changes	7/1/2021	10,215,184	16	8,474,510	12	953,598
14.	Actuarial Gain	7/1/2021	(5,703,358)	15	(4,631,437)	11	(553,994)
15.	Actuarial Loss	7/1/2022	10,345,013	15	8,930,060	12	1,004,859
16.	Actuarial Loss	7/1/2023	12,250,922	14	11,050,026	12	1,243,410
17.	Actuarial Loss	7/1/2024	10,039,576	13	9,507,879	12	1,069,879
18.	Actuarial Loss	7/1/2025	5,747,053	12	5,747,053	12	646,690
	TOTAL				**$ 145,555,731**		**$ 17,465,118**
					Total UAL Payment, Middle of Year		**$ 17,981,440**

SECTION V – CONTRIBUTIONS

Table V-3 presents the development of the PEPRA Member Contribution Rate. PEPRA Members must contribute half of the total normal cost rate of the PEPRA member benefits, rounded to the nearest 0.25%, as shown in the table below. However, the member rate does not adjust unless the total normal cost upon which the current member rate is based changes by more than 1.00%. The current member contribution rate of 9.00% is based on the July 1, 2023 total normal cost rate of 18.07%. Since the July 1, 2025 total normal cost rate of 18.84% did not change by more than 1.00%, the PEPRA member contribution rate remains at 9.00%.

Table V-3
Development of the PEPRA Member Contribution Rate

Valuation Date	**July 1, 2024**	**July 1, 2025**
Effective Date	FY 2025-2026	FY 2026-2027
Assumed Rate of Return	6.00%	6.00%
Total Normal Cost Rate	17.72%	18.44%
50/50 Cost Sharing Rate for Members	8.86%	9.22%
Member Contribution Rate	**9.00%**	**9.00%**
Active PEPRA Membership Statistics		
Number	29	30
Average Age	43.8	44.1
Average Service	3.9	4.5
Average Age at Hire Date	39.9	39.6

APPENDIX A – MEMBERSHIP INFORMATION

Data pertaining to active and inactive Members and their beneficiaries as of the valuation date was supplied by the Plan Administrator on electronic media. As is usual in studies of this type, Member data was neither verified nor audited; however, it was reviewed to ensure that it complies with generally accepted actuarial standards.

Summary of Participant Data

Active Participants

Non-Contract/Admin		July 1, 2024		July 1, 2025
Number		44		43
Average Age		52.3		52.0
Average Service		19.2		20.2
Average Pay	$	100,008	$	104,368
Non-Contract/PEPRA		**July 1, 2024**		**July 1, 2025**
Number		29		30
Average Age		43.8		44.1
Average Service		3.9		4.5
Average Pay	$	82,803	$	89,506
ATU/Clerical		**July 1, 2024**		**July 1, 2025**
Number		8		7
Average Age		53.9		51.7
Average Service		15.9		16.7
Average Pay	$	55,796	$	60,257
ATU/Drivers		**July 1, 2024**		**July 1, 2025**
Number		139		125
Average Age		56.0		56.7
Average Service		19.3		20.1
Average Pay	$	81,273	$	88,062
IBEW/Mechanics		**July 1, 2024**		**July 1, 2025**
Number		69		63
Average Age		54.7		55.2
Average Service		25.0		25.8
Average Pay	$	79,835	$	85,514
Total		**July 1, 2024**		**July 1, 2025**
Number		289		268
Average Age		53.9		54.1
Average Service		19.0		19.6
Average Pay	$	83,230	$	89,515

APPENDIX A – MEMBERSHIP INFORMATION

Summary of Participant Data

Deferred Participants

Terminated Vested		July 1, 2024		July 1, 2025
Number		172		169
Average Age		56.3		57.1
Average Annual Benefit	$	9,730	$	10,193

In-Pay Participants

Service Retired		July 1, 2024		July 1, 2025
Number		818		818
Average Age		72.1		72.6
Average Annual Benefit	$	25,420	$	25,906
Beneficiaries		**July 1, 2024**		**July 1, 2025**
Number		179		183
Average Age		73.6		74.3
Average Annual Benefit	$	12,046	$	12,201
Disabled		**July 1, 2024**		**July 1, 2025**
Number		67		66
Average Age		72.8		73.4
Average Annual Benefit	$	10,287	$	10,252
Total		**July 1, 2024**		**July 1, 2025**
Number		1,064		1,067
Average Age		72.4		72.9
Average Annual Benefit	$	22,217	$	22,587

APPENDIX A – MEMBERSHIP INFORMATION

Status Reconciliation - All Divisions
Changes in Plan Membership as of July 1, 2025

	Active	Terminated Vested	Disabled	Retired	Beneficiaries	Total
Participant count as of July 1, 2024	**289**	**172**	**67**	**818**	**179**	**1,525**
New Entrants	3					3
Rehires						0
Disabilities		(2)	2			0
Retirements/ Domestic Relations Order (DRO)	(16)	(8)		24	3	3
Vested Terminations	(7)	7				0
Died, with Beneficiaries' Benefit Payable				(5)	5	0
Transfers						0
Died, without Beneficiary, and Other Terminations	(1)		(3)	(19)		(23)
Beneficiary Deaths					(5)	(5)
Data Corrections					1	1
Total Change	(21)	(3)	(1)	0	4	(21)
Participant count as of July 1, 2025	**268**	**169**	**66**	**818**	**183**	**1,504**

APPENDIX A – MEMBERSHIP INFORMATION

Status Reconciliation - Non-Contract/Administrative[1]
Changes in Plan Membership as of July 1, 2025

	Active	Terminated Vested	Disabled	Retired	Beneficiaries	Total
Participant count as of July 1, 2024	**73**	**19**	**1**	**142**	**36**	**271**
New Entrants	3					3
Rehires						0
Disabilities						0
Retirements/ Domestic Relations Order (DRO)	(2)	(1)		3		0
Vested Terminations	(2)	2				0
Died, with Beneficiaries' Benefit Payable				(1)	1	0
Transfers	2					2
Died, without Beneficiary, and Other Terminations	(1)			(4)		(5)
Beneficiary Deaths					(1)	(1)
Data Corrections						0
Total Change	0	1	0	(2)	0	(1)
Participant count as of July 1, 2025	**73**	**20**	**1**	**140**	**36**	**270**

[1] *Includes 23 active individuals participating in PEPRA.*

APPENDIX A – MEMBERSHIP INFORMATION

Status Reconciliation - Clerical
Changes in Plan Membership as of July 1, 2025

	Active	Terminated Vested	Disabled	Retired	Beneficiaries	Total
Participant count as of July 1, 2024	**8**	**8**	**1**	**31**	**5**	**53**
New Entrants						0
Rehires						0
Disabilities						0
Retirements/ Domestic Relations Order (DRO)						0
Vested Terminations	(1)	1				0
Died, with Beneficiaries' Benefit Payable						0
Transfers						0
Died, without Beneficiary, and Other Terminations						0
Beneficiary Deaths					(1)	(1)
Data Corrections						0
Total Change	(1)	1	0	0	(1)	(1)
Participant count as of July 1, 2025	**7**	**9**	**1**	**31**	**4**	**52**

APPENDIX A – MEMBERSHIP INFORMATION

Status Reconciliation - ATU/Drivers
Changes in Plan Membership as of July 1, 2025

	Active	Terminated Vested	Disabled	Retired	Beneficiaries	Total
Participant count as of July 1, 2024	**139**	**107**	**55**	**515**	**102**	**918**
New Entrants						0
Rehires						0
Disabilities		(1)	1			0
Retirements/ Domestic Relations Order (DRO)	(10)	(7)		17	1	1
Vested Terminations	(3)	3				0
Died, with Beneficiaries' Benefit Payable				(3)	3	0
Transfers	(1)					(1)
Died, without Beneficiary, and Other Terminations			(3)	(13)		(16)
Beneficiary Deaths					(3)	(3)
Data Corrections					1	1
Total Change	(14)	(5)	(2)	1	2	(18)
Participant count as of July 1, 2025	**125**	**102**	**53**	**516**	**104**	**900**

APPENDIX A – MEMBERSHIP INFORMATION

Status Reconciliation - IBEW/Mechanics
Changes in Plan Membership as of July 1, 2025

	Active	Terminated Vested	Disabled	Retired	Beneficiaries	Total
Participant count as of July 1, 2024	**69**	**38**	**10**	**130**	**36**	**283**
New Entrants						0
Rehires						0
Disabilities		(1)	1			0
Retirements/ Domestic Relations Order (DRO)	(4)			4	2	2
Vested Terminations	(1)	1				0
Died, with Beneficiaries' Benefit Payable				(1)	1	0
Transfers	(1)					(1)
Died, without Beneficiary, and Other Terminations				(2)		(2)
Beneficiary Deaths						0
Data Corrections						0
Total Change	(6)	0	1	1	3	(1)
Participant count as of July 1, 2025	**63**	**38**	**11**	**131**	**39**	**282**

APPENDIX A – MEMBERSHIP INFORMATION

Age / Service Distribution Of Active Participants - Non-Contract/Administrative[1] (Counts)
As of July 1, 2025

	Service												
Age	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	**Total**
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	**0**
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	**0**
25 to 29	0	0	2	0	0	0	0	0	0	0	0	0	**2**
30 to 34	0	2	1	1	0	0	0	0	0	0	0	0	**4**
35 to 39	0	1	1	1	0	3	1	3	0	0	0	0	**10**
40 to 44	2	3	1	0	0	0	3	4	1	0	0	0	**14**
45 to 49	1	0	0	1	0	1	3	3	1	2	0	0	**12**
50 to 54	0	0	0	2	0	0	2	2	1	3	0	0	**10**
55 to 59	0	0	0	0	0	1	1	1	2	2	0	0	**7**
60 to 64	0	0	0	0	0	1	0	5	1	0	0	2	**9**
65 to 69	0	0	0	0	0	2	2	0	0	0	1	0	**5**
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**3**	**6**	**5**	**5**	**0**	**8**	**12**	**18**	**6**	**7**	**1**	**2**	**73**

[1] *Includes 30 active individuals participating in PEPRA.*

Age / Service Distribution Of Active Participants - Non-Contract/Administrative[1] (Average Salary)
As of July 1, 2025

	Service												
Age	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	**Total**
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
25 to 29	0	0	69,685	0	0	0	0	0	0	0	0	0	**$69,685**
30 to 34	0	88,534	104,587	90,509	0	0	0	0	0	0	0	0	**$93,041**
35 to 39	0	103,240	85,838	90,264	0	94,426	109,059	107,200	0	0	0	0	**$99,328**
40 to 44	93,309	76,999	104,624	0	0	0	101,945	116,233	111,463	0	0	0	**$100,319**
45 to 49	84,510	0	0	88,478	0	95,052	110,690	102,010	92,114	111,991	0	0	**$101,853**
50 to 54	0	0	0	71,179	0	0	95,052	118,978	88,308	113,330	0	0	**$99,871**
55 to 59	0	0	0	0	0	73,153	109,471	101,066	96,471	83,117	0	0	**$91,838**
60 to 64	0	0	0	0	0	59,505	0	101,180	100,549	0	0	99,082	**$96,014**
65 to 69	0	0	0	0	0	92,249	99,876	0	0	0	151,549	0	**$107,160**
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
Total	**$90,376**	**$85,218**	**$86,884**	**$82,322**	**$0**	**$86,936**	**$103,857**	**$107,638**	**$97,563**	**$104,315**	**$151,549**	**$99,082**	**$98,261**

[1] *Includes 30 active individuals participating in PEPRA.*

RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2025

APPENDIX A – MEMBERSHIP INFORMATION

Age / Service Distribution Of Active Participants - ATU/Clerical (Counts)
As of July 1, 2025

	Service												
Age	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	**Total**
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	**0**
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	**0**
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0	**0**
30 to 34	0	0	0	0	0	0	0	0	0	0	0	0	**0**
35 to 39	0	0	0	0	0	0	0	1	0	0	0	0	**1**
40 to 44	0	0	0	0	0	0	0	0	0	0	0	0	**0**
45 to 49	0	0	0	0	0	0	1	0	1	0	0	0	**2**
50 to 54	0	0	0	0	0	0	1	0	0	0	0	0	**1**
55 to 59	0	0	0	0	0	0	1	1	1	0	0	0	**3**
60 to 64	0	0	0	0	0	0	0	0	0	0	0	0	**0**
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	**0**
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**2**	**2**	**0**	**0**	**0**	**7**

Age / Service Distribution Of Active Participants - ATU/Clerical (Average Salary)
As of July 1, 2025

	Service												
Age	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	**Total**
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
30 to 34	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
35 to 39	0	0	0	0	0	0	0	60,501	0	0	0	0	**$60,501**
40 to 44	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
45 to 49	0	0	0	0	0	0	84,831	0	55,293	0	0	0	**$70,062**
50 to 54	0	0	0	0	0	0	55,293	0	0	0	0	0	**$55,293**
55 to 59	0	0	0	0	0	0	55,293	55,293	55,293	0	0	0	**$55,293**
60 to 64	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
Total	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$65,139**	**$57,897**	**$55,293**	**$0**	**$0**	**$0**	**$60,257**

RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2025

APPENDIX A – MEMBERSHIP INFORMATION

Age / Service Distribution Of Active Participants - ATU/Drivers (Counts)
As of July 1, 2025

	Service												
Age	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	**Total**
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	**0**
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	**0**
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0	**0**
30 to 34	0	0	0	0	0	0	0	0	0	0	0	0	**0**
35 to 39	0	0	0	0	0	0	2	2	0	0	0	0	**4**
40 to 44	0	0	0	0	0	0	5	6	1	0	0	0	**12**
45 to 49	0	0	0	0	0	0	1	6	3	1	0	0	**11**
50 to 54	0	0	0	0	0	0	1	8	6	2	0	0	**17**
55 to 59	0	0	0	0	0	0	5	15	5	2	2	1	**30**
60 to 64	0	0	0	0	0	0	4	13	7	7	3	0	**34**
65 to 69	0	0	0	0	0	0	5	4	2	2	0	1	**14**
70 & up	0	0	0	0	0	0	0	1	0	0	1	1	**3**
Total	**0**	**0**	**0**	**0**	**0**	**0**	**23**	**55**	**24**	**14**	**6**	**3**	**125**

Age / Service Distribution Of Active Participants - ATU/Drivers (Average Salary)
As of July 1, 2025

	Service												
Age	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	**Total**
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
30 to 34	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
35 to 39	0	0	0	0	0	0	107,500	80,085	0	0	0	0	**$93,793**
40 to 44	0	0	0	0	0	0	80,453	76,115	77,780	0	0	0	**$78,062**
45 to 49	0	0	0	0	0	0	75,783	92,641	94,482	74,891	0	0	**$89,997**
50 to 54	0	0	0	0	0	0	89,450	79,493	99,021	65,934	0	0	**$85,376**
55 to 59	0	0	0	0	0	0	87,573	95,048	76,839	90,871	91,911	97,700	**$90,368**
60 to 64	0	0	0	0	0	0	77,377	96,561	79,282	94,704	86,428	0	**$89,470**
65 to 69	0	0	0	0	0	0	93,263	82,590	87,147	100,220	0	84,068	**$89,677**
70 & up	0	0	0	0	0	0	0	70,957	0	0	86,547	88,503	**$82,003**
Total	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$86,791**	**$88,927**	**$86,200**	**$89,419**	**$88,276**	**$90,091**	**$88,062**

RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2025

APPENDIX A – MEMBERSHIP INFORMATION

Age / Service Distribution Of Active Participants - IBEW/Mechanics (Counts)
As of July 1, 2025

	Service												
Age	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	**Total**
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	**0**
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	**0**
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0	**0**
30 to 34	0	0	0	0	0	0	1	0	0	0	0	0	**1**
35 to 39	0	0	0	0	0	0	2	6	0	0	0	0	**8**
40 to 44	0	0	0	0	0	0	2	1	2	0	0	0	**5**
45 to 49	0	0	0	0	0	0	0	0	1	2	0	0	**3**
50 to 54	0	0	0	0	0	0	0	1	1	5	3	0	**10**
55 to 59	0	0	0	0	0	0	0	2	0	2	1	3	**8**
60 to 64	0	0	0	0	0	0	0	3	3	3	3	5	**17**
65 to 69	0	0	0	0	0	0	0	2	3	1	1	2	**9**
70 & up	0	0	0	0	0	0	0	1	0	0	0	1	**2**
Total	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**16**	**10**	**13**	**8**	**11**	**63**

Age / Service Distribution Of Active Participants - IBEW/Mechanics (Average Salary)
As of July 1, 2025

	Service												
Age	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	**Total**
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
30 to 34	0	0	0	0	0	0	95,009	0	0	0	0	0	**$95,009**
35 to 39	0	0	0	0	0	0	91,859	95,009	0	0	0	0	**$94,221**
40 to 44	0	0	0	0	0	0	68,359	95,009	95,009	0	0	0	**$84,349**
45 to 49	0	0	0	0	0	0	0	0	95,009	89,988	0	0	**$91,662**
50 to 54	0	0	0	0	0	0	0	95,009	54,417	82,874	88,315	0	**$82,874**
55 to 59	0	0	0	0	0	0	0	70,262	0	89,988	84,968	91,662	**$85,057**
60 to 64	0	0	0	0	0	0	0	67,768	95,009	88,315	91,662	84,775	**$85,420**
65 to 69	0	0	0	0	0	0	0	79,464	70,936	63,920	95,009	89,988	**$78,960**
70 & up	0	0	0	0	0	0	0	84,968	0	0	0	84,968	**$84,968**
Total	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$83,089**	**$84,237**	**$83,727**	**$84,861**	**$89,988**	**$87,618**	**$85,514**

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

A. Contribution Allocation Procedure

The contribution allocation procedure primarily consists of an actuarial cost method, an asset smoothing method, and an amortization method as described below. This contribution allocation procedure, combined with reasonable assumptions, produces a reasonable actuarially determined contribution as defined in Actuarial Standard of Practice No. 4. The contribution allocation procedure was selected to balance benefit security, intergenerational equity, and the stability of actuarially determined contributions. The selection also considered the demographics of plan members, the funding goals and objectives of the Board, and the need to accumulate assets to make benefit payments when due.

1. Actuarial Cost Method

The actuarial funding method used to determine the normal cost and the Unfunded Actuarial Liability is the individual entry age to final decrement cost method. This method is consistent with the method required under the GASB accounting statements. Under this cost method, the normal cost is calculated as the amount necessary to fund Members' benefits as a level percentage of total payroll over their projected working lives. At each valuation date, the Actuarial Liability is equal to the difference between the liability for the Members' total projected benefit and the present value of future normal cost contributions. The total normal cost is calculated as the sum of the individual normal costs for each active member (individual entry age method). The Unfunded Actuarial Liability (UAL) is the difference between the Actuarial Liability and the Actuarial Value of Assets (AVA).

2. Amortization Method

The initial Unfunded Actuarial Liability as of July 1, 2012 is amortized in level dollar payments over a 25-year period ending June 30, 2037. Changes in the Unfunded Actuarial Liability due to Plan amendments, changes in actuarial assumptions or methods will be amortized in level dollar payments over a separate period that ends on June 30, 2037 consistent with the amortization of the remaining June 30, 2012 UAL. Changes in the Unfunded Actuarial Liability due to actuarial gains and losses are amortized over closed separate 15-year periods in level dollar payments. In order for SDTC to achieve its goal of full funding by 2037 once the amortization of future gains and losses extends beyond June 30, 2037, the period will be reduced to end on June 30, 2037. The amortization period for the actuarial loss as of July 1, 2025 is 12 years. However, as the targeted full funding date approaches, changes to the amortization policy may be made at the MTS Board's discretion to mitigate volatility or unsustainable increases in the UAL payment.

Though the Retirement Board may make exceptions, in general, the intent is to follow the guidelines published by the California Actuarial Advisory Panel and the Government Finance Officers' Association.

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

3. Actuarial Value of Plan Assets

For the purposes of determining contributions, a smoothed Actuarial Value of Assets (AVA) is used that dampens the effects of volatility in the Market Value of Assets on the pattern of contributions. The AVA is determined using an adjusted market value. Under this method, a preliminary AVA is determined as the Market Value of Assets on the valuation date less a decreasing fraction (4/5, 3/5, 2/5, 1/5) of the gain or loss in each of the preceding four years. The gain or loss for a given year is the difference between the actual investment return (on a market-to-market basis) and the assumed investment return based on the Market Value of Assets at the beginning of the year and actual cash flow. The AVA is adjusted, if necessary, to remain between 80% and 120% of the market value.

B. Actuarial Assumptions

The economic and demographic assumptions are based on the experience study covering the period from July 1, 2015 through June 30, 2020 that was adopted at the MTS Board of Directors Meeting in November 2021. The rationale for all the assumptions can also be found in the experience study report dated September 2021. All assets and liabilities are computed as of the valuation date, July 1, 2025.

1. **Rate of Return**

   The annual rate of return on all Plan assets is assumed to be 6.00% net of investment expenses.

2. **Low-Default-Risk Obligation Measure Interest Rate**

   5.50% based on the FTSE Pension Discount Yield Curve published as of June 30, 2025, 5.58%, rounded to the nearest quarter percent.

3. **Cost of Living**

   The cost of living as measured by the Consumer Price Index (CPI) will increase at the rate of 2.50% per year.

4. **Post Retirement COLA**

   Benefits for Non-Contract retirees assumed to increase after retirement at the rate of 2.0% per year.

5. **Pay for Benefits**

   In most cases, pay for benefits is based on a two-year average of each Participant's pay during the two years preceding the valuation date. Special procedures are used in some cases, as noted for full-time Participants.

Unit	Pay for Continuing Participants	Pay for New Participants
Drivers	The larger of gross pay or 1,800 hours times the member's hourly rate	
Mechanics	2,150 hours times the Participant's hourly rate	
Clerical	Gross pay	The larger of gross pay or 2,100 hours times the Participant's hourly rate
Non-Contract	Gross pay	The larger of gross pay or 2,080 hours times the Participant's hourly rate

Part-time Participants are assumed to work 1,040 hours in the calculations shown above.

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

6. Merit Pay (Longevity and Promotion) Increases

Assumed pay increases for active Participants consist of increases due to inflation (cost-of-living adjustments) and those due to longevity and promotion. Based on an analysis of pay levels and service, we developed the following assumptions:

Longevity and Promotion Increases				
Service	ATU Drivers	IBEW Mechanics	Clerical	Non-Contract
0	6.00%	7.50%	10.00%	3.50%
1	6.00%	7.50%	10.00%	3.50%
2	6.00%	7.50%	0.25%	3.50%
3	6.00%	7.50%	0.25%	3.50%
4	6.00%	7.50%	0.25%	3.50%
5	6.00%	7.50%	0.25%	3.50%
6	6.00%	7.50%	0.25%	3.50%
7	6.00%	7.50%	0.25%	3.50%
8	0.50%	7.50%	0.25%	3.50%
9	0.50%	7.50%	0.25%	3.50%
10+	0.50%	0.50%	0.25%	0.25%

In addition, annual adjustments in pay due to inflation will equal the CPI, for an additional annual increase of 2.50%. The combination of rates is compounded rather than using an additive method.

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

7. Active Participant Mortality

Rates of mortality for all active non-Clerical ATU and IBEW Participants are given by Cheiron's ATU Non-Annuitant mortality with generational improvements from the base year 2016 using Scale MP-2020. Sample base rates are shown in the table below:

Age	Male	Female
25	0.040%	0.033%
30	0.049%	0.038%
35	0.056%	0.051%
40	0.064%	0.072%
45	0.079%	0.101%
50	0.113%	0.151%
55	0.174%	0.239%
60	0.272%	0.365%
65	0.408%	0.524%

Rates of mortality for all active Clerical and Non-Contract Participants are given by 2010 Public General Employee mortality with generational improvements from the base year 2010 using Scale MP-2020.

8. Healthy Inactive Participant and Beneficiary Mortality

Rates of mortality for healthy inactive non-Clerical ATU and IBEW Participants, spouses, and surviving spouses are given by Cheiron's ATU Healthy-Annuitant mortality with generational improvements from the base year 2016 using Scale MP-2020. Sample base rates are shown in the table below:

Age	Male	Female
55	0.898%	0.519%
60	1.123%	0.762%
65	1.309%	1.103%
70	1.983%	1.633%
75	3.272%	2.631%
80	5.595%	4.433%
85	9.647%	7.691%
90	15.707%	13.411%
95	22.864%	20.609%

Rates of mortality for healthy inactive Clerical and Non-Contract Participants, spouses, and surviving spouses are given by 2010 Public General Healthy Annuitant Amount Weighted mortality with generational improvements from the base year 2010 using Scale MP-2020.

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

9. Disabled Participant Mortality

Rates of mortality for disabled members are given by Cheiron's ATU Disabled Annuitant mortality with generational improvements from the base year 2016 using Scale MP-2020. Sample base rates are shown in the table below:

Age	Male	Female
55	2.413%	1.852%
60	2.800%	2.062%
65	3.348%	2.211%
70	4.198%	2.720%
75	5.702%	3.857%
80	8.157%	5.905%
85	12.163%	9.262%
90	18.616%	13.582%
95	26.042%	19.152%

10. Mortality Improvement

Mortality is assumed to improve in future years in accordance with the MP-2020 generational improvement tables.

11. Disability

Among ATU Drivers and IBEW Mechanics uses an 80% male/20% female blend of the standard CalPERS Public Agency Table, with sample rates below. Disabled Participants are assumed not to return to active service. No disability is assumed for Clerical and Non-Contract Participants.

Disability	
Age	Rate
25	0.016%
30	0.020%
35	0.045%
40	0.109%
45	0.158%
50	0.166%
55	0.156%
60	0.143%
65	0.120%
70	0.098%
75+	0.099%

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

12. Plan Expenses

Expected Plan administrative expenses as of the valuation date of $303,683 are included in the total annual cost, increasing each year with the assumed rate of inflation.

13. Family Composition

100% of active Participants are assumed married. Male spouses are assumed four years older than their wives are.

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

14. Service Retirement

Rates of service retirement among Participants eligible to retire are given by the following table:

Age	ATU Drivers	IBEW Mechanics	Clerical/Non Contract
52[1]	0%	0%	0%
53-54	0%	0%	7.5%
55	10%	5%	7.5%
56-59	7.5%	5%	10%
60-61	10%	10%	10%
62	15%	10%	30%
63	15%	10%	25%
64	20%	15%	25%
65-66	40%	45%	25%
67-69	25%	20%	25%
70 and older	100%	100%	100%

[1] *Non-Contract retirement assumption at age 52 is for PEPRA participants only, 0% otherwise.*

15. Termination

Service-based or age-based termination rates are shown below by group. For all Participants, termination rates are assumed zero once a participant is eligible for retirement.

Termination for ATU Driver, IBEW Mechanic, and Non-Contract Participants are assumed to occur in accordance with the service-based rates shown in the following table:

Service	ATU Driver	IBEW Mechanic	Non-Contract
0	10.0%	10.0%	5.0%
1-6	4.0%	4.0%	5.0%
7 +	3.0%	3.0%	5.0%

Termination for Clerical Participants is assumed to occur in accordance with the age-based rates shown in the following table:

Clerical	
Age	Rate
20-24	25.0%
25-29	15.0%
30-34	13.0%
35-39	11.0%
40-44	10.0%
45-49	9.0%
50 and older	9.0%

16. Employment Status

No future transfers among Participant groups are assumed.

17. Changes in Actuarial Methods and Assumptions since the Prior Valuation

None.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

A. Definitions

Average Monthly Final Earnings: Average Monthly Final Earnings means the average monthly compensation during the consecutive months that produces a Participant's highest average compensation, computed by dividing the Compensation Earnable for such period by the number of months in such period.

- For ATU, IBEW, and Clerical Participants, the averaging period is 36 consecutive months.
- For Non-Contract Participants, the number of consecutive months is 12.
- Public Employees' Pension Reform Act (PEPRA): For Non-Contract Participants hired on and after January 1, 2013, the number of consecutive months is 36.
- Those months during which the Participant did not receive compensation from the Employer equivalent to one-half the regular working days will be excluded. The average is then based on that portion of the averaging period remaining after the excluded months.
- PEPRA: It is possible that exclusions for months in which the Participant did not work full-time may be subject to change.
- Use the total of the Periodic Pensionable Earnings from the highest three calendar (payroll) years. These years need not be consecutive years. There shall be no skips and drops within the three calendar (payroll) years. Add the total Periodic Pensionable Earnings to Terminal Earnings and then divide by 36.

Compensation: Compensation means the remuneration for services paid by the Employer. The monetary value of board, lodgings, fuel, car allowance, laundry, or other advantages furnished to a Participant is not included.

PEPRA: For Participants joining the Plan on or after January 1, 2013, only base compensation up to the Social Security-integrated PEPRA compensation limit ($155,081 for 2025 and $151,446 for 2024) will count for computing Plan benefits and employee and employer contributions; in particular, all or most overtime will be excluded.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

Compensation Earnable:

Compensation Earnable is the compensation actually received by a Participant during a period of employment. For ATU and Non-Contract Participants, any bonus or retroactive wage increases are treated as compensation when received rather than when the services are performed. For IBEW Participants, Compensation Earnable is limited to 2,140 hours of straight time equivalent hours in any 12-month period.

In addition, the value of any vacation or sick leave accumulated but unused when benefits begin is excluded from Compensation Earnable and from Average Monthly Final Earnings.

PEPRA: For Participants joining the Plan on and after January 1, 2013, it is likely that some sources of compensation, such as those underlined above, may be excluded from benefit and contribution computations for these new Participants.

Credited Years Of Service:

In general, Credited Years of Service is continuous service with the San Diego Transit Corporation and its predecessor company from the last date of employment through the date of retirement, death, disability, or other termination of service.

As of November 10, 1997, part-time ATU employees receive one Credited Year of Service for every 2,080 hours of service worked as a part-time employee after December 1, 1990.

For Non-Contract Participants, Credited Years of Service includes any year commencing on or after July 1, 1982 in which the Participant completes at least 1,000 Hours of Service. In addition, Credited Years of Service for Non-Contract Participants will exclude any period of service after the Participant's Normal Retirement Date.

A Participant who is disabled and recovers from disability and reenters the Plan as an active Participant will not receive Credited Years of Service for the period of disability.

B. Membership

All full-time and certain part-time IBEW employees hired prior to May 1, 2011, will become Participants on their date of hire. IBEW employees hired on and after May 1, 2011, will become Participants of a separate defined contribution plan and will not be Participants of this Plan.

All full-time and certain part-time ATU employees hired prior to November 1, 2012, will become Participants on their date of hire. ATU

employees hired on and after November 1, 2012, will become Participants of a separate defined contribution plan and will not be Participants of this Plan. All Non-Contract employees become Participants after earning one Credited Year of Service.

PEPRA: Any Participant joining the Plan for the first time on or after January 1, 2013, is a New Participant.

C. Retirement Benefit

Eligibility: Clerical and Non-Contract Participants are eligible for normal service retirement upon attaining age 63 and completing five or more Credited Years of Service and eligible for early service retirement upon attaining age 53 and completing five or more Credited Years of Service.

ATU and IBEW Participants are eligible for normal service retirement upon attaining age 63 (65 for IBEW) and completing five or more Credited Years of Service and eligible for early service retirement upon attaining age 55 and completing five or more Credited Years of Service.

PEPRA: New Participants are eligible to retire upon attaining age 52 and completing five or more Credited Years of Service.

Benefit Amount: The monthly service retirement benefit is the Participant's Average Monthly Final Earnings multiplied by the percentage figures shown in the tables below.

- For ATU and Clerical Participants terminating prior to October 1, 2005, ATU/Clerical Table A-1 is used; for ATU and Clerical Participants terminating on and after October 1, 2005, ATU/Clerical Table A-2 is used. Prior to July 1, 2006, the benefit from the table is limited to 60%.

- For IBEW Participants terminating prior to January 1, 2007, IBEW Table A-1 is used; for IBEW Participants terminating on and after January 1, 2007, IBEW Table A-2 is used.

- For Non-Contract participants terminating prior to July 1, 2000, Non-Contract Table A-1 is used; for Non-Contract participants terminating on and after July 1, 2000, Non-Contract Table A-2 is used.

For Participants with fractions of a year of age or service, the Participant's age or service will be rounded to the completed quarter year, and the percentage multiplier will be computed from the table using interpolation.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

ATU participants who are active from November 10, 1997 to December 31, 1998 and from November 10, 1997, to December 31, 1999 receive an additional 2.5% and 2.5%, respectively. However, the multiplier from Table A-1 or A-2, as augmented by the additional 2.5% increments, is still limited to 60% prior to July 1, 2006 and 70% thereafter.

Non-Contract Participants who are active as of July 1, 1994 and July 1, 1995 receive an additional 6% and 2%, respectively. However, the benefit multiplier, as augmented by the additional 6% and 2% increments, is still limited to 60% under Table A-1 and 70% under Table A-2.

A Participant who is disabled and recovers from disability and reenters the Plan as an active Participant will have this benefit amount reduced by the actuarial equivalent of the benefits paid during the period of disability.

PEPRA: For New Participants, the benefit multiplier will be 1% at age 52, increasing by 0.1% for each year of age to 2.5% at 67. In between exact ages, the multiplier will increase by 0.025% for each quarter year increase in age.

Form of Benefit: The normal form of benefit is an annuity payable for the life of the Participant, with no continuation of benefits to a beneficiary after death. The retirement benefit will be paid as a 50% Joint and Survivor benefit actuarially equivalent to the normal form for participants who have been married for at least one year. Otherwise, the normal form will be paid.

Because Participants will be making employee contributions, the Participant's beneficiaries may be eligible to receive a refund of accumulated contributions that exceed the benefits paid out to the Participant (if any) upon death.

The ATU and IBEW benefits have been amended from time to time to remove the actuarial reduction in benefits for previously retired Participants whose spouses have died before them. However, these adjustments are retroactive only, and they do not apply to benefits paid to currently active Participants.

ATU and IBEW Participants may elect an Alternative Retirement Formula if they terminate employment before early retirement but after 10 Credited Years of Service or were hired between April 1, 1968 and March 31, 1971 and desire to retire at their Normal Retirement Date. These Participants are eligible for a deferred benefit commencing at age 65 based on Table B.

Tables A-1 and A-2 for each employee group, as well as Table B, can be found at the end of Appendix C herein.

D. Disability Retirement Benefit

Eligibility: A Participant is eligible for a Disability Retirement Benefit if:

- The Participant has earned five Credited Years of Service (ATU, IBEW, Clerical and Non-Contract), and
- The Participant is unable to perform the duties of his or her job with the Corporation, cannot be transferred to another job with the Corporation, and has submitted satisfactory medical evidence of permanent disqualification from his or her job.

Benefit Amount: The Disability Retirement Benefit is a monthly benefit equal to the lesser of:

1. 1.5% times Credited Years of Service at Disability Retirement Date times the Participant's Average Monthly Final Earnings; and,
2. The Normal Retirement Benefit calculated using the Average Monthly Final Earnings at Disability Retirement Date and the projected Credited Years of Service to Normal Retirement Date.

The benefit is reduced by 50% of the amount of any earned income from other sources in excess of 50% of the Participant's Average Monthly Earnings during the 12 months prior to disability; this reduction applies to all IBEW and Non-Contract Participants, but only to ATU Participants hired after June 30, 1983.

PEPRA: Note that the Disability Retirement Benefit for New Participants is based on the new definition of Compensation, which is subject to a maximum and excludes overtime.

Form of Benefit: The normal form of benefit is an annuity commencing at disability and payable for the life of the Participant, with no continuation of benefits to a beneficiary after death. The Disability Retirement Benefit will be paid as a 50% Joint and Survivor benefit actuarially equivalent to the normal form for participants who have been married for at least one year. Otherwise, the normal form will be paid.

Because Participants will be making employee contributions, the Participant's beneficiaries may be eligible to receive a refund of accumulated contributions that exceed the benefits paid out to the Participant (if any) upon death.

The ATU and IBEW benefits have been amended from time to time to remove the actuarial reduction in benefits for previously retired Participants whose spouses have died before them. However, these adjustments are retroactive only, and they do not apply to benefits paid to currently active Participants.

E. Pre-Retirement Death Benefit

Eligibility: A vested Participant is entitled to elect coverage of a pre-retirement spouse's benefit.

For years, if a Participant is age 55 or under, the cost of the coverage is paid by the Company For the years, a Participant is over age 55 and has elected this coverage, the cost of this coverage is paid by the Participant in the form of a reduced benefit upon retirement. The reduction is 3.5¢ per $10 of monthly benefit for each year of coverage.

There is no cost for this benefit for any ATU, Clerical, or Non-Contract Participant whose monthly benefit commences after November 27, 1990. There is no cost for this benefit for any IBEW Participant whose monthly benefit commences after December 3, 1996.

In order for the spouse to be eligible for this benefit, the participant must be married to the spouse for one year prior to death, unless death occurs from accidental causes.

Benefit Amount: For a Participant who is eligible to retire at death, the pre-retirement death benefit is 50% of the benefit that would have been payable had the Participant retired immediately prior to his or her death and elected to receive a 50% Joint and Survivor annuity.

For a Participant who dies before being eligible to retire, the pre-retirement death benefit is 50% of the benefit that would have been payable had the Participant survived to his or her earliest retirement date, retired, elected to receive a 50% Joint and Survivor annuity, and died immediately.

PEPRA: Note that the Pre-Retirement Death Benefit for New Participants is based on the new definition of compensation, which is subject to a maximum and excludes overtime.

Form of Benefit: For a Participant who is eligible to retire at death, the death benefit begins when the Participant dies and continues for the life of the surviving spouse.

For a Participant who dies before being eligible to retire, the death benefit begins when the Participant would have reached his or her earliest retirement date and continues for the life of the surviving spouse.

Because Participants will be making employee contributions, the Participant's beneficiaries may be eligible to receive a refund of accumulated contributions that exceed the benefits paid out to the Participant or spouse (if any) upon death.

F. Termination Benefit

Eligibility: A Participant is eligible for a termination benefit after earning five Credited Years of Service.

Benefit Amount: The termination benefit is computed in the same manner as the Normal Retirement Benefit, but it is based on Credited Years of Service and Average Monthly Final Earnings on the date of termination.

Effective July 1, 2000, Non-Contract participants who terminate prior to eligibility for early service retirement will have their benefits actuarially reduced if they begin receiving benefits before Normal Retirement Age.

PEPRA: For New Participants, the benefit multiplier will be 1% at age 52, increasing by 0.1% for each year of age to 2.5% at 67. In between exact ages, the multiplier will increase by 0.025% for each quarter year increase in age. Note also that the Termination Benefit for New Participants is based on the new definition of compensation, which is subject to a maximum and excludes overtime.

We assume a refund of employee contributions, with no interest, if termination occurs before five years of service.

Form of Benefit: The Participant will be eligible to commence benefits at the later of termination and earliest retirement eligibility age.

The normal form of benefit is an annuity payable for the life of the Participant, with no continuation of benefits to a beneficiary after death. The retirement benefit will be paid as a 50% Joint and Survivor benefit actuarially equivalent to the normal form for participants who have been married for at least one year. Otherwise, the normal form will be paid.

Because Participants will be making employee contributions, the Participant's beneficiaries may be eligible to receive a refund of accumulated contributions that exceed the benefits paid out to the Participant (if any) upon death.

The ATU and IBEW benefits have been amended from time to time to remove the actuarial reduction in benefits for previously retired Participants whose spouses have died before them. However, these adjustments are retroactive only, and they do not apply to benefits paid to currently active Participants.

G. Cost-of-Living Adjustments

Eligibility: An annual Cost-of-Living Adjustment (COLA) has been added for Non-Contract Participants who were actively employed on or after June 30, 1999. One time only (ad hoc) COLAs were granted to ATU and IBEW Participants in 1991 and 1992.

Benefit Amount: For Non-Contract Participants, the cumulative COLA is the increase in the Consumer Price Index (CPI) since the Participant began receiving benefits.

The COLA is subject to the following limits for Non-Contract Participants:

- The cumulative COLA cannot exceed 2% compounded annually for all years since the Participant's benefits began;
- The annual COLA is zero if the CPI increase in that year is less than 1%;
- The annual COLA is limited to 6% of the initial benefit amount in any year; and,
- A Participant's benefit cannot be reduced below the benefit level when payments commenced.

H. Voluntary Early Retirement Program

The Plan provided enhanced benefits to ATU participants who voluntarily elected early retirement during the window period from July 1, 1998 through February 20, 1998.

The Plan provided enhanced benefits to certain IBEW participants who voluntarily elected early retirement during the window period from July 1, 2004, through December 31, 2004.

I. DROP Program

The Plan provided DROP benefits to a number of ATU participants who elected retirement from July 1, 2002, through December 31, 2002.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

J. Funding

- IBEW members contributed 3% of compensation to the Plan in April 2013 and 4% of compensation in April 2014. The contribution rate increased to 6% of compensation in April 2015 and increased to 8% of compensation in April 2016.

- ATU drivers and clerical members contributed 3% of compensation in July 2013. The contribution rate increased to 5% of compensation in July 2014, to 6% in July 2015, and to 7% of compensation in July 2016. The contribution rate increased to 8% of compensation in December 2017.

- Non-Contract members hired before January 1, 2013 contributed 2% of compensation to the Plan prior to January 2014. The Non-Contract member contributions increased to 4% of compensation in January 2014, to 6% of in January 2015, and increased to 7% of compensation on January 1, 2016. As of January 1, 2017, the member contribution rate increased to 8% of compensation.

- New members under PEPRA must contribute half of the normal cost of the Plan, rounded to the nearest 0.25%. Effective January 1, 2013, PEPRA members were paying 6.25% of pay and the employer has been paying the remaining cost of the Plan. The PEPRA employee contribution rate increased to 7.75% of pay based on the results of July 1, 2021 valuation, to 9.50% of pay based on the results of the July 1, 2022 valuation and decreased to 9.00% of pay based on the results of the July 1, 2023 valuation.

  The Corporation pays the actuarial cost of the Plan as reduced by Member contributions. Member contribution rates in the future may change in response to collective bargaining.

K. Changes in Plan Provisions since the Prior Valuation

None.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

ATU/Clerical Table A-1: Retirement Benefit Multipliers

Credited Years Of Service	Age at Retirement								
	55	56	57	58	59	60	61	62	63+
5	5.9%	6.3%	6.7%	7.2%	7.8%	8.3%	8.9%	9.5%	10.1%
6	7.1%	7.5%	8.1%	8.7%	9.3%	10.0%	10.7%	11.4%	12.1%
7	8.2%	8.8%	9.4%	10.1%	10.9%	11.7%	12.4%	13.3%	14.1%
8	9.4%	10.1%	10.8%	11.6%	12.4%	13.3%	14.2%	15.1%	16.1%
9	10.6%	11.3%	12.1%	13.0%	14.0%	15.0%	16.0%	17.0%	18.1%
10	11.8%	12.6%	13.5%	14.4%	15.5%	16.7%	17.8%	18.9%	20.1%
11	12.9%	13.8%	14.8%	15.9%	17.1%	18.3%	19.5%	20.8%	22.2%
12	14.1%	15.1%	16.2%	17.3%	18.6%	20.0%	21.3%	22.7%	24.2%
13	15.3%	16.3%	17.5%	18.8%	20.2%	21.7%	23.1%	24.6%	26.2%
14	16.5%	17.6%	18.9%	20.2%	21.7%	23.3%	24.9%	26.5%	28.2%
15	17.6%	18.9%	20.2%	21.7%	23.3%	25.0%	26.7%	28.4%	30.2%
16	18.8%	20.1%	21.5%	23.1%	24.8%	26.7%	28.4%	30.3%	32.2%
17	20.0%	21.4%	22.9%	24.5%	26.4%	28.3%	30.2%	32.2%	34.3%
18	21.2%	22.6%	24.2%	26.0%	27.9%	30.0%	32.0%	34.1%	36.3%
19	22.3%	23.9%	25.6%	27.4%	29.5%	31.7%	33.8%	36.0%	38.3%
20	23.5%	25.2%	26.9%	28.9%	31.0%	33.3%	35.5%	37.9%	40.3%
21	24.7%	26.4%	28.3%	30.3%	32.6%	35.0%	37.3%	39.7%	42.3%
22	25.9%	27.7%	29.6%	31.8%	34.1%	36.7%	39.1%	41.6%	44.3%
23	27.0%	28.9%	31.0%	33.2%	35.7%	38.3%	40.9%	43.5%	46.3%
24	28.2%	30.2%	32.3%	34.6%	37.2%	40.0%	42.6%	45.4%	48.4%
25	29.4%	31.4%	33.7%	36.1%	38.8%	41.7%	44.4%	47.3%	50.4%
26	30.6%	32.7%	35.0%	37.5%	40.3%	43.3%	46.2%	49.2%	52.4%
27	31.7%	34.0%	36.4%	39.0%	41.9%	45.0%	48.0%	51.1%	54.4%
28	32.9%	35.2%	37.7%	40.4%	43.4%	46.7%	49.8%	52.0%	56.4%
29	34.1%	36.5%	39.1%	41.9%	45.0%	48.3%	50.0%	55.0%	58.4%
30	35.3%	37.7%	40.4%	43.4%	46.5%	50.0%	51.0%	55.5%	60.0%
31	36.5%	39.0%	41.7%	44.8%	48.1%	51.0%	51.5%	56.0%	60.0%
32	37.6%	40.2%	43.1%	46.2%	49.6%	51.5%	52.0%	56.5%	60.0%
33	38.8%	41.5%	44.4%	47.6%	50.0%	52.0%	52.5%	57.0%	60.0%
34	40.0%	42.8%	45.8%	49.1%	51.0%	52.5%	53.0%	57.5%	60.0%
35 or more	41.2%	44.0%	47.1%	50.0%	51.5%	53.0%	53.5%	58.0%	60.0%

APPENDIX C – SUMMARY OF PLAN PROVISIONS

ATU/Clerical Table A-2: Retirement Benefit Multipliers

Credited Years Of Service	Age at Retirement										
	Clerical										
	53	*54*	55	56	57	58	59	60	61	62	63+
5	*8.71%*	*9.33%*	10.00%	10.26%	10.52%	10.78%	11.05%	11.31%	11.57%	11.83%	12.09%
6	*10.45%*	*11.20%*	12.00%	12.31%	12.62%	12.94%	13.26%	13.57%	13.88%	14.20%	14.51%
7	*12.19%*	*13.06%*	14.00%	14.36%	14.73%	15.09%	15.47%	15.83%	16.20%	16.56%	16.93%
8	*13.94%*	*14.93%*	16.00%	16.42%	16.83%	17.25%	17.68%	18.10%	18.51%	18.93%	19.34%
9	*15.68%*	*16.79%*	18.00%	18.47%	18.94%	19.40%	19.89%	20.36%	20.83%	21.29%	21.76%
10	*17.42%*	*18.66%*	20.00%	20.52%	21.04%	21.56%	22.10%	22.62%	23.14%	23.66%	24.18%
11	*19.16%*	*20.53%*	22.00%	22.57%	23.14%	23.72%	24.31%	24.88%	25.45%	26.03%	26.60%
12	*20.90%*	*22.39%*	24.00%	24.62%	25.25%	25.87%	26.52%	27.14%	27.77%	28.39%	29.02%
13	*22.65%*	*24.26%*	26.00%	26.68%	27.35%	28.03%	28.73%	29.41%	30.08%	30.76%	31.43%
14	*24.39%*	*26.12%*	28.00%	28.73%	29.46%	30.18%	30.94%	31.67%	32.40%	33.12%	33.85%
15	*26.13%*	*27.99%*	30.00%	30.78%	31.56%	32.34%	33.15%	33.93%	34.71%	35.49%	36.27%
16	*27.87%*	*29.86%*	32.00%	32.83%	33.66%	34.50%	35.36%	36.19%	37.02%	37.86%	38.69%
17	*29.61%*	*31.72%*	34.00%	34.88%	35.77%	36.65%	37.57%	38.45%	39.34%	40.22%	41.11%
18	*31.36%*	*33.59%*	36.00%	36.94%	37.87%	38.81%	39.78%	40.72%	41.65%	42.59%	43.52%
19	*33.10%*	*35.45%*	38.00%	38.99%	39.98%	40.96%	41.99%	42.98%	43.97%	44.95%	45.94%
20	*34.84%*	*37.32%*	40.00%	41.04%	42.08%	43.12%	44.20%	45.24%	46.28%	47.32%	48.36%
21	*36.58%*	*39.19%*	42.00%	43.09%	44.18%	45.28%	46.41%	47.50%	48.59%	49.69%	50.78%
22	*38.32%*	*41.05%*	44.00%	45.14%	46.29%	47.43%	48.62%	49.76%	50.91%	52.05%	53.20%
23	*40.07%*	*42.92%*	46.00%	47.20%	48.39%	49.59%	50.83%	52.03%	53.22%	54.42%	55.61%
24	*41.81%*	*44.78%*	48.00%	49.25%	50.50%	51.74%	53.04%	54.29%	55.54%	56.78%	58.03%
25	*43.55%*	*46.65%*	50.00%	51.30%	52.60%	53.90%	55.25%	56.55%	57.85%	59.15%	60.45%
26	*45.29%*	*48.52%*	52.00%	53.35%	54.70%	56.06%	57.46%	58.81%	60.16%	61.52%	62.87%
27	*47.03%*	*50.38%*	54.00%	55.40%	56.81%	58.21%	59.67%	61.07%	62.48%	63.88%	65.29%
28	*48.78%*	*52.25%*	56.00%	57.46%	58.91%	60.37%	61.88%	63.34%	64.79%	66.25%	67.70%
29	*50.52%*	*54.11%*	58.00%	59.51%	61.02%	62.52%	64.09%	65.60%	67.11%	68.61%	70.00%
30	*52.26%*	*55.98%*	60.00%	61.56%	63.12%	64.68%	66.30%	67.86%	69.42%	70.00%	70.00%
31	*54.00%*	*57.85%*	62.00%	63.61%	65.22%	66.84%	68.51%	70.00%	70.00%	70.00%	70.00%
32	*55.74%*	*59.71%*	64.00%	65.66%	67.33%	68.99%	70.00%	70.00%	70.00%	70.00%	70.00%
33	*57.49%*	*61.58%*	66.00%	67.72%	69.43%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%
34	*59.23%*	*63.44%*	68.00%	69.77%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%
35 or more	*60.97%*	*65.31%*	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%

APPENDIX C – SUMMARY OF PLAN PROVISIONS

IBEW Table A-1: Retirement Benefit Multipliers

Credited Years Of Service	Age at Retirement										
	55	56	57	58	59	60	61	62	63	64	65+
5	5.2%	5.5%	5.9%	6.3%	6.7%	7.2%	7.8%	8.3%	8.9%	9.5%	10.1%
6	6.2%	6.6%	7.1%	7.5%	8.1%	8.7%	9.3%	10.0%	10.7%	11.4%	12.1%
7	7.2%	7.7%	8.2%	8.8%	9.4%	10.1%	10.9%	11.7%	12.4%	13.3%	14.1%
8	8.2%	8.8%	9.4%	10.1%	10.8%	11.6%	12.4%	13.3%	14.2%	15.1%	16.1%
9	9.3%	9.9%	10.6%	11.3%	12.1%	13.0%	14.0%	15.0%	16.0%	17.0%	18.1%
10	10.2%	11.0%	11.8%	12.6%	13.5%	14.4%	15.5%	16.7%	17.8%	18.9%	20.1%
11	11.2%	12.1%	12.9%	13.8%	14.8%	15.9%	17.1%	18.3%	19.5%	20.8%	22.2%
12	12.3%	13.2%	14.1%	15.1%	16.2%	17.3%	18.6%	20.0%	21.3%	22.7%	24.2%
13	13.3%	14.3%	15.3%	16.3%	17.5%	18.8%	20.2%	21.7%	23.1%	24.6%	26.2%
14	14.4%	15.4%	16.5%	17.6%	18.9%	20.2%	21.7%	23.3%	24.9%	26.5%	28.2%
15	15.4%	16.5%	17.6%	18.9%	20.2%	21.7%	23.3%	25.0%	26.7%	28.4%	30.2%
16	16.4%	17.6%	18.8%	20.1%	21.5%	23.1%	24.8%	26.7%	28.4%	30.3%	32.2%
17	17.5%	18.7%	20.0%	21.4%	22.9%	24.5%	26.4%	28.3%	30.2%	32.2%	34.3%
18	18.5%	19.8%	21.2%	22.6%	24.2%	26.0%	27.9%	30.0%	32.0%	34.1%	36.3%
19	19.6%	20.9%	22.3%	23.9%	25.6%	27.4%	29.5%	31.7%	33.8%	36.0%	38.3%
20	20.6%	22.0%	23.5%	25.2%	26.9%	28.9%	31.0%	33.3%	35.5%	37.9%	40.3%
21	21.6%	23.1%	24.7%	26.4%	28.3%	30.3%	32.6%	35.0%	37.3%	39.7%	42.3%
22	22.7%	24.2%	25.9%	27.7%	29.6%	31.8%	34.1%	36.7%	39.1%	41.6%	44.3%
23	23.7%	25.3%	27.0%	28.9%	31.0%	33.2%	35.7%	38.3%	40.9%	43.5%	46.3%
24	24.8%	26.4%	28.2%	30.2%	32.3%	34.6%	37.2%	40.0%	42.6%	45.4%	48.4%
25	25.8%	27.5%	29.4%	31.4%	33.7%	36.1%	38.8%	41.7%	44.4%	47.3%	50.4%
26	26.9%	28.6%	30.6%	32.7%	35.0%	37.5%	40.3%	43.3%	46.2%	49.2%	52.4%
27	27.9%	29.7%	31.7%	34.0%	36.4%	39.0%	41.9%	45.0%	48.0%	51.1%	54.4%
28	29.0%	30.9%	32.9%	35.2%	37.7%	40.4%	43.4%	46.7%	49.8%	52.0%	56.4%
29	30.0%	32.0%	34.1%	36.5%	39.1%	41.9%	45.0%	48.3%	50.0%	55.0%	58.4%
30	31.1%	33.1%	35.3%	37.7%	40.4%	43.4%	46.5%	50.0%	51.0%	55.5%	60.0%
31	32.1%	34.2%	36.5%	39.0%	41.7%	44.8%	48.1%	51.0%	51.5%	56.0%	60.0%
32	33.2%	35.3%	37.6%	40.2%	43.1%	46.2%	49.6%	51.5%	52.0%	56.5%	60.0%
33	34.3%	36.5%	38.8%	41.5%	44.4%	47.6%	50.0%	52.0%	52.5%	57.0%	60.0%
34	35.4%	37.6%	40.0%	42.8%	45.8%	49.1%	51.0%	52.5%	53.0%	57.5%	60.0%
35 or more	36.5%	38.7%	41.2%	44.0%	47.1%	50.0%	51.5%	53.0%	53.5%	58.0%	60.0%

APPENDIX C – SUMMARY OF PLAN PROVISIONS

IBEW Table A-2: Retirement Benefit Multipliers

Credited Years Of Service	Age at Retirement								
	55	56	57	58	59	60	61	62	63+
5	10.00%	10.26%	10.52%	10.78%	11.05%	11.31%	11.57%	11.83%	12.09%
6	12.00%	12.31%	12.62%	12.94%	13.26%	13.57%	13.88%	14.20%	14.51%
7	14.00%	14.36%	14.73%	15.09%	15.47%	15.83%	16.20%	16.56%	16.93%
8	16.00%	16.42%	16.83%	17.25%	17.68%	18.10%	18.51%	18.93%	19.34%
9	18.00%	18.47%	18.94%	19.40%	19.89%	20.36%	20.83%	21.29%	21.76%
10	20.00%	20.52%	21.04%	21.56%	22.10%	22.62%	23.14%	23.66%	24.18%
11	22.00%	22.57%	23.14%	23.72%	24.31%	24.88%	25.45%	26.03%	26.60%
12	24.00%	24.62%	25.25%	25.87%	26.52%	27.14%	27.77%	28.39%	29.02%
13	26.00%	26.68%	27.35%	28.03%	28.73%	29.41%	30.08%	30.76%	31.43%
14	28.00%	28.73%	29.46%	30.18%	30.94%	31.67%	32.40%	33.12%	33.85%
15	30.00%	30.78%	31.56%	32.34%	33.15%	33.93%	34.71%	35.49%	36.27%
16	32.00%	32.83%	33.66%	34.50%	35.36%	36.19%	37.02%	37.86%	38.69%
17	34.00%	34.88%	35.77%	36.65%	37.57%	38.45%	39.34%	40.22%	41.11%
18	36.00%	36.94%	37.87%	38.81%	39.78%	40.72%	41.65%	42.59%	43.52%
19	38.00%	38.99%	39.98%	40.96%	41.99%	42.98%	43.97%	44.95%	45.94%
20	40.00%	41.04%	42.08%	43.12%	44.20%	45.24%	46.28%	47.32%	48.36%
21	42.00%	43.09%	44.18%	45.28%	46.41%	47.50%	48.59%	49.69%	50.78%
22	44.00%	45.14%	46.29%	47.43%	48.62%	49.76%	50.91%	52.05%	53.20%
23	46.00%	47.20%	48.39%	49.59%	50.83%	52.03%	53.22%	54.42%	55.61%
24	48.00%	49.25%	50.50%	51.74%	53.04%	54.29%	55.54%	56.78%	58.03%
25	50.00%	51.30%	52.60%	53.90%	55.25%	56.55%	57.85%	59.15%	60.45%
26	52.00%	53.35%	54.70%	56.06%	57.46%	58.81%	60.16%	61.52%	62.87%
27	54.00%	55.40%	56.81%	58.21%	59.67%	61.07%	62.48%	63.88%	65.29%
28	56.00%	57.46%	58.91%	60.37%	61.88%	63.34%	64.79%	66.25%	67.70%
29	58.00%	59.51%	61.02%	62.52%	64.09%	65.60%	67.11%	68.61%	70.00%
30	60.00%	61.56%	63.12%	64.68%	66.30%	67.86%	69.42%	70.00%	70.00%
31	62.00%	63.61%	65.22%	66.84%	68.51%	70.00%	70.00%	70.00%	70.00%
32	64.00%	65.66%	67.33%	68.99%	70.00%	70.00%	70.00%	70.00%	70.00%
33	66.00%	67.72%	69.43%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%
34	68.00%	69.77%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%
35 or more	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%

APPENDIX C – SUMMARY OF PLAN PROVISIONS

Non-Contract Table A-1: Retirement Benefit Multipliers

Credited Years Of Service	Age at Retirement										
	53	54	55	56	57	58	59	60	61	62	63+
5	5.2%	5.5%	5.9%	6.3%	6.7%	7.2%	7.8%	8.3%	8.9%	9.5%	10.1%
6	6.2%	6.6%	7.1%	7.5%	8.1%	8.7%	9.3%	10.0%	10.7%	11.4%	12.1%
7	7.2%	7.7%	8.2%	8.8%	9.4%	10.1%	10.9%	11.7%	12.4%	13.3%	14.1%
8	8.2%	8.8%	9.4%	10.1%	10.8%	11.6%	12.4%	13.3%	14.2%	15.1%	16.1%
9	9.3%	9.9%	10.6%	11.3%	12.1%	13.0%	14.0%	15.0%	16.0%	17.0%	18.1%
10	10.2%	11.0%	11.8%	12.6%	13.5%	14.4%	15.5%	16.7%	17.8%	18.9%	20.1%
11	11.2%	12.1%	12.9%	13.8%	14.8%	15.9%	17.1%	18.3%	19.5%	20.8%	22.2%
12	12.3%	13.2%	14.1%	15.1%	16.2%	17.3%	18.6%	20.0%	21.3%	22.7%	24.2%
13	13.3%	14.3%	15.3%	16.3%	17.5%	18.8%	20.2%	21.7%	23.1%	24.6%	26.2%
14	14.4%	15.4%	16.5%	17.6%	18.9%	20.2%	21.7%	23.3%	24.9%	26.5%	28.2%
15	15.4%	16.5%	17.6%	18.9%	20.2%	21.7%	23.3%	25.0%	26.7%	28.4%	30.2%
16	16.4%	17.6%	18.8%	20.1%	21.5%	23.1%	24.8%	26.7%	28.4%	30.3%	32.2%
17	17.5%	18.7%	20.0%	21.4%	22.9%	24.5%	26.4%	28.3%	30.2%	32.2%	34.3%
18	18.5%	19.8%	21.2%	22.6%	24.2%	26.0%	27.9%	30.0%	32.0%	34.1%	36.3%
19	19.6%	20.9%	22.3%	23.9%	25.6%	27.4%	29.5%	31.7%	33.8%	36.0%	38.3%
20	20.6%	22.0%	23.5%	25.2%	26.9%	28.9%	31.0%	33.3%	35.5%	37.9%	40.3%
21	21.6%	23.1%	24.7%	26.4%	28.3%	30.3%	32.6%	35.0%	37.3%	39.7%	42.3%
22	22.7%	24.2%	25.9%	27.7%	29.6%	31.8%	34.1%	36.7%	39.1%	41.6%	44.3%
23	23.7%	25.3%	27.0%	28.9%	31.0%	33.2%	35.7%	38.3%	40.9%	43.5%	46.3%
24	24.8%	26.4%	28.2%	30.2%	32.3%	34.6%	37.2%	40.0%	42.6%	45.4%	48.4%
25	25.8%	27.5%	29.4%	31.4%	33.7%	36.1%	38.8%	41.7%	44.4%	47.3%	50.4%
26	26.9%	28.6%	30.6%	32.7%	35.0%	37.5%	40.3%	43.3%	46.2%	49.2%	52.4%
27	27.9%	29.7%	31.7%	34.0%	36.4%	39.0%	41.9%	45.0%	48.0%	51.1%	54.4%
28	29.0%	30.9%	32.9%	35.2%	37.7%	40.4%	43.4%	46.7%	49.8%	52.0%	56.4%
29	30.0%	32.0%	34.1%	36.5%	39.1%	41.9%	45.0%	48.3%	50.0%	55.0%	58.4%
30	31.1%	33.1%	35.3%	37.7%	40.4%	43.4%	46.5%	50.0%	51.0%	55.5%	60.0%
31	32.1%	34.2%	36.5%	39.0%	41.7%	44.8%	48.1%	51.0%	51.5%	56.0%	60.0%
32	33.2%	35.3%	37.6%	40.2%	43.1%	46.2%	49.6%	51.5%	52.0%	56.5%	60.0%
33	34.3%	36.5%	38.8%	41.5%	44.4%	47.6%	50.0%	52.0%	52.5%	57.0%	60.0%
34	35.4%	37.6%	40.0%	42.8%	45.8%	49.1%	51.0%	52.5%	53.0%	57.5%	60.0%
35 or more	36.5%	38.7%	41.2%	44.0%	47.1%	50.0%	51.5%	53.0%	53.5%	58.0%	60.0%

APPENDIX C – SUMMARY OF PLAN PROVISIONS

Non-Contract Table A-2: Retirement Benefit Multipliers

Credited Years Of Service	Age at Retirement										
	53	54	55	56	57	58	59	60	61	62	63+
5	8.71%	9.33%	10.00%	10.26%	10.52%	10.78%	11.05%	11.31%	11.57%	11.83%	12.09%
6	10.45%	11.20%	12.00%	12.31%	12.62%	12.94%	13.26%	13.57%	13.88%	14.20%	14.51%
7	12.19%	13.06%	14.00%	14.36%	14.73%	15.09%	15.47%	15.83%	16.20%	16.56%	16.93%
8	13.94%	14.93%	16.00%	16.42%	16.83%	17.25%	17.68%	18.10%	18.51%	18.93%	19.34%
9	15.68%	16.79%	18.00%	18.47%	18.94%	19.40%	19.89%	20.36%	20.83%	21.29%	21.76%
10	17.42%	18.66%	20.00%	20.52%	21.04%	21.56%	22.10%	22.62%	23.14%	23.66%	24.18%
11	19.16%	20.53%	22.00%	22.57%	23.14%	23.72%	24.31%	24.88%	25.45%	26.03%	26.60%
12	20.90%	22.39%	24.00%	24.62%	25.25%	25.87%	26.52%	27.14%	27.77%	28.39%	29.02%
13	22.65%	24.26%	26.00%	26.68%	27.35%	28.03%	28.73%	29.41%	30.08%	30.76%	31.43%
14	24.39%	26.12%	28.00%	28.73%	29.46%	30.18%	30.94%	31.67%	32.40%	33.12%	33.85%
15	26.13%	27.99%	30.00%	30.78%	31.56%	32.34%	33.15%	33.93%	34.71%	35.49%	36.27%
16	27.87%	29.86%	32.00%	32.83%	33.66%	34.50%	35.36%	36.19%	37.02%	37.86%	38.69%
17	29.61%	31.72%	34.00%	34.88%	35.77%	36.65%	37.57%	38.45%	39.34%	40.22%	41.11%
18	31.36%	33.59%	36.00%	36.94%	37.87%	38.81%	39.78%	40.72%	41.65%	42.59%	43.52%
19	33.10%	35.45%	38.00%	38.99%	39.98%	40.96%	41.99%	42.98%	43.97%	44.95%	45.94%
20	34.84%	37.32%	40.00%	41.04%	42.08%	43.12%	44.20%	45.24%	46.28%	47.32%	48.36%
21	36.58%	39.19%	42.00%	43.09%	44.18%	45.28%	46.41%	47.50%	48.59%	49.69%	50.78%
22	38.32%	41.05%	44.00%	45.14%	46.29%	47.43%	48.62%	49.76%	50.91%	52.05%	53.20%
23	40.07%	42.92%	46.00%	47.20%	48.39%	49.59%	50.83%	52.03%	53.22%	54.42%	55.61%
24	41.81%	44.78%	48.00%	49.25%	50.50%	51.74%	53.04%	54.29%	55.54%	56.78%	58.03%
25	43.55%	46.65%	50.00%	51.30%	52.60%	53.90%	55.25%	56.55%	57.85%	59.15%	60.45%
26	45.29%	48.52%	52.00%	53.35%	54.70%	56.06%	57.46%	58.81%	60.16%	61.52%	62.87%
27	47.03%	50.38%	54.00%	55.40%	56.81%	58.21%	59.67%	61.07%	62.48%	63.88%	65.29%
28	48.78%	52.25%	56.00%	57.46%	58.91%	60.37%	61.88%	63.34%	64.79%	66.25%	67.70%
29	50.52%	54.11%	58.00%	59.51%	61.02%	62.52%	64.09%	65.60%	67.11%	68.61%	70.00%
30	52.26%	55.98%	60.00%	61.56%	63.12%	64.68%	66.30%	67.86%	69.42%	70.00%	70.00%
31	54.00%	57.85%	62.00%	63.61%	65.22%	66.84%	68.51%	70.00%	70.00%	70.00%	70.00%
32	55.74%	59.71%	64.00%	65.66%	67.33%	68.99%	70.00%	70.00%	70.00%	70.00%	70.00%
33	57.49%	61.58%	66.00%	67.72%	69.43%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%
34	59.23%	63.44%	68.00%	69.77%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%
35 or more	60.97%	65.31%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%

APPENDIX C – SUMMARY OF PLAN PROVISIONS

Table B: Alternate Retirement Formula Multipliers

Credited Years Of Service	Percentage
10	20.1%
11	22.2%
12	24.2%
13	26.2%
14	28.2%
15	30.2%
16	32.2%
17	34.3%
18	36.3%
19	38.3%
20	40.3%
21	42.3%
22	44.3%
23	46.3%
24	48.4%
25	50.4%
26	52.4%
27	54.4%
28	56.4%
29	58.4%
30	60.4%
31	62.5%
32	64.5%
33	66.5%
34	68.5%
35 or more	70.5%

APPENDIX D – GLOSSARY

1. Actuarial Assumptions

Assumptions as to the occurrence of future events affecting pension costs such as mortality, withdrawal, disability, retirement, changes in compensation, and rates of investment return.

2. Actuarial Cost Method

A procedure for determining the actuarial present value of pension plan benefits and expenses and for developing an allocation of such value to each year of service, usually in the form of a normal cost and an Actuarial Liability.

3. Actuarial Gain (Loss)

The difference between actual experience and that expected is based upon a set of actuarial assumptions during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

4. Actuarial Liability

The portion of the actuarial present value of projected benefits, which will not be paid by future normal costs. It represents the value of the past normal costs with interest to the valuation date.

5. Actuarial Present Value (Present Value)

The value as of a given date of a future amount or series of payments. The actuarial present value discounts the payments to the given date at the assumed investment return and includes the probability of the payment being made.

6. Actuarial Valuation

The determination, as of a specified date, of the normal cost, Actuarial Liability, Actuarial Value of Assets, and related actuarial present values for a pension plan.

7. Actuarial Value of Assets

The value of cash, investments, and other property belonging to a pension plan as used by the actuary for the purpose of an actuarial valuation. The purpose of an Actuarial Value of Assets is to smooth out fluctuations in market values.

8. Actuarially Equivalent

Of equal actuarial present value, determined as of a given date, with each value based on the same set of actuarial assumptions.

APPENDIX D – GLOSSARY

9. Amortization Payment

The portion of the pension plan contribution that is designed to pay interest and principal on the Unfunded Actuarial Liability in order to pay for that liability in a given number of years.

10. Entry Age Normal Actuarial Cost Method

A method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages.

11. Funded Ratio

The ratio of the Actuarial Value of Assets to the Actuarial Liabilities.

12. Normal Cost

That portion of the actuarial present value of pension plan benefits and expenses, which is allocated to a valuation year by the actuarial cost method.

13. Projected Benefits

Those pension plan benefit amounts which are expected to be paid in the future under a particular set of actuarial assumptions, taking into account such items as increases in future compensation and service credits.

14. Unfunded Actuarial Liability

The excess of the Actuarial Liability over the Actuarial Value of Assets.

CHEIRON

Classic Values, Innovative Advice

CHEIRON Classic Values, Innovative Advice

Retirement Plans of San Diego Transit Corporation

Actuarial Valuation Report as of July 1, 2025 (Revised Amortization Policy)

Produced by Cheiron

December 2025

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Via Electronic Mail

December 9, 2025

Mr. Larry Marinesi
San Diego Transit Corporation
1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490

Dear Mr. Marinesi,

At your request, we have conducted an actuarial valuation of the Retirement Plans of San Diego Transit Corporation ("Plan," "SDTC") as of July 1, 2025. This report contains information on the Plan's assets, liabilities, and contribution levels. It also contains an assessment and disclosures of the Plan's risks. In the Foreword, we refer to the general approach employed in the preparation of this report.

The purpose of this report is to present the results of the annual actuarial valuation of the Plans. This report is for the use of the Retirement Board and the San Diego Metropolitan Transit System ("MTS") Board and its auditors in preparing financial reports in accordance with applicable law and accounting requirements.

In preparing our report, we relied on information (some oral and some written) supplied by the plan administrator. This information includes, but is not limited to, the Plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

The assumptions used in calculating the liabilities found in this report reflect the results of an Experience Study approved by the Budget Development Committee in October 2021 and the San Diego Metropolitan Transit System's (MTS) Board of Directors in November 2021.

Future results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the assumptions; changes in assumptions; changes in methods; and, changes in plan provisions or applicable law.

This report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable law and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

This report was prepared exclusively for the Retirement Board and MTS Board for the purposes described herein. Other users of this valuation report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any other user.

Sincerely,
Cheiron

Anne D. Harper, FSA, EA, MAAA
Principal Consulting Actuary

Alice I. Alsberghe, ASA, EA, MAAA
Consulting Actuary

FOREWORD

Cheiron has performed the actuarial valuation of the Retirement Plans of San Diego Transit Corporation as of July 1, 2025. The valuation report is organized as follows:

- In Section I, the **Executive Summary,** we describe the purpose of an actuarial valuation, summarize the key results found in this valuation, and disclose important trends.

- The **Main Body** of the report presents details on the Plan's:

    - Section II – Assessment and Disclosure of Risk
    - Section III – Assets
    - Section IV – Liabilities
    - Section V – Contributions

- In the **Appendices,** we conclude our report with detailed information describing plan membership (Appendix A), actuarial assumptions and methods employed in the valuation (Appendix B), a summary of pertinent plan provisions (Appendix C), and a glossary of key actuarial terms (Appendix D).

Cheiron utilizes ProVal, an actuarial valuation application leased from Winklevoss Technologies (WinTech), to calculate liabilities and project benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this report. The deterministic and stochastic projections shown in this report were developed using R-Scan, our proprietary stochastic projection tool for assessing probabilities of different outcomes. We have relied on Cheiron colleagues who developed the tool, and we have used the tool in accordance with its purpose.

SECTION I – EXECUTIVE SUMMARY

The primary purpose of the actuarial valuation and this report is to measure, describe, and identify the following as of the valuation date:

- The financial condition of the Plan,
- Past and expected trends in the financial progress of the Plan, and
- The total contribution amount (employer and employee) to be made during Fiscal Year 2026-2027.

In the balance of this Executive Summary, we present (A) the basis upon which this year's valuation was completed, (B) the key results of this valuation including a summary of all key financial results, (C) changes in Plan cost, (D) an examination of historical trends, and (E) the future expected financial trends for the Plan.

A. Valuation Basis

This valuation determines total employer and employee contributions for the fiscal year 2026-2027.

The Plan's funding policy is to contribute an amount equal to the sum of:

- The normal cost under the Entry Age Normal Cost Method,
- Expected administrative expenses, and
- Amortization of the Unfunded Actuarial Liability (UAL) based on level dollar payments.

The employee will contribute according to the Plan schedules below. Member contribution rates in the future may change in response to collective bargaining. It will be the responsibility of the employer to contribute the remaining portion of the total contribution determined in this report.

- IBEW members contribute 8% of compensation (since April 2016)

- ATU drivers and clerical members contribute 8% of compensation (since December 2017)

- Non-Contract members hired before January 1, 2013, contribute 8% of compensation (since January 2017)

- PEPRA members, Non-Contract members hired after on or January 1, 2013 are required to contribute half of the normal cost of the PEPRA member benefits, rounded to the nearest 0.25% of pay. The PEPRA member contribution rate, calculated in the July 1, 2025 actuarial valuation and effective during FY 2026-2027, will remain at 9.00% of pay. The development of the PEPRA member contribution rate can be found in Section V in the body of this report.

SECTION I – EXECUTIVE SUMMARY

The SDTC Plans are closed to new entrants, except for Non-Contract members. A closed plan has very different dynamics as active plan membership declines and grows older and a larger portion of the Plan's liability shifts to payees. This dynamic shortens the investment horizon thus mitigating investment risk becomes more important. If the asset mix changes to reflect the expected pattern of benefit payments, it may become more conservative and the expected return on plan assets could change. Thus, continuing to monitor the impact of changes to the Plan's asset allocation on expected future asset returns is important.

The true cost of the Plan is a function of actual Plan experience, not the actuarial assumptions. It is important to set realistic assumptions to mitigate the risk of Plan contribution volatility. In Section II of this report, we provide a detailed assessment and disclosure of the Plan's risks.

This valuation was prepared based on the Plan provisions as summarized in Appendix C. There have been no changes in plan provisions since the prior valuation. The results of this valuation do not include members participating in the defined contribution plans.

B. Key Results of this Valuation

The key results of the July 1, 2025 actuarial valuation are as follows:

- The actuarially determined contribution shown in this report is the total contribution required from both the employer and the employees. The total contribution decreased from $21.2 million to $16.5 million, a decrease of approximately $4.8 million from the July 1, 2024 valuation. This decrease was driven by the impact of the new amortization policy and marginally offset by increases due to the recognition of the prior years' net asset losses as well as unfavorable liability experience.

  Based on the July 1, 2024 actuarial valuation, the contribution was expected to increase to approximately $21.3 million. See Table I-2 for a reconciliation of the contribution cost from last year to this year that includes all components of the change. See Appendix B for a full description of the new amortization method.

- During the plan year ending June 30, 2025, the return on Plan assets was 9.9% based on the Market Value of Assets (MVA) compared to the 6.0% assumed rate of return. A return over 6.0% would result in an actuarial gain, and a return lower than 6.0% would result in an actuarial loss. The favorable investment experience resulted in an actuarial gain on the Market Value of Assets of $7.4 million.

- The Actuarial Value of Assets (AVA) recognizes 20% of the difference between the expected and actual return, referred to as "Unexpected Earnings," on the Market Value of Assets (MVA) for each of the prior five years. The return on the AVA was 5.8% for June 30, 2025 which is slightly less than the 6.0% assumed rate of return. The asset experience resulted in an actuarial loss of $0.3 million.

  There are $1.4 million in net deferred asset gains in the July 1, 2025 actuarial valuation compared to $6.0 million in net deferred asset losses in the previous valuation. See Tables III-3 and III-4 for the detailed calculations.

- The Actuarial Liability was more than expected by $4.4 million, primarily due to active member salary increases that were higher than expected by about 3.7%.

- The Plan's funded ratio, the ratio of actuarial (smoothed) assets over the Actuarial Liability, increased from 57.2% last year to 58.6% as of July 1, 2025. The funded ratio based on the Market Value of Assets also increased significantly from 55.5% to 59.1%, because the asset gains for FYE 2025 are recognized immediately in the MVA.

- The Unfunded Actuarial Liability (UAL) is the excess of the Plan's Actuarial Liability over the Actuarial Value of Assets. The Plan's UAL decreased from $148.7 million to $145.6 million as of July 1, 2025.

SECTION I – EXECUTIVE SUMMARY

Below we present Table I-1, which summarizes all the key results of the valuation with respect to membership, assets and liabilities, and contributions. The results are presented and compared for both the current and prior plan year.

Table I-1
Summary of Principal Plan Results

	July 1, 2024	July 1, 2025	% Change
Participant Counts			
Active Participants	289	268	-7.3%
Participants Receiving a Benefit	1,064	1,067	0.3%
Inactive Participants	172	169	-1.7%
Total	1,525	1,504	-1.4%
Projected Plan Member Payroll [1] for Fiscal Year 2025 and 2026	$ 22,601,625	$ 22,531,987	-0.3%
Assets and Liabilities			
Actuarial Liability (AL)	$ 347,621,403	$ 352,007,494	1.3%
Actuarial Value of Assets (AVA)	198,907,997	206,451,763	3.8%
Unfunded Actuarial Liability (UAL)	$ 148,713,406	$ 145,555,731	-2.1%
Market Value of Assets (MVA)	$ 192,944,763	$ 207,876,069	7.7%
Funded Ratio (AVA)	57.2%	58.6%	1.4%
Funded Ratio (MVA)	55.5%	59.1%	3.6%
Contributions	**FY 2025-2026**	**FY 2026-2027**	
Total Normal Cost [2]	$ 3,915,835	$ 3,873,399	-1.1%
Total UAL Contribution	17,315,630	12,597,576	-27.2%
Total Contribution (middle of year)	$ 21,231,465	$ 16,470,975	-22.4%

[1] *Based on valuation data projected using half-year of salary increases but excludes payroll for members expected to leave employment or retire during the year.*

[2] *Includes assumed administrative expenses as of the beginning of the valuation year of $296,276 and $303,683 for both July 1, 2024 and July 1, 2025, respectively.*

C. Changes in Plan Cost

Table I-2 below summarizes the impact of actuarial experience on Plan cost.

Table I-2
Total Contribution Reconciliation

Fiscal Year 2025-2026, middle of year		**$**	**21,231,465**
Change due to amortization policy			(5,383,864)
Total Change due to actuarial investment experience			34,835
Investment experience from FYE 2025	(172,496)		
Increase from deferred investment losses 2021-2024	207,331		
Change due to liability experience			628,049
Change due to effect of closed plan on benefits earned			(168,857)
Change due to other miscellaneous factors		$	129,347
Fiscal Year 2026-2027, middle of year		**$**	**16,470,975**

An analysis of the cost **changes from the prior valuation** reveals the following:

- The contribution allocation procedure was updated to reflect a new amortization policy. The impact was a reduction in the Unfunded Actuarial Liability (UAL) payment contribution of $5,383,864.

  Under the prior amortization policy, the UAL was amortized over a series of layers with each layer amortized over a closed period no longer than 12 years, in order to achieve full funding by 2037. As of July 1, 2025, the new amortization policy combines all the UAL layers from the July 1, 2024 actuarial valuation into one consolidated layer with a closed 20-year period. Subsequent, changes to the UAL, including the July 1, 2025 actuarial experience loss, are amortized over separate 10-year periods.

- The Actuarial Value of Assets recognizes unexpected gains or losses on the Market Value of Assets over a five-year period. Actuarial gains and losses are based on the assumed rate of return. The actual return on Actuarial Value of Assets (AVA) was 5.8%, compared to the expected return of 6.00%, resulting in an actuarial loss of $300,689. The actuarial asset experience increased the total contribution by $34,835.

  The asset gain on the Market Value of Assets for the plan year ending June 30, 2025 was $7,444,645 and resulted in a $172,496 decrease to the total contribution but was offset by the partial recognition of previous years' net deferred assets losses of $207,331.

SECTION I – EXECUTIVE SUMMARY

- Actual demographic experience will always differ from the actuarial assumptions. The liability experience of the Plan increased the total contribution by $628,049. The liability experience loss was primarily driven by salary increases for active members which increased the contribution by about $509,000 and the changing demographics of the active membership (including new entrants) which increased the contribution by about $119,000.

- Closing the Plan to most new entrants decreased the total amount of benefits that are being earned each year as members continue to leave employment through retirements, terminations, disabilities, and death, and thus cease to earn additional benefits. This decreased the Plan contribution by $168,857.

- The net effect of other miscellaneous factors mostly due to the contribution timing lag slightly offset by administrative expense experience increased the Plan contributions by $129,347.

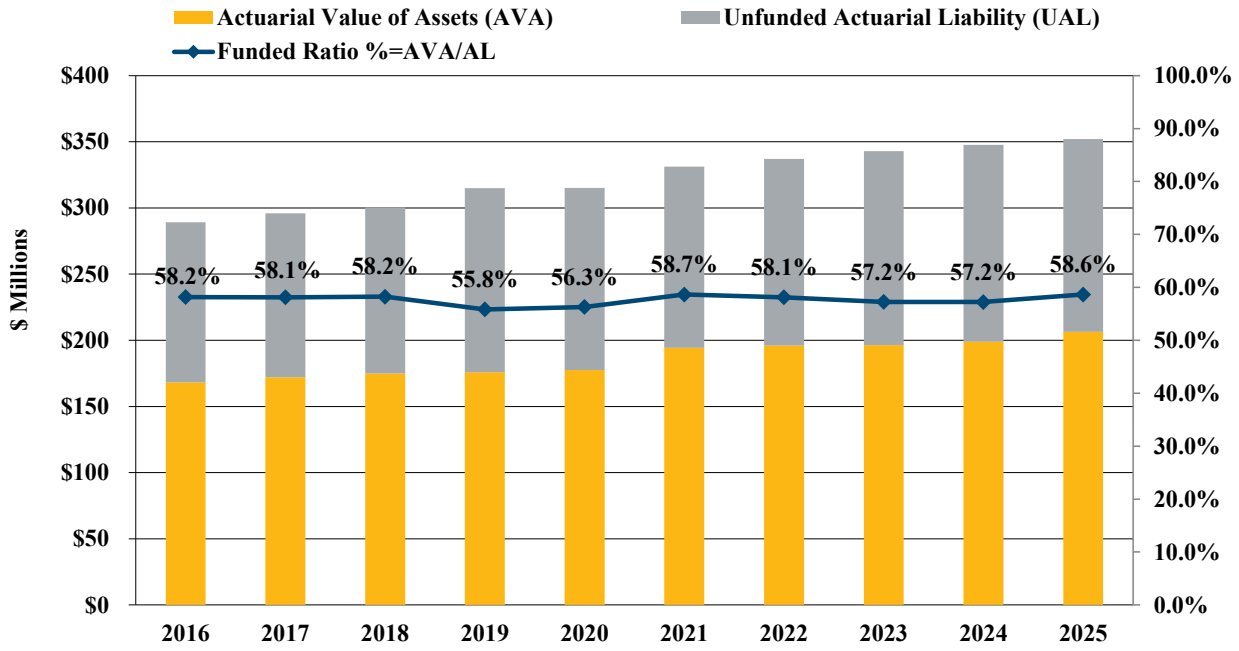
D. Historical Trends

For most retirement plans the greatest attention is given to the current valuation results – in particular, the size of the current Unfunded Actuarial Liability (UAL) and the total contribution; however, it is important to remember that each valuation is merely a snapshot in the long-term progress of a pension fund. It is important to judge a current year's valuation results relative to historical trends, as well as trends expected into the future.

Assets and Liabilities

The chart below presents the Actuarial Value of Assets (gold bars), Unfunded Actuarial Liability (gray bars), and Funded Ratio (navy line). The top of the bars (sum of gold and gray bars) depicts the total Actuarial Liability. Over the 10-year period shown, both the Actuarial Liability and Actuarial Value of Assets have been increasing at a similar pace. It is important to note that the assumed rate of return at the beginning of the period was 7.00% and had been gradually reduced over the 10-year period to 6.00% as of July 1, 2021, which has been a major source of the decrease in the funded ratio.

In 2019, the funded ratio decreased from 58.2% to 55.8% due to a reduction to 6.75% in the assumed rate of return. There was an increase in the funded ratio in 2021 even though the assumed rate of return was reduced from 6.75% to 6.00%. The significant return on assets as of June 30, 2021, and an additional $7.8 million contribution from the CARES Act, more than offset the impact of the assumption changes. From 2021 to 2024, the funded ratio declined due to both liability experience (mostly salary increases in excess of the assumptions) and the 2022 asset losses. The funded ratio increased in 2025 given that the increase on the Actuarial Value of Assets outpaced the increase on the Actuarial Liability.



SECTION I – EXECUTIVE SUMMARY

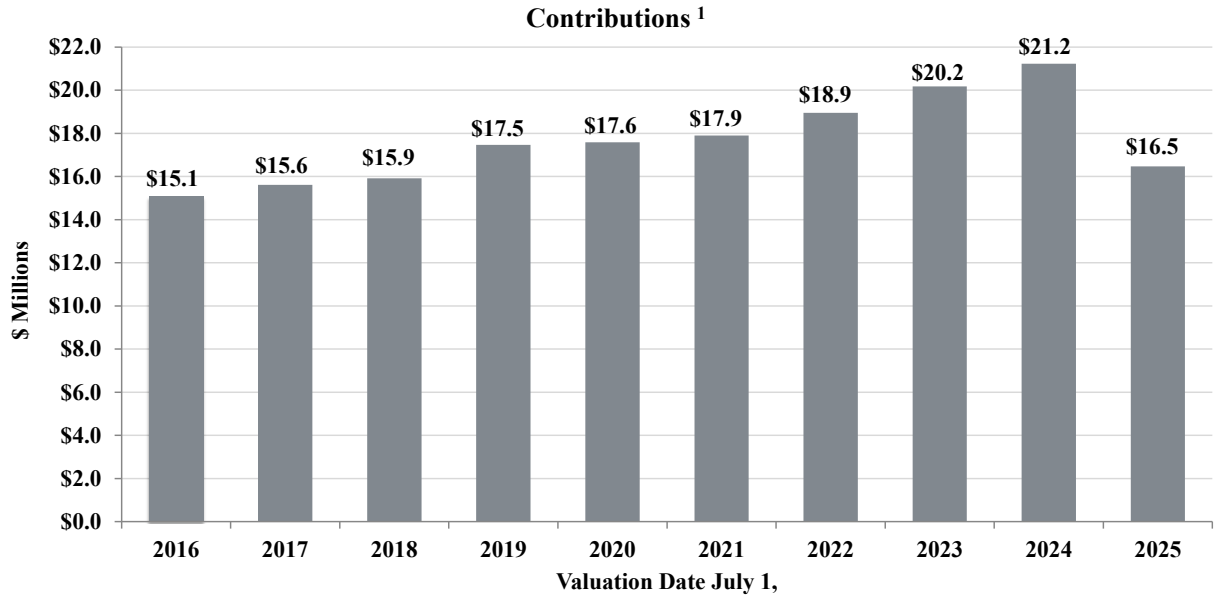
Contributions

The chart below shows a history of the Plan's actuarially determined total contribution for the upcoming fiscal year, reported by valuation date.

From 2016 to 2018, investment experience on the actuarial valuation of assets was the primary source of contribution increases. However, in 2019, there was a reduction in the assumed rate of return to from 7.00% to 6.75% which increased the contribution to $17.5 million.

In 2021, the assumption changes, including a reduction in the assumed rate of return to 6.00%, were the primary source for the increase in the total contribution, but were partially offset by the additional CARES Act contribution and favorable investment experience. From 2021 to 2024, the contributions continued to increase as the 2022 investment losses were recognized, in addition to liability losses. With the 2025 valuation, the required contributions decreased to $16.5 million driven by the new amortization policy and somewhat offset by larger than expected salary increases during FYE 2025.

A reconciliation of the contributions from the 2024 to 2025 valuations can be found in Table I-2 of this report.

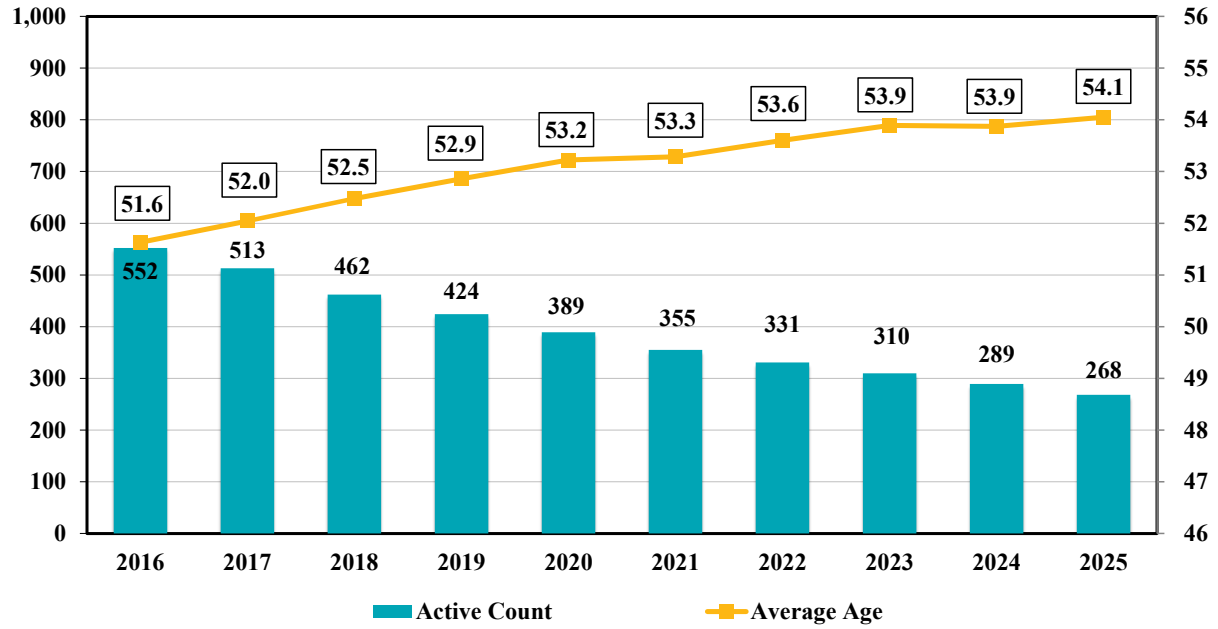


[1] *Contribution amounts reported by valuation date are mid-year values for the upcoming fiscal year.*

SECTION I – EXECUTIVE SUMMARY

Active Participant Trends

The number and average age of active Plan members for the last 10 years is shown in the chart below. Because the plan has been mostly closed to new entrants since 2012, the membership has declined by more than 50% from 552 to 268 actives over the period shown. In addition, the average age of an active member has increased by almost three years during the period shown. The trend of declining active membership is expected to continue, as new bargained employees participate in the defined contribution plan.

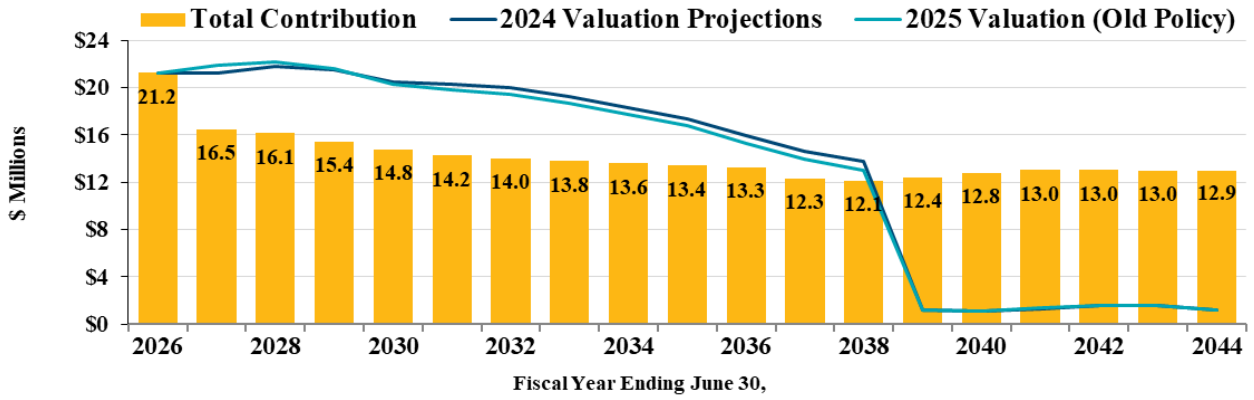


E. Future Expected Financial Trends

The analysis of projected financial trends is an important component of this valuation. In this section, we present our assessment of the implications of the July 1, 2025 valuation results in terms of benefit security (assets over liabilities) and contributions over the next 19 years.

The projections in this section assume that the Plan will achieve the 6.00% investment return assumption, and all other actuarial assumptions will be met each year, which is highly unlikely. We also assume the current funding method and amortization policy will remain in place throughout the projection period.

Contributions are shown for the Fiscal Year End that they are expected to be made. For example, the actuarially determined contribution from the July 1, 2025 valuation of $16.5 million is expected to be made during the period July 1, 2026 through June 30, 2027.

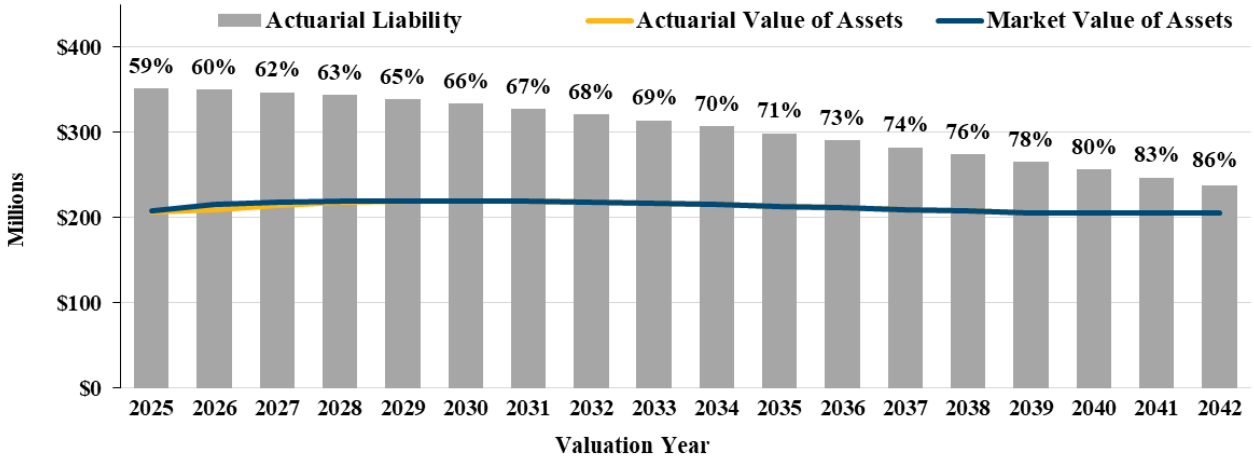


The Plan's projected contributions prior to the amortization policy change (teal line) are very similar to those projected in the 2024 valuation (blue line). However, the Plan's contribution projections under the new amortization policy (gold bars) show significant decreases until FYE 2039 since the new amortization policy extends the existing UAL payment period to 20 years. From FYE 2027 to FYE 2031, there is a steady decline in the contributions due to previous years' net deferred asset gains being fully recognized. Thereafter, the contributions gradually decrease as there are fewer active members earning benefits each year since the Plan is closed to most new entrants. The $1 million decrease in the FYE 2037 contribution, from $13.3 million to $12.3 million, is as result of the July 1, 2025 actuarial experience loss being fully paid.

SECTION I – EXECUTIVE SUMMARY

Asset and Liability Projections:

This graph shows the projection of assets and liabilities, assuming that assets will earn the 6.00% assumption each year during the projection period, as all other assumptions are met. The percentages at the top of the graph represent the funded ratio based on the Actuarial Value of Assets.



The funded status is expected to gradually increase over the projection period as the Actuarial Liability (gray bars) is expected to decrease while the Plan's assets are expected to increase (yellow and blue lines). Assuming the actuarial assumptions are achieved, the Plan is projected to be 86% funded with the July 1, 2042 valuation and 100% funded three years later when the consolidated UAL layer with the new amortization policy is fully paid.

It is important to remember, it is the actual return on Plan assets that will determine the future funding status and contributions to the Plan.

SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Actuarial valuations are based on a set of assumptions about future economic and demographic experience. These assumptions represent a reasonable estimate of future experience, but actual future experience will undoubtedly be different and may be significantly different. This section of the report is intended to identify the primary risks to the plan, provide some background information about those risks, and provide an assessment of those risks.

Identification of Risks

The fundamental risk to a pension plan is that the contributions needed to pay the benefits become unaffordable. While we believe it is unlikely that the Plan by itself would become unaffordable, the contributions needed to support the Plan may differ significantly from expectations. While there are a number of factors that could lead to contribution amounts deviating from expectations, we believe the primary sources are:

- Investment risk,
- Inflation risk, and
- Contribution risk.

Other risks that we have not identified may also turn out to be important.

Investment Risk is the potential for investment returns to be different than expected. Lower investment returns than anticipated will increase the Unfunded Actuarial Liability (UAL) necessitating higher contributions in the future unless there are other gains that offset these investment losses. In contrast, higher investment returns than anticipated may create a potentially significant surplus that could be difficult to use until all benefits have been paid. Expected future investment returns and their potential volatility are determined by the Plan's asset allocation.

Inflation risk is the potential for actual inflation to be different than expected. Retirement benefits under the plan for the Non-Contract retirees who retired on or after June 30, 1999 are potentially increased annually for inflation with certain caps. Higher inflation than expected could result in the payment of greater benefits, and lower inflation than expected could result in the payment of lower benefits. Inflation can also potentially impact expected salary increases, but since the plan is closed to most new hires, this risk is diminishing.

Contribution risk is the potential for actual future actuarially determined contributions to deviate from expected future contributions to an extent that they become unaffordable. The Plan's funding policy is to determine an Actuarially Determined Contribution (ADC) equal to the sum of the normal cost, amortization of the UAL, and the Plan's expected administrative expenses. The UAL is amortized in level dollar payments with several layers with differing amortization periods. The UAL amortization policy was changed as of July 1, 2025 to consolidate the UAL balance from prior experience and changes over a closed 20-year period, with subsequent actuarial experience amortized over separate closed 10-year periods, including the actuarial loss from the July 1, 2025 actuarial valuation. Any reduction in the ADC will result in a slower recovery in funded status.

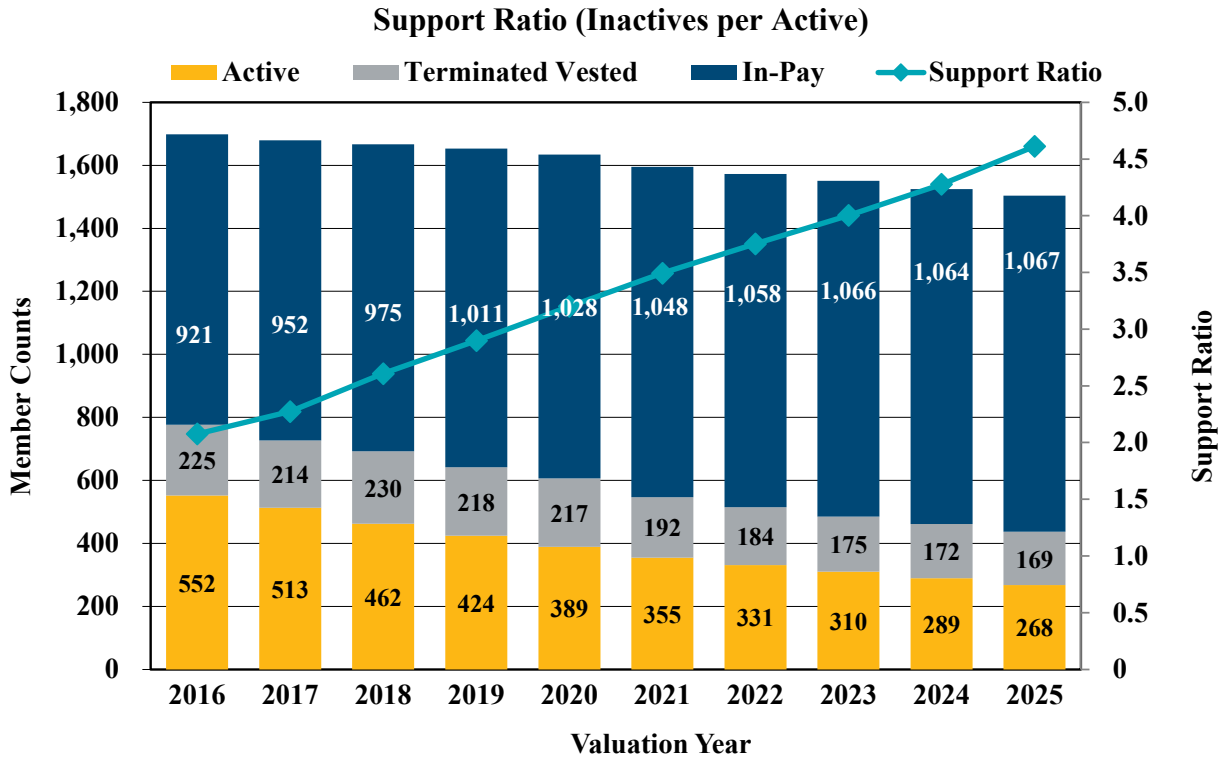
Plan Maturity Measures

The future financial condition of a mature pension plan is more sensitive to each of the risks identified above than a less mature plan. Before assessing each of these risks, it is important to understand the maturity of the plan.

Plan maturity can be measured in a variety of ways, but they all get at one basic dynamic – the larger the plan is compared to the contribution or revenue base that supports it, the more sensitive the plan will be to risk. Given that the Plan has been closed to most new entrants since 2012, measures specific to the Plan show significant increases in maturity and risk. However, for the Metropolitan Transit System, this risk is declining relative to the total employment base.

Support Ratio (Inactives per Active)

One simple measure of plan maturity is the ratio of the number of inactive members (those receiving benefits or entitled to a deferred benefit) to the number of active members. For a closed plan, the Support Ratio is expected to increase significantly as the active members retire or terminate and there are no new entrants replacing them. The chart below shows the growth in the Support Ratio for the Plan for the past 10 years.

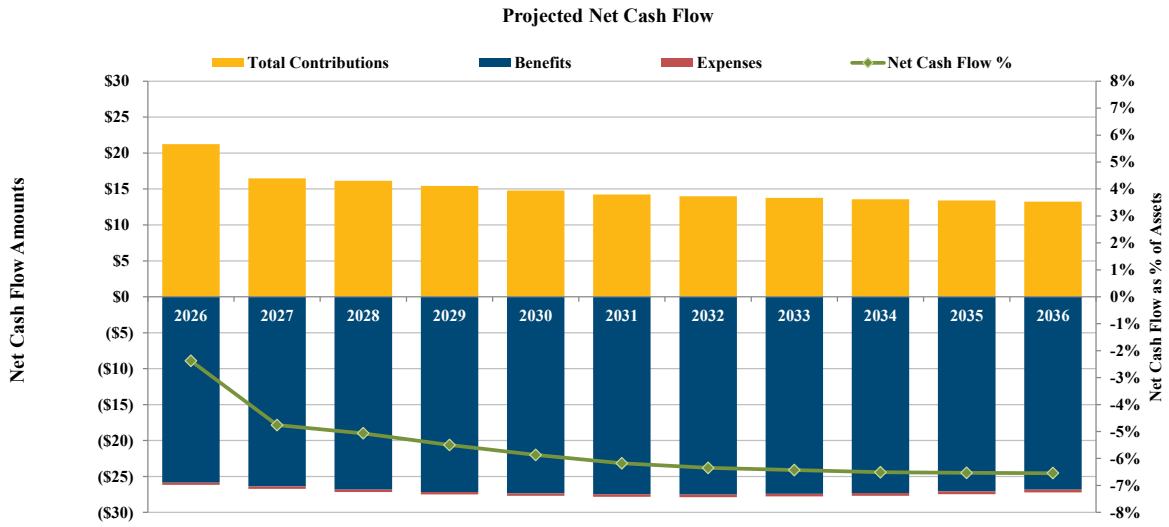


SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Net Cash Flow

The net cash flow of the plan as a percentage of the beginning of year assets indicates the sensitivity of the plan to short-term investment returns. Net cash flow is equal to contributions less benefit payments and administrative expenses. Mature plans can have large amounts of benefit payments compared to contributions, particularly if they are well funded.

The chart below shows the projected net cash flow for the next 10 fiscal years. The bars represent the dollar amounts of the different components of the projected net cash flow, and the line represents the net cash flow as a percentage of the assets as of the beginning of the fiscal year.



The net cash flow has been negative since at least 2013. The net cash flow is expected to be increasingly negative as a result of the revised amortization policy which reduces expected future contributions to the Plan. Over the period shown above, as benefit payments slowly increase and contributions slowly decline, the net cash flow approaches -7%.

The first issue the negative cash flow presents to the Plan is a need for liquidity in the investments so that benefits can be paid. When the cash flow was positive or close to neutral, benefits could be paid out of contributions without liquidating investments. As net cash flow becomes increasingly negative, the benefit payments will require liquidation of some investments (at least to the extent the bond portfolio does not generate sufficient cash income).

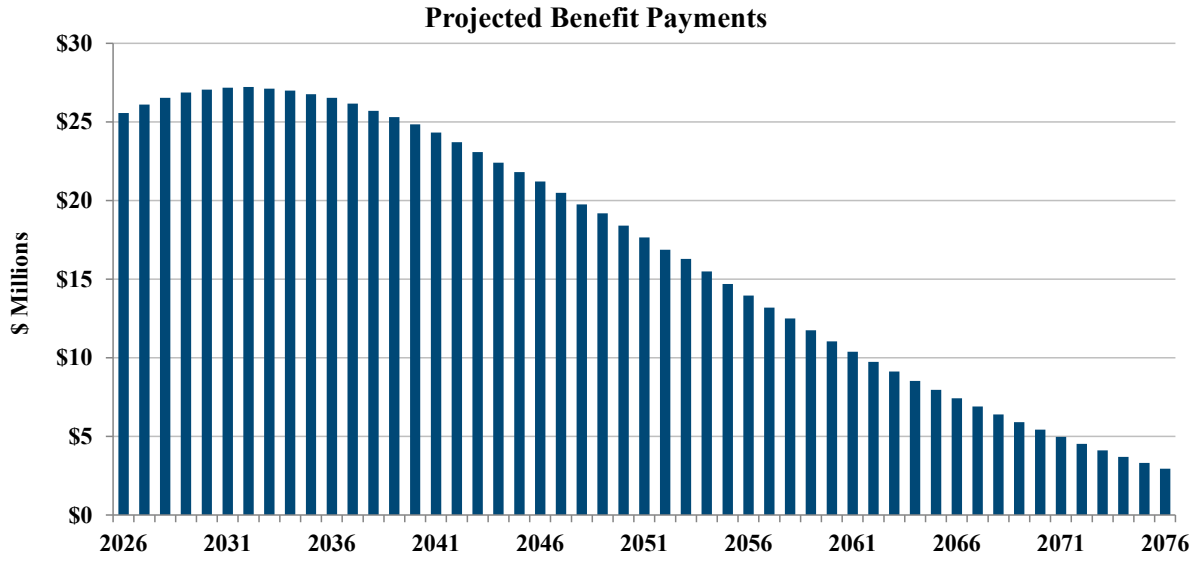
The other change of note is the sensitivity to short-term investment returns. Investment losses in the short term are compounded by the net withdrawal from the plan leaving a smaller asset base to recover from the investment losses. On the other hand, large investment gains in the short term also tend to have a longer beneficial effect as any future losses are relative to a smaller liability base due to the negative cash flow.

SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Assessing Costs and Risks

A closed pension plan will ultimately either end up with excess assets after all benefits have been paid or run out of assets before all benefits have been paid. If the Plan develops surplus assets, it may be able to reduce the risk in its investment portfolio, immunize investments, or purchase annuities to settle the remaining obligation. However, such an approach may not be the objective for MTS, and if the surplus assets exceed the additional amounts needed to purchase annuities or immunize the portfolio, it is not clear how they could be used once all benefits have been paid.

If the Plan, on the other hand, were to run out of assets, MTS would be forced to pay benefits directly on a pay-as-you-go basis. As long as MTS can afford the pay-as-you-go costs, benefits would remain secure. The chart below shows a projection of expected benefit payments for the closed plan.

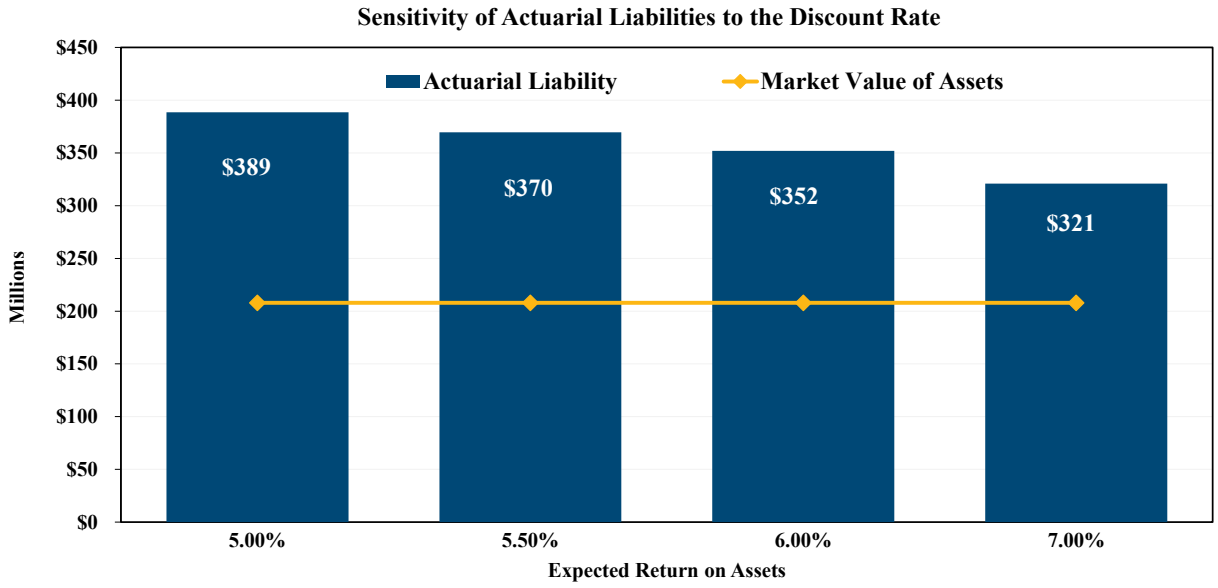


SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Sensitivity to Discount Rates (Investment Returns)

The chart below compares the Market Value of Assets (gold line) to the Actuarial Liability (blue bars) using the discount rates equal to the current expected rate of return, 6.00% and 100 basis points above and below the expected rate of return, as well as the LDROM rate of 5.50%. The low-default-risk obligation measure (LDROM) is the Actuarial Liability using a discount rate derived from low-default-risk fixed-income securities that approximately match the benefit payments of the plan. The revised Actuarial Standard of Practice No. 4 requires the disclosure of this measurement.

Present Value of Future Benefits versus Assets



The Plan invests in a diversified portfolio with the objective of maximizing investment returns at a reasonable level of risk. If investments return 6.00% annually, the Plan would need approximately $352 million in assets today to pay all benefits attributable to past service compared to current assets of $208 million. If investment returns are only 5.00%, the Plan would need approximately $389 million in assets today, and if investment returns are 7.00%, the Plan would only need $321 million in assets.

The lowest risk portfolio for a pension plan with fixed cash flows would be composed entirely of low-default-risk fixed-income securities whose cash flows match the benefit cash flows of the Plan. As of June 30, 2025 using the FTSE Pension Liability Index (rounded to the nearest 0.25%), we estimate that such a portfolio would have an expected return of 5.50% and the Plan would need $370 million to pay all benefits attributed to past service. This amount is the LDROM. The $18 million difference between the LDROM and the Actuarial Liability at 6.00% represents the expected savings from bearing the risk of investing in the Plan's diversified portfolio. Alternatively, it also represents the cost of significantly minimizing the investment risk.

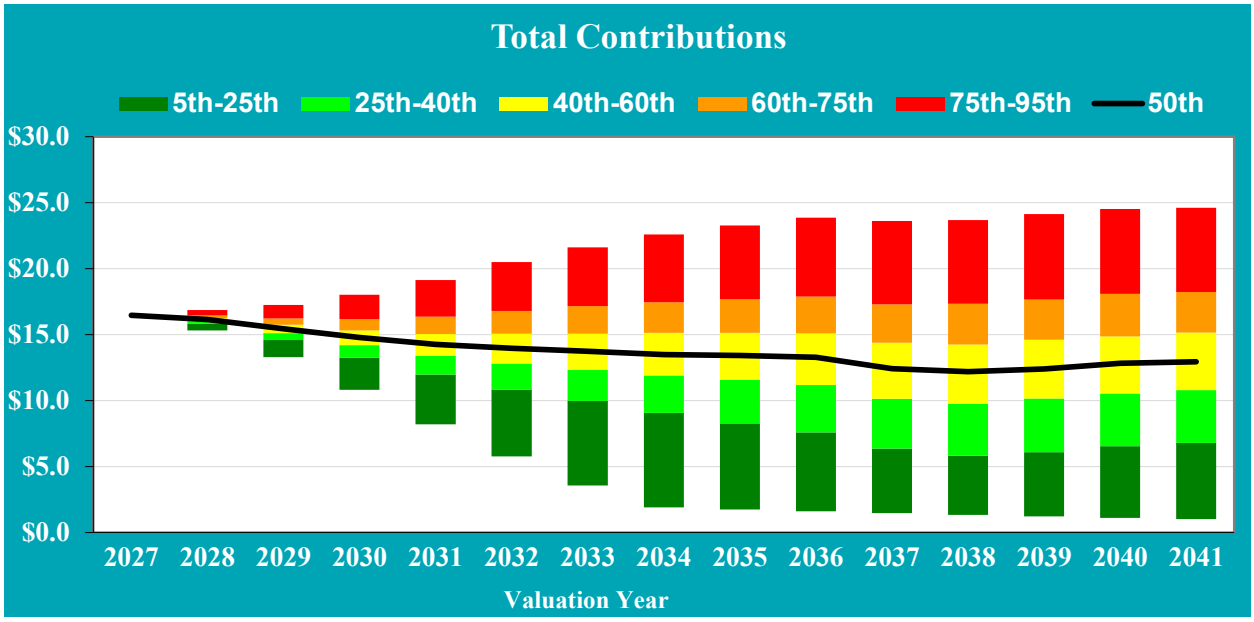
SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Because the Plan invests in a diversified portfolio and not the LDROM portfolio, the reported funded status is higher and expected employer contributions are lower. Benefit security for members of the Plan depends on a combination of the Plan's assets, the investment returns generated on those assets, and the ability of the Plan to make any needed future contributions. An LDROM portfolio would generate more predictable but lower expected investment returns, potentially changing the level of reliance on future MTS contributions to secure benefits.

Stochastic Projections

Stochastic projections show the range of probable outcomes of various measurements. The charts that follow show the projected range of the total contributions and of the funded ratio on an actuarial value of assets basis. The large range in both scenarios is driven by the volatility of investment returns (8.7% standard deviation of annual returns from RVK's Asset Allocation Study dated March 2025). The stochastic projections of investment returns are based on an assumption that each future year's investment return is independent from all other years and is identically distributed according to a lognormal distribution. This assumption may result in an unrealistically wide range of compound investment returns over longer periods of time.

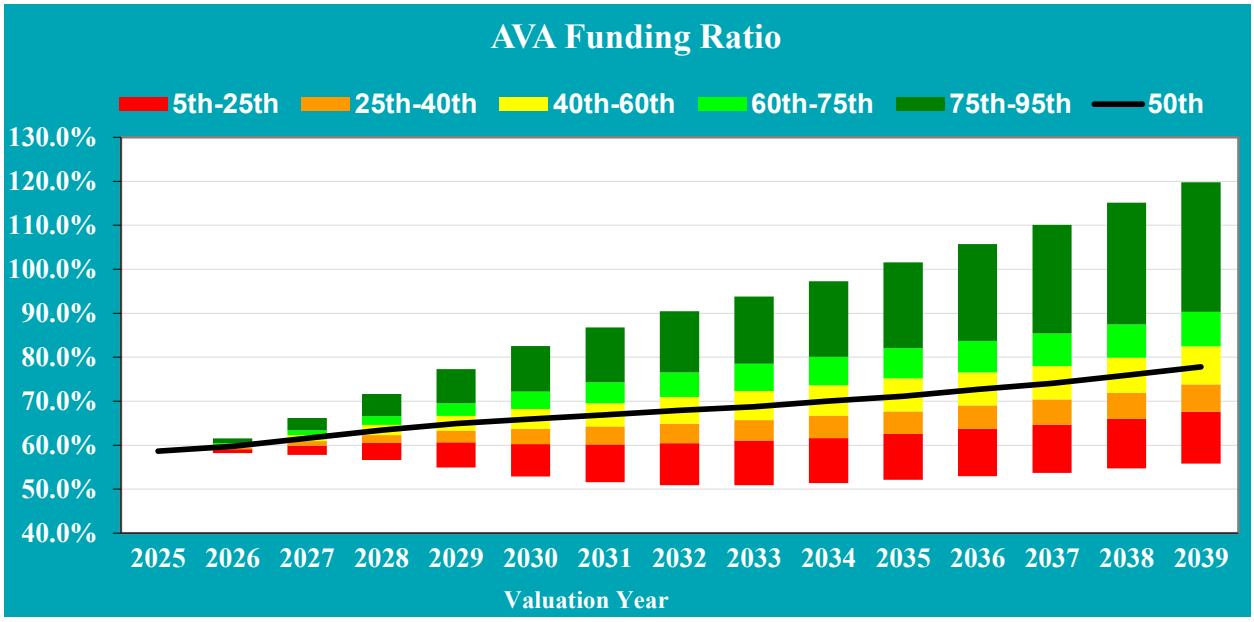
Stochastic Projection of Total Contributions (in millions)



The stochastic projection of contributions shows the probable range of future contributions. The baseline contributions (black line), which is based on the median simulations using an average return of 6.00%, aligns with the projections discussed in Subsection E (page 10) of the Executive Summary of this report. In the most pessimistic scenario (the 95th percentile) shown in FYE 2041, the projected contributions are just below $25 million. In the most optimistic scenario shown, the 5th percentile, the projected contribution amount declines to about $1 million starting in FYE 2037.

SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Stochastic Projection of Funded Ratio based on the Actuarial Value of Assets



While the baseline funded ratio (black line) is projected to slowly increase during the 15-year period shown here, there is a wide range of potential outcomes. Consistently favorable investment returns have the likelihood of bringing the funded ratio to 80% by 2034. Even in scenarios with unfavorable investment returns, the Plan is projected to remain above 50%, as long as actuarially determined contributions continue to be made.

SECTION III – ASSETS

Pension Plan assets play a key role in the financial operation of the Plan and in the decisions the Board may make with respect to future deployment of those assets. The level of assets, the allocation of assets among asset classes, and the methodology used to measure assets will likely impact benefit levels, contributions, and the ultimate security of participants' benefits.

In this section, we present detailed information on Plan assets including:

- **Disclosure** of Plan assets as of June 30, 2024 and June 30, 2025,
- Statement of the **changes** in market values during the year,
- Development of the **Actuarial Value of Assets**.

Disclosure

There are two types of asset values disclosed in the valuation, the Market Value of Assets, and the Actuarial Value of Assets. The market value represents a snapshot value that provides the principal basis for measuring financial performance from one year to the next. Market values, however, can fluctuate widely with corresponding swings in the marketplace. As a result, market values are usually not as suitable for long-range planning as are the Actuarial Value of Assets that reflect smoothing of annual investment returns.

SECTION III – ASSETS

Table III-1 discloses and compares each component of the Market Value of Assets as of June, 30, 2024 and June 30, 2025.

Table III-1
Statement of Assets at Market Value

	June 30, 2024	June 30, 2025
Investments		
Common Stock	$ 66,949,764	$ 50,287,539
Mutual Funds	45,478,416	62,827,350
Corporate Debt / Bond Funds	53,838,498	64,979,272
US Treasury Obligations	9,607,283	0
Short-Term Investments	17,671,846	30,205,749
Total Investments	$ 193,545,807	$ 208,299,910
Receivables		
Dividends and Interest	$ 78,434	$ 109,710
Other Reveivables	27,842	5,379
Total Receivables	$ 106,276	$ 115,089
Payables		
Due to Plan Sponsor	$ 600,842	$ 450,085
Other Payables	106,478	88,845
Total Payables	$ 707,320	$ 538,930
Market Value of Assets	**$ 192,944,763**	**$ 207,876,069**

Changes in Market Value

The components of asset change are:

- Contributions (employer and employee)
- Investment income (realized and unrealized), net of investment expenses
- Benefit payments
- Administrative Expenses

Table III-2 shows the components of a change in the Market Value of Assets during FYE 2024 and FYE 2025.

Table III-2
Changes in Market Values

	June 30, 2024	June 30, 2025
Contributions		
Employer's Contribution	17,213,854	18,430,690
Members' Contributions	1,712,165	1,740,617
Total Contributions	18,926,019	20,171,307
Investment Income		
Interest	128,205	1,168,511
Dividends	5,187,711	4,914,600
Realized & Unrealized Gain/(Loss)	9,207,890	13,036,554
Investment Expenses	(219,026)	(215,776)
Net Investment Income	14,304,780	18,903,889
Disbursements		
Benefit Payments	(23,302,300)	(23,878,520)
Administrative Expenses	(156,428)	(265,370)
Total Disbursments	(23,458,728)	(24,143,890)
Net Increase (Decrease)	9,772,071	14,931,306
Net Assets Held in Trust for Benefits		
Beginning of Year	183,172,692	192,944,763
End of Year	192,944,763	207,876,069
Approximate Return	7.9%	9.9%

SECTION III – ASSETS

Actuarial Value of Assets (AVA)

The Actuarial Value of Assets represents a "smoothed" value developed by the actuary to reduce the volatile results, which could develop due to short-term fluctuations in the Market Value of Assets. For this Plan, the Actuarial Value of Assets is calculated on a modified market-related value. The Market Value of Assets is adjusted to recognize, over a five-year period, investment earnings which are greater than (or less than) the assumed investment return. The actuarial value is constrained to fall within 20% of the market value.

Table III-3
Development of Actuarial Value of Assets
as of June 30, 2025

Plan Year	(a) Expected Earnings	(b) Actual Earnings	(c) = (b) – (a) Unexpected Earnings	(d) Phase-In Factor	(c) x (d) Phase-In Adjustment
2020 -21	11,328,702	34,664,950	23,336,248	0%	0
2021 -22	12,125,387	(22,759,878)	(34,885,265)	20%	(6,977,053)
2022 -23	10,461,642	11,403,121	941,479	40%	376,592
2023 -24	10,856,361	14,304,780	3,448,419	60%	2,069,051
2024 -25	11,459,244	18,903,889	7,444,645	80%	5,955,716
1. Total Unrecognized Asset Gains/(Losses)					1,424,306
2. Market Value of Assets as of June 30, 2025					207,876,069
3. Actuarial Value of Assets as of June 30, 2025: [(2) - (1)]					206,451,763
4. Ratio of Actuarial Value to Market Value [(3) ÷ (2)]					99%

Investment Performance

The following table calculates the investment related gain/loss for the plan year on both a market value and an actuarial value basis. The market value gain/loss is an appropriate measure for comparing the actual asset performance to the valuation's long-term assumption. The rate of return assumption was 6.00% for FY 2024-25 based on the July 1, 2024 actuarial valuation.

Table III-4
Asset Gain/(Loss)

		Market Value		Actuarial Value
As of June 30, 2024	**$**	**192,944,763**	**$**	**198,907,997**
Employer Contributions		18,430,690		18,430,690
Employee Contributions		1,740,617		1,740,617
Benefit Payments		(23,878,520)		(23,878,520)
Administrative Expenses		(265,370)		(265,370)
Expected Investment Earnings at 6.00%		11,459,244		11,817,038
Expected Value as of June 30, 2025	**$**	**200,431,424**	**$**	**206,752,452**
Actuarial Gain/(Loss) on Assets		7,444,645		(300,689)
Actual Value as of June 30, 2025	**$**	**207,876,069**	**$**	**206,451,763**
Return		9.9%		5.8%
Variance from Expected Return of 6.00%		3.9%		-0.2%

SECTION IV – LIABILITIES

In this section, we present detailed information on Plan liabilities including:

- **Disclosure** of Plan liabilities at July 1, 2024 and July 1, 2025,
- Statement of **changes** in these liabilities during the year.

Disclosure

Several types of liabilities are calculated and presented in this report. Each type is distinguished by the people ultimately using the figures and the purpose for which they are using them. Note that these liabilities are not appropriate for settlement purposes, including the purchase of annuities and the payment of lump sums.

- **Present Value of Future Benefits:** Used for measuring all future Plan obligations; the obligations of the Plan earned as of the valuation date and those to be earned in the future by current Plan participants, under the current Plan provisions.

- **Actuarial Liability:** Used for funding calculations, this liability is calculated taking the total Present Value of Future Benefits and subtracting all future normal costs. The method used for this Plan is called the Entry Age Normal (EAN) Funding Method.

- **Unfunded Actuarial Liability:** The excess of the Actuarial Liability over the Actuarial Value of Assets.

SECTION IV – LIABILITIES

Table IV-1 discloses each of these liabilities for the current and prior valuations.

Table IV-1
Liabilities and Unfunded Actuarial Liability

	July 1, 2024	July 1, 2025
1. Present Value of Future Benefits		
Active Participant Benefits		
ATU/Drivers	$ 54,621,376	$ 54,640,681
IBEW/Mechanics	27,953,569	27,677,842
ATU/Clerical	1,798,906	1,836,984
Non-Contract/Admin [1]	31,546,117	34,695,036
Total	**$ 115,919,968**	**$ 118,850,543**
2. Inactive Actuarial Liability		
ATU/Drivers	$ 129,053,590	$ 129,111,399
IBEW/Mechanics	34,959,383	37,518,395
ATU/Clerical	5,272,084	4,916,089
Non-Contract/Admin [1]	85,149,192	83,970,601
Total	**$ 254,434,249**	**$ 255,516,484**
3. Active Actuarial Liability		
ATU/Drivers	$ 44,640,491	$ 45,354,710
IBEW/Mechanics	23,728,949	23,748,851
ATU/Clerical	1,514,519	1,547,553
Non-Contract/Admin [1]	23,303,195	25,839,896
Total	**$ 93,187,154**	**$ 96,491,010**
4. Total Actuarial Liability, [(2) + (3)]	$ 347,621,403	$ 352,007,494
5. Plan Assets (Actuarial Value)	198,907,997	206,451,763
6. Unfunded Actuarial Liability (UAL), [(4) - (5)]	**$ 148,713,406**	**$ 145,555,731**

[1] *Includes PEPRA members.*

SECTION IV – LIABILITIES

Table IV-2 below analyzes the increases or decreases in the liabilities since the last valuation.

Changes in Liabilities

Each of the liabilities disclosed in the prior table are expected to change at each valuation. The components of that change (as shown in Table IV-2 below), depending upon which liability is analyzed, can include:

- Benefits accrued since the last valuation
- Plan amendments changing benefits
- Passage of time which adds interest to the prior liability
- Benefits paid to retirees since the last valuation
- Actuarial gains or losses from participants retiring, terminating, or dying at rates different than expected
- A change in actuarial assumptions
- A change in the actuarial funding method or software

Table IV-2
Changes in Actuarial Liability

Actuarial Liability at July 1, 2025	$	352,007,494
Actuarial Liability at July 1, 2024	$	347,621,403
Liability Increase (Decrease)	$	4,386,091
Change due to:		
Assumption Changes		0
Accrual of Benefits		3,507,119
Actual Benefit Payments		(23,878,520)
Interest		20,361,790
Actuarial (Gain)/Loss		4,395,702
Liability Increase (Decrease)	$	4,386,091

SECTION IV – LIABILITIES

Unfunded liabilities will change (as shown in Table IV-3 below) because of the changes in liabilities on the previous page, and also due to changes in Plan assets resulting from:

- Contributions different than expected
- Investment earnings different than expected
- Expenses different than expected

Table IV-3
Development of Actuarial Gain / (Loss)

1. Unfunded Actuarial Liability (UAL) at Start of Year (not less than zero)	$	148,713,406
2. Expected UAL Payment		(16,818,427)
3. Interest on (1) and (2) to End of Year		7,913,699
4. Increase in UAL due to Assumption Change		0
5. Expected Unfunded Actuarial Liability at End of Year, [(1) + (2) + (3) + (4)]	$	139,808,678
6. Actual Unfunded Actuarial Liability at End of Year (not less than zero)	$	145,555,731
7. **Actuarial Gain/(Loss), [(5) – (6)]**	$	**(5,747,053)**
(a) Liability Gain/(Loss)		(4,395,702)
(b) Asset Gain/(Loss) on Actuarial Value		(300,689)
(c) Contribution Timing Delay Gain/(Loss)		(1,091,499)
(d) Administrative Expenses Less than Expected		40,837

SECTION V – CONTRIBUTIONS

In the process of evaluating the financial condition of any pension plan, the actuary analyzes the assets and liabilities to determine what level (if any) of contributions are needed to properly maintain the funding status of the Plan. Typically, the actuarial process will use a funding technique that will result in a pattern of contributions that are both stable and predictable.

Based on the assumptions and cost method, Plan assets are currently below the target level of assets determined by the cost method; consequently, there is an Unfunded Actuarial Liability. As a result, the required Plan contribution consists of three components: The normal cost, the amortization of the Unfunded Actuarial Liability (UAL), and assumed administrative expenses.

The normal cost represents the cost of the additional benefits earned during the plan year by active Plan members. The amortization of the unfunded liability represents a payment designed to bring the Plan's assets up to the target level set by the actuarial cost method. Currently, the amortization of UAL represents about three-fourths of the total contribution.

As the UAL is paid over time, the Plan contribution is expected to decrease to a level near the normal cost plus administrative expenses. The normal cost itself will be changing since the Plan is closed to new members other than Non-Contract employees.

The table below presents the total Plan contributions (both employer and employee) for the current and prior valuations.

Table V-1
Development of Annual Contribution

	Valuation Date		**July 1, 2024**		**July 1, 2025**
	Effective Date		FY 2025-2026		FY 2026-2027
1.	Total Actuarial Liability	$	347,621,403	$	352,007,494
2.	Plan Assets (Actuarial Value)		198,907,997		206,451,763
3.	Unfunded Actuarial Liability (UAL), [(1) - (2)]	$	148,713,406	$	145,555,731
4.	UAL Amortization Payment	$	16,818,427	$	12,235,847
5.	Total Plan Normal Cost		3,507,119		3,458,495
6.	Expected Administrative Expenses		296,276		303,683
7.	Total Cost (beginning of year), [(4) + (5) + (6)]	$	20,621,822	$	15,998,025
8.	Total Cost (interest adjusted to middle of year)	$	21,231,465	$	16,470,975

SECTION V – CONTRIBUTIONS

Table V-2 presents the calculation of the UAL payments for the Plan under the amortization policy adopted in 2025. Under the new amortization policy, the UAL attributable to asset and liability experience, as well as assumption and method changes, prior to July 1, 2025 were consolidated into one base as of July 1, 2025 and amortized over a level dollar closed 20-year period. The actuarial experience loss from July 1, 2025 is amortized over a separate closed 10-year period. See Table I-2 for the impact to the total contribution due to this new amortization policy. See Appendix B for a full description of the new amortization policy.

Table V-2
Development of the Amortization Payment (BOY) as of July 1, 2025

	Type of Base	Date Established	Initial Balance	Initial Amortization	Outstanding Balance	Remaining Amortization	Amortization Amount
1.	Initial Unfunded Actuarial Liability	7/1/2025	$ 139,808,678	20	$ 139,808,678	20	$ 11,499,205
2.	Actuarial Loss	7/1/2025	5,747,053	10	5,747,053	10	736,642
	TOTAL				**$ 145,555,731**		**$ 12,235,847**
					Total UAL Payment, Middle of Year		**$ 12,597,576**

SECTION V – CONTRIBUTIONS

Table V-3 presents the development of the PEPRA Member Contribution Rate. PEPRA Members must contribute half of the total normal cost rate of the PEPRA member benefits, rounded to the nearest 0.25%, as shown in the table below. However, the member rate does not adjust unless the total normal cost upon which the current member rate is based changes by more than 1.00%. The current member contribution rate of 9.00% is based on the July 1, 2023 total normal cost rate of 18.07%. Since the July 1, 2025 total normal cost rate of 18.84% did not change by more than 1.00%, the PEPRA member contribution rate remains at 9.00%.

Table V-3
Development of the PEPRA Member Contribution Rate

Valuation Date	**July 1, 2024**	**July 1, 2025**
Effective Date	FY 2025-2026	FY 2026-2027
Assumed Rate of Return	6.00%	6.00%
Total Normal Cost Rate	17.72%	18.44%
50/50 Cost Sharing Rate for Members	8.86%	9.22%
Member Contribution Rate	**9.00%**	**9.00%**
Active PEPRA Membership Statistics		
Number	29	30
Average Age	43.8	44.1
Average Service	3.9	4.5
Average Age at Hire Date	39.9	39.6

APPENDIX A – MEMBERSHIP INFORMATION

Data pertaining to active and inactive Members and their beneficiaries as of the valuation date was supplied by the Plan Administrator on electronic media. As is usual in studies of this type, Member data was neither verified nor audited; however, it was reviewed to ensure that it complies with generally accepted actuarial standards.

Summary of Participant Data

Active Participants

Non-Contract/Admin	July 1, 2024	July 1, 2025
Number	44	43
Average Age	52.3	52.0
Average Service	19.2	20.2
Average Pay	$ 100,008	$ 104,368
Non-Contract/PEPRA	**July 1, 2024**	**July 1, 2025**
Number	29	30
Average Age	43.8	44.1
Average Service	3.9	4.5
Average Pay	$ 82,803	$ 89,506
ATU/Clerical	**July 1, 2024**	**July 1, 2025**
Number	8	7
Average Age	53.9	51.7
Average Service	15.9	16.7
Average Pay	$ 55,796	$ 60,257
ATU/Drivers	**July 1, 2024**	**July 1, 2025**
Number	139	125
Average Age	56.0	56.7
Average Service	19.3	20.1
Average Pay	$ 81,273	$ 88,062
IBEW/Mechanics	**July 1, 2024**	**July 1, 2025**
Number	69	63
Average Age	54.7	55.2
Average Service	25.0	25.8
Average Pay	$ 79,835	$ 85,514
Total	**July 1, 2024**	**July 1, 2025**
Number	289	268
Average Age	53.9	54.1
Average Service	19.0	19.6
Average Pay	$ 83,230	$ 89,515

APPENDIX A – MEMBERSHIP INFORMATION

Summary of Participant Data

Deferred Participants

Terminated Vested		July 1, 2024		July 1, 2025
Number		172		169
Average Age		56.3		57.1
Average Annual Benefit	$	9,730	$	10,193

In-Pay Participants

Service Retired		July 1, 2024		July 1, 2025
Number		818		818
Average Age		72.1		72.6
Average Annual Benefit	$	25,420	$	25,906
Beneficiaries		**July 1, 2024**		**July 1, 2025**
Number		179		183
Average Age		73.6		74.3
Average Annual Benefit	$	12,046	$	12,201
Disabled		**July 1, 2024**		**July 1, 2025**
Number		67		66
Average Age		72.8		73.4
Average Annual Benefit	$	10,287	$	10,252
Total		**July 1, 2024**		**July 1, 2025**
Number		1,064		1,067
Average Age		72.4		72.9
Average Annual Benefit	$	22,217	$	22,587

APPENDIX A – MEMBERSHIP INFORMATION

Status Reconciliation - All Divisions
Changes in Plan Membership as of July 1, 2025

	Active	Terminated Vested	Disabled	Retired	Beneficiaries	Total
Participant count as of July 1, 2024	**289**	**172**	**67**	**818**	**179**	**1,525**
New Entrants	3					3
Rehires						0
Disabilities		(2)	2			0
Retirements/ Domestic Relations Order (DRO)	(16)	(8)		24	3	3
Vested Terminations	(7)	7				0
Died, with Beneficiaries' Benefit Payable				(5)	5	0
Transfers						0
Died, without Beneficiary, and Other Terminations	(1)		(3)	(19)		(23)
Beneficiary Deaths					(5)	(5)
Data Corrections					1	1
Total Change	(21)	(3)	(1)	0	4	(21)
Participant count as of July 1, 2025	**268**	**169**	**66**	**818**	**183**	**1,504**

APPENDIX A – MEMBERSHIP INFORMATION

Status Reconciliation - Non-Contract/Administrative[1]
Changes in Plan Membership as of July 1, 2025

	Active	Terminated Vested	Disabled	Retired	Beneficiaries	Total
Participant count as of July 1, 2024	**73**	**19**	**1**	**142**	**36**	**271**
New Entrants	3					3
Rehires						0
Disabilities						0
Retirements/ Domestic Relations Order (DRO)	(2)	(1)		3		0
Vested Terminations	(2)	2				0
Died, with Beneficiaries' Benefit Payable				(1)	1	0
Transfers	2					2
Died, without Beneficiary, and Other Terminations	(1)			(4)		(5)
Beneficiary Deaths					(1)	(1)
Data Corrections						0
Total Change	0	1	0	(2)	0	(1)
Participant count as of July 1, 2025	**73**	**20**	**1**	**140**	**36**	**270**

[1] *Includes 23 active individuals participating in PEPRA.*

APPENDIX A – MEMBERSHIP INFORMATION

Status Reconciliation - Clerical
Changes in Plan Membership as of July 1, 2025

	Active	Terminated Vested	Disabled	Retired	Beneficiaries	Total
Participant count as of July 1, 2024	**8**	**8**	**1**	**31**	**5**	**53**
New Entrants						0
Rehires						0
Disabilities						0
Retirements/ Domestic Relations Order (DRO)						0
Vested Terminations	(1)	1				0
Died, with Beneficiaries' Benefit Payable						0
Transfers						0
Died, without Beneficiary, and Other Terminations						0
Beneficiary Deaths					(1)	(1)
Data Corrections						0
Total Change	(1)	1	0	0	(1)	(1)
Participant count as of July 1, 2025	**7**	**9**	**1**	**31**	**4**	**52**

APPENDIX A – MEMBERSHIP INFORMATION

Status Reconciliation - ATU/Drivers
Changes in Plan Membership as of July 1, 2025

	Active	Terminated Vested	Disabled	Retired	Beneficiaries	Total
Participant count as of July 1, 2024	**139**	**107**	**55**	**515**	**102**	**918**
New Entrants						0
Rehires						0
Disabilities		(1)	1			0
Retirements/ Domestic Relations Order (DRO)	(10)	(7)		17	1	1
Vested Terminations	(3)	3				0
Died, with Beneficiaries' Benefit Payable				(3)	3	0
Transfers	(1)					(1)
Died, without Beneficiary, and Other Terminations			(3)	(13)		(16)
Beneficiary Deaths					(3)	(3)
Data Corrections					1	1
Total Change	(14)	(5)	(2)	1	2	(18)
Participant count as of July 1, 2025	**125**	**102**	**53**	**516**	**104**	**900**

APPENDIX A – MEMBERSHIP INFORMATION

Status Reconciliation - IBEW/Mechanics
Changes in Plan Membership as of July 1, 2025

	Active	Terminated Vested	Disabled	Retired	Beneficiaries	Total
Participant count as of July 1, 2024	**69**	**38**	**10**	**130**	**36**	**283**
New Entrants						0
Rehires						0
Disabilities		(1)	1			0
Retirements/ Domestic Relations Order (DRO)	(4)			4	2	2
Vested Terminations	(1)	1				0
Died, with Beneficiaries' Benefit Payable				(1)	1	0
Transfers	(1)					(1)
Died, without Beneficiary, and Other Terminations				(2)		(2)
Beneficiary Deaths						0
Data Corrections						0
Total Change	(6)	0	1	1	3	(1)
Participant count as of July 1, 2025	**63**	**38**	**11**	**131**	**39**	**282**

RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2025

APPENDIX A – MEMBERSHIP INFORMATION

Age / Service Distribution Of Active Participants - Non-Contract/Administrative[1] (Counts)
As of July 1, 2025

	Service												
Age	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	**Total**
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	**0**
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	**0**
25 to 29	0	0	2	0	0	0	0	0	0	0	0	0	**2**
30 to 34	0	2	1	1	0	0	0	0	0	0	0	0	**4**
35 to 39	0	1	1	1	0	3	1	3	0	0	0	0	**10**
40 to 44	2	3	1	0	0	0	3	4	1	0	0	0	**14**
45 to 49	1	0	0	1	0	1	3	3	1	2	0	0	**12**
50 to 54	0	0	0	2	0	0	2	2	1	3	0	0	**10**
55 to 59	0	0	0	0	0	1	1	1	2	2	0	0	**7**
60 to 64	0	0	0	0	0	1	0	5	1	0	0	2	**9**
65 to 69	0	0	0	0	0	2	2	0	0	0	1	0	**5**
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**3**	**6**	**5**	**5**	**0**	**8**	**12**	**18**	**6**	**7**	**1**	**2**	**73**

[1] *Includes 30 active individuals participating in PEPRA.*

Age / Service Distribution Of Active Participants - Non-Contract/Administrative[1] (Average Salary)
As of July 1, 2025

	Service												
Age	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	**Total**
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
25 to 29	0	0	69,685	0	0	0	0	0	0	0	0	0	**$69,685**
30 to 34	0	88,534	104,587	90,509	0	0	0	0	0	0	0	0	**$93,041**
35 to 39	0	103,240	85,838	90,264	0	94,426	109,059	107,200	0	0	0	0	**$99,328**
40 to 44	93,309	76,999	104,624	0	0	0	101,945	116,233	111,463	0	0	0	**$100,319**
45 to 49	84,510	0	0	88,478	0	95,052	110,690	102,010	92,114	111,991	0	0	**$101,853**
50 to 54	0	0	0	71,179	0	0	95,052	118,978	88,308	113,330	0	0	**$99,871**
55 to 59	0	0	0	0	0	73,153	109,471	101,066	96,471	83,117	0	0	**$91,838**
60 to 64	0	0	0	0	0	59,505	0	101,180	100,549	0	0	99,082	**$96,014**
65 to 69	0	0	0	0	0	92,249	99,876	0	0	0	151,549	0	**$107,160**
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
Total	**$90,376**	**$85,218**	**$86,884**	**$82,322**	**$0**	**$86,936**	**$103,857**	**$107,638**	**$97,563**	**$104,315**	**$151,549**	**$99,082**	**$98,261**

[1] *Includes 30 active individuals participating in PEPRA.*

RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2025

APPENDIX A – MEMBERSHIP INFORMATION

Age / Service Distribution Of Active Participants - ATU/Clerical (Counts)
As of July 1, 2025

	Service												
Age	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	**Total**
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	**0**
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	**0**
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0	**0**
30 to 34	0	0	0	0	0	0	0	0	0	0	0	0	**0**
35 to 39	0	0	0	0	0	0	0	1	0	0	0	0	**1**
40 to 44	0	0	0	0	0	0	0	0	0	0	0	0	**0**
45 to 49	0	0	0	0	0	0	1	0	1	0	0	0	**2**
50 to 54	0	0	0	0	0	0	1	0	0	0	0	0	**1**
55 to 59	0	0	0	0	0	0	1	1	1	0	0	0	**3**
60 to 64	0	0	0	0	0	0	0	0	0	0	0	0	**0**
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	**0**
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**2**	**2**	**0**	**0**	**0**	**7**

Age / Service Distribution Of Active Participants - ATU/Clerical (Average Salary)
As of July 1, 2025

	Service												
Age	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	**Total**
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
30 to 34	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
35 to 39	0	0	0	0	0	0	0	60,501	0	0	0	0	**$60,501**
40 to 44	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
45 to 49	0	0	0	0	0	0	84,831	0	55,293	0	0	0	**$70,062**
50 to 54	0	0	0	0	0	0	55,293	0	0	0	0	0	**$55,293**
55 to 59	0	0	0	0	0	0	55,293	55,293	55,293	0	0	0	**$55,293**
60 to 64	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
Total	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$65,139**	**$57,897**	**$55,293**	**$0**	**$0**	**$0**	**$60,257**

RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2025

APPENDIX A – MEMBERSHIP INFORMATION

Age / Service Distribution Of Active Participants - ATU/Drivers (Counts)
As of July 1, 2025

	Service												
Age	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	**Total**
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	**0**
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	**0**
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0	**0**
30 to 34	0	0	0	0	0	0	0	0	0	0	0	0	**0**
35 to 39	0	0	0	0	0	0	2	2	0	0	0	0	**4**
40 to 44	0	0	0	0	0	0	5	6	1	0	0	0	**12**
45 to 49	0	0	0	0	0	0	1	6	3	1	0	0	**11**
50 to 54	0	0	0	0	0	0	1	8	6	2	0	0	**17**
55 to 59	0	0	0	0	0	0	5	15	5	2	2	1	**30**
60 to 64	0	0	0	0	0	0	4	13	7	7	3	0	**34**
65 to 69	0	0	0	0	0	0	5	4	2	2	0	1	**14**
70 & up	0	0	0	0	0	0	0	1	0	0	1	1	**3**
Total	**0**	**0**	**0**	**0**	**0**	**0**	**23**	**55**	**24**	**14**	**6**	**3**	**125**

Age / Service Distribution Of Active Participants - ATU/Drivers (Average Salary)
As of July 1, 2025

	Service												
Age	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	**Total**
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
30 to 34	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
35 to 39	0	0	0	0	0	0	107,500	80,085	0	0	0	0	**$93,793**
40 to 44	0	0	0	0	0	0	80,453	76,115	77,780	0	0	0	**$78,062**
45 to 49	0	0	0	0	0	0	75,783	92,641	94,482	74,891	0	0	**$89,997**
50 to 54	0	0	0	0	0	0	89,450	79,493	99,021	65,934	0	0	**$85,376**
55 to 59	0	0	0	0	0	0	87,573	95,048	76,839	90,871	91,911	97,700	**$90,368**
60 to 64	0	0	0	0	0	0	77,377	96,561	79,282	94,704	86,428	0	**$89,470**
65 to 69	0	0	0	0	0	0	93,263	82,590	87,147	100,220	0	84,068	**$89,677**
70 & up	0	0	0	0	0	0	0	70,957	0	0	86,547	88,503	**$82,003**
Total	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$86,791**	**$88,927**	**$86,200**	**$89,419**	**$88,276**	**$90,091**	**$88,062**

RETIREMENT PLANS OF SAN DIEGO TRANSIT CORPORATION
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2025

APPENDIX A – MEMBERSHIP INFORMATION

Age / Service Distribution Of Active Participants - IBEW/Mechanics (Counts)
As of July 1, 2025

	Service												
Age	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	**Total**
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	**0**
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	**0**
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0	**0**
30 to 34	0	0	0	0	0	0	1	0	0	0	0	0	**1**
35 to 39	0	0	0	0	0	0	2	6	0	0	0	0	**8**
40 to 44	0	0	0	0	0	0	2	1	2	0	0	0	**5**
45 to 49	0	0	0	0	0	0	0	0	1	2	0	0	**3**
50 to 54	0	0	0	0	0	0	0	1	1	5	3	0	**10**
55 to 59	0	0	0	0	0	0	0	2	0	2	1	3	**8**
60 to 64	0	0	0	0	0	0	0	3	3	3	3	5	**17**
65 to 69	0	0	0	0	0	0	0	2	3	1	1	2	**9**
70 & up	0	0	0	0	0	0	0	1	0	0	0	1	**2**
Total	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**16**	**10**	**13**	**8**	**11**	**63**

Age / Service Distribution Of Active Participants - IBEW/Mechanics (Average Salary)
As of July 1, 2025

	Service												
Age	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	**Total**
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0	**$0**
30 to 34	0	0	0	0	0	0	95,009	0	0	0	0	0	**$95,009**
35 to 39	0	0	0	0	0	0	91,859	95,009	0	0	0	0	**$94,221**
40 to 44	0	0	0	0	0	0	68,359	95,009	95,009	0	0	0	**$84,349**
45 to 49	0	0	0	0	0	0	0	0	95,009	89,988	0	0	**$91,662**
50 to 54	0	0	0	0	0	0	0	95,009	54,417	82,874	88,315	0	**$82,874**
55 to 59	0	0	0	0	0	0	0	70,262	0	89,988	84,968	91,662	**$85,057**
60 to 64	0	0	0	0	0	0	0	67,768	95,009	88,315	91,662	84,775	**$85,420**
65 to 69	0	0	0	0	0	0	0	79,464	70,936	63,920	95,009	89,988	**$78,960**
70 & up	0	0	0	0	0	0	0	84,968	0	0	0	84,968	**$84,968**
Total	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$83,089**	**$84,237**	**$83,727**	**$84,861**	**$89,988**	**$87,618**	**$85,514**

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

A. Contribution Allocation Procedure

The contribution allocation procedure primarily consists of an actuarial cost method, an asset smoothing method, and an amortization method as described below. This contribution allocation procedure, combined with reasonable assumptions, produces a reasonable actuarially determined contribution as defined in Actuarial Standard of Practice No. 4. The contribution allocation procedure was selected to balance benefit security, intergenerational equity, and the stability of actuarially determined contributions. The selection also considered the demographics of plan members, the funding goals and objectives of the Board, and the need to accumulate assets to make benefit payments when due.

1. Actuarial Cost Method

The actuarial funding method used to determine the normal cost and the Unfunded Actuarial Liability is the individual entry age to final decrement cost method. This method is consistent with the method required under the GASB accounting statements. Under this cost method, the normal cost is calculated as the amount necessary to fund Members' benefits as a level percentage of total payroll over their projected working lives. At each valuation date, the Actuarial Liability is equal to the difference between the liability for the Members' total projected benefit and the present value of future normal cost contributions. The total normal cost is calculated as the sum of the individual normal costs for each active member (individual entry age method). The Unfunded Actuarial Liability (UAL) is the difference between the Actuarial Liability and the Actuarial Value of Assets (AVA).

2. Amortization Method

Under the prior amortization method which was adopted in 2012 and applied through the July 1, 2024 actuarial valuation, the initial Unfunded Actuarial Liability as of July 1, 2012 was amortized in level dollar payments over a 25-year period ending June 30, 2037. Changes in the Unfunded Actuarial Liability due to Plan amendments, changes in actuarial assumptions or methods were amortized in level dollar payments over separate periods that ended on June 30, 2037 consistent with the amortization of the remaining June 30, 2012 UAL. Changes in the Unfunded Actuarial Liability due to actuarial gains and losses were amortized over closed separate 15-year periods in level dollar payments. The amortization period of future gains and losses which extended beyond June 30, 2037, were reduced to end on June 30, 2037.

However, as the targeted full funding date approached, changes to the amortization policy were made at the MTS Board's discretion to mitigate volatility and significant increases in the UAL payment. Though the Retirement Board may make exceptions, in general, the intent is to follow the guidelines published by the California Actuarial Advisory Panel and the Government Finance Officers' Association. See Cheiron's Amortization Policy Study for SDTC dated September 2, 2025 for a full description of the basis for the new amortization policy.

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

The current amortization policy consolidated the existing UAL layers from the July 1, 2024 actuarial valuation into one layer as of July 1, 2025. This portion of the UAL is amortized in level dollar payments over a 20-year period. As of July 1, 2025, changes in the Unfunded Actuarial Liability due to Plan amendments, actuarial assumptions changes, and actuarial experience will be amortized in level dollar payments over separate 10-year periods.

3. Actuarial Value of Plan Assets

For the purposes of determining contributions, a smoothed Actuarial Value of Assets (AVA) is used that dampens the effects of volatility in the Market Value of Assets on the pattern of contributions. The AVA is determined using an adjusted market value. Under this method, a preliminary AVA is determined as the Market Value of Assets on the valuation date less a decreasing fraction (4/5, 3/5, 2/5, 1/5) of the gain or loss in each of the preceding four years. The gain or loss for a given year is the difference between the actual investment return (on a market-to-market basis) and the assumed investment return based on the Market Value of Assets at the beginning of the year and actual cash flow. The AVA is adjusted, if necessary, to remain between 80% and 120% of the market value.

B. Actuarial Assumptions

The economic and demographic assumptions are based on the experience study covering the period from July 1, 2015 through June 30, 2020 that was adopted at the MTS Board of Directors Meeting in November 2021. The rationale for all the assumptions can also be found in the experience study report dated September 2021. All assets and liabilities are computed as of the valuation date, July 1, 2025.

1. **Rate of Return**

   The annual rate of return on all Plan assets is assumed to be 6.00% net of investment expenses.

2. **Low-Default-Risk Obligation Measure Interest Rate**

   5.50% based on the FTSE Pension Discount Yield Curve published as of June 30, 2025, 5.58%, rounded to the nearest quarter percent.

3. **Cost of Living**

   The cost of living as measured by the Consumer Price Index (CPI) will increase at the rate of 2.50% per year.

4. **Post Retirement COLA**

   Benefits for Non-Contract retirees assumed to increase after retirement at the rate of 2.0% per year.

5. **Pay for Benefits**

   In most cases, pay for benefits is based on a two-year average of each Participant's pay during the two years preceding the valuation date. Special procedures are used in some cases, as noted for full-time Participants.

Unit	Pay for Continuing Participants	Pay for New Participants
Drivers	The larger of gross pay or 1,800 hours times the member's hourly rate	
Mechanics	2,150 hours times the Participant's hourly rate	
Clerical	Gross pay	The larger of gross pay or 2,100 hours times the Participant's hourly rate
Non-Contract	Gross pay	The larger of gross pay or 2,080 hours times the Participant's hourly rate

Part-time Participants are assumed to work 1,040 hours in the calculations shown above.

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

6. Merit Pay (Longevity and Promotion) Increases

Assumed pay increases for active Participants consist of increases due to inflation (cost-of-living adjustments) and those due to longevity and promotion. Based on an analysis of pay levels and service, we developed the following assumptions:

Longevity and Promotion Increases				
Service	ATU Drivers	IBEW Mechanics	Clerical	Non-Contract
0	6.00%	7.50%	10.00%	3.50%
1	6.00%	7.50%	10.00%	3.50%
2	6.00%	7.50%	0.25%	3.50%
3	6.00%	7.50%	0.25%	3.50%
4	6.00%	7.50%	0.25%	3.50%
5	6.00%	7.50%	0.25%	3.50%
6	6.00%	7.50%	0.25%	3.50%
7	6.00%	7.50%	0.25%	3.50%
8	0.50%	7.50%	0.25%	3.50%
9	0.50%	7.50%	0.25%	3.50%
10+	0.50%	0.50%	0.25%	0.25%

In addition, annual adjustments in pay due to inflation will equal the CPI, for an additional annual increase of 2.50%. The combination of rates is compounded rather than using an additive method.

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

7. Active Participant Mortality

Rates of mortality for non-clerical ATU and IBEW Participants are given by Cheiron's ATU Non-Annuitant mortality with generational improvements from the base year 2016 using Scale MP-2020. Sample base rates are shown in the table below:

Age	Male	Female
25	0.040%	0.033%
30	0.049%	0.038%
35	0.056%	0.051%
40	0.064%	0.072%
45	0.079%	0.101%
50	0.113%	0.151%
55	0.174%	0.239%
60	0.272%	0.365%
65	0.408%	0.524%

Rates of mortality for all active Clerical and Non-Contract Participants are given by 2010 Public General Employee mortality with generational improvements from the base year 2010 using Scale MP-2020.

8. Healthy Inactive Participant and Beneficiary Mortality

Rates of mortality for healthy inactive non-clerical ATU and IBEW Participants, spouses, and surviving spouses are given by Cheiron's ATU Healthy-Annuitant mortality with generational improvements from the base year 2016 using Scale MP-2020. Sample base rates are shown in the table below:

Age	Male	Female
55	0.898%	0.519%
60	1.123%	0.762%
65	1.309%	1.103%
70	1.983%	1.633%
75	3.272%	2.631%
80	5.595%	4.433%
85	9.647%	7.691%
90	15.707%	13.411%
95	22.864%	20.609%

Rates of mortality for healthy inactive Clerical and Non-Contract Participants, spouses, and surviving spouses are given by 2010 Public General Healthy Annuitant Amount Weighted mortality with generational improvements from the base year 2010 using Scale MP-2020.

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

9. Disabled Participant Mortality

Rates of mortality for disabled members are given by Cheiron's ATU Disabled Annuitant mortality with generational improvements from the base year 2016 using Scale MP-2020. Sample base rates are shown in the table below:

Age	Male	Female
55	2.413%	1.852%
60	2.800%	2.062%
65	3.348%	2.211%
70	4.198%	2.720%
75	5.702%	3.857%
80	8.157%	5.905%
85	12.163%	9.262%
90	18.616%	13.582%
95	26.042%	19.152%

10. Mortality Improvement

Mortality is assumed to improve in future years in accordance with the MP-2020 generational improvement tables.

11. Disability

Among ATU Drivers and IBEW Mechanics uses an 80% male/20% female blend of the standard CalPERS Public Agency Table, with sample rates below. Disabled Participants are assumed not to return to active service. No disability is assumed for Clerical and Non-Contract Participants.

Disability	
Age	Rate
25	0.016%
30	0.020%
35	0.045%
40	0.109%
45	0.158%
50	0.166%
55	0.156%
60	0.143%
65	0.120%
70	0.098%
75+	0.099%

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

12. Plan Expenses

Expected Plan administrative expenses as of the valuation date of $303,683 are included in the total annual cost, increasing each year with the assumed rate of inflation.

13. Family Composition

100% of active Participants are assumed married. Male spouses are assumed four years older than their wives are.

14. Service Retirement

Rates of service retirement among Participants eligible to retire are given by the following table:

Age	ATU Drivers	IBEW Mechanics	Clerical/Non Contract
52[1]	0%	0%	0%
53-54	0%	0%	7.5%
55	10%	5%	7.5%
56-59	7.5%	5%	10%
60-61	10%	10%	10%
62	15%	10%	30%
63	15%	10%	25%
64	20%	15%	25%
65-66	40%	45%	25%
67-69	25%	20%	25%
70 and older	100%	100%	100%

[1] *Non-Contract retirement assumption at age 52 is for PEPRA participants only, 0% otherwise.*

15. Termination

Service-based or age-based termination rates are shown below by group. For all Participants, termination rates are assumed zero once a participant is eligible for retirement.

Termination for ATU Driver, IBEW Mechanic, and Non-Contract Participants are assumed to occur in accordance with the service-based rates shown in the following table:

Service	ATU Driver	IBEW Mechanic	Non-Contract
0	10.0%	10.0%	5.0%
1-6	4.0%	4.0%	5.0%
7 +	3.0%	3.0%	5.0%

Termination for Clerical Participants is assumed to occur in accordance with the age-based rates shown in the following table:

Clerical	
Age	Rate
20-24	25.0%
25-29	15.0%
30-34	13.0%
35-39	11.0%
40-44	10.0%
45-49	9.0%
50 and older	9.0%

16. Employment Status

No future transfers among Participant groups are assumed.

17. Changes in Actuarial Methods and Assumptions since the Prior Valuation

None.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

A. Definitions

Average Monthly Final Earnings: Average Monthly Final Earnings means the average monthly compensation during the consecutive months that produces a Participant's highest average compensation, computed by dividing the Compensation Earnable for such period by the number of months in such period.

- For ATU, IBEW, and Clerical Participants, the averaging period is 36 consecutive months.
- For Non-Contract Participants, the number of consecutive months is 12.
- Public Employees' Pension Reform Act (PEPRA): For Non-Contract Participants hired on and after January 1, 2013, the number of consecutive months is 36.
- Those months during which the Participant did not receive compensation from the Employer equivalent to one-half the regular working days will be excluded. The average is then based on that portion of the averaging period remaining after the excluded months.
- PEPRA: It is possible that exclusions for months in which the Participant did not work full-time may be subject to change.
- Use the total of the Periodic Pensionable Earnings from the highest three calendar (payroll) years. These years need not be consecutive years. There shall be no skips and drops within the three calendar (payroll) years. Add the total Periodic Pensionable Earnings to Terminal Earnings and then divide by 36.

Compensation: Compensation means the remuneration for services paid by the Employer. The monetary value of board, lodgings, fuel, car allowance, laundry, or other advantages furnished to a Participant is not included.

PEPRA: For Participants joining the Plan on or after January 1, 2013, only base compensation up to the Social Security-integrated PEPRA compensation limit ($155,081 for 2025 and $151,446 for 2024) will count for computing Plan benefits and employee and employer contributions; in particular, all or most overtime will be excluded.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

Compensation Earnable:

Compensation Earnable is the compensation actually received by a Participant during a period of employment. For ATU and Non-Contract Participants, any bonus or retroactive wage increases are treated as compensation when received rather than when the services are performed. For IBEW Participants, Compensation Earnable is limited to 2,140 hours of straight time equivalent hours in any 12-month period.

In addition, the value of any vacation or sick leave accumulated but unused when benefits begin is excluded from Compensation Earnable and from Average Monthly Final Earnings.

PEPRA: For Participants joining the Plan on and after January 1, 2013, it is likely that some sources of compensation, such as those underlined above, may be excluded from benefit and contribution computations for these new Participants.

Credited Years Of Service:

In general, Credited Years of Service is continuous service with the San Diego Transit Corporation and its predecessor company from the last date of employment through the date of retirement, death, disability, or other termination of service.

As of November 10, 1997, part-time ATU employees receive one Credited Year of Service for every 2,080 hours of service worked as a part-time employee after December 1, 1990.

For Non-Contract Participants, Credited Years of Service includes any year commencing on or after July 1, 1982 in which the Participant completes at least 1,000 Hours of Service. In addition, Credited Years of Service for Non-Contract Participants will exclude any period of service after the Participant's Normal Retirement Date.

A Participant who is disabled and recovers from disability and reenters the Plan as an active Participant will not receive Credited Years of Service for the period of disability.

B. Membership

All full-time and certain part-time IBEW employees hired prior to May 1, 2011, will become Participants on their date of hire. IBEW employees hired on and after May 1, 2011, will become Participants of a separate defined contribution plan and will not be Participants of this Plan.

All full-time and certain part-time ATU employees hired prior to November 1, 2012, will become Participants on their date of hire. ATU

employees hired on and after November 1, 2012, will become Participants of a separate defined contribution plan and will not be Participants of this Plan. All Non-Contract employees become Participants after earning one Credited Year of Service.

PEPRA: Any Participant joining the Plan for the first time on or after January 1, 2013, is a New Participant.

C. Retirement Benefit

Eligibility: Clerical and Non-Contract Participants are eligible for normal service retirement upon attaining age 63 and completing five or more Credited Years of Service and eligible for early service retirement upon attaining age 53 and completing five or more Credited Years of Service.

ATU and IBEW Participants are eligible for normal service retirement upon attaining age 63 (65 for IBEW) and completing five or more Credited Years of Service and eligible for early service retirement upon attaining age 55 and completing five or more Credited Years of Service.

PEPRA: New Participants are eligible to retire upon attaining age 52 and completing five or more Credited Years of Service.

Benefit Amount: The monthly service retirement benefit is the Participant's Average Monthly Final Earnings multiplied by the percentage figures shown in the tables below.

- For ATU and Clerical Participants terminating prior to October 1, 2005, ATU/Clerical Table A-1 is used; for ATU and Clerical Participants terminating on and after October 1, 2005, ATU/Clerical Table A-2 is used. Prior to July 1, 2006, the benefit from the table is limited to 60%.

- For IBEW Participants terminating prior to January 1, 2007, IBEW Table A-1 is used; for IBEW Participants terminating on and after January 1, 2007, IBEW Table A-2 is used.

- For Non-Contract participants terminating prior to July 1, 2000, Non-Contract Table A-1 is used; for Non-Contract participants terminating on and after July 1, 2000, Non-Contract Table A-2 is used.

For Participants with fractions of a year of age or service, the Participant's age or service will be rounded to the completed quarter year, and the percentage multiplier will be computed from the table using interpolation.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

ATU participants who are active from November 10, 1997 to December 31, 1998 and from November 10, 1997, to December 31, 1999 receive an additional 2.5% and 2.5%, respectively. However, the multiplier from Table A-1 or A-2, as augmented by the additional 2.5% increments, is still limited to 60% prior to July 1, 2006 and 70% thereafter.

Non-Contract Participants who are active as of July 1, 1994 and July 1, 1995 receive an additional 6% and 2%, respectively. However, the benefit multiplier, as augmented by the additional 6% and 2% increments, is still limited to 60% under Table A-1 and 70% under Table A-2.

A Participant who is disabled and recovers from disability and reenters the Plan as an active Participant will have this benefit amount reduced by the actuarial equivalent of the benefits paid during the period of disability.

PEPRA: For New Participants, the benefit multiplier will be 1% at age 52, increasing by 0.1% for each year of age to 2.5% at 67. In between exact ages, the multiplier will increase by 0.025% for each quarter year increase in age.

Form of Benefit: The normal form of benefit is an annuity payable for the life of the Participant, with no continuation of benefits to a beneficiary after death. The retirement benefit will be paid as a 50% Joint and Survivor benefit actuarially equivalent to the normal form for participants who have been married for at least one year. Otherwise, the normal form will be paid.

Because Participants will be making employee contributions, the Participant's beneficiaries may be eligible to receive a refund of accumulated contributions that exceed the benefits paid out to the Participant (if any) upon death.

The ATU and IBEW benefits have been amended from time to time to remove the actuarial reduction in benefits for previously retired Participants whose spouses have died before them. However, these adjustments are retroactive only, and they do not apply to benefits paid to currently active Participants.

ATU and IBEW Participants may elect an Alternative Retirement Formula if they terminate employment before early retirement but after 10 Credited Years of Service or were hired between April 1, 1968 and March 31, 1971 and desire to retire at their Normal Retirement Date. These Participants are eligible for a deferred benefit commencing at age 65 based on Table B.

Tables A-1 and A-2 for each employee group, as well as Table B, can be found at the end of Appendix C herein.

D. Disability Retirement Benefit

Eligibility: A Participant is eligible for a Disability Retirement Benefit if:

- The Participant has earned five Credited Years of Service (ATU, IBEW, Clerical and Non-Contract), and
- The Participant is unable to perform the duties of his or her job with the Corporation, cannot be transferred to another job with the Corporation, and has submitted satisfactory medical evidence of permanent disqualification from his or her job.

Benefit Amount: The Disability Retirement Benefit is a monthly benefit equal to the lesser of:

1. 1.5% times Credited Years of Service at Disability Retirement Date times the Participant's Average Monthly Final Earnings; and,
2. The Normal Retirement Benefit calculated using the Average Monthly Final Earnings at Disability Retirement Date and the projected Credited Years of Service to Normal Retirement Date.

The benefit is reduced by 50% of the amount of any earned income from other sources in excess of 50% of the Participant's Average Monthly Earnings during the 12 months prior to disability; this reduction applies to all IBEW and Non-Contract Participants, but only to ATU Participants hired after June 30, 1983.

PEPRA: Note that the Disability Retirement Benefit for New Participants is based on the new definition of Compensation, which is subject to a maximum and excludes overtime.

Form of Benefit: The normal form of benefit is an annuity commencing at disability and payable for the life of the Participant, with no continuation of benefits to a beneficiary after death. The Disability Retirement Benefit will be paid as a 50% Joint and Survivor benefit actuarially equivalent to the normal form for participants who have been married for at least one year. Otherwise, the normal form will be paid.

Because Participants will be making employee contributions, the Participant's beneficiaries may be eligible to receive a refund of accumulated contributions that exceed the benefits paid out to the Participant (if any) upon death.

The ATU and IBEW benefits have been amended from time to time to remove the actuarial reduction in benefits for previously retired Participants whose spouses have died before them. However, these adjustments are retroactive only, and they do not apply to benefits paid to currently active Participants.

E. Pre-Retirement Death Benefit

Eligibility: A vested Participant is entitled to elect coverage of a pre-retirement spouse's benefit.

For years, if a Participant is age 55 or under, the cost of the coverage is paid by the Company For the years, a Participant is over age 55 and has elected this coverage, the cost of this coverage is paid by the Participant in the form of a reduced benefit upon retirement. The reduction is 3.5¢ per $10 of monthly benefit for each year of coverage.

There is no cost for this benefit for any ATU, Clerical, or Non-Contract Participant whose monthly benefit commences after November 27, 1990. There is no cost for this benefit for any IBEW Participant whose monthly benefit commences after December 3, 1996.

In order for the spouse to be eligible for this benefit, the participant must be married to the spouse for one year prior to death, unless death occurs from accidental causes.

Benefit Amount: For a Participant who is eligible to retire at death, the pre-retirement death benefit is 50% of the benefit that would have been payable had the Participant retired immediately prior to his or her death and elected to receive a 50% Joint and Survivor annuity.

For a Participant who dies before being eligible to retire, the pre-retirement death benefit is 50% of the benefit that would have been payable had the Participant survived to his or her earliest retirement date, retired, elected to receive a 50% Joint and Survivor annuity, and died immediately.

PEPRA: Note that the Pre-Retirement Death Benefit for New Participants is based on the new definition of compensation, which is subject to a maximum and excludes overtime.

Form of Benefit: For a Participant who is eligible to retire at death, the death benefit begins when the Participant dies and continues for the life of the surviving spouse.

For a Participant who dies before being eligible to retire, the death benefit begins when the Participant would have reached his or her earliest retirement date and continues for the life of the surviving spouse.

Because Participants will be making employee contributions, the Participant's beneficiaries may be eligible to receive a refund of accumulated contributions that exceed the benefits paid out to the Participant or spouse (if any) upon death.

F. Termination Benefit

Eligibility: A Participant is eligible for a termination benefit after earning five Credited Years of Service.

Benefit Amount: The termination benefit is computed in the same manner as the Normal Retirement Benefit, but it is based on Credited Years of Service and Average Monthly Final Earnings on the date of termination.

Effective July 1, 2000, Non-Contract participants who terminate prior to eligibility for early service retirement will have their benefits actuarially reduced if they begin receiving benefits before Normal Retirement Age.

PEPRA: For New Participants, the benefit multiplier will be 1% at age 52, increasing by 0.1% for each year of age to 2.5% at 67. In between exact ages, the multiplier will increase by 0.025% for each quarter year increase in age. Note also that the Termination Benefit for New Participants is based on the new definition of compensation, which is subject to a maximum and excludes overtime.

We assume a refund of employee contributions, with no interest, if termination occurs before five years of service.

Form of Benefit: The Participant will be eligible to commence benefits at the later of termination and earliest retirement eligibility age.

The normal form of benefit is an annuity payable for the life of the Participant, with no continuation of benefits to a beneficiary after death. The retirement benefit will be paid as a 50% Joint and Survivor benefit actuarially equivalent to the normal form for participants who have been married for at least one year. Otherwise, the normal form will be paid.

Because Participants will be making employee contributions, the Participant's beneficiaries may be eligible to receive a refund of accumulated contributions that exceed the benefits paid out to the Participant (if any) upon death.

The ATU and IBEW benefits have been amended from time to time to remove the actuarial reduction in benefits for previously retired Participants whose spouses have died before them. However, these adjustments are retroactive only, and they do not apply to benefits paid to currently active Participants.

G. Cost-of-Living Adjustments

Eligibility: An annual Cost-of-Living Adjustment (COLA) has been added for Non-Contract Participants who were actively employed on or after June 30, 1999. One time only (ad hoc) COLAs were granted to ATU and IBEW Participants in 1991 and 1992.

Benefit Amount: For Non-Contract Participants, the cumulative COLA is the increase in the Consumer Price Index (CPI) since the Participant began receiving benefits.

The COLA is subject to the following limits for Non-Contract Participants:

- The cumulative COLA cannot exceed 2% compounded annually for all years since the Participant's benefits began;
- The annual COLA is zero if the CPI increase in that year is less than 1%;
- The annual COLA is limited to 6% of the initial benefit amount in any year; and,
- A Participant's benefit cannot be reduced below the benefit level when payments commenced.

H. Voluntary Early Retirement Program

The Plan provided enhanced benefits to ATU participants who voluntarily elected early retirement during the window period from July 1, 1998 through February 20, 1998.

The Plan provided enhanced benefits to certain IBEW participants who voluntarily elected early retirement during the window period from July 1, 2004, through December 31, 2004.

I. DROP Program

The Plan provided DROP benefits to a number of ATU participants who elected retirement from July 1, 2002, through December 31, 2002.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

J. Funding

- IBEW members contributed 3% of compensation to the Plan in April 2013 and 4% of compensation in April 2014. The contribution rate increased to 6% of compensation in April 2015 and increased to 8% of compensation in April 2016.

- ATU drivers and clerical members contributed 3% of compensation in July 2013. The contribution rate increased to 5% of compensation in July 2014, to 6% in July 2015, and to 7% of compensation in July 2016. The contribution rate increased to 8% of compensation in December 2017.

- Non-Contract members hired before January 1, 2013 contributed 2% of compensation to the Plan prior to January 2014. The Non-Contract member contributions increased to 4% of compensation in January 2014, to 6% of in January 2015, and increased to 7% of compensation on January 1, 2016. As of January 1, 2017, the member contribution rate increased to 8% of compensation.

- New members under PEPRA must contribute half of the normal cost of the Plan, rounded to the nearest 0.25%. Effective January 1, 2013, PEPRA members were paying 6.25% of pay and the employer has been paying the remaining cost of the Plan. The PEPRA employee contribution rate increased to 7.75% of pay based on the results of July 1, 2021 valuation, to 9.50% of pay based on the results of the July 1, 2022 valuation and decreased to 9.00% of pay based on the results of the July 1, 2023 valuation.

  The Corporation pays the actuarial cost of the Plan as reduced by Member contributions. Member contribution rates in the future may change in response to collective bargaining.

K. Changes in Plan Provisions since the Prior Valuation

None.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

ATU/Clerical Table A-1: Retirement Benefit Multipliers

Credited Years Of Service	Age at Retirement								
	55	56	57	58	59	60	61	62	63+
5	5.9%	6.3%	6.7%	7.2%	7.8%	8.3%	8.9%	9.5%	10.1%
6	7.1%	7.5%	8.1%	8.7%	9.3%	10.0%	10.7%	11.4%	12.1%
7	8.2%	8.8%	9.4%	10.1%	10.9%	11.7%	12.4%	13.3%	14.1%
8	9.4%	10.1%	10.8%	11.6%	12.4%	13.3%	14.2%	15.1%	16.1%
9	10.6%	11.3%	12.1%	13.0%	14.0%	15.0%	16.0%	17.0%	18.1%
10	11.8%	12.6%	13.5%	14.4%	15.5%	16.7%	17.8%	18.9%	20.1%
11	12.9%	13.8%	14.8%	15.9%	17.1%	18.3%	19.5%	20.8%	22.2%
12	14.1%	15.1%	16.2%	17.3%	18.6%	20.0%	21.3%	22.7%	24.2%
13	15.3%	16.3%	17.5%	18.8%	20.2%	21.7%	23.1%	24.6%	26.2%
14	16.5%	17.6%	18.9%	20.2%	21.7%	23.3%	24.9%	26.5%	28.2%
15	17.6%	18.9%	20.2%	21.7%	23.3%	25.0%	26.7%	28.4%	30.2%
16	18.8%	20.1%	21.5%	23.1%	24.8%	26.7%	28.4%	30.3%	32.2%
17	20.0%	21.4%	22.9%	24.5%	26.4%	28.3%	30.2%	32.2%	34.3%
18	21.2%	22.6%	24.2%	26.0%	27.9%	30.0%	32.0%	34.1%	36.3%
19	22.3%	23.9%	25.6%	27.4%	29.5%	31.7%	33.8%	36.0%	38.3%
20	23.5%	25.2%	26.9%	28.9%	31.0%	33.3%	35.5%	37.9%	40.3%
21	24.7%	26.4%	28.3%	30.3%	32.6%	35.0%	37.3%	39.7%	42.3%
22	25.9%	27.7%	29.6%	31.8%	34.1%	36.7%	39.1%	41.6%	44.3%
23	27.0%	28.9%	31.0%	33.2%	35.7%	38.3%	40.9%	43.5%	46.3%
24	28.2%	30.2%	32.3%	34.6%	37.2%	40.0%	42.6%	45.4%	48.4%
25	29.4%	31.4%	33.7%	36.1%	38.8%	41.7%	44.4%	47.3%	50.4%
26	30.6%	32.7%	35.0%	37.5%	40.3%	43.3%	46.2%	49.2%	52.4%
27	31.7%	34.0%	36.4%	39.0%	41.9%	45.0%	48.0%	51.1%	54.4%
28	32.9%	35.2%	37.7%	40.4%	43.4%	46.7%	49.8%	52.0%	56.4%
29	34.1%	36.5%	39.1%	41.9%	45.0%	48.3%	50.0%	55.0%	58.4%
30	35.3%	37.7%	40.4%	43.4%	46.5%	50.0%	51.0%	55.5%	60.0%
31	36.5%	39.0%	41.7%	44.8%	48.1%	51.0%	51.5%	56.0%	60.0%
32	37.6%	40.2%	43.1%	46.2%	49.6%	51.5%	52.0%	56.5%	60.0%
33	38.8%	41.5%	44.4%	47.6%	50.0%	52.0%	52.5%	57.0%	60.0%
34	40.0%	42.8%	45.8%	49.1%	51.0%	52.5%	53.0%	57.5%	60.0%
35 or more	41.2%	44.0%	47.1%	50.0%	51.5%	53.0%	53.5%	58.0%	60.0%

APPENDIX C – SUMMARY OF PLAN PROVISIONS

ATU/Clerical Table A-2: Retirement Benefit Multipliers

Credited Years Of Service	Age at Retirement										
	Clerical										
	53	*54*	55	56	57	58	59	60	61	62	63+
5	*8.71%*	*9.33%*	10.00%	10.26%	10.52%	10.78%	11.05%	11.31%	11.57%	11.83%	12.09%
6	*10.45%*	*11.20%*	12.00%	12.31%	12.62%	12.94%	13.26%	13.57%	13.88%	14.20%	14.51%
7	*12.19%*	*13.06%*	14.00%	14.36%	14.73%	15.09%	15.47%	15.83%	16.20%	16.56%	16.93%
8	*13.94%*	*14.93%*	16.00%	16.42%	16.83%	17.25%	17.68%	18.10%	18.51%	18.93%	19.34%
9	*15.68%*	*16.79%*	18.00%	18.47%	18.94%	19.40%	19.89%	20.36%	20.83%	21.29%	21.76%
10	*17.42%*	*18.66%*	20.00%	20.52%	21.04%	21.56%	22.10%	22.62%	23.14%	23.66%	24.18%
11	*19.16%*	*20.53%*	22.00%	22.57%	23.14%	23.72%	24.31%	24.88%	25.45%	26.03%	26.60%
12	*20.90%*	*22.39%*	24.00%	24.62%	25.25%	25.87%	26.52%	27.14%	27.77%	28.39%	29.02%
13	*22.65%*	*24.26%*	26.00%	26.68%	27.35%	28.03%	28.73%	29.41%	30.08%	30.76%	31.43%
14	*24.39%*	*26.12%*	28.00%	28.73%	29.46%	30.18%	30.94%	31.67%	32.40%	33.12%	33.85%
15	*26.13%*	*27.99%*	30.00%	30.78%	31.56%	32.34%	33.15%	33.93%	34.71%	35.49%	36.27%
16	*27.87%*	*29.86%*	32.00%	32.83%	33.66%	34.50%	35.36%	36.19%	37.02%	37.86%	38.69%
17	*29.61%*	*31.72%*	34.00%	34.88%	35.77%	36.65%	37.57%	38.45%	39.34%	40.22%	41.11%
18	*31.36%*	*33.59%*	36.00%	36.94%	37.87%	38.81%	39.78%	40.72%	41.65%	42.59%	43.52%
19	*33.10%*	*35.45%*	38.00%	38.99%	39.98%	40.96%	41.99%	42.98%	43.97%	44.95%	45.94%
20	*34.84%*	*37.32%*	40.00%	41.04%	42.08%	43.12%	44.20%	45.24%	46.28%	47.32%	48.36%
21	*36.58%*	*39.19%*	42.00%	43.09%	44.18%	45.28%	46.41%	47.50%	48.59%	49.69%	50.78%
22	*38.32%*	*41.05%*	44.00%	45.14%	46.29%	47.43%	48.62%	49.76%	50.91%	52.05%	53.20%
23	*40.07%*	*42.92%*	46.00%	47.20%	48.39%	49.59%	50.83%	52.03%	53.22%	54.42%	55.61%
24	*41.81%*	*44.78%*	48.00%	49.25%	50.50%	51.74%	53.04%	54.29%	55.54%	56.78%	58.03%
25	*43.55%*	*46.65%*	50.00%	51.30%	52.60%	53.90%	55.25%	56.55%	57.85%	59.15%	60.45%
26	*45.29%*	*48.52%*	52.00%	53.35%	54.70%	56.06%	57.46%	58.81%	60.16%	61.52%	62.87%
27	*47.03%*	*50.38%*	54.00%	55.40%	56.81%	58.21%	59.67%	61.07%	62.48%	63.88%	65.29%
28	*48.78%*	*52.25%*	56.00%	57.46%	58.91%	60.37%	61.88%	63.34%	64.79%	66.25%	67.70%
29	*50.52%*	*54.11%*	58.00%	59.51%	61.02%	62.52%	64.09%	65.60%	67.11%	68.61%	70.00%
30	*52.26%*	*55.98%*	60.00%	61.56%	63.12%	64.68%	66.30%	67.86%	69.42%	70.00%	70.00%
31	*54.00%*	*57.85%*	62.00%	63.61%	65.22%	66.84%	68.51%	70.00%	70.00%	70.00%	70.00%
32	*55.74%*	*59.71%*	64.00%	65.66%	67.33%	68.99%	70.00%	70.00%	70.00%	70.00%	70.00%
33	*57.49%*	*61.58%*	66.00%	67.72%	69.43%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%
34	*59.23%*	*63.44%*	68.00%	69.77%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%
35 or more	*60.97%*	*65.31%*	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%

APPENDIX C – SUMMARY OF PLAN PROVISIONS

IBEW Table A-1: Retirement Benefit Multipliers

Credited Years Of Service	Age at Retirement										
	55	56	57	58	59	60	61	62	63	64	65+
5	5.2%	5.5%	5.9%	6.3%	6.7%	7.2%	7.8%	8.3%	8.9%	9.5%	10.1%
6	6.2%	6.6%	7.1%	7.5%	8.1%	8.7%	9.3%	10.0%	10.7%	11.4%	12.1%
7	7.2%	7.7%	8.2%	8.8%	9.4%	10.1%	10.9%	11.7%	12.4%	13.3%	14.1%
8	8.2%	8.8%	9.4%	10.1%	10.8%	11.6%	12.4%	13.3%	14.2%	15.1%	16.1%
9	9.3%	9.9%	10.6%	11.3%	12.1%	13.0%	14.0%	15.0%	16.0%	17.0%	18.1%
10	10.2%	11.0%	11.8%	12.6%	13.5%	14.4%	15.5%	16.7%	17.8%	18.9%	20.1%
11	11.2%	12.1%	12.9%	13.8%	14.8%	15.9%	17.1%	18.3%	19.5%	20.8%	22.2%
12	12.3%	13.2%	14.1%	15.1%	16.2%	17.3%	18.6%	20.0%	21.3%	22.7%	24.2%
13	13.3%	14.3%	15.3%	16.3%	17.5%	18.8%	20.2%	21.7%	23.1%	24.6%	26.2%
14	14.4%	15.4%	16.5%	17.6%	18.9%	20.2%	21.7%	23.3%	24.9%	26.5%	28.2%
15	15.4%	16.5%	17.6%	18.9%	20.2%	21.7%	23.3%	25.0%	26.7%	28.4%	30.2%
16	16.4%	17.6%	18.8%	20.1%	21.5%	23.1%	24.8%	26.7%	28.4%	30.3%	32.2%
17	17.5%	18.7%	20.0%	21.4%	22.9%	24.5%	26.4%	28.3%	30.2%	32.2%	34.3%
18	18.5%	19.8%	21.2%	22.6%	24.2%	26.0%	27.9%	30.0%	32.0%	34.1%	36.3%
19	19.6%	20.9%	22.3%	23.9%	25.6%	27.4%	29.5%	31.7%	33.8%	36.0%	38.3%
20	20.6%	22.0%	23.5%	25.2%	26.9%	28.9%	31.0%	33.3%	35.5%	37.9%	40.3%
21	21.6%	23.1%	24.7%	26.4%	28.3%	30.3%	32.6%	35.0%	37.3%	39.7%	42.3%
22	22.7%	24.2%	25.9%	27.7%	29.6%	31.8%	34.1%	36.7%	39.1%	41.6%	44.3%
23	23.7%	25.3%	27.0%	28.9%	31.0%	33.2%	35.7%	38.3%	40.9%	43.5%	46.3%
24	24.8%	26.4%	28.2%	30.2%	32.3%	34.6%	37.2%	40.0%	42.6%	45.4%	48.4%
25	25.8%	27.5%	29.4%	31.4%	33.7%	36.1%	38.8%	41.7%	44.4%	47.3%	50.4%
26	26.9%	28.6%	30.6%	32.7%	35.0%	37.5%	40.3%	43.3%	46.2%	49.2%	52.4%
27	27.9%	29.7%	31.7%	34.0%	36.4%	39.0%	41.9%	45.0%	48.0%	51.1%	54.4%
28	29.0%	30.9%	32.9%	35.2%	37.7%	40.4%	43.4%	46.7%	49.8%	52.0%	56.4%
29	30.0%	32.0%	34.1%	36.5%	39.1%	41.9%	45.0%	48.3%	50.0%	55.0%	58.4%
30	31.1%	33.1%	35.3%	37.7%	40.4%	43.4%	46.5%	50.0%	51.0%	55.5%	60.0%
31	32.1%	34.2%	36.5%	39.0%	41.7%	44.8%	48.1%	51.0%	51.5%	56.0%	60.0%
32	33.2%	35.3%	37.6%	40.2%	43.1%	46.2%	49.6%	51.5%	52.0%	56.5%	60.0%
33	34.3%	36.5%	38.8%	41.5%	44.4%	47.6%	50.0%	52.0%	52.5%	57.0%	60.0%
34	35.4%	37.6%	40.0%	42.8%	45.8%	49.1%	51.0%	52.5%	53.0%	57.5%	60.0%
35 or more	36.5%	38.7%	41.2%	44.0%	47.1%	50.0%	51.5%	53.0%	53.5%	58.0%	60.0%

APPENDIX C – SUMMARY OF PLAN PROVISIONS

IBEW Table A-2: Retirement Benefit Multipliers

Credited Years Of Service	Age at Retirement								
	55	56	57	58	59	60	61	62	63+
5	10.00%	10.26%	10.52%	10.78%	11.05%	11.31%	11.57%	11.83%	12.09%
6	12.00%	12.31%	12.62%	12.94%	13.26%	13.57%	13.88%	14.20%	14.51%
7	14.00%	14.36%	14.73%	15.09%	15.47%	15.83%	16.20%	16.56%	16.93%
8	16.00%	16.42%	16.83%	17.25%	17.68%	18.10%	18.51%	18.93%	19.34%
9	18.00%	18.47%	18.94%	19.40%	19.89%	20.36%	20.83%	21.29%	21.76%
10	20.00%	20.52%	21.04%	21.56%	22.10%	22.62%	23.14%	23.66%	24.18%
11	22.00%	22.57%	23.14%	23.72%	24.31%	24.88%	25.45%	26.03%	26.60%
12	24.00%	24.62%	25.25%	25.87%	26.52%	27.14%	27.77%	28.39%	29.02%
13	26.00%	26.68%	27.35%	28.03%	28.73%	29.41%	30.08%	30.76%	31.43%
14	28.00%	28.73%	29.46%	30.18%	30.94%	31.67%	32.40%	33.12%	33.85%
15	30.00%	30.78%	31.56%	32.34%	33.15%	33.93%	34.71%	35.49%	36.27%
16	32.00%	32.83%	33.66%	34.50%	35.36%	36.19%	37.02%	37.86%	38.69%
17	34.00%	34.88%	35.77%	36.65%	37.57%	38.45%	39.34%	40.22%	41.11%
18	36.00%	36.94%	37.87%	38.81%	39.78%	40.72%	41.65%	42.59%	43.52%
19	38.00%	38.99%	39.98%	40.96%	41.99%	42.98%	43.97%	44.95%	45.94%
20	40.00%	41.04%	42.08%	43.12%	44.20%	45.24%	46.28%	47.32%	48.36%
21	42.00%	43.09%	44.18%	45.28%	46.41%	47.50%	48.59%	49.69%	50.78%
22	44.00%	45.14%	46.29%	47.43%	48.62%	49.76%	50.91%	52.05%	53.20%
23	46.00%	47.20%	48.39%	49.59%	50.83%	52.03%	53.22%	54.42%	55.61%
24	48.00%	49.25%	50.50%	51.74%	53.04%	54.29%	55.54%	56.78%	58.03%
25	50.00%	51.30%	52.60%	53.90%	55.25%	56.55%	57.85%	59.15%	60.45%
26	52.00%	53.35%	54.70%	56.06%	57.46%	58.81%	60.16%	61.52%	62.87%
27	54.00%	55.40%	56.81%	58.21%	59.67%	61.07%	62.48%	63.88%	65.29%
28	56.00%	57.46%	58.91%	60.37%	61.88%	63.34%	64.79%	66.25%	67.70%
29	58.00%	59.51%	61.02%	62.52%	64.09%	65.60%	67.11%	68.61%	70.00%
30	60.00%	61.56%	63.12%	64.68%	66.30%	67.86%	69.42%	70.00%	70.00%
31	62.00%	63.61%	65.22%	66.84%	68.51%	70.00%	70.00%	70.00%	70.00%
32	64.00%	65.66%	67.33%	68.99%	70.00%	70.00%	70.00%	70.00%	70.00%
33	66.00%	67.72%	69.43%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%
34	68.00%	69.77%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%
35 or more	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%

APPENDIX C – SUMMARY OF PLAN PROVISIONS

Non-Contract Table A-1: Retirement Benefit Multipliers

Credited Years Of Service	Age at Retirement										
	53	54	55	56	57	58	59	60	61	62	63+
5	5.2%	5.5%	5.9%	6.3%	6.7%	7.2%	7.8%	8.3%	8.9%	9.5%	10.1%
6	6.2%	6.6%	7.1%	7.5%	8.1%	8.7%	9.3%	10.0%	10.7%	11.4%	12.1%
7	7.2%	7.7%	8.2%	8.8%	9.4%	10.1%	10.9%	11.7%	12.4%	13.3%	14.1%
8	8.2%	8.8%	9.4%	10.1%	10.8%	11.6%	12.4%	13.3%	14.2%	15.1%	16.1%
9	9.3%	9.9%	10.6%	11.3%	12.1%	13.0%	14.0%	15.0%	16.0%	17.0%	18.1%
10	10.2%	11.0%	11.8%	12.6%	13.5%	14.4%	15.5%	16.7%	17.8%	18.9%	20.1%
11	11.2%	12.1%	12.9%	13.8%	14.8%	15.9%	17.1%	18.3%	19.5%	20.8%	22.2%
12	12.3%	13.2%	14.1%	15.1%	16.2%	17.3%	18.6%	20.0%	21.3%	22.7%	24.2%
13	13.3%	14.3%	15.3%	16.3%	17.5%	18.8%	20.2%	21.7%	23.1%	24.6%	26.2%
14	14.4%	15.4%	16.5%	17.6%	18.9%	20.2%	21.7%	23.3%	24.9%	26.5%	28.2%
15	15.4%	16.5%	17.6%	18.9%	20.2%	21.7%	23.3%	25.0%	26.7%	28.4%	30.2%
16	16.4%	17.6%	18.8%	20.1%	21.5%	23.1%	24.8%	26.7%	28.4%	30.3%	32.2%
17	17.5%	18.7%	20.0%	21.4%	22.9%	24.5%	26.4%	28.3%	30.2%	32.2%	34.3%
18	18.5%	19.8%	21.2%	22.6%	24.2%	26.0%	27.9%	30.0%	32.0%	34.1%	36.3%
19	19.6%	20.9%	22.3%	23.9%	25.6%	27.4%	29.5%	31.7%	33.8%	36.0%	38.3%
20	20.6%	22.0%	23.5%	25.2%	26.9%	28.9%	31.0%	33.3%	35.5%	37.9%	40.3%
21	21.6%	23.1%	24.7%	26.4%	28.3%	30.3%	32.6%	35.0%	37.3%	39.7%	42.3%
22	22.7%	24.2%	25.9%	27.7%	29.6%	31.8%	34.1%	36.7%	39.1%	41.6%	44.3%
23	23.7%	25.3%	27.0%	28.9%	31.0%	33.2%	35.7%	38.3%	40.9%	43.5%	46.3%
24	24.8%	26.4%	28.2%	30.2%	32.3%	34.6%	37.2%	40.0%	42.6%	45.4%	48.4%
25	25.8%	27.5%	29.4%	31.4%	33.7%	36.1%	38.8%	41.7%	44.4%	47.3%	50.4%
26	26.9%	28.6%	30.6%	32.7%	35.0%	37.5%	40.3%	43.3%	46.2%	49.2%	52.4%
27	27.9%	29.7%	31.7%	34.0%	36.4%	39.0%	41.9%	45.0%	48.0%	51.1%	54.4%
28	29.0%	30.9%	32.9%	35.2%	37.7%	40.4%	43.4%	46.7%	49.8%	52.0%	56.4%
29	30.0%	32.0%	34.1%	36.5%	39.1%	41.9%	45.0%	48.3%	50.0%	55.0%	58.4%
30	31.1%	33.1%	35.3%	37.7%	40.4%	43.4%	46.5%	50.0%	51.0%	55.5%	60.0%
31	32.1%	34.2%	36.5%	39.0%	41.7%	44.8%	48.1%	51.0%	51.5%	56.0%	60.0%
32	33.2%	35.3%	37.6%	40.2%	43.1%	46.2%	49.6%	51.5%	52.0%	56.5%	60.0%
33	34.3%	36.5%	38.8%	41.5%	44.4%	47.6%	50.0%	52.0%	52.5%	57.0%	60.0%
34	35.4%	37.6%	40.0%	42.8%	45.8%	49.1%	51.0%	52.5%	53.0%	57.5%	60.0%
35 or more	36.5%	38.7%	41.2%	44.0%	47.1%	50.0%	51.5%	53.0%	53.5%	58.0%	60.0%

APPENDIX C – SUMMARY OF PLAN PROVISIONS

Non-Contract Table A-2: Retirement Benefit Multipliers

Credited Years Of Service	Age at Retirement										
	53	54	55	56	57	58	59	60	61	62	63+
5	8.71%	9.33%	10.00%	10.26%	10.52%	10.78%	11.05%	11.31%	11.57%	11.83%	12.09%
6	10.45%	11.20%	12.00%	12.31%	12.62%	12.94%	13.26%	13.57%	13.88%	14.20%	14.51%
7	12.19%	13.06%	14.00%	14.36%	14.73%	15.09%	15.47%	15.83%	16.20%	16.56%	16.93%
8	13.94%	14.93%	16.00%	16.42%	16.83%	17.25%	17.68%	18.10%	18.51%	18.93%	19.34%
9	15.68%	16.79%	18.00%	18.47%	18.94%	19.40%	19.89%	20.36%	20.83%	21.29%	21.76%
10	17.42%	18.66%	20.00%	20.52%	21.04%	21.56%	22.10%	22.62%	23.14%	23.66%	24.18%
11	19.16%	20.53%	22.00%	22.57%	23.14%	23.72%	24.31%	24.88%	25.45%	26.03%	26.60%
12	20.90%	22.39%	24.00%	24.62%	25.25%	25.87%	26.52%	27.14%	27.77%	28.39%	29.02%
13	22.65%	24.26%	26.00%	26.68%	27.35%	28.03%	28.73%	29.41%	30.08%	30.76%	31.43%
14	24.39%	26.12%	28.00%	28.73%	29.46%	30.18%	30.94%	31.67%	32.40%	33.12%	33.85%
15	26.13%	27.99%	30.00%	30.78%	31.56%	32.34%	33.15%	33.93%	34.71%	35.49%	36.27%
16	27.87%	29.86%	32.00%	32.83%	33.66%	34.50%	35.36%	36.19%	37.02%	37.86%	38.69%
17	29.61%	31.72%	34.00%	34.88%	35.77%	36.65%	37.57%	38.45%	39.34%	40.22%	41.11%
18	31.36%	33.59%	36.00%	36.94%	37.87%	38.81%	39.78%	40.72%	41.65%	42.59%	43.52%
19	33.10%	35.45%	38.00%	38.99%	39.98%	40.96%	41.99%	42.98%	43.97%	44.95%	45.94%
20	34.84%	37.32%	40.00%	41.04%	42.08%	43.12%	44.20%	45.24%	46.28%	47.32%	48.36%
21	36.58%	39.19%	42.00%	43.09%	44.18%	45.28%	46.41%	47.50%	48.59%	49.69%	50.78%
22	38.32%	41.05%	44.00%	45.14%	46.29%	47.43%	48.62%	49.76%	50.91%	52.05%	53.20%
23	40.07%	42.92%	46.00%	47.20%	48.39%	49.59%	50.83%	52.03%	53.22%	54.42%	55.61%
24	41.81%	44.78%	48.00%	49.25%	50.50%	51.74%	53.04%	54.29%	55.54%	56.78%	58.03%
25	43.55%	46.65%	50.00%	51.30%	52.60%	53.90%	55.25%	56.55%	57.85%	59.15%	60.45%
26	45.29%	48.52%	52.00%	53.35%	54.70%	56.06%	57.46%	58.81%	60.16%	61.52%	62.87%
27	47.03%	50.38%	54.00%	55.40%	56.81%	58.21%	59.67%	61.07%	62.48%	63.88%	65.29%
28	48.78%	52.25%	56.00%	57.46%	58.91%	60.37%	61.88%	63.34%	64.79%	66.25%	67.70%
29	50.52%	54.11%	58.00%	59.51%	61.02%	62.52%	64.09%	65.60%	67.11%	68.61%	70.00%
30	52.26%	55.98%	60.00%	61.56%	63.12%	64.68%	66.30%	67.86%	69.42%	70.00%	70.00%
31	54.00%	57.85%	62.00%	63.61%	65.22%	66.84%	68.51%	70.00%	70.00%	70.00%	70.00%
32	55.74%	59.71%	64.00%	65.66%	67.33%	68.99%	70.00%	70.00%	70.00%	70.00%	70.00%
33	57.49%	61.58%	66.00%	67.72%	69.43%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%
34	59.23%	63.44%	68.00%	69.77%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%
35 or more	60.97%	65.31%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%	70.00%

APPENDIX C – SUMMARY OF PLAN PROVISIONS

Table B: Alternate Retirement Formula Multipliers

Credited Years Of Service	Percentage
10	20.1%
11	22.2%
12	24.2%
13	26.2%
14	28.2%
15	30.2%
16	32.2%
17	34.3%
18	36.3%
19	38.3%
20	40.3%
21	42.3%
22	44.3%
23	46.3%
24	48.4%
25	50.4%
26	52.4%
27	54.4%
28	56.4%
29	58.4%
30	60.4%
31	62.5%
32	64.5%
33	66.5%
34	68.5%
35 or more	70.5%

APPENDIX D – GLOSSARY

1. Actuarial Assumptions

Assumptions as to the occurrence of future events affecting pension costs such as mortality, withdrawal, disability, retirement, changes in compensation, and rates of investment return.

2. Actuarial Cost Method

A procedure for determining the actuarial present value of pension plan benefits and expenses and for developing an allocation of such value to each year of service, usually in the form of a normal cost and an Actuarial Liability.

3. Actuarial Gain (Loss)

The difference between actual experience and that expected is based upon a set of actuarial assumptions during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

4. Actuarial Liability

The portion of the actuarial present value of projected benefits, which will not be paid by future normal costs. It represents the value of the past normal costs with interest to the valuation date.

5. Actuarial Present Value (Present Value)

The value as of a given date of a future amount or series of payments. The actuarial present value discounts the payments to the given date at the assumed investment return and includes the probability of the payment being made.

6. Actuarial Valuation

The determination, as of a specified date, of the normal cost, Actuarial Liability, Actuarial Value of Assets, and related actuarial present values for a pension plan.

7. Actuarial Value of Assets

The value of cash, investments, and other property belonging to a pension plan as used by the actuary for the purpose of an actuarial valuation. The purpose of an Actuarial Value of Assets is to smooth out fluctuations in market values.

8. Actuarially Equivalent

Of equal actuarial present value, determined as of a given date, with each value based on the same set of actuarial assumptions.

APPENDIX D – GLOSSARY

9. Amortization Payment

The portion of the pension plan contribution that is designed to pay interest and principal on the Unfunded Actuarial Liability in order to pay for that liability in a given number of years.

10. Entry Age Normal Actuarial Cost Method

A method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages.

11. Funded Ratio

The ratio of the Actuarial Value of Assets to the Actuarial Liabilities.

12. Normal Cost

That portion of the actuarial present value of pension plan benefits and expenses, which is allocated to a valuation year by the actuarial cost method.

13. Projected Benefits

Those pension plan benefit amounts which are expected to be paid in the future under a particular set of actuarial assumptions, taking into account such items as increases in future compensation and service credits.

14. Unfunded Actuarial Liability

The excess of the Actuarial Liability over the Actuarial Value of Assets.

CHEIRON

Classic Values, Innovative Advice

Via Electronic Mail

September 2, 2025

Mr. Larry Marinesi
Chief Financial Officer
San Diego Metropolitan Transit System
1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490

Re: Retirement Plans of San Diego Transit Corporation – Amortization Policy Study

Dear Larry,

At your request, we have prepared a study on the actuarial amortization policy for the Retirement Plans of San Diego Transit Corporation ("Plan," "SDTC"). This study reviews the principal elements of an actuarial funding policy, which includes SDTC's amortization policy and reasonable alternative options. We have developed actuarial projections to model the future expectations of the Plan's contributions and funded ratio under the current and alternative amortization policies.

Principal Elements of an Actuarial Funding Policy

"The principal goal of an actuarial funding policy is to pre-fund the benefits so that future contributions together with current plan assets and future investment returns should be sufficient to provide for all benefits expected to be paid to members and their beneficiaries when due."[1]

The principal elements of an actuarial funding policy, which are described in Appendix B of the Actuarial Valuation Report as of July 1, 2024 for SDTC are an actuarial cost method, an asset smoothing method, and an amortization policy.

- An actuarial cost method is used to determine the normal cost and the Unfunded Actuarial Liability (UAL). SDTC uses the individual entry age to final decrement cost method.
- For purposes of determining contributions, a smoothed Actuarial Value of Assets (AVA) is used that dampens the effects of volatility in the Market Value of Assets (MVA) on the pattern of contributions. SDTC uses a five-year smoothing period to defer recognition of asset gains and losses.
- An amortization policy determines how much and when contributions are to be made to systematically fund a plan's UAL or recognize a plan's surplus. The current amortization policy for SDTC is to achieve full funding by July 1, 2037.

[1] Actuarial Funding Policies and Practices for Public Pension Plans, Second Edition August 2024, Conference of Consulting Actuaries, Public Plans Community.

The funding policy along with a set of reasonable actuarial assumptions is also called the contribution allocation procedure. The contribution allocation procedure determines the Actuarially Determined Contributions (ADC) for a plan as defined in the Actuarial Standard of Practice No. 4, *"Measuring Pension Obligations and Determining Pension Plan Costs or Contributions."*

The Plan's funding policy is to contribute the ADC equal to the sum of:

- The normal cost under the Entry Age Normal Cost Method,
- Expected administrative expenses, and
- Amortization of the Unfunded Actuarial Liability (UAL) based on level dollar payments.

This contribution allocation procedure was selected to balance benefit security, intergenerational equity, and the stability of Actuarially Determined Contributions. The selection also considered the demographics of plan members, the funding goals and objectives of the Board, and the need to accumulate assets to make benefit payments when due.

Overview of the Plan's Current Amortization Policy

The UAL payment is currently a series of layers each amortized as a level dollar amount over a closed period. The initial UAL as of July 1, 2012 is amortized in level dollar payments over a 25-year period ending with the July 1, 2037 actuarial valuation. Subsequent changes in the UAL due to changes in the actuarial assumptions or methods and plan amendments are amortized in level dollar payments over separate periods such that the amortization periods are fully amortized with the July 1, 2037 valuation, consistent with the amortization of the remaining July 1, 2012 UAL.

Annual unexpected changes in the UAL due to actuarial experience gains and losses are amortized over separate closed 15-year periods in level dollar payments. However, in order for SDTC to achieve its goal of full funding by July 1, 2037, the amortization periods for experience gains and losses are maximum of 15-years or a period to be fully paid for by the July 1, 2037 valuation. As such, the July 1, 2023 and the July 1, 2024 UAL from actuarial experience losses were amortized over 14-years and 13-years, respectively.

Alternatives to the Amortization Policy

The Unfunded Actuarial Liability payment is currently made up of 17 separate amortization layers, or bases (see Attachment). Each layer is being amortized in lever dollar payments over a closed period as set by the Plan's amortization policy. The amortization payments for each base should fully amortize the UAL base within a reasonable time period or reduce the outstanding balance by a reasonable amount each year. Amortization periods that are too short could lead to unsustainably high contributions and periods that are too long could lead to negative amortization (a growing Unfunded Actuarial Liability). It is good practice to regularly review a plan's amortization policy to ensure that the plan's funding objectives are appropriately balanced.

Alternatives to SDTC's current amortization policy must remain appropriate and reasonably consistent with the Plan's funding objectives. We propose keeping the UAL payments as a level dollar amount rather than a level percentage of pay since the Plan is closed to new entrants. The UAL payment using a level percentage of pay methodology would increase overtime as pensionable payroll decreases. The following are our proposed alternatives to the current amortization policy:

- Scenario 1A: Reset the entire UAL ("fresh start") as one base for a closed 15-year period;
- Scenario 1B: Reset the entire UAL ("fresh start") as one base for a closed 20-year period;
- Scenario 2A: Extend the period for some of the existing bases[2] to 15-years with a 5-year phase-out at the end of the 15-year period;
- Scenario 2B: Extend the payment period for some of the existing bases[2] to 15-years with a 7-year phase-out at the end of the 15-year period;
- Any future unexpected changes to the UAL for any alternative would be amortized over a closed 10-year period.

All alternative amortization policies seek to avoid tail contribution volatility while making reasonable progress to pay down the Unfunded Actuarial Liability over time.

The proposed alternative amortization polices follow the "Model Practices" (the highest ranking practice) as found in the *Actuarial Funding Policies and Practices for Public Pension and OPEB Plans and Level Cost Allocation* published by the California Actuarial Advisory Panel (CAAP), with the exception that the new UAL payments are not substantially the same as the current UAL payments. However, the CAAP guidelines state that *"...there are situations where the policy parameters developed herein may require additional analysis to establish the appropriate parameters for that situation. For example, plans that are closed to new entrants may require additional analyses and forecasts to determine whether the policy parameters here provide for adequate funding."* The projections found in the next section show that the alternative amortization policies meet the Plan's funding objectives and are expected to fully fund the Plan in all scenarios.

[2] See Attachment for more detail.

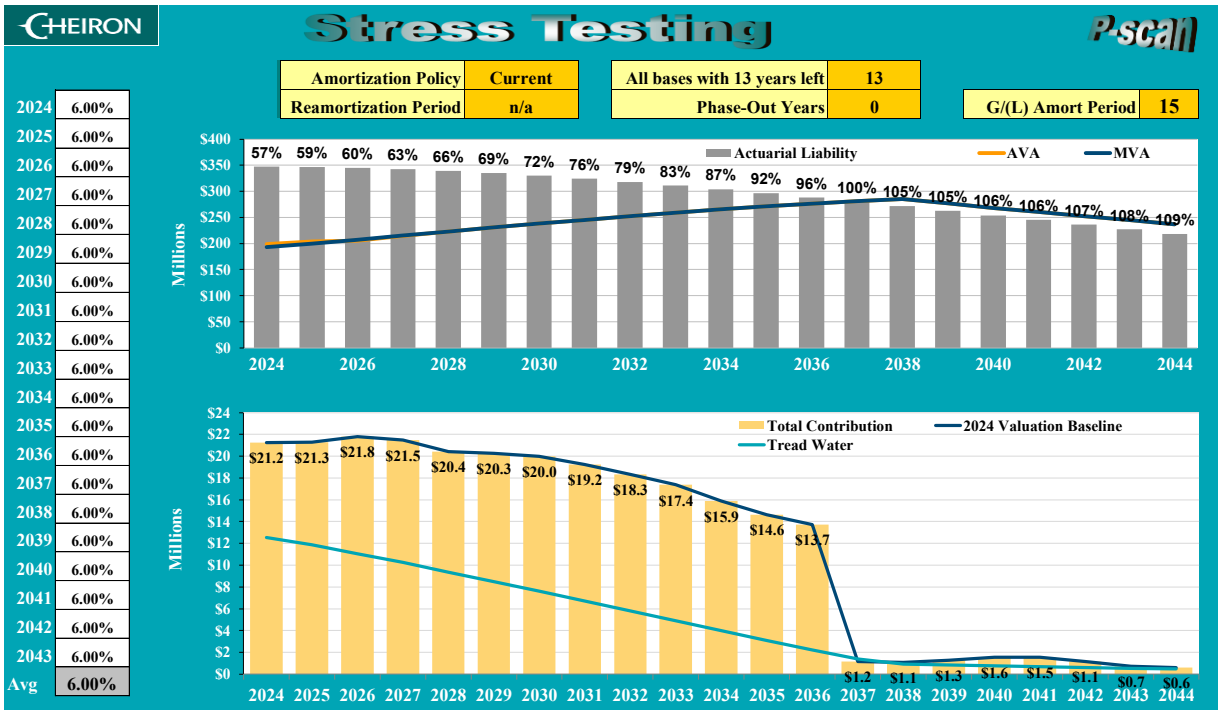
Projection Modeling

In order to assess the potential impact of changing the Plan's amortization policy, we prepared projection scenarios that show the expected funded ratios and future contributions of the Plan. The projections are based on the same data, actuarial assumptions and methods, and plan provisions as used in the July 1, 2024 Actuarial Valuation Report for the Retirement Plans of SDTC, with the exception of the amortization methods as described in each scenario. All actuarial assumptions, including an assumed rate of return of 6.0% per year, are expected to be met each year.

The years shown in the projection scenarios correspond to the valuation year. For example, 2024 shows the results of the July 1, 2024 actuarial valuation – the funded ratio is 57%, in the top graph, and the total contribution is $21.2 million, in the bottom graph, which is payable in fiscal year ending June 30, 2026. Under the baseline scenario, the Plan is projected to be fully funded with a funded ratio of 100% by the 2037 actuarial valuation.

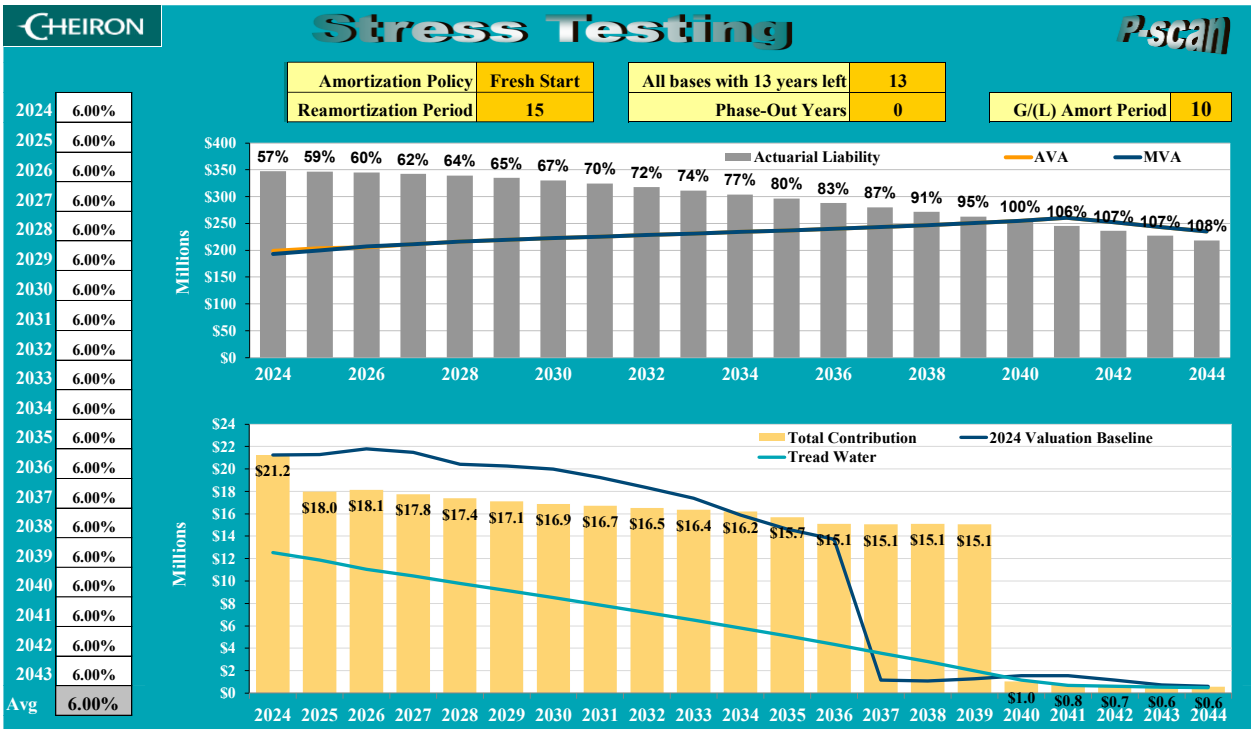
In the bottom graph, the teal blue line represents the "tread water" level which is the cost of the active benefits earned in the year, expected administrative expenses, plus interest on the UAL. If contributions are greater than the tread water level, the UAL is expected to decrease. Conversely, if contributions are less than the tread water level, the UAL is expected to increase. An amortization policy where the contribution levels are below the tread water level results in negative amortization. It is important to note that all proposed amortization policies result in expected contributions well above the tread water level. The Plan is also expected to be fully funded in all scenarios, although later than the July 1, 2037 valuation under the current amortization policy.

Baseline: Current Amortization Policy – Full funding of UAL by 2037

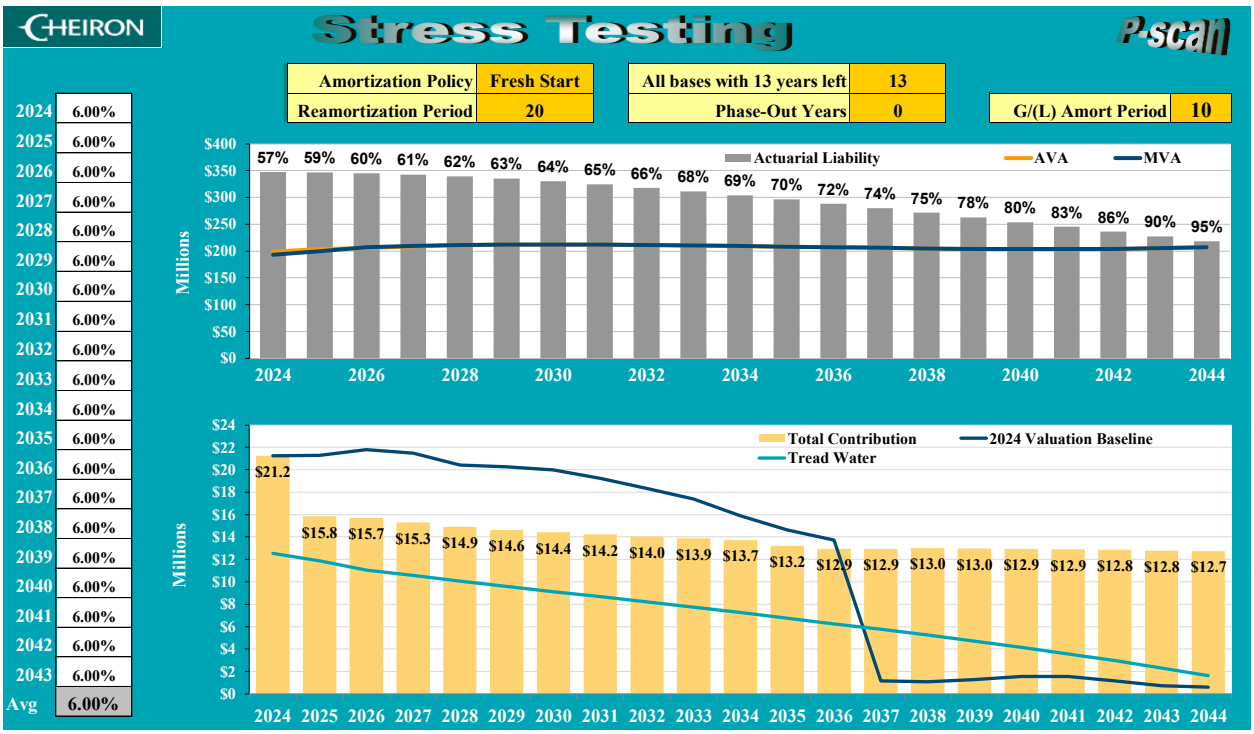


Mr. Larry Marinesi
September 2, 2025
Page 5

Scenario 1A: Reset all current amortization layers to a 15-year amortization



Scenario 1B: Reset all current amortization layers to a 20-year amortization



Mr. Larry Marinesi
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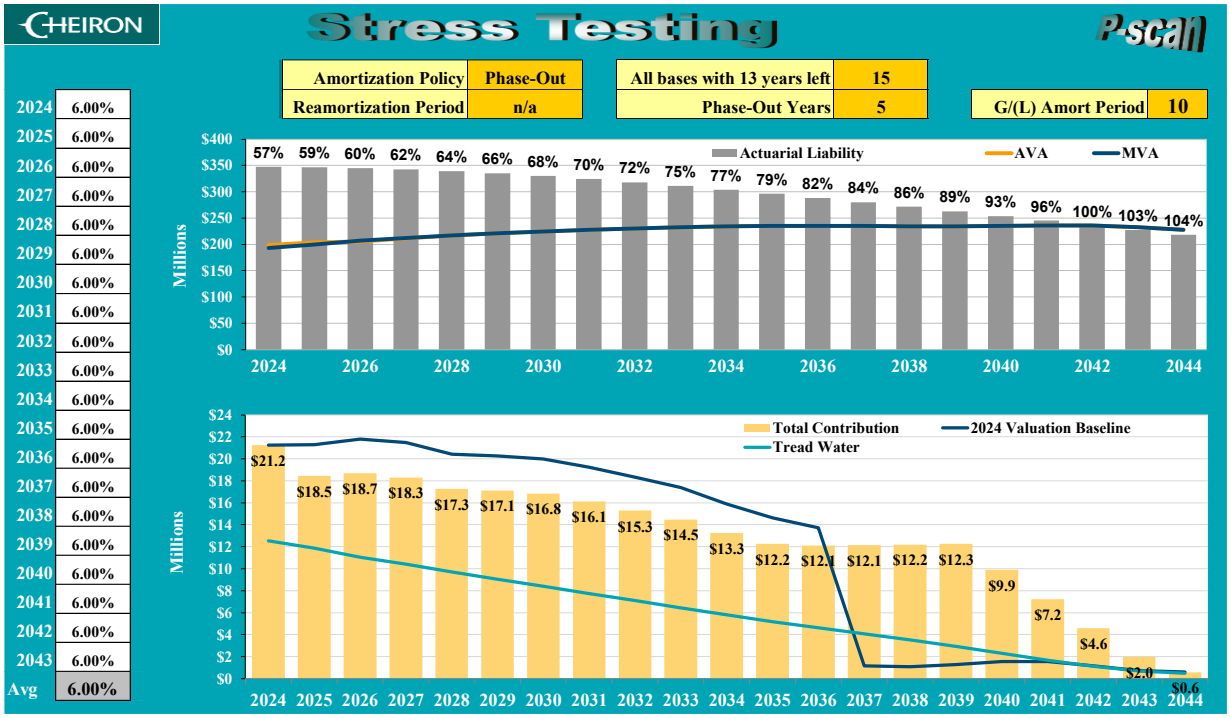
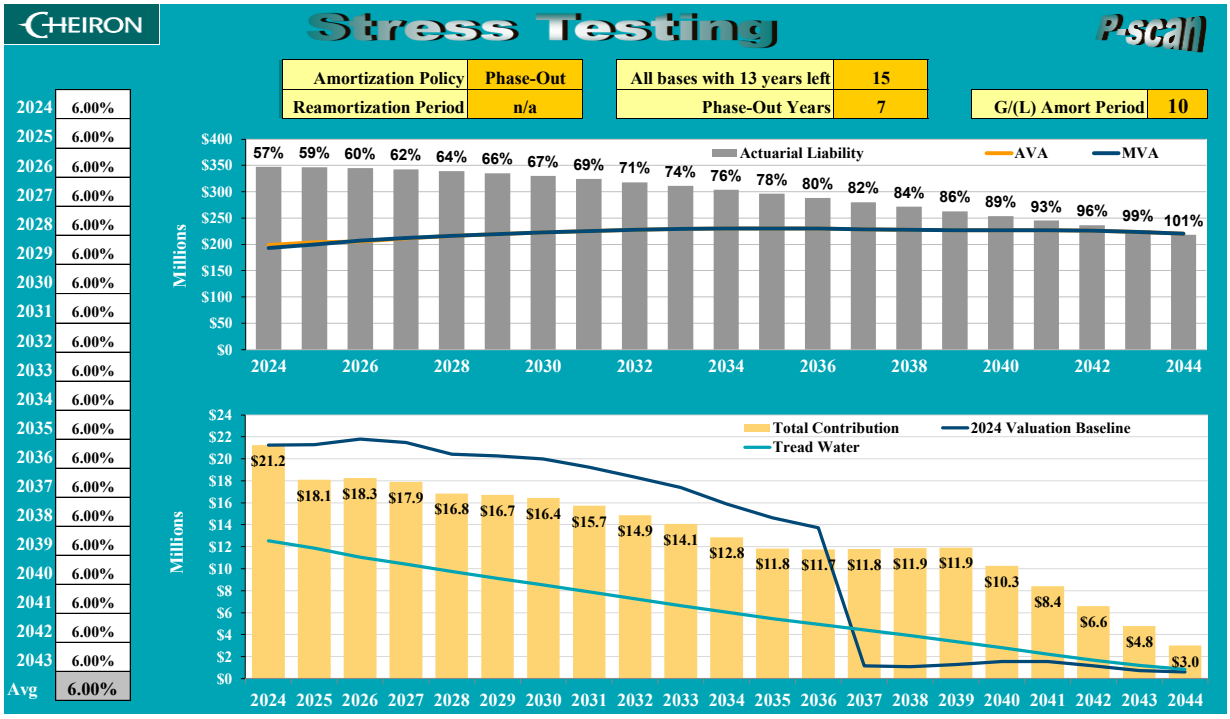
Scenarios 2A and 2B aim to eliminate the large decrease in projected contributions and smooth out potential tail volatility at the end of the UAL payment period compared to Scenarios 1A and 1B.

Scenario 2A: Extend certain layers to a 15-year period with a 5-year phase out



Scenario 2B: Extend certain layers to a 15-year period with a 7-year phase out



In preparing our study, we relied on information (some oral and some written) supplied by the plan administrator. This information includes, but is not limited to, the Plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

Future results may differ significantly from the current results presented in this study due to such factors as the following: plan experience different from that anticipated by the assumptions; changes in assumptions; changes in active member demographics; and, any change in plan provisions or applicable law.

Cheiron utilizes ProVal actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate liabilities and project benefit payments. We have relied on WinTech as the developer of ProVal. We have a basic understanding of ProVal and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this valuation. The deterministic projections shown in this study were developed using R-Scan, our proprietary stochastic projection tool for assessing probabilities of different outcomes. We have relied on Cheiron colleagues who developed the tool, and we have used the tool in accordance with its purpose.

This letter and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this letter. This letter does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

Finally, this letter was prepared for the Retirement Board and MTS Board for the purpose described herein. This letter is not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

Sincerely,
Cheiron

Anne D. Harper, FSA, EA, MAAA
Principal Consulting Actuary

Alice I. Alsberghe, ASA, EA, MAAA
Consulting Actuary

Attachment

cc: Mike Thompson

ATTACHMENT

The exhibit below is from the July 1, 2024 actuarial valuation report. Scenarios 2A and 2B extend the Initial Unfunded Actuarial Liability (base 1), the assumption changes (bases 5, 10, and 13), and the actuarial losses (bases 15, 16, and 17) to 15 years.

Table V-2
Development of the Amortization Payment (BOY) as of July 1, 2024

	Type of Base	Date Established	Initial Balance	Initial Amortization	Outstanding Balance	Remaining Amortization	Amortization Amount
1.	Initial Unfunded Actuarial Liability	7/1/2012	$ 87,613,245	25	$ 62,414,979	13	$ 6,651,323
2.	Actuarial Loss	7/1/2013	6,555,553	15	2,414,847	4	657,457
3.	Actuarial Gain	7/1/2014	(2,132,368)	15	(949,575)	5	(212,666)
4.	Actuarial Loss	7/1/2015	740,624	15	382,920	6	73,464
5.	Assumption Changes	7/1/2016	29,699,872	21	22,648,195	13	2,413,531
6.	Actuarial Loss	7/1/2016	4,978,340	15	2,906,622	7	491,205
7.	Actuarial Loss	7/1/2017	5,880,935	15	3,805,686	8	578,162
8.	Method Changes	7/1/2018	(640,322)	19	(511,908)	13	(54,552)
9.	Actuarial Loss	7/1/2018	5,453,907	15	3,852,118	9	534,290
10.	Assumption Changes	7/1/2019	7,536,766	18	6,190,925	13	659,743
11.	Actuarial Loss	7/1/2019	9,988,472	15	7,607,865	10	975,156
12.	Actuarial Loss	7/1/2020	3,425,437	15	2,788,603	11	333,561
13.	Assumption Changes	7/1/2021	10,215,184	16	8,948,419	13	953,598
14.	Actuarial Gain	7/1/2021	(5,703,358)	15	(4,923,274)	12	(553,994)
15.	Actuarial Loss	7/1/2022	10,345,013	15	9,429,445	13	1,004,860
16.	Actuarial Loss	7/1/2023	12,250,922	14	11,667,963	13	1,243,410
17.	Actuarial Loss	7/1/2024	10,039,576	13	10,039,576	13	1,069,879
	TOTAL				**$ 148,713,406**		**$ 16,818,427**
					Total UAL Payment, Middle of Year		**$ 17,315,630**

Item No. 17, 02/12/2026

Retirement Plans of San Diego Transit Corporation

July 1, 2025 Actuarial Valuation & Amortization Policy Review

Anne D. Harper, FSA, EA, MAAA
Alice I. Alsberghe, ASA, EA, MAAA

February 12, 2026

CHEIRON
Classic Values, Innovative Advice

Today's Discussion

- Background
- Plan Contributions for Fiscal Year 2026-2027 (based on 2025 Actuarial Valuation)
- Plan History
- Plan Projections
- Amortization Policy Review
- Appendix

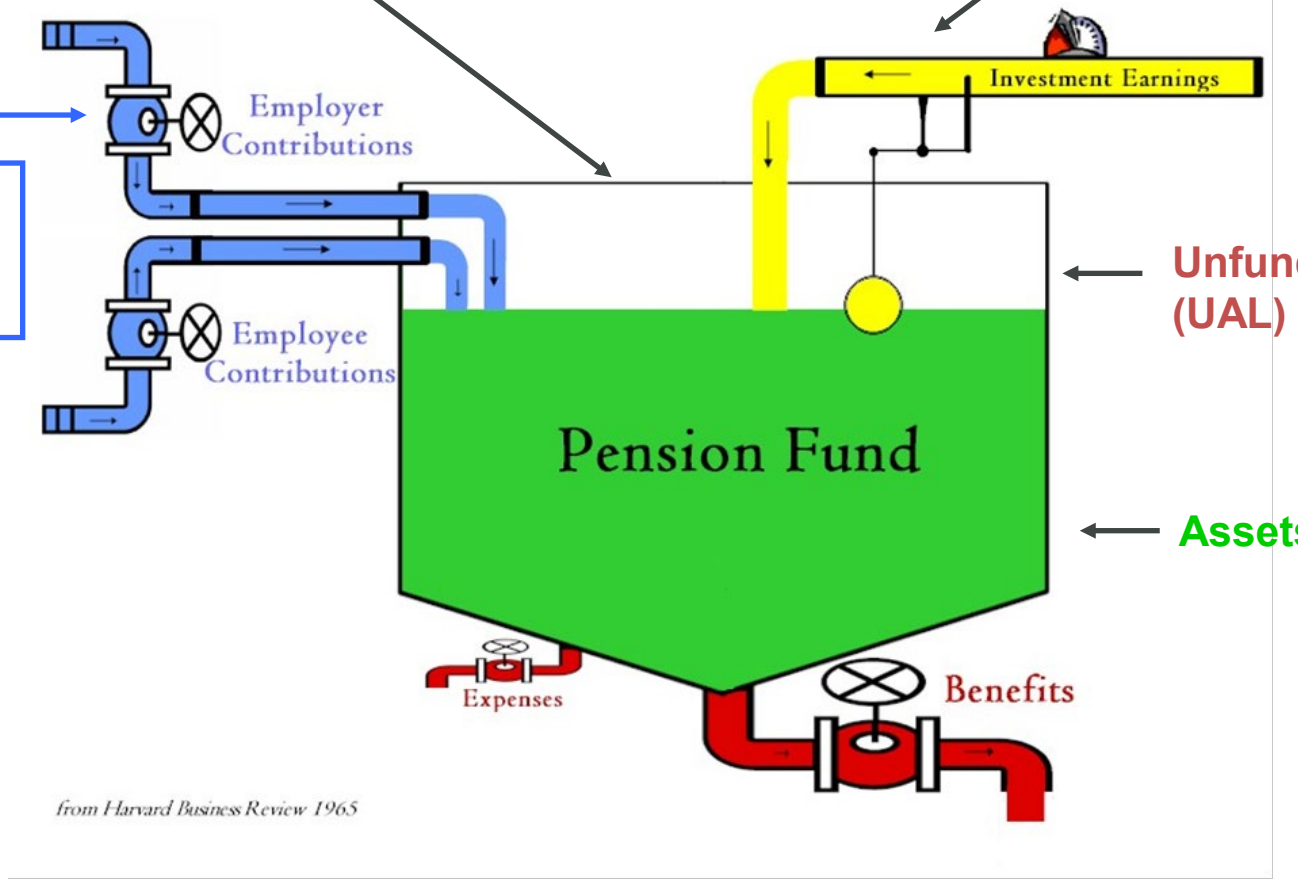
Pension Plan Management

The "Tank" represents the Plan's Liabilities

Investment Policy:

Determines expected return

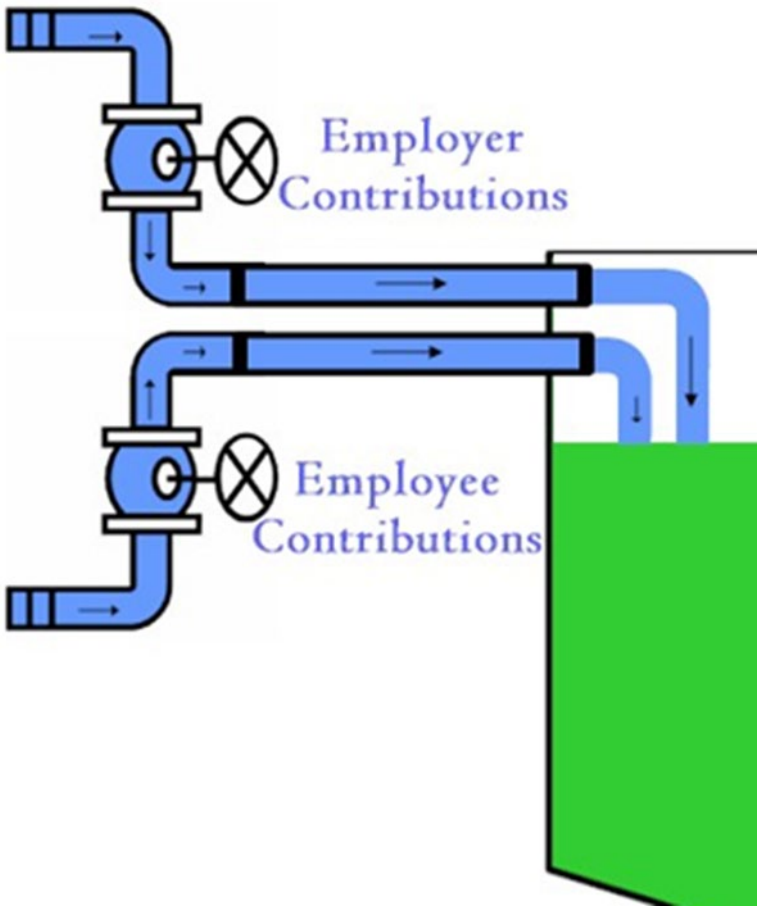
Funding Policy:
Determines how much to turn this valve



Unfunded Actuarial Liability (UAL)

Assets in Fund

Pension Plan Contributions



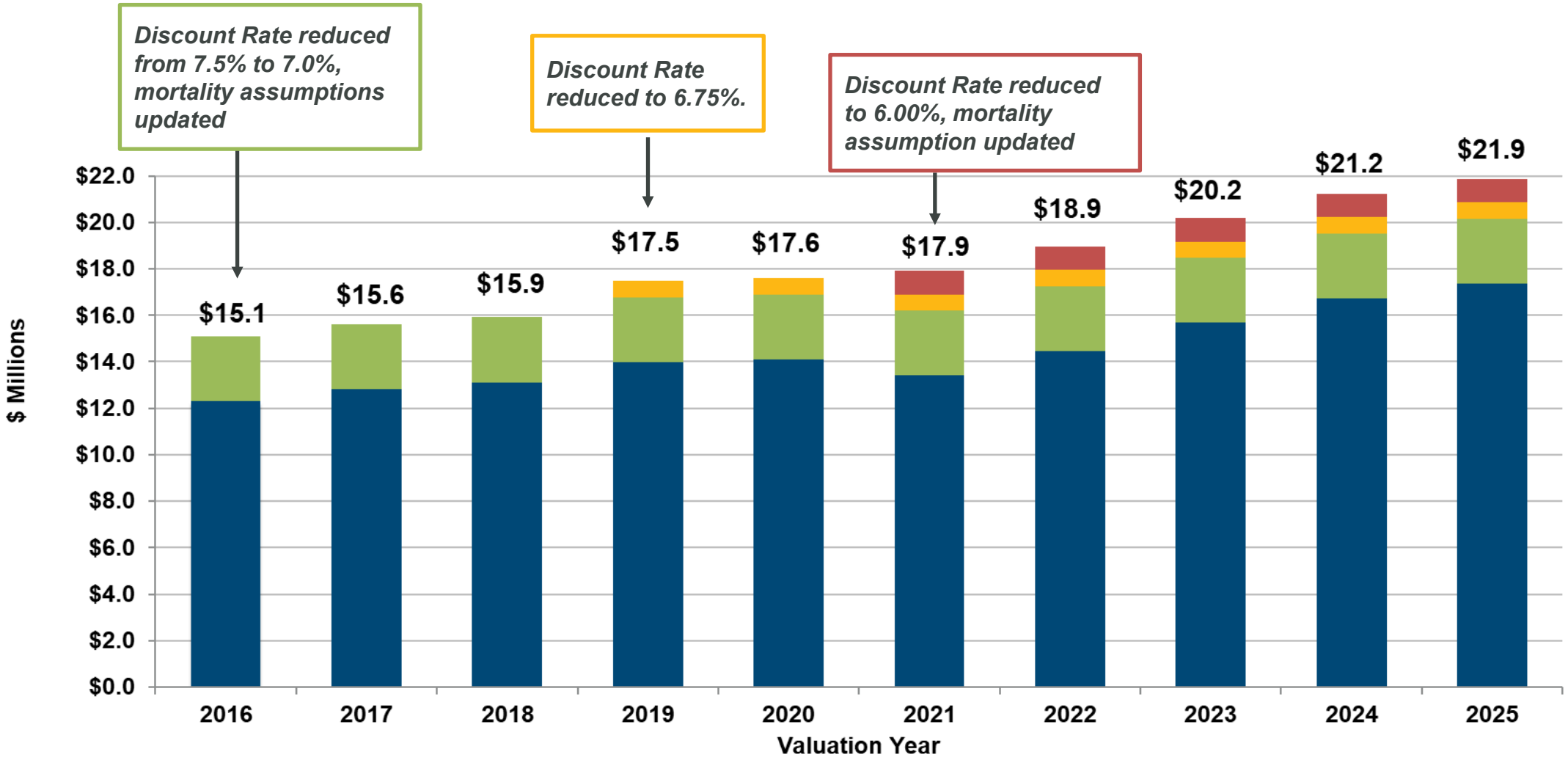
Components of the Contribution

1. ***Normal Cost***
   - **Active members' benefits earned during the year**
2. ***Unfunded Actuarial Liability (UAL) Payment***
   - ***Based on Amortization Policy***
3. ***Expected Administrative Expenses***
4. ***Employer Contributions =***
   1. + 2. + 3. less Employee Contributions

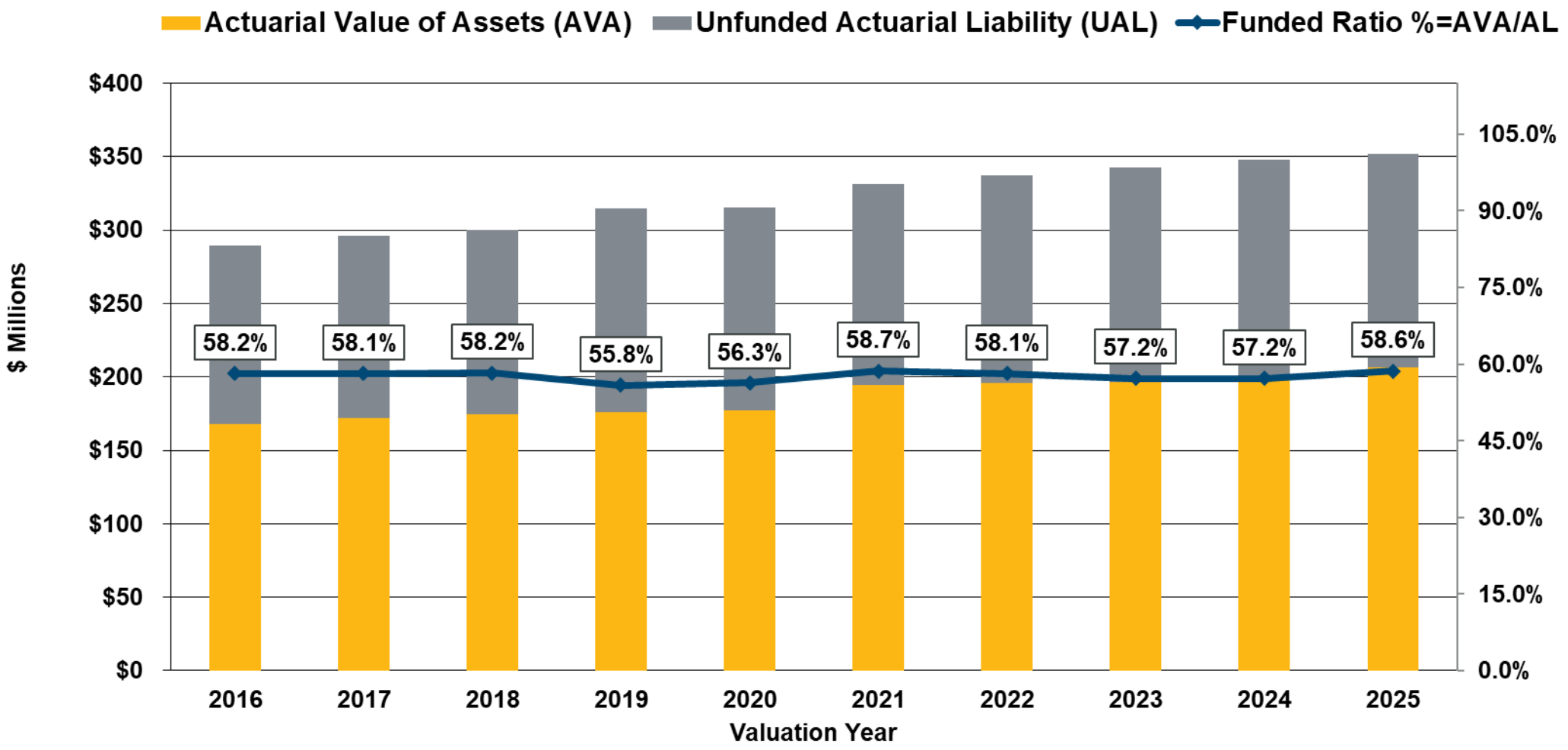
Plan Contributions – Change from 2024 Valuation

Total Contribution Reconciliation		
Fiscal Year 2025-2026		**$ 21,231,000**
Actuarial Investment Experience		
FYE 2025 Asset Gain	(172,000)	
FYE 2021-2024 Net Deferred Losses	207,000	
		35,000
Actuarial Liability Experience		628,000
Fewer benefits earned by active membership due to primarily closed plan		(169,000)
Other Miscellaneous Factors		130,000
Net Change in Contribution		***624,000***
Fiscal Year 2026-2027		**$ 21,855,000**

Plan History – Contributions



Plan History – Funding

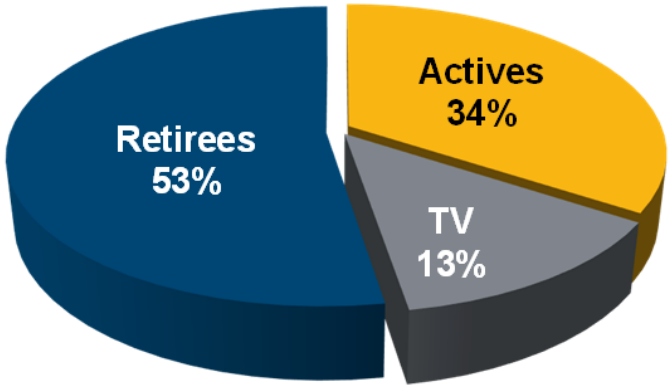


Note: As of July 1, 2025, the Funded Ratio based on the Market Value of Assets is 59.1%.

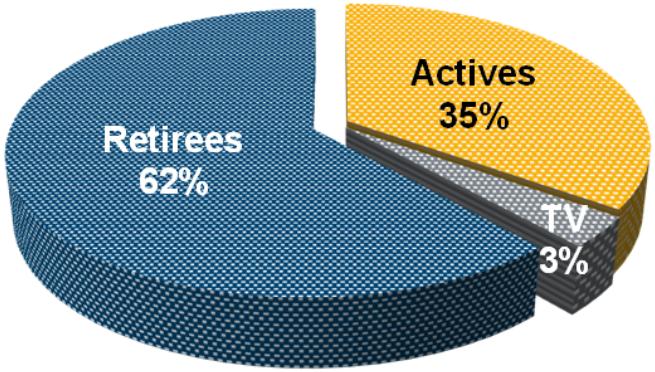
Plan History – Membership Composition

2015

2015 Head Count

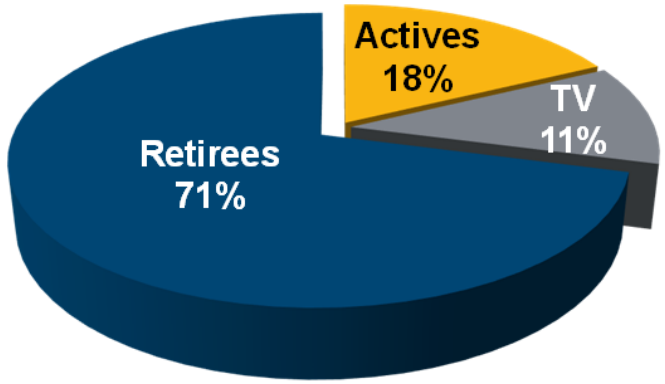


2015 Plan Liabilities

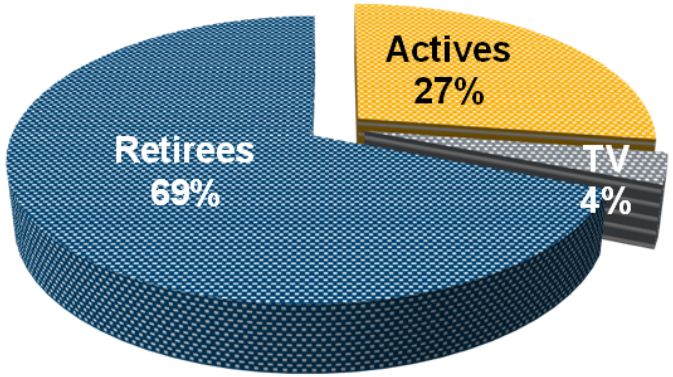


2025

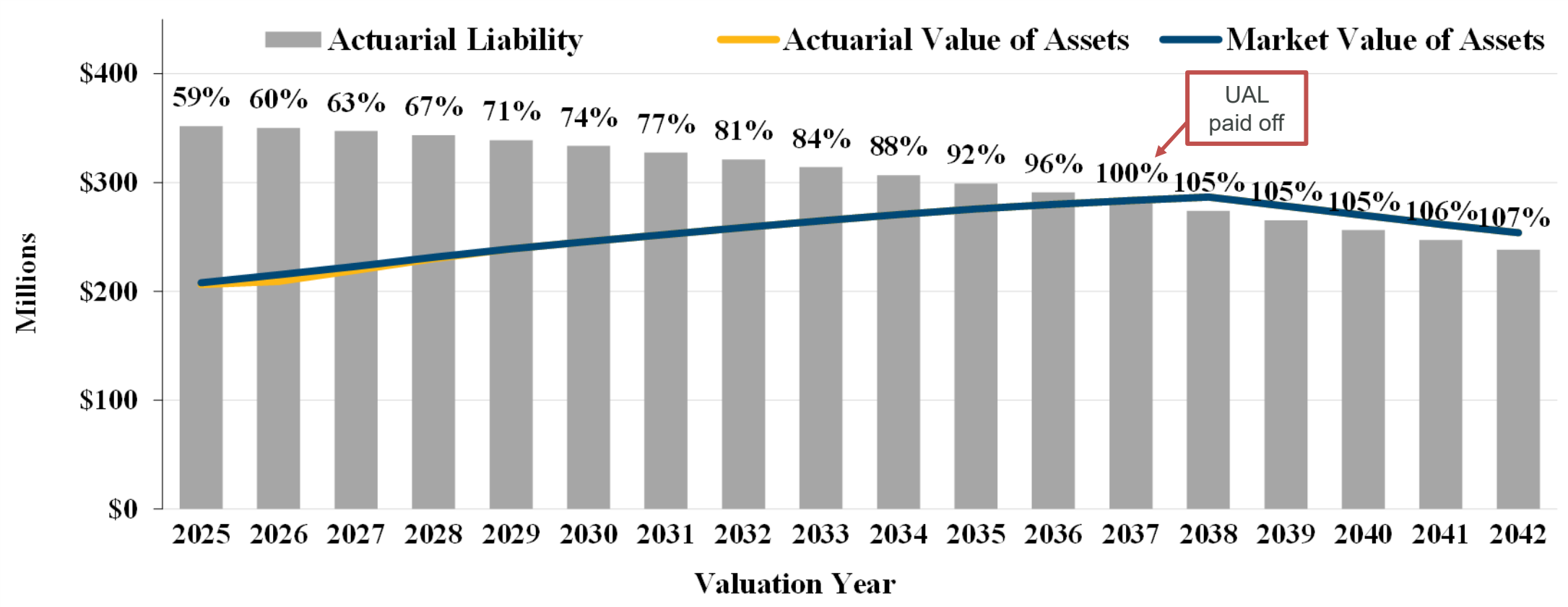
2025 Head Count



2025 Plan Liabilities

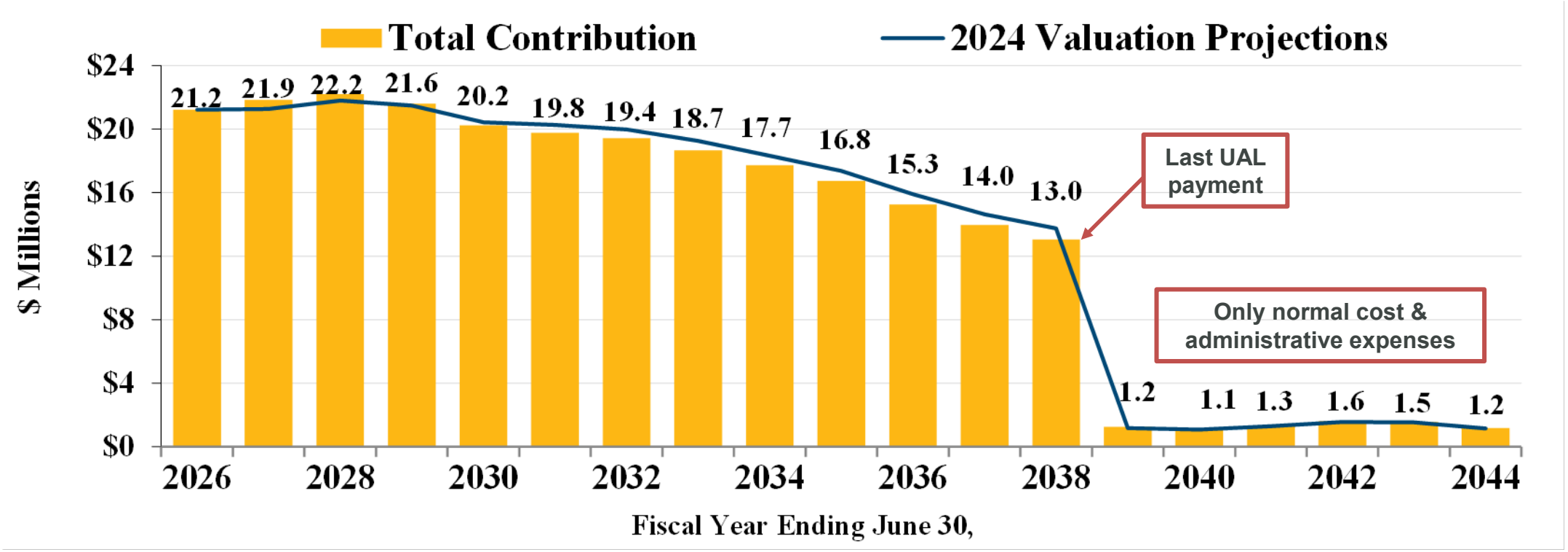


Projected Funded Ratio



- Liabilities are expected to decrease over the period while assets are expected to increase
- Steady progress is expected in the funded ratio
- Under the current amortization policy, the Plan is projected to be fully funded by the 2037 valuation

Projected Contributions



- Compared to the 2024 projections, contributions initially increase slightly due to liability losses in 2025
- As favorable investment returns from FYE 2024 and FYE 2025 are phased-in, the expected contributions will decrease starting in FYE 2029
- Thereafter, contributions gradually decrease as the number of active members declines and actuarial losses prior to 2020 are fully amortized/paid off

Amortization Policy Review

"The principal goal of an actuarial funding policy is to pre-fund the benefits so that future contributions together with current plan assets and future investment returns should be sufficient to provide for all benefits expected to be paid to members and their beneficiaries when due."

-Actuarial Funding Policies and Practices for Public Pension Plans, Second Edition August 2024, Conference of Consulting Actuaries, Public Plans Community.

- Principal Elements of an Actuarial Funding Policy
  - Actuarial Cost Method
  - Actuarial Value of Assets
  - **Amortization Policy**

Amortization Policy Review

- Amortization Policy
  - Determines how the Unfunded Actuarial Liability (UAL) is paid
  - Structure UAL payments to avoid negative amortization
  - Level percent of compensation or level dollar
  - Layered bases or single base
  - Period of payment (years) for different sources of change in UAL
  - Pros/Cons of longer versus shorter amortization periods; need balance between stability and affordability

Amortization Policy Review

At the request of MTS, Cheiron performed an amortization policy study, dated September 2, 2025, detailing four reasonable alternatives to the current policy:

1. Reset the entire UAL as one base for a closed 15-year period
2. Reset the entire UAL as one base for a closed 20-year period
3. Extend the period for some of the existing bases to 15-years with a 5-year phase-out at the end of the 15-year period
4. Extend the period for some of the existing bases to 15-years with a 7-year phase-out at the end of the 15-year period

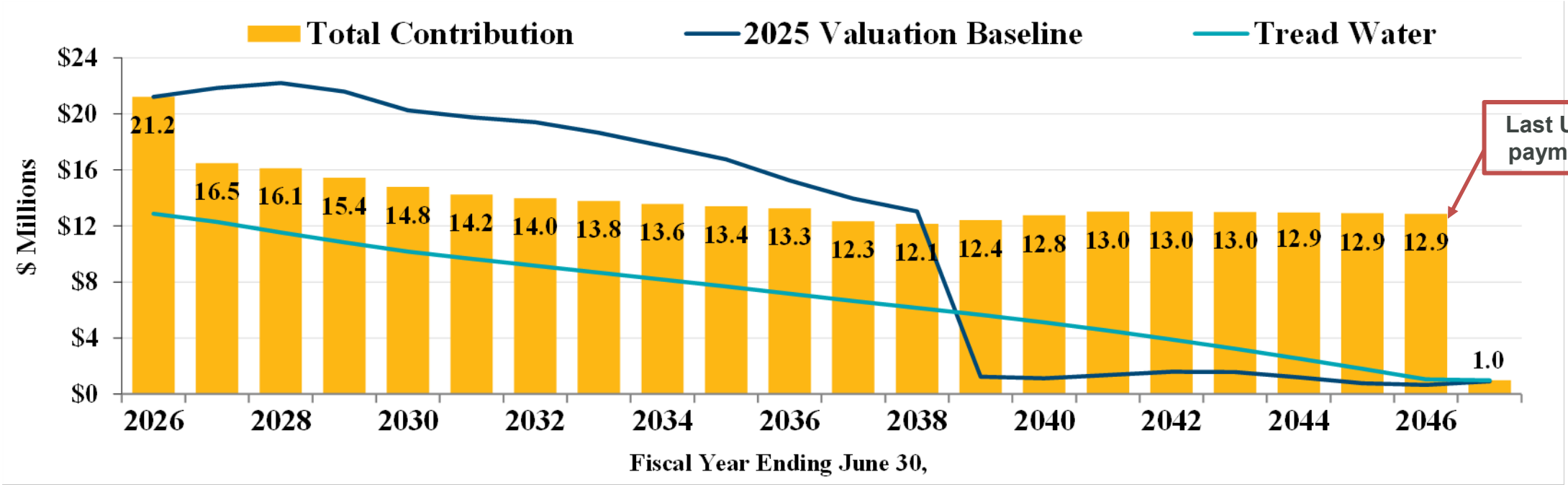
Any future unexpected changes to the UAL for all alternatives would be amortized over a closed 10-year period.

Amortization Policies Compared

- Current Amortization Policy
  - Layered bases
  - Level dollar payments
  - Reset entire UAL as of 7/1/2012 into one base
  - Amortization period = 25 years
  - Subsequent actuarial gains and losses are amortized over the lesser of 15-years or the remaining period on the 2012 UAL
  - Assumption changes are amortized over the remaining period on the 2012 UAL

- Alternative Amortization Policy
  - Layered bases
  - Level dollar payments
  - Reset the Outstanding Balance of the 7/1/2024 UAL as of 7/1/2025 into one base
  - Amortization period = 20 years
  - Subsequent changes in the UAL are amortized over 10-years

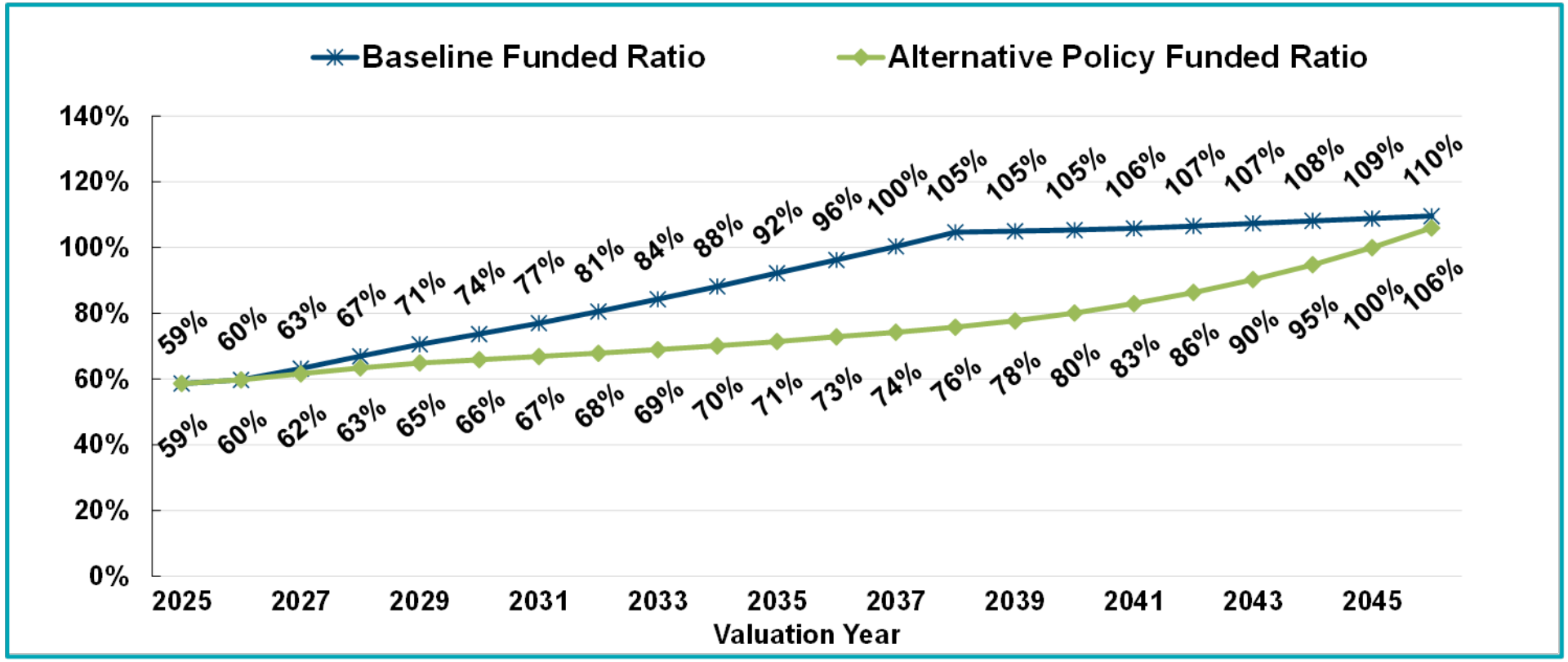
Projected Contributions – Alternative Amortization Policy



- Contributions are notably lower through 2038 than under the valuation baseline amortization policy given the longer payment timeframe
- Projected contributions remain above the "Tread Water" level, **no negative amortization**
  - "Tread Water" level which is the cost of the active benefits earned in the year, expected administrative expenses, plus interest on the UAL
  - Contributions above the "Tread Water" level pay down principal on the UAL

Amortization Policy Funded Ratios Compared

Under both the baseline and alternative amortization policies, the funded ratio continuously improves, and the Plan reaches full funding by the end of the projection period.



Staff Recommendation

That the MTS Board of Directors:

1. Receive the SDTC Employee Retirement Plan's (Plan) Actuarial Valuation as of July 1, 2025 (Attachment A and B);
2. Adopt the staff recommended Unfunded Actuarial Liability (UAL) amortization from the current 12-year remaining term to a recalibrated 20-year amortization; and
3. Adopt the resulting pension contribution amount of $16,470,975 for Fiscal Year (FY) 2027 (Attachment B – Page B-9).

Required Disclosures

The purpose of this presentation is to discuss the July 1, 2025 Actuarial Valuation Results for the Retirement Plans of San Diego Transit Corporation and its amortization policy.

In preparing this presentation, we relied on information (some oral and some written) supplied by the plan administrator. This information includes, but is not limited to, the Plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

Cheiron utilizes ProVal, an actuarial valuation application leased from Winklevoss Technologies (WinTech) to calculate liabilities and project benefit payments. We have relied on WinTech as the developer of ProVal. We have a basic understanding of ProVal and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this valuation.

Deterministic and stochastic projections in this presentation were developed using R-Scan, a proprietary tool used to illustrate the impact of changes in assumptions, methods, plan provisions, or actual experience (particularly investment experience) on the future financial status of the System. R-Scan uses standard roll-forward techniques that implicitly assume a stable active population.

Future results may differ significantly from the current results presented herein due to such factors as the following: plan experience differing from that anticipated by the assumptions; changes in assumptions; and, changes in Plan provisions or applicable law. The future outcomes become increasingly uncertain over time, and therefore the general trends and not the absolute values should be considered in the review of these projections.

This presentation has been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable law and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this presentation. This presentation does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

This presentation was prepared exclusively for the Retirement Board and MTS Board for the purposes described herein. Other users of this presentation are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any other user.

Anne D. Harper, FSA, EA, MAAA
Principal Consulting Actuary

Alice I. Alsberghe, ASA, EA, MAAA
Consulting Actuary

APPENDIX

UAL Payment – Current Amortization Policy

Current Amortization Policy

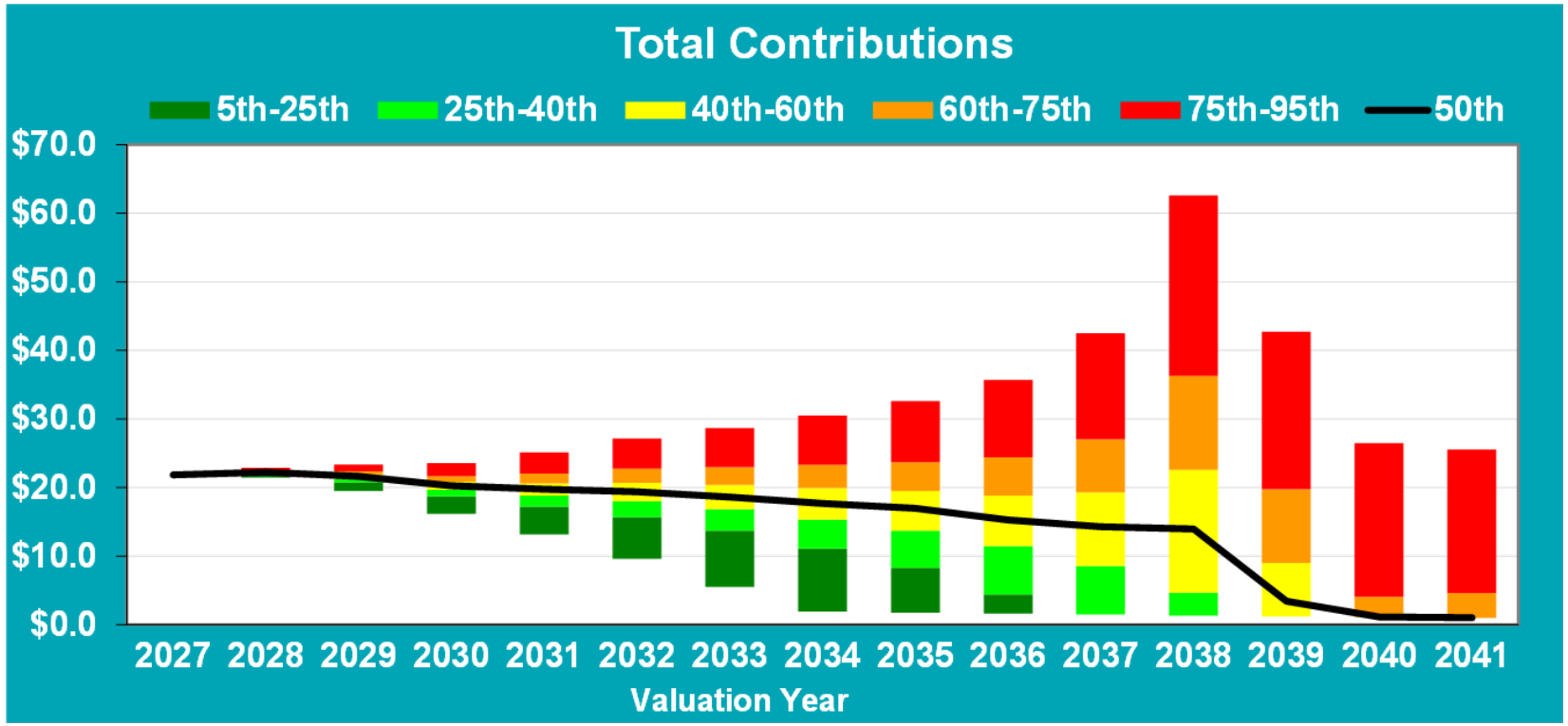
Development of the Amortization Payment as of July 1, 2025

	Type of Base	Date Established	Initial Balance	Period	Outstanding Balance	Remaining Period	UAL Payment Amount
1.	Initial Unfunded Actuarial Liability	7/1/2012	$ 87,613,245	25	$ 59,109,476	12	$ 6,651,323
2.	Actuarial Loss	7/1/2013	6,555,553	15	1,862,833	3	657,457
3.	Actuarial Gain	7/1/2014	(2,132,368)	15	(781,124)	4	(212,666)
4.	Actuarial Loss	7/1/2015	740,624	15	328,023	5	73,464
5.	Assumption Changes	7/1/2016	29,699,872	21	21,448,744	12	2,413,531
6.	Actuarial Loss	7/1/2016	4,978,340	15	2,560,342	6	491,206
7.	Actuarial Loss	7/1/2017	5,880,935	15	3,421,175	7	578,162
8.	Method Changes	7/1/2018	(640,322)	19	(484,797)	12	(54,552)
9.	Actuarial Loss	7/1/2018	5,453,907	15	3,516,898	8	534,290
10.	Assumption Changes	7/1/2019	7,536,766	18	5,863,053	12	659,743
11.	Actuarial Loss	7/1/2019	9,988,472	15	7,030,672	9	975,156
12.	Actuarial Loss	7/1/2020	3,425,437	15	2,602,345	10	333,562
13.	Assumption Changes	7/1/2021	10,215,184	16	8,474,510	12	953,598
14.	Actuarial Gain	7/1/2021	(5,703,358)	15	(4,631,437)	11	(553,994)
15.	Actuarial Loss	7/1/2022	10,345,013	15	8,930,060	12	1,004,859
16.	Actuarial Loss	7/1/2023	12,250,922	14	11,050,026	12	1,243,410
17.	Actuarial Loss	7/1/2024	10,039,576	13	9,507,879	12	1,069,879
18.	Actuarial Loss	7/1/2025	5,747,053	12	5,747,053	12	646,690
	TOTAL				**$ 145,555,731**		**$ 17,465,118**
					Total UAL Payment, Middle of Year		**$ 17,981,440**

UAL Payment – Alternative Amortization Policy

Alternative Amortization Policy Development of the Amortization Payment as of July 1, 2025							
	Type of Base	Date Established	Initial Balance	Period	Outstanding Balance	Remaining Period	UAL Payment Amount
1.	Initial Unfunded Actuarial Liability	7/1/2025	$ 139,808,678	20	$ 139,808,678	20	$ 11,499,205
2.	Actuarial Loss	7/1/2025	5,747,053	10	5,747,053	10	736,642
	TOTAL				**$ 145,555,731**		**$ 12,235,847**
				Total UAL Payment, Middle of Year			**$ 12,597,576**

Stochastic Projections for Current Amortization Policy



- These projections show the probable range of future contributions based on variable investment returns, with all other assumptions met
- Based on the Plan's current investment risk profile and current funding policy
- As the Plan approaches 2038, the risk of volatile contributions increases under unfavorable scenarios with the current funding policy

Stochastic Projections for Alternative Amortization Policy

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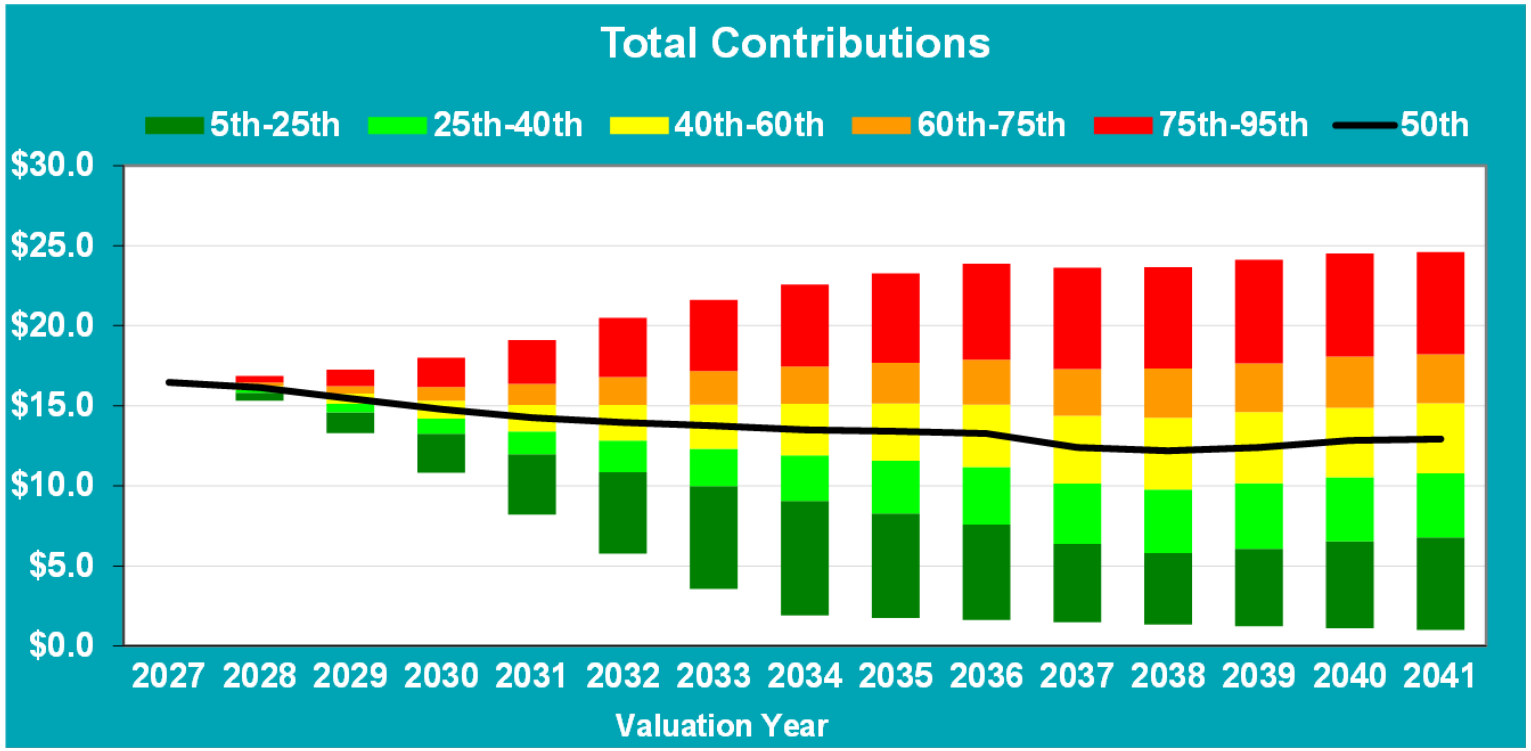

- These projections show the probable range of future contributions based on variable investment returns, with all other assumptions met
- Based on the Plan's current investment risk profile and alternative amortization policy
- Under the alternative funding policy, the contribution risk is stable across the projection period