

JPB CAC
CORRESPONDENCE
AS OF
June 17, 2025

From: [Roland Lebrun](#)
To: [Public Comment](#)
Cc: [Board \(@caltrain.com\)](#); [cacsecretary \[@caltrain.com\]](#); [SFCTA CAC](#)
Subject: Board Board Budget Workshop item 5 Public Comment
Date: Wednesday, May 28, 2025 4:18:28 PM
Attachments: [Business case for 4-car EMU trainsets.pdf](#)
[Business case for Battery-electric locomotives.pdf](#)

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders.
Dear Chair Hemminger and Board members,

Please find attached two items for your consideration and consider directing staff to upload these as supplemental items to the Documents folder for the May 29 Workshop meeting (<https://www.caltrain.com/meetings/2025/05/caltrain-board-budget-workshop>)

1) Business Case for 4-car EMU trainsets

Key Points:

- **Compliance with FFGA requirement for 4,112 seats/hour/direction during peak**
- 30% reduction in O&M (**\$25M in FY25**)
- 30% reduction in power consumption (**\$6M in FY25**)
- 30% Battery-electric locomotive range extension sufficient to reach Salinas (**\$1/2B saving**)

2) Business case for Battery-Electric Locomotives (BELs)

Key Points:

- Can be funded entirely by transferring \$85M CalSTA grant residuals to the purchase of 6 BELs and wayside charging infrastructure
- Elimination of all diesel maintenance and fuel costs (\$6M annually)
- **Elimination of requirement for a bus bridge between Tamien and Diridon during the Guadalupe bridge reconstruction** (and other projects)

Respectfully presented for your consideration.

Roland Lebrun

PS. Kindly note that dumping a 68-slide deck on members of the public less than 24 hours prior of the workshop instead of close of business on the Friday preceding the Holiday makes it impossible for members of the public to prepare meaningful written public comments before the posting deadline for the workshop.

Dear Chair Zmuda,

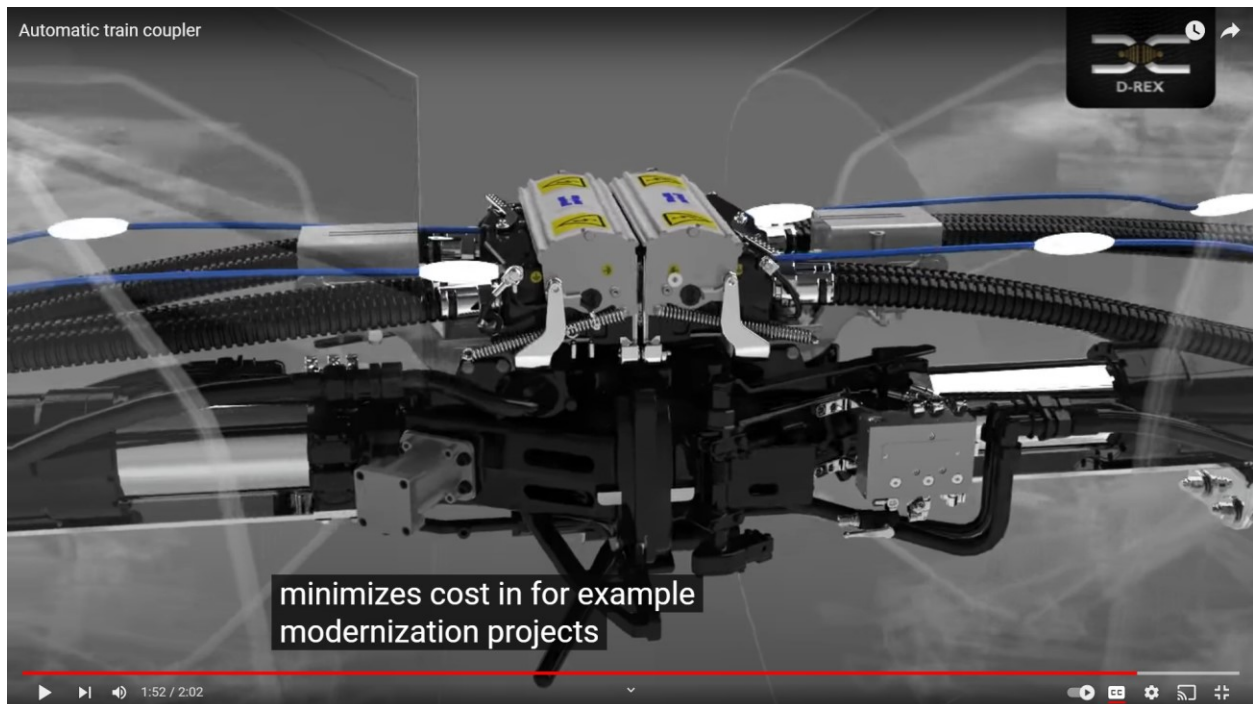
The intent of this letter is to substantiate and elaborate on multiple recommendations by members of the public to reconfigure the entire EMU fleet from 7-car to 4-car trainsets to achieve the following:

- **Compliance with FFGA requirement for 4,112 seats/hour/direction during peak**
- 30% reduction in O&M (\$25M in FY25)
- 30% reduction in power consumption (\$6M in FY25)
- 30% Battery-electric locomotive range extension sufficient to reach Salinas (\$1/2B saving)

The letter concludes with a specific trainset reconfiguration proposal for referral to the Caltrain CAC and Finance Committee July meetings followed by a recommendation to the August full Board meeting.

Key Enabling technology

Unlike Caltrain's existing fleet, Stadler Cab ("A" & "B") cars are equipped with automatic couplers capable of connecting trainsets anywhere at a stop on the line in seconds.

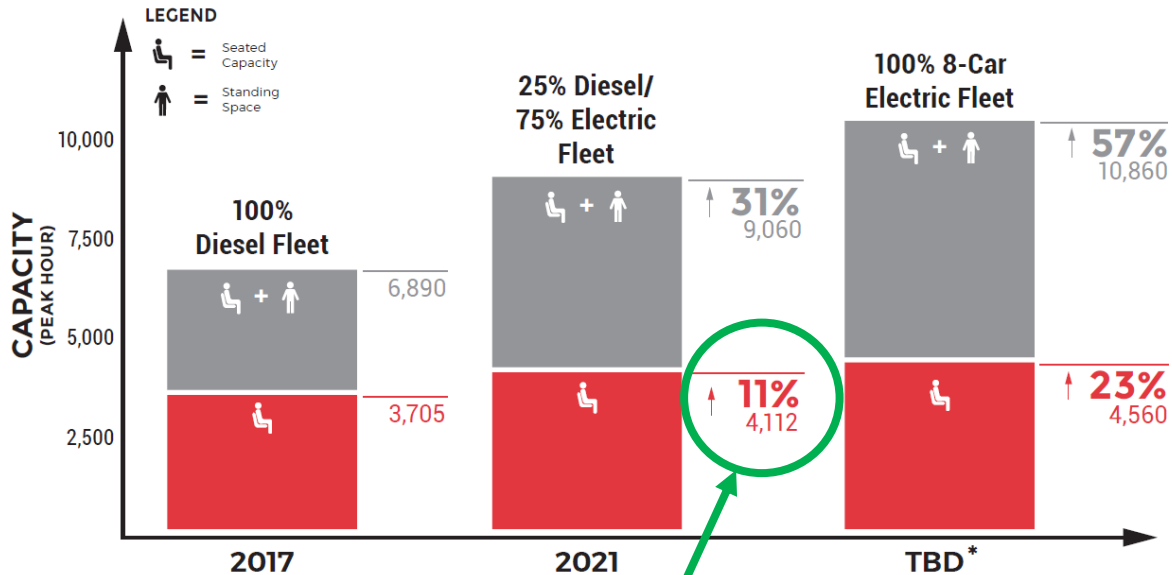


Compliance with FFGA requirement for 4,112 seats/hour/direction during peak

Please refer to the last paragraph in the attached May 9 2017 Seamus Murphy PCEP capacity email which reads as follows:

"The attached chart demonstrates that with the addition of the Metrolink cars increased current capacity from 3,403 to 3,705 seats/hour and increased post-project capacity from 3,768 to 4,112 seats/hour."
These capacity numbers exceed the program's minimum 10 percent increase requirement."

CAPACITY INCREASE



**The CalMod program lays the foundation for continued capacity growth on the corridor. Unlike diesel trains, electric trains can maintain performance while expanding to 8-cars. Eight car expansion is dependent on additional funding.
Figures and percentages subject to changes as EMU design elements and new service schedules are finalized.*

Please refer to the EMU seating capacity chart on the next page and consider the following challenges & opportunities:

- Staff's current proposal to operate six 656-seat 7-car EMUs during peak cannot possibly meet the requirements of the FFGA (6x656= 3,936).
- Current ridership (and associated farebox recovery) cannot possibly sustain the permanent operation of 7-car trainsets.
- 4-car trainsets can be coupled into 8-car consists during peak and special events.
- 4-car trainsets open an opportunity to negotiate a single conductor per trainset with the unions (one conductor for a 4-car consist, two conductors for an 8-car consist).
- Flexible 4-car/8-car operations based on demand can potentially yield:
 - o a 30% annual saving in O&M (\$25M in FY25).
 - o a 30% reduction in power consumption (\$6M in FY25).

	Car B	Car C	Car D	Car E	Car F	Car A	Total	Ratio
Fixed Seats	84	69	76	84	76	84	473	6.57
Folding Seats	18	16	13	16	13	18	94	
Total Seats	102	85	89	100	89	102	567	
Folding Seats - all passenger side doors operational	8	6	3	6	3	8	34	
Total Seats - all passenger side doors operational	92	75	79	90	79	92	507	
Countable Folding Seats - for the core number	16	13	12	14	12	16	83	
Total countable Seats (core number)	100	82	88	98	88	100	556	
Standees 4 P / m ² - without Stairwells / Wheelchairs	138	143	150	141	150	138	860	
Standees 6 P / m ² - without Stairwells / Wheelchairs	207	214	225	212	225	207	1290	
Max Capacity 4 P / m ² - without Stairwells / Wheelchairs	240	228	239	241	239	240	1427	
Max Capacity 6 P / m ² - without Stairwells / Wheelchairs	309	299	314	312	314	309	1857	
Wheelchairs	2	2	2	2	2	2	12	
Max Bikes (4 per stand)			36 		36 		72 	

4-car EMU configuration proposal

- CAR "A" (100 seats + 2 wheelchairs) CAB car
- CAR "C" (82 seats + 2 wheelchairs + 1 bathroom)
- CAR "D" (88 seats + 2 wheelchairs + 36 bikes)
- CAR "B" (100 seats + 2 wheelchairs) CAB car

Total seating capacities

- 4-car consist: 370 seats + 1 bathroom + 36 bikes
- 8-car consist: 740 seats + 2 bathrooms + 72 bikes
- Six 8-car consists: 4,440 seats (exceeds FFGA seating requirement of 4,112 seats)

Respectfully presented for your consideration

Roland Lebrun

CC:

SFCTA Commissioners
TJPA Board of Directors
CHSRA Board of Directors
Caltrain CAC
TJPA CAC
SFCTA CAC

Attachments:

May 9, 2017 Seamus Murphy PCEP capacity memo
CAR "A" (100 seats + 2 wheelchairs) CAB car diagram
CAR "C" (82 seats + 2 wheelchairs + 1 bathroom) diagram
CAR "D" (88 seats + 2 wheelchairs + 36 bikes) diagram
CAR "B" (100 seats + 2 wheelchairs) CAB car diagram

Martinez, Martha

From: Martinez, Martha
Sent: Tuesday, May 9, 2017 5:01 PM
Cc: Martinez, Martha; Murphy, Seamus; Hartnett, Jim; McKenna, Nancy
Subject: PCEP Capacity
Attachments: EMU Capacity Graphic PDF.pdf

JPB Board Members,

Attached please find a chart with the capacity numbers we discussed during the Executive Director's report at the last meeting. You'll recall that some members of the public identified that the numbers in the PCEP FFGA application do not reflect the recent addition of the Metrolink railcars to the system.

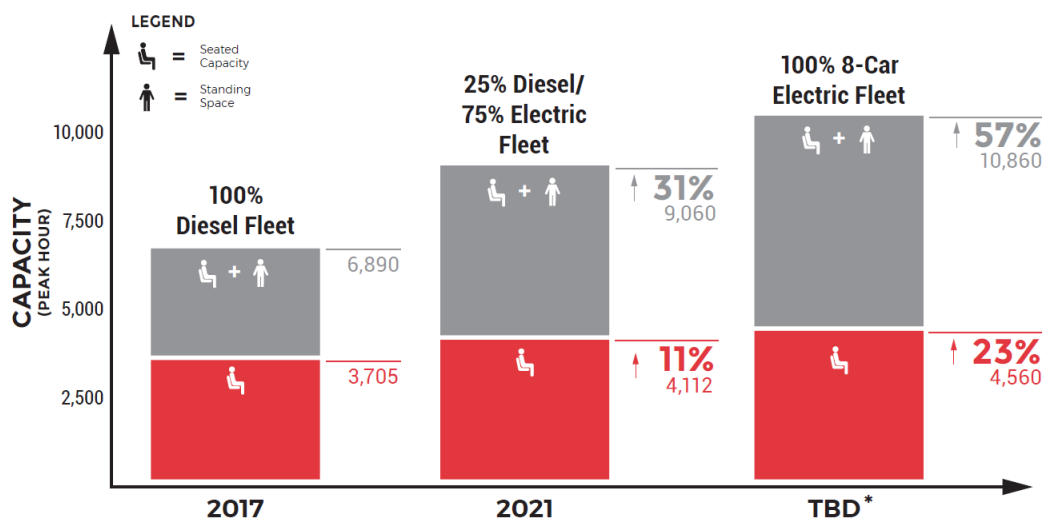
To be eligible for Core Capacity funds a project must achieve at least a 10 percent seated capacity increase. The Caltrain application identified a 10.7 percent increase in peak hour service, from 3,403 seats/hour to 3,768 seats/hour.

As you know, the Metrolink cars were added after the application was filed to address continuing increases in ridership demand. As represented in the attached chart, the Metrolink cars add capacity to the current service and also add capacity to the post-project capacity when Caltrain will be operating a mixed fleet (EMUs and diesel).

The attached chart demonstrates that with the addition of the Metrolink cars increased current capacity from 3,403 to 3,705 seats/hour and increased post-project capacity from 3,768 to 4,112 seats/per hour. These capacity numbers exceed the program's minimum 10 percent increase requirement.

Seamus P. Murphy | Caltrain, SamTrans, SMCTA
Chief Communications Officer
1250 San Carlos Avenue | San Carlos, CA 94070
650.508.6388 | murphys@samtrans.com

CAPACITY INCREASE

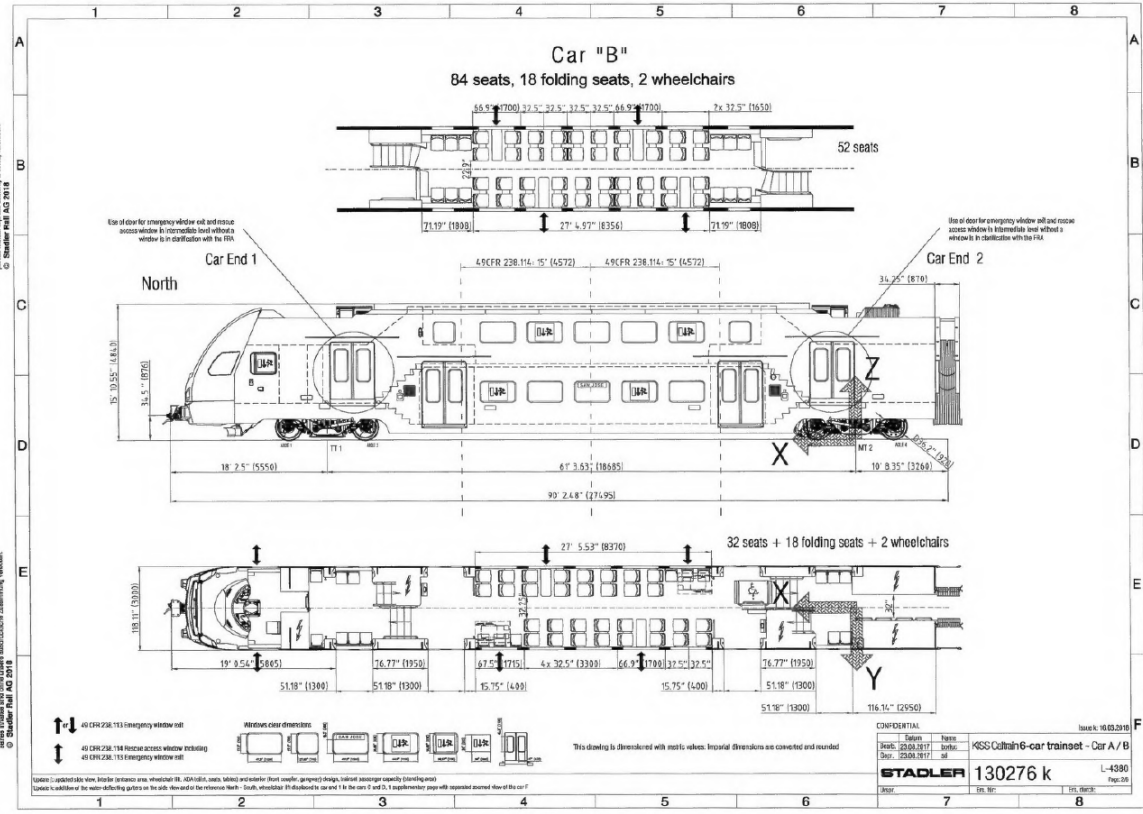


**The CalMod program lays the foundation for continued capacity growth on the corridor. Unlike diesel trains, electric trains can maintain performance while expanding to 8-cars. Eight car expansion is dependent on additional funding.*

Figures and percentages subject to changes as EMU design elements and new service schedules are finalized.

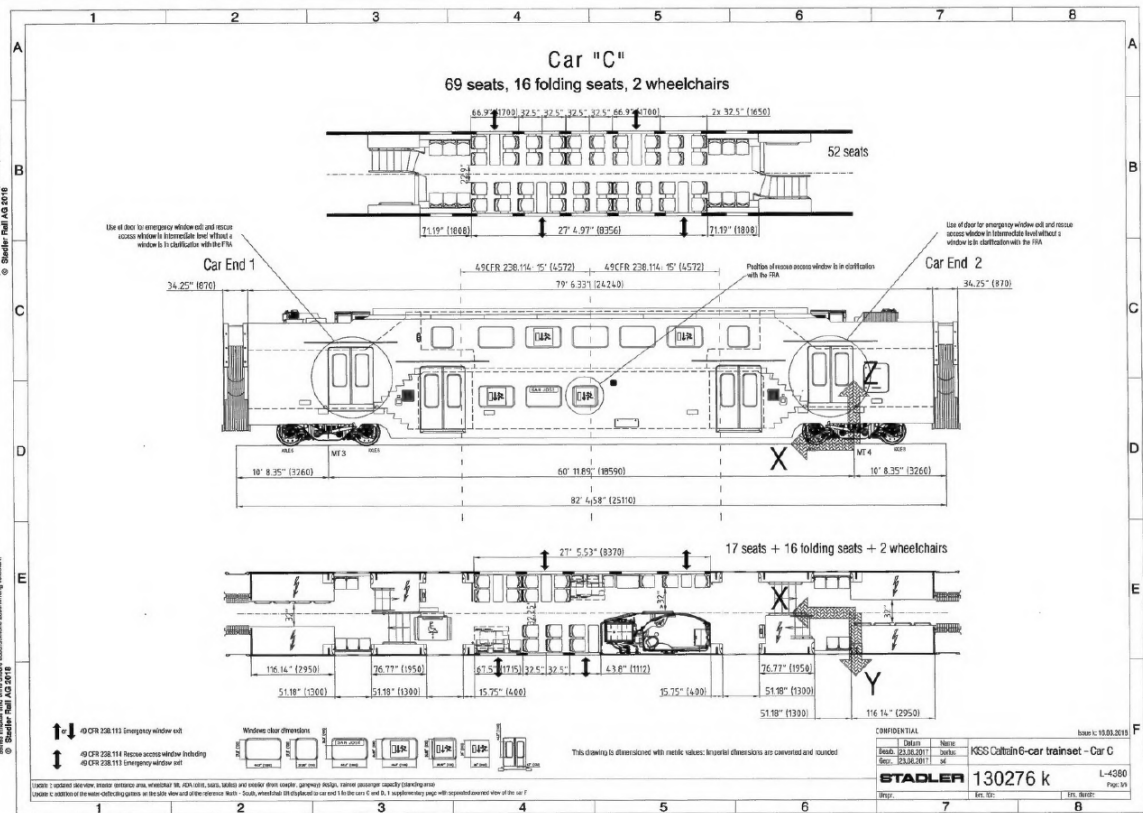
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Dear Chair Zmuda,

Further to my earlier recommendation to convert the entire Caltrain EMU fleet to 4-car trainsets and the subsequent **\$85M award for a 7-car BEMU** in the state budget signed by Governor Newsom, please consider directing staff as follows at the July 24 Finance Committee:

- 1) Return to the Finance Committee with a reduced estimate for a **4-car** BEMU prototype
- 2) Redirect \$35-\$40M residual funds from the CalSTA BEMU grant to the **competitive** procurement of Battery-Electric Locomotives (BELs) **currently available from Wabtec & Progress Rail for \$5M/locomotive** to replace the **entire** Caltrain diesel fleet **by 2025 at a saving of \$1/2B**

Background

Caltrain have demonstrated that 7-car EMUs can be propelled by locomotives

- Between Salt Lake City and the Pueblo testing facility (650 miles each way)
- Between Salt Lake City and San Jose (770 miles)
- **Between San Jose and San Francisco** (50 miles each way)

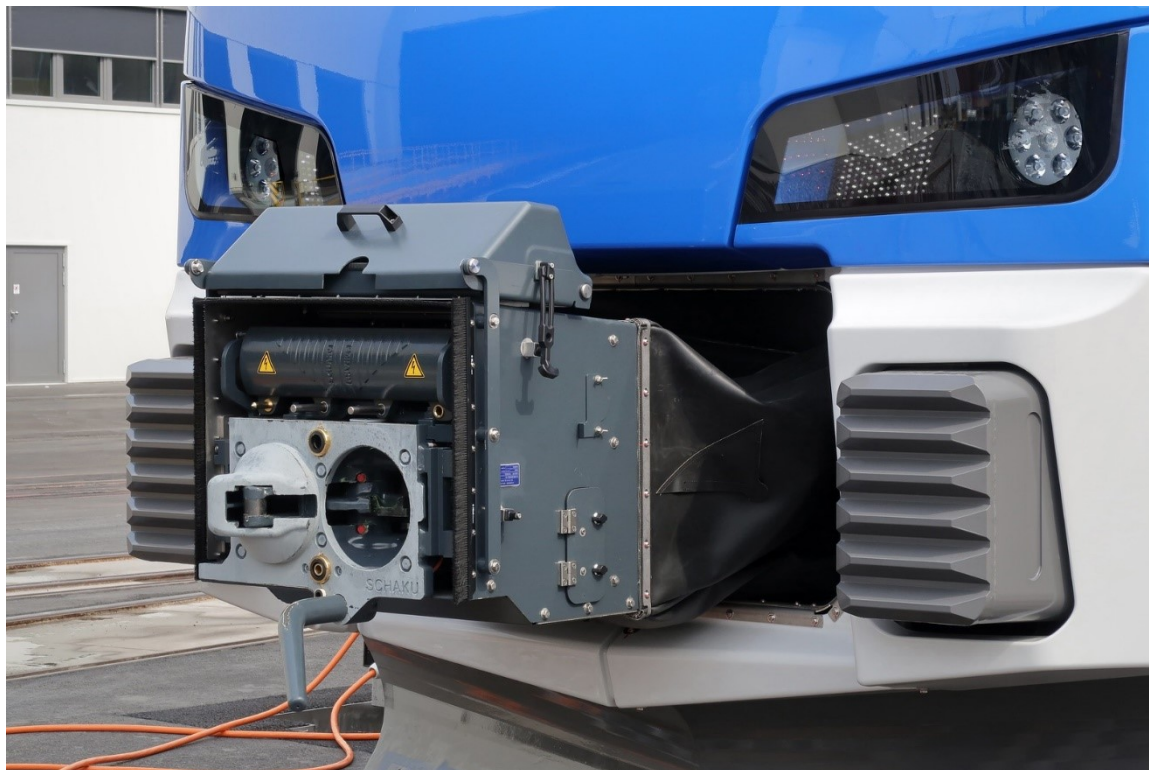
Key enabling technology for passenger service

“The [Schwab coupler](#) [nl], made by [Schwab Verkehrstechnik AG](#), [Schaffhausen](#), is used on [Stadler Kiss](#)”

“The Schwab coupler is superior in many ways to many other automatic couplers because it makes the pneumatic and electrical connections automatically and is capable of automatic uncoupling.^[55]”

“As of 2020 Wabtec is working on an automatic coupler based on Schwab”

https://en.wikipedia.org/wiki/Railway_coupling#Schwab_coupler



Potential operating scenarios south of Diridon

1) Southbound

- 8-car EMU consists could decouple at Diridon.
- The southern-most 4-car EMU would continue to Tamien at which point it would couple to a BEL.
- The 4-car EMU + 1 BEL consist would continue to Gilroy (and potentially to Salinas) on a single charge.
- BELs would recharge upon arrival in Gilroy (up to 4 consists) or Salinas (up to 2 additional consists)

2) Northbound

- Upon arrival at Tamien, the BEL would decouple from the EMU consist and recharge while awaiting the next southbound EMU trainset.
- The 4-car EMU would continue northbound under its own power
- The 4-car EMU could couple to another 4-car EMU at Diridon (to form an 8-car consist) or continue north as a 4-car EMU, potentially all the way up to San Francisco.

Testing Regime

The BEL RFP should specify that the selection of the eventual winner of the BEL procurement will be informed by the results of **rigorous testing of the above scenarios at the Pueblo Testing Facility, NOT by SamTrans consultants engaged in Stadler BEMU testing**, including recommendations on sequencing of coupling/decoupling and door opening/closing during passenger service.

"Joining portions of a passenger train can be done at very low speed (less than 2 mph or 3.2 km/h in the final approach), so that the passengers are not jostled about"

https://en.wikipedia.org/wiki/Railway_coupling#Scharfenberg_coupler

Testing should also include the evaluation of BEL **potentially superior suitability for the rescue of 4 and 8-car stranded Stadler consists**: <https://youtu.be/WzRUVyDVf0s?t=465>

Additional funding for BELs and charging infrastructure

[Incentives for Locomotives | California Air Resources Board](#)

Respectfully presented for your consideration

Roland Lebrun

CC

California Air Resources Board

Caltrain Board

SFCTA Commissioners

TJPA Board of Directors

TAMC Rail Committee

Caltrain CAC

SFCTA CAC

TJPA CAC

From: [Roland Lebrun](#)
To: [Public Comment](#)
Cc: [Board \(@caltrain.com\)](#); [cassecretary \(@caltrain.com\)](#); [SFCTA CAC](#)
Subject: Item 9 Guadalupe River Bridge Replacement
Date: Wednesday, June 4, 2025 2:58:00 AM
Attachments: [image.png](#)
[image.png](#)
[Guadalupe River Bridge alternative proposal.pdf](#)
[Drawing TT-D4004.pdf](#)

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders.

Dear Chair Heminger,

Further to this project having more than quadrupled in cost (from \$40,214,620 to \$171,389,598) in less than 3 years,

Guadalupe River Bridge Replacement and Extension (PCJPB) Construction

Prop K request: \$1,963,825

Total cost: \$40,214,620

Replacement of two rail bridges over the Guadalupe River in San Jose, which have exceeded their useful life.

- Necessary to avoid slow orders and weight limits for Caltrain and freight operations
- Full demolition and replacement of MT-1 (built 1935); replacement of sections and extension of MT-2 (built 1990)
- Open for use March 2025



Existing wooden piles and sub-structure



2

thank you for the opportunity to reiterate the comments I made at the September 13, 2022, SFCTA Board meeting

[Public Comment 2022-09-13 \(PDF\)](#)

(attached for your convenience), specifically:

Page 2 "*The project as currently envisioned proposes to replace one bridge (MT-1) and extend the other one (MT-2) by 110 feet. Given the current funding shortfall, it is unclear why Caltrain should prioritize a bridge (MT-1) that (contrary to assertions by Caltrain's Interim Executive Director) is rarely used by Caltrain and will never be electrified.*"

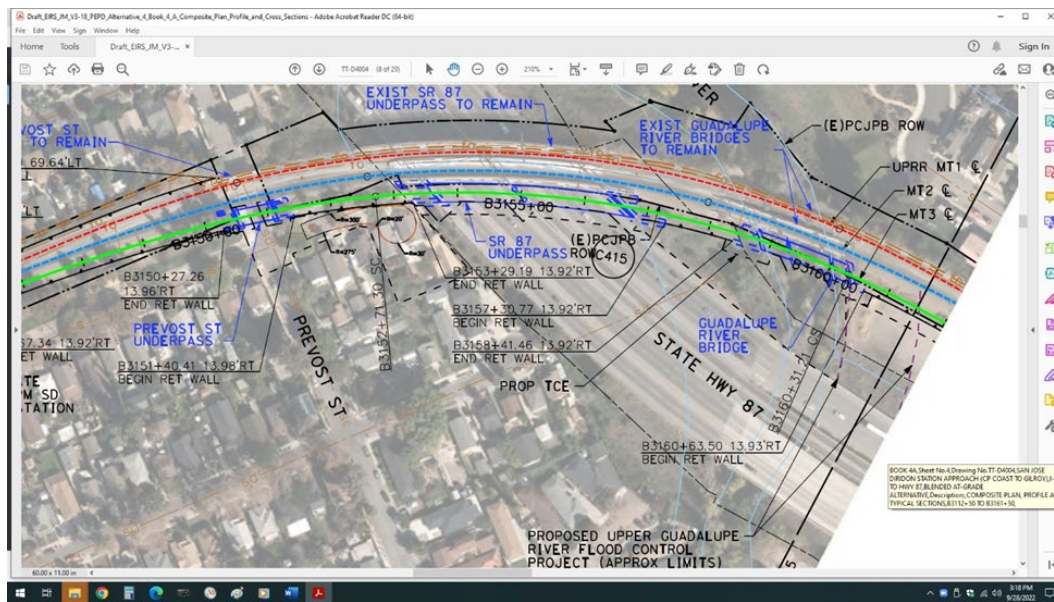
Page 4 "*Another approach could be to leverage the current funding envelope to prioritize the future MT-3 bridge environmentally cleared in the Merced to San Jose EIR and delay the reconstruction of the MT-1 & MT-2 bridges until funding is available.*"

Page 5 **Recommendations:**

- 1) Reject all bids for the Guadalupe River bridge replacement project as currently proposed.
- 2) Advance the engineering for the MT-3 bridge (San Jose to Merced EIR drawing number TTD4004 attached for your convenience).
- 3) Solicit bids for the MT-3 bridge including the MT-2 to MT-3 switch and the extension of MT-3 to Tamien platform #2.
- 4) Re-issue bids for MT-1 & MT-2 bridge replacements when funding has been secured.

Respectfully presented for your consideration

Roland Lebrun



From: Roland Lebrun <ccss@msn.com>
Sent: Wednesday, April 30, 2025 5:00 PM
To: Caltrain Board <board@caltrain.com>
Cc: SFCTA Board Secretary <clerk@sfcta.org>; SFCTA CAC <cac@sfcta.org>; Caltrain CAC Secretary <cacsecretary@caltrain.com>
Subject: Item 11 Receive update on Guadalupe River Bridge replacement

Dear Chair Heminger and Board members,

Further to my letter of October 10, 2022 which introduced the MT-3 alternative (attached for your convenience), I believe that the first issue that needs addressing is the factually incorrect narrative in the staff report, specifically:

"This Project involves the full replacement of a northbound bridge (Main Track Bridge 1 or "MT1") and a partial replacement of a southbound bridge (Main Track Bridge 2 or "MT-2")"

While this may have been an accurate characterization of rail operations between Diridon and Tamien pre-electrification, **this is no longer true** post-electrification because each bridge now supports bi-directional single-track traffic (electrified on the former southbound MT-2 bridge and diesel on the former northbound MT-1 bridge).

The second issue with the staff report is that it completely fails to mention that Union Pacific correctly argued that the MT-1 diesel bridge used by Union Pacific and ACE, while in need of repairs, **DOES NOT REQUIRE A COMPLETE REPLACEMENT**.

Recommendation

My October 2022 recommendations stand, specifically:

1. **Reject all bids for the Guadalupe River bridge replacement project as currently proposed.**
2. Advance the engineering for the **MT-3** bridge (San Jose to Merced EIR engineering drawing number TT-D4004 attached for your convenience).
3. Solicit bids for the **MT-3** bridge including the **MT-2 to MT-3** switch and the extension of **MT-3** to Tamien platform #2.
4. **Reach out to Union Pacific and ask them to assume responsibility for the repairs to the MT-1 diesel bridge after Caltrain electrified single-tracking has been relocated to the new MT-3 bridge.**

This approach will make it possible to de-energize the MT-2 electrified bridge while Union Pacific repairs the MT-1 diesel bridge and full bi-directional electrified operations between Diridon and Tamien will be restored once Union Pacific completes the MT-1 diesel bridge repairs.

Respectfully presented for your consideration.

Roland Lebrun

From: Roland Lebrun
Sent: Tuesday, October 4, 2022 1:28 AM
To: Mandelman, Rafael (BOS) <rafael.mandelman@sfgov.org>
Cc: SFCTA Board Secretary <clerk@sfcta.org>; SFCTA CAC <cac@sfcta.org>
Subject: Caltrain Capital Projects oversight

Dear Chair Mandelman and Commissioners,

The attached letter is intended to substantiate and elaborate on the comments I made at the September 13th SFCTA Board meeting that the Authority and MTC staffs should increase their oversight of Caltrain capital projects starting with the Guadalupe River bridge replacement, specifically:

- The project has a \$36.3M funding gap on top of the existing \$410M electrification funding shortfall.

It is unclear why SamTrans staff are prioritizing the replacement of a freight bridge that will never be electrified

- There is sufficient funding in the FY23 budget to construct a third (environmentally cleared) bridge suitable for electrification
- The developing recession is likely to result in lower bids in the next 12-18 months

The letter concludes with a recommendation to reject all bids for the Guadalupe River Bridges replacement and solicit bids for the new (third) bridge until funding has been identified for the first two.

Respectfully presented for your consideration.

Roland Lebrun

Dear Chair Mandelman and Commissioners,

This letter is intended to substantiate and elaborate on the comments I made at the September 13th Authority Full Board meeting that the Authority and MTC staffs should increase their oversight of Caltrain capital projects starting with the Guadalupe River bridge replacement project, specifically:

Funding

The Guadalupe River bridge replacement project has a **FY23 funding gap of \$36.3M** (\$63.7M-\$27.4M)

Item #8.
10/6/2022

	Prior Years	FY22	FY23	FY23 Budget Amendment	FY24	FY25 and Beyond	Total
Previously Obligated or Programmed							
Total Obligated (All Sources)	\$12,399,982						\$12,399,982
Total Programmed (All Sources)		\$3,952,825					\$3,952,825
Planned Funding by Source:							
FTA Section 5337 **			\$6,353,943		\$13,021,834	\$13,021,834	\$32,397,611
State SOGR					\$2,377,573	\$2,377,573	\$4,755,146
Local Partnership Funds			\$3,288,623	\$1,317,377			\$4,606,000
UPRR				\$100,000	\$1,300,000	\$2,856,600	\$4,256,600
ACE					\$665,215	\$665,215	\$1,330,429
Total Planned			\$9,642,566	\$1,417,377	\$17,364,622	\$18,921,222	\$47,345,786
Total Funding	\$12,399,982	\$3,952,825	\$9,642,566	\$1,417,377	\$17,364,622	\$18,921,222	\$63,698,593
Running Total: Funding	\$12,399,982	\$16,352,807	\$25,995,373	\$27,412,750	\$44,777,372	\$63,698,593	

** This essential project consumes 90% of FTA Section 5337 funds.
The program will seek other funding sources and options in FY24 and FY25 to support other SOGR needs.

Caltrain 19

200

This funding gap further exacerbates the \$410M Caltrain electrification project funding shortfall (that project is currently 6 years late and 100% over the \$1.25B 2012 cost estimate).

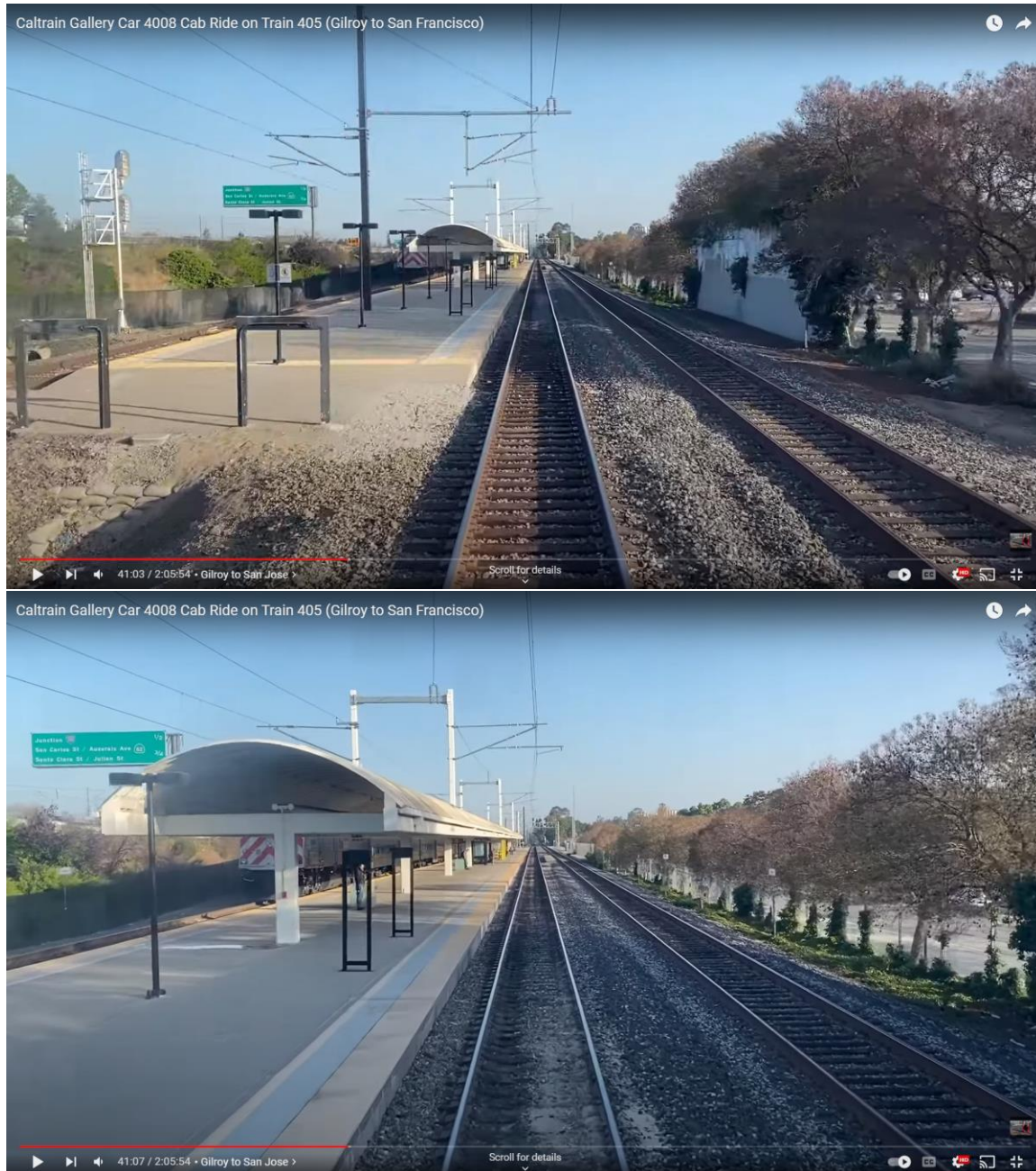
Top Risks		
		Find (1/1) \$410 million program gap Previous Next
Risk	Mitigation	Critical Date
OCS installation delay due to low productivity	- Additional BBII OCS crew training for regulation and variance in the OCS design/installation due to redesign and accommodations to resolve foundation Differing Site Conditions (DSC) issues. - Hiring additional BBII OCS staff members to prevent schedule slippage and help in future installation planning. - Held OCS construction scheduling recovery workshop for remaining OCS installation and testing. - Additional resources expected in September	September 2022
Funding of \$410 million program gap	- Special task force is in place to identify federal and state grant opportunities to pursue. - Targeted advocacy is ongoing. - Prepare earmarks grant scope and application.	April 2023
Lack of field railway worker in charge (RWIC) for increased work crews	- Design-builder brought in more watchmen for off-track work. - TASI to expedite RWIC hiring and training. - Explore third party field resource procurement path. - Assess operational impact for expanding work limits with track and time.	Ongoing

Green = Mitigations/actions identified and no impact to budget/schedule
Yellow = Mitigations/actions identified and potential impact to budget/schedule
Red = Impact to budget/schedule

Caltrain 20

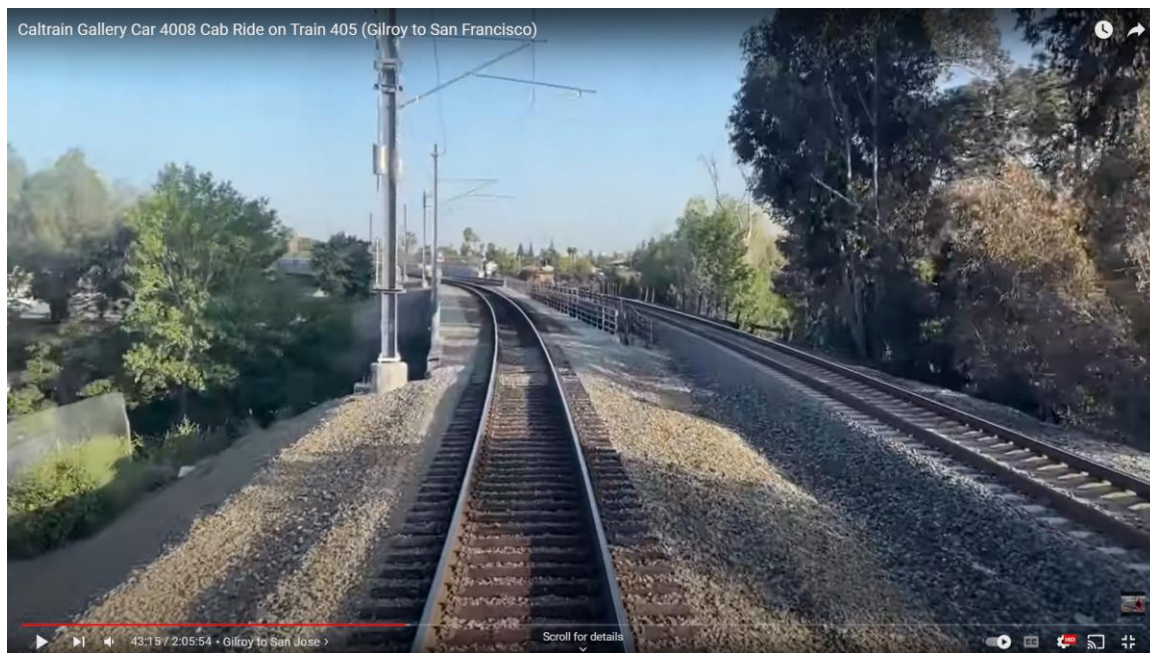
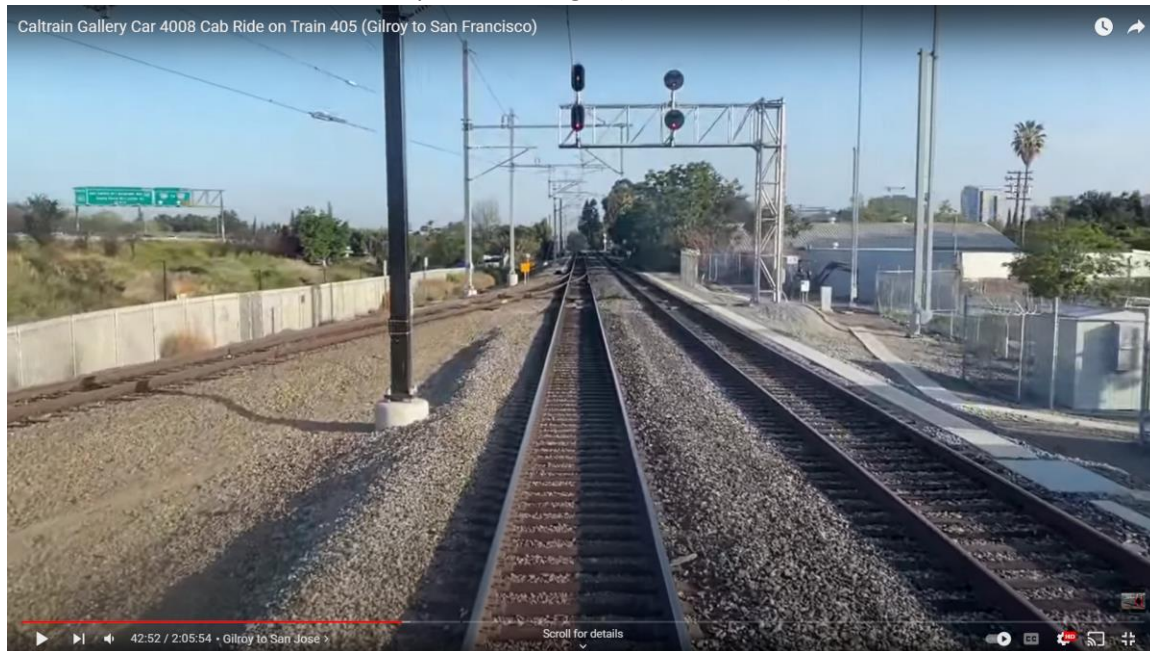
Issues with the current project

The project as currently envisioned proposes to replace one bridge (**MT-1**) and extend the other one (**MT-2**) by 110 feet. Given the current funding shortfall, **it is unclear why Caltrain should prioritize a bridge (**MT-1**) that (contrary to assertions by Caltrain's Interim Executive Director) is rarely used by Caltrain and will never be electrified.**



Northbound Caltrain approaching Tamien station on **MT-2** with another train waiting on the opposite side of the island platform (**MT-3**). **There are no plans to electrify **MT-1** (to the right).**

Current end of **MT-3**. The Guadalupe River bridges (**MT-2** & **MT-1**) are visible in the distance.



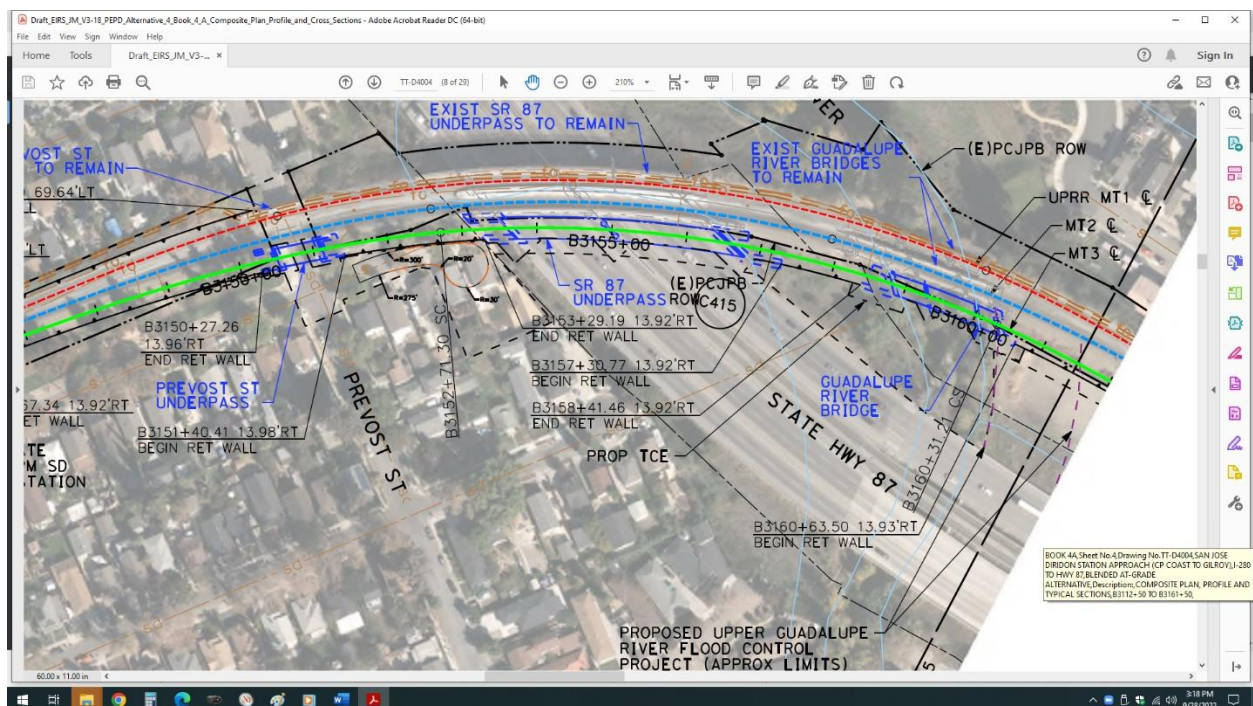
Approaching the Guadalupe River bridges

Guadalupe River bridges **MT-2** on the left & **MT-1** on the right



Phased alternative

Another approach could be to leverage the current funding envelope to prioritize the future **MT-3** bridge environmentally cleared in the Merced to San Jose EIR and delay the reconstruction of the **MT-1** & **MT-2** bridges until funding is available. Access to the **MT-3** bridge would be provided via the addition of a switch connecting **MT-2** to **MT-3** located between Highway 87 and the Guadalupe River.

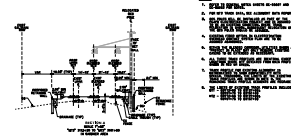
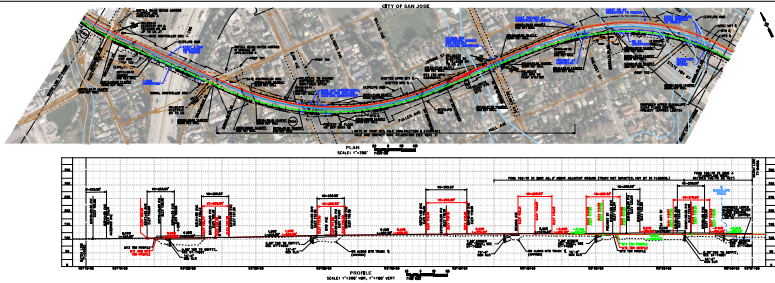


Recommendations:

- 1) Reject all bids for the Guadalupe River bridge replacement project as currently proposed.**
- 2) Advance the engineering for the **MT-3** bridge (San Jose to Merced EIR drawing number TT-D4004 attached for your convenience).
- 3) Solicit bids for the **MT-3** bridge including the **MT-2** to **MT-3** switch and the extension of **MT-3** to Tamien platform #2.
- 4) Re-issue bids for **MT-1** & **MT-2** bridge replacements when funding has been secured.

Respectfully presented for your consideration

Roland Lebrun



From: [Roland Lebrun](#)
To: City.clerk@sanjoseca.gov
Cc: [Board \(@caltrain.com\)](#); [cacsecretary \(@caltrain.com\)](#); [Caltrain, Bac \(@caltrain.com\)](#)
Subject: City Council Item 2.27 At-Grade Station Alternative and Diridon Program
Date: Tuesday, June 10, 2025 4:06:15 AM
Attachments: [Item 2.27 Diridon City Council June 10 2025.pdf](#)

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders.

Dear Sir or Madam,

Please find attached my public comments on this item and add them to the packet

Thank you

Roland Lebrun

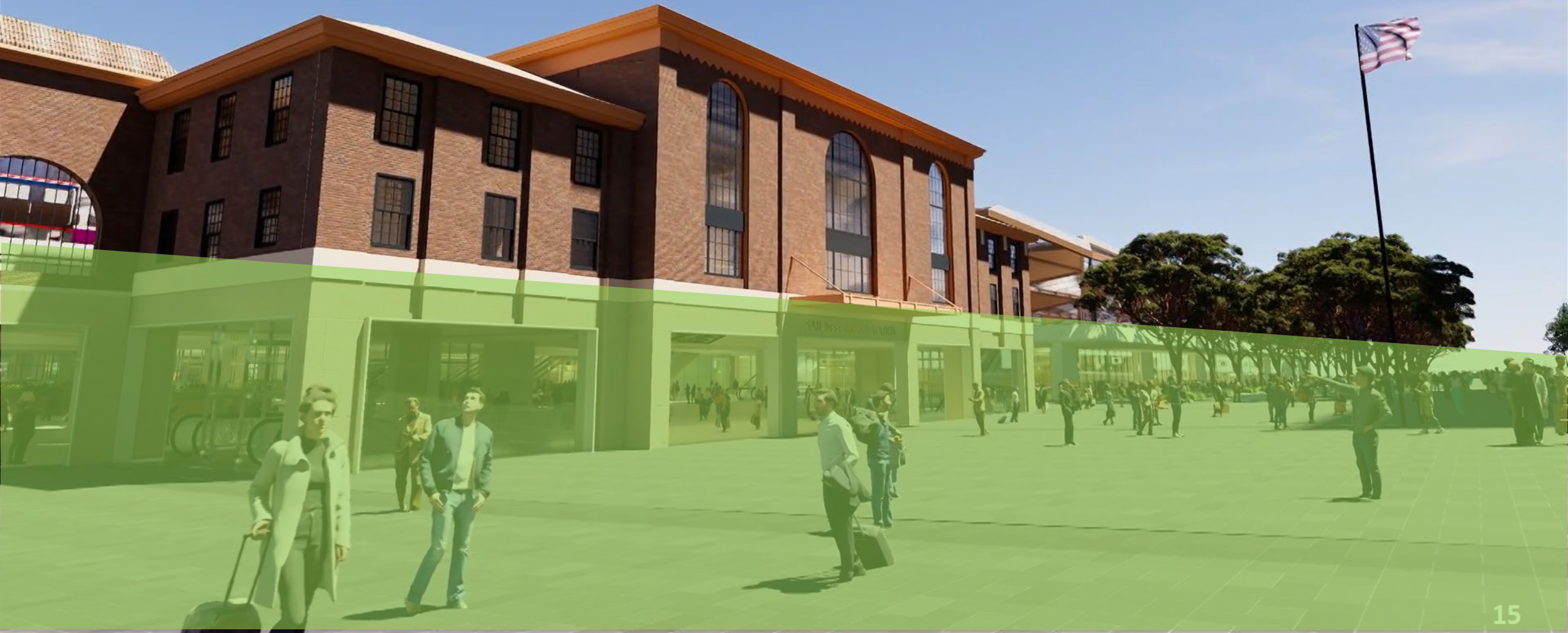
Putting Diridon back on track

Why the “at grade” alternative was never going to work
and how to fix it without impacting the Historic Depot,
The Alameda, Stockton, Vespaio, Whole Foods
or anything else on the west side of the tracks

Fatal flaws

- “At grade” is 20 feet below Los Gatos Creek/Guadalupe embankment
 - 20-foot drop impacts The Alameda, Stockton and Whole Foods
 - 20-foot Paseo de San Fernando “Big Dip” conflicts with the light rail
- The PG&E substation conflict was addressed in the Downtown West EIR
- **The one-block shift to the north impacts the Vespaio apartment complex**
- The light rail realignment bisects Downtown West (conflicts with EIR)
- **The light rail realignment conflicts with the Historic Depot**
- There is no integration between BART and the light rail
- Buses, Kiss & Ride and taxis are on the wrong (north) side of Santa Clara
- **The I280 viaduct is completely missing**

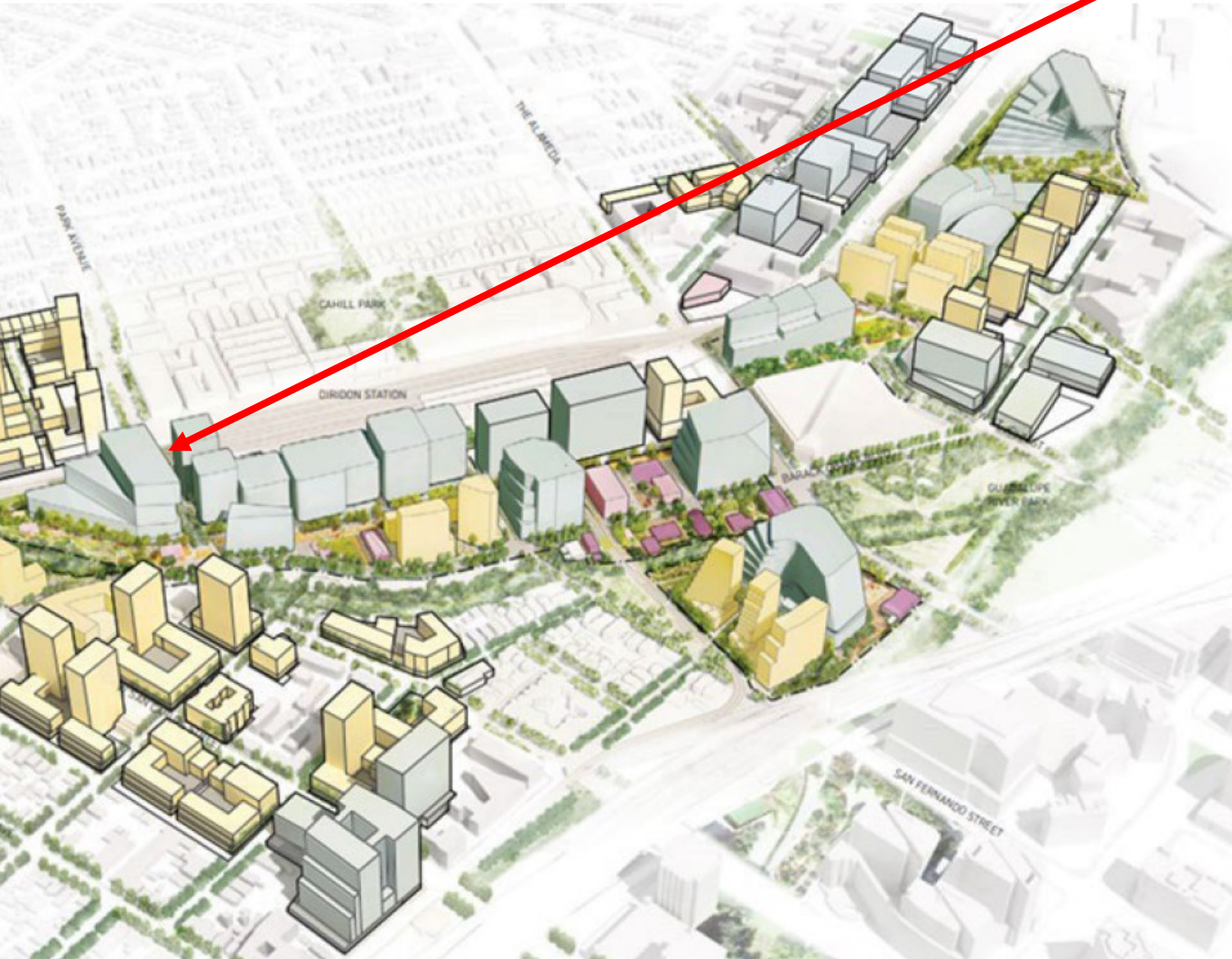
The regrading of Downtown West moves the entire station 20 feet below the creek embankment



The Paseo de San Fernando “Big Dip” conflicts with the light rail alignment

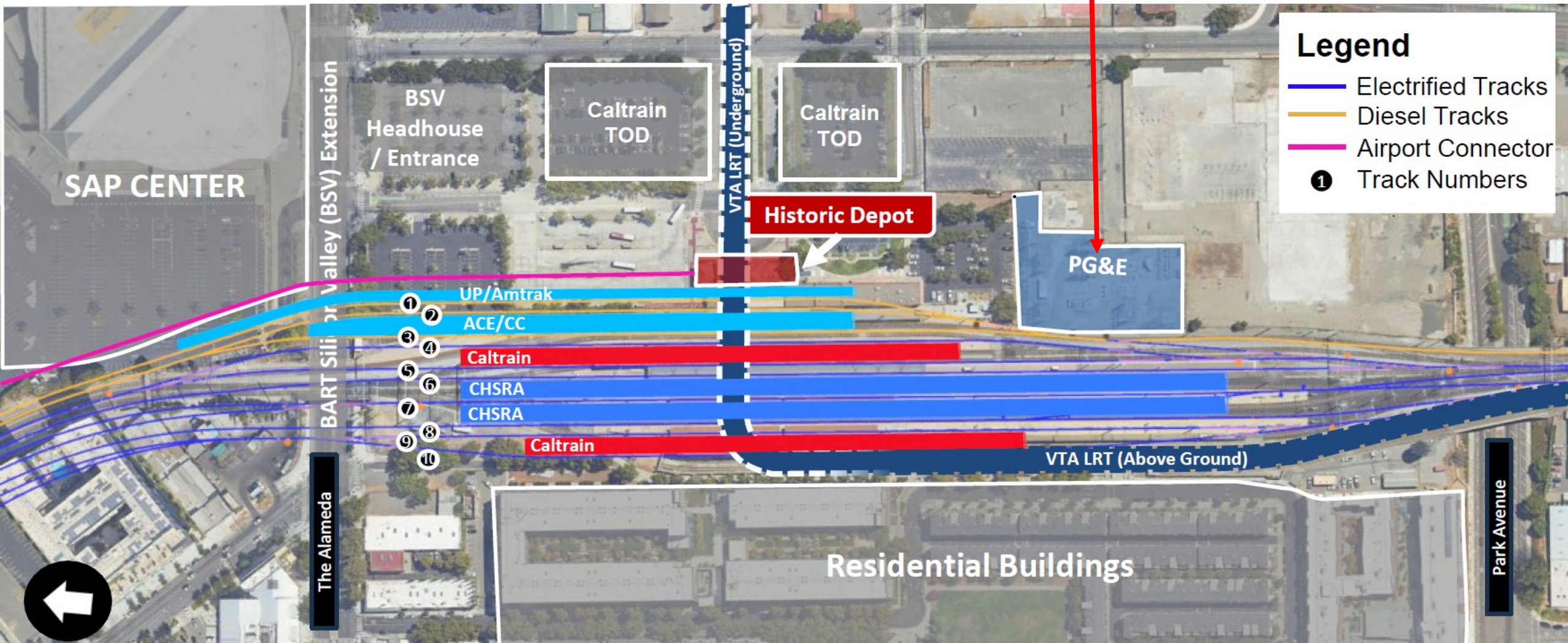


The Downtown West EIR eliminated the PG&E substation conflict



- Significant redevelopment opportunity
 - Connect and extend Downtown
 - Caltrain TOD
 - SAP Arena
- Diridon Station Area Plan
 - 12,900 new homes
 - 14.7M sq.ft. office/commercial uses
- 2021 Google development entitled

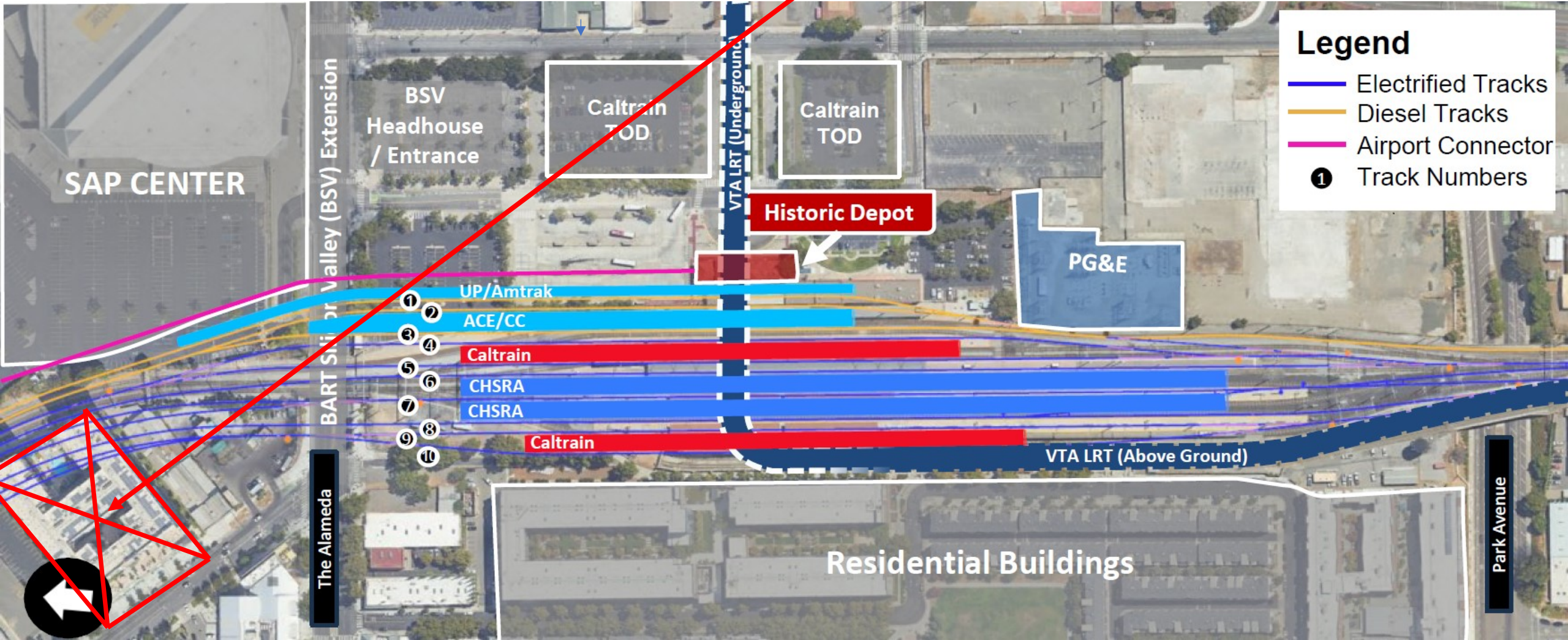
Designing around the existing PG&E substation resulted in shifting the station platforms one block too far north



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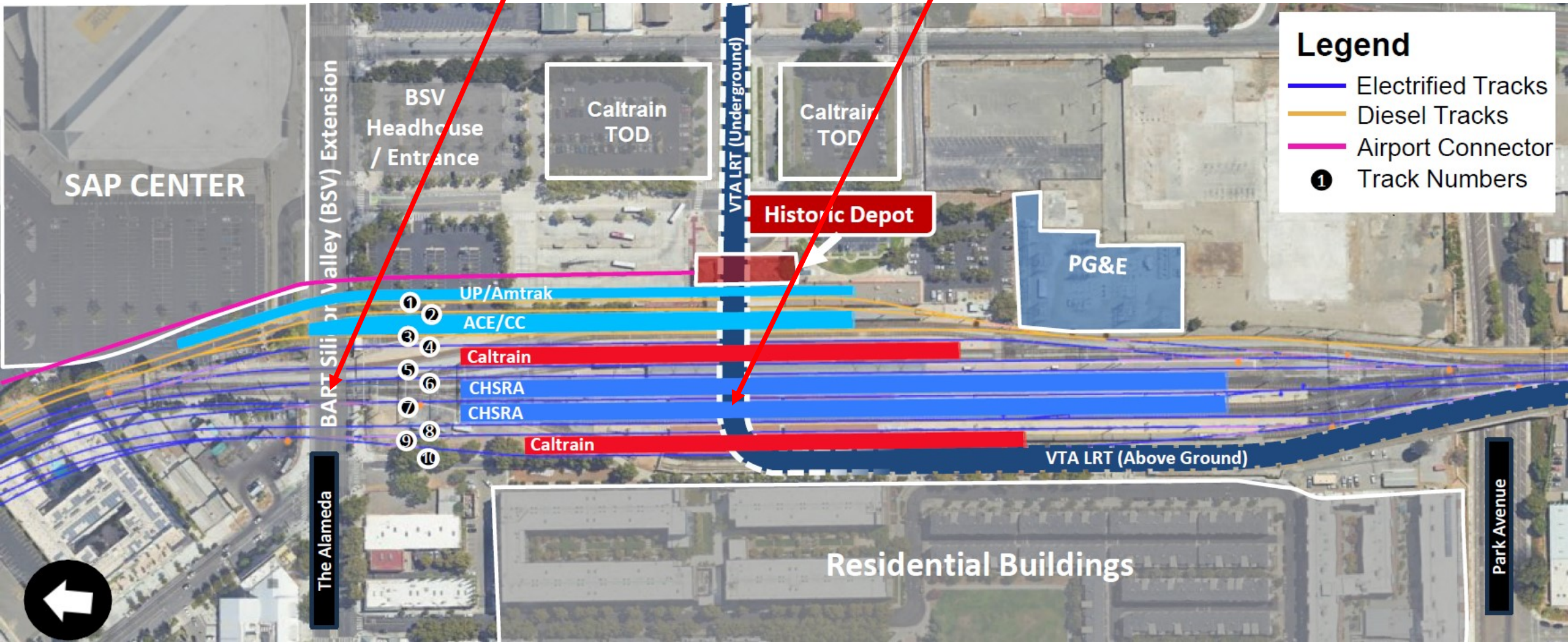
Shifting the station platforms one block too far north resulted in impacts on the Vespaio Apartment complex



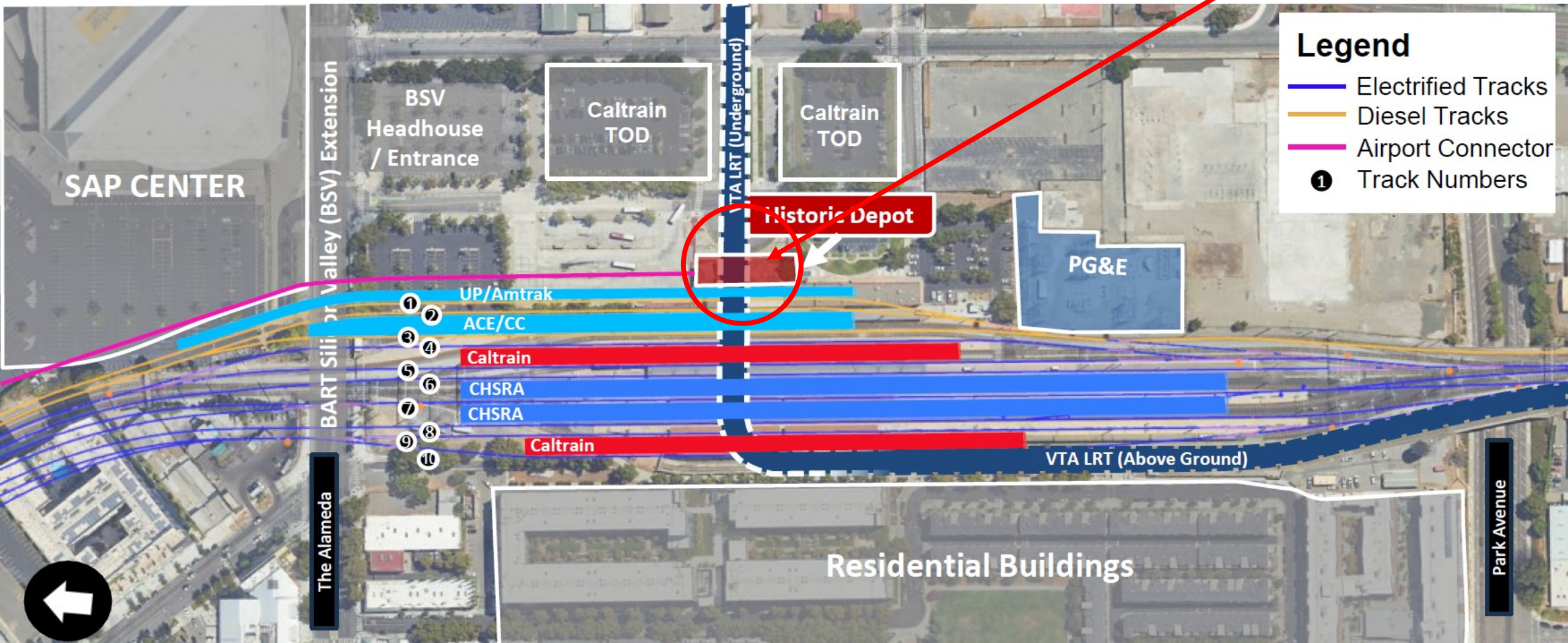
The lack of grade-separation between vehicular traffic, bikes and peds introduces multiple Vision Zero conflicts



There is no integration between
BART and the light rail



The light rail realignment bisects Downtown West (conflicts with EIR) and conflicts with the Historic Depot



The light rail tunnel realignment requires a complete demolition and reconstruction of the historic depot



The iconic gateway to Downtown San Jose is missing



