

**DATE:** April 10, 2023

**TO:** Council Transportation Committee

**FROM:** Joy Houghton, Associate Civil Engineer  
Dawn S. Cameron, Public Works Director

**SUBJECT:** **Transit Center Grade Separation and Access Project Update**

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**RECOMMENDATION**

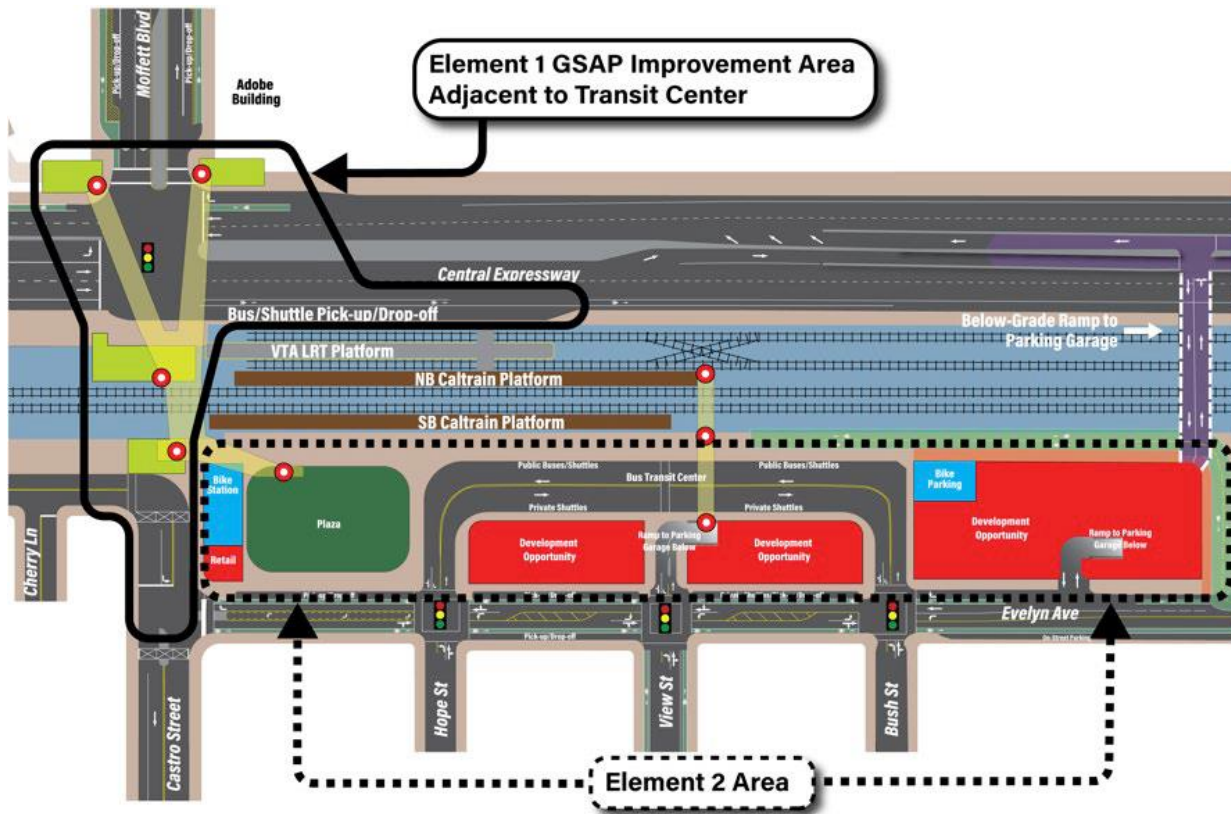
Receive an update on the Transit Center Grade Separation and Access Project.

**BACKGROUND**

**City Plans and Actions**

On [November 10, 2015](#), the City Council authorized the development of a Transit Center Master Plan. Following analysis of alternative concepts and several community and stakeholder meetings, the Council approved the Master Plan on [May 23, 2017](#). The master plan included elements related to the current at-grade railroad crossing and better access to downtown and the Transit Center.

On [February 13, 2018](#), the Council supported the concept of dividing the implementation of the Master Plan into two elements (see Figure 1). The first element (Grade Separation and Access Project (GSAP)), which is the focus of this item, is the Castro Street grade separation, including a ramp to Shoreline Boulevard at Evelyn Avenue and pedestrian and bicycle undercrossings of the tracks and Central Expressway.



**Figure 1: 2017 Transit Center Master Plan, Elements 1 and 2**

The second element is the redevelopment of the Transit Center itself, including improved on-site pedestrian and transit vehicle circulation to meet current and future demands, reconfiguration of Centennial Plaza and the Transit Center as a gateway into downtown, and a possible partnership between the City, the Peninsula Corridor Joint Powers Board/Caltrain (Caltrain), and a developer for a mixed-use development and underground parking. Additional planning and concept development for the second element is anticipated to occur in the future when the City, Caltrain, and the Santa Clara Valley Transportation Authority (VTA), as property/easement owners (see Figure 2), are prepared to engage in next steps and pending other downtown planning activities, including land use planning for the Transit Center and design for the permanent Castro Pedestrian Mall.



**Figure 2: Transit Center Property Ownership**

Also, on February 13, 2018, the Council awarded a contract to Kimley Horn and Associates, for the GSAP preliminary engineering (35% design) and environmental clearance in conformance with the California Environmental Quality Act (CEQA).

In 2018 and 2019, staff and the consultant team developed project design elements and coordinated with key stakeholders and agency partners, including Caltrain, VTA, and the County of Santa Clara. On [March 19, 2019](#), key design elements were considered at a Council Study Session. Direction was provided allowing for preparation of the environmental document and additional progress on project design. On [December 10, 2019](#), the Council approved a CEQA Mitigated Negative Declaration for the GSAP.

On [April 21, 2020](#), the City Council approved a contract amendment with Kimley-Horn to complete additional preliminary engineering (35% augmentation) requested by Caltrain to comply with their engineering standards. This work was completed in February 2021.

On [June 9, 2020](#), the Council authorized the City Manager to execute a Cooperative Agreement with Caltrain and VTA, and the agreement was executed on April 6, 2021. The Agreement includes agency key roles and responsibilities such as Caltrain as the lead agency for designing and constructing the project, VTA as funding partner providing Measure B Grade Separation Program funds for final design, and the City as the project sponsor responsible for coordination with Caltrain on the project and ensuring a minimum of 10% match in non-Measure B funds is

provided toward the full project costs. The Agreement committed VTA to provide \$10 million to Caltrain for final design of the project. The City committed \$1.2 million toward its own costs related to final design, including public art. The City is also relocating City utilities (water and sewer) as separate City projects in preparation for the GSAP construction.

The list of Council and community meetings for the Transit Center Master Plan and the GSAP project, with links to all documents, presentation materials, and meeting summaries, is provided at [MountainViewTransitCenter.com](https://MountainViewTransitCenter.com).

### **Caltrain Final Design Status**

The Final Design Phase for the GSAP kicked-off in July 2022, with HNTB as the design consultant retained by Caltrain. The HNTB team consists of various members with expertise on structures, civil, utilities, track and systems, and architecture design. The HNTB team is supplemented with subconsultants, including Gehl Studio providing urban design and familiarity with Castro Street as they are also providing services as the prime consultant for the Castro Pedestrian Mall project. Since July 2022, the Project team, consisting of Caltrain, HNTB, VTA, and the City, have been closely coordinating to meet project milestones, including completion of the 65% design, by the end of May 2023.

### ***Project Delivery Method***

In March 2022, Caltrain, VTA, and City staff participated in a facilitated Project Delivery Assessment Workshop. The objective of the workshop was to evaluate two project delivery methods – Construction Management/General Contractor (CMGC) or Design-Bid-Build (DBB).

In California and across the nation, DBB is the standard infrastructure delivery method and is well understood by infrastructure owners, designers, and contractors. DBB requires a well-defined design concept and anticipation of the construction means and methods and phasing of potential price-based competitive bidders. DBB is linear, sequential development process based on the designer's completed construction documents. The DBB delivery method assumes that all bidders produce the same product from a set of 100% complete plans and specifications provided by the owner.

Under the CMGC delivery method, the owner conducts two qualifications-based selections to separately hire a designer and a contractor to collaborate during the preconstruction design phase to deliver the best value project. The contractor provides input during the preconstruction design phase before the start of construction to incorporate its preferred means and methods, deliver early enabling work, and include its construction phases approach into the final design solution.

After assessment of both the DBB and CMGC project delivery methods and how these methods would best address the unique features and complexities of the project, it was determined that use of the CMGC project delivery method will provide features that are not achievable through the DBB process and will allow contractor collaboration with the designer, providing opportunities to improve the project with innovative solutions. The CMGC project delivery method may also result in reduced project costs and expedited project completion.

On August 4, 2022, the Peninsula Corridor Joint Powers Board authorized the use of the CMGC project delivery method for the project based on the findings that use of the method will accomplish one or more of the following: reduce project costs, expedite the project's completion, or provide features not achievable through the more traditional DBB method.

In January 2023, City staff participated in the evaluation of proposals submitted by general contractors to provide construction management and general contractor services for the project. A total of five proposals were received and scored. The JPB will consider awarding a contract to the highest-ranked firm with the most qualified proposal and approach for preconstruction services for the project at its May 4, 2023 meeting.

The Cooperative Agreement with Caltrain and VTA for the Final Design Phase of the project is currently being amended to increase VTA Measure B funding in the amount of \$7 million, of which \$3 million is for final design and \$4 million is for the CMGC preconstruction phase. No additional funding from the City is required at this time.

## **DISCUSSION**

As the 35% design plans were completed and during development of the 65% design plans, refinements and adjustments have been made based on direction from Council, unforeseen engineering design constraints, and the creation of the Castro Pedestrian Mall. Updates on the refinement and adjustments, projects schedule and costs, and next steps are provided below.

### **Elevator at Adobe Plaza**

On [March 19, 2019](#), the City Council considered concept design alternatives for access to the bicycle and pedestrian undercrossing as part of the project. At that meeting, Council directed staff to explore the possible use of escalators or elevators to better serve the users of the undercrossings, particularly where the planned ramps required for compliance with the Americans with Disabilities Act (ADA) were constrained or inconvenient for users.

In response to the Council request at the March 19, 2019 meeting regarding consideration for elevators and escalators, staff and the consulting team explored the potential opportunities and issues associated with escalators and elevators based on the preferred alternative for the Moffett Boulevard entrances selected by Council.

The project team analyzed use of escalators and elevators and compared capital cost, operation and maintenance cost, accessibility, and space requirements. The analysis did not recommend further consideration of escalators due to a high capital cost for installation, significant issues with reliability and ongoing operating and maintenance costs (particularly in an outdoor environment), not meeting ADA requirements as they do not alleviate the need for ramps and/or elevators, and the additional space that would be needed not available with the proposed design.

The analysis indicated that elevators could provide several benefits to users of the undercrossing, including:

- ADA-compliance, potentially replacing the need for ramps;
- Higher desirability for users that are less mobile allowing them to avoid a longer walk on a ramp or a more taxing ascent or descent via stairs;
- Accessibility to cyclists, although most cyclists may prefer to use ramps or stairs rather than wait for an elevator to arrive and for passengers to board and exit an elevator; and
- Less space required than for ramp configurations, which would potentially reduce potential right-of-way and utility impacts.

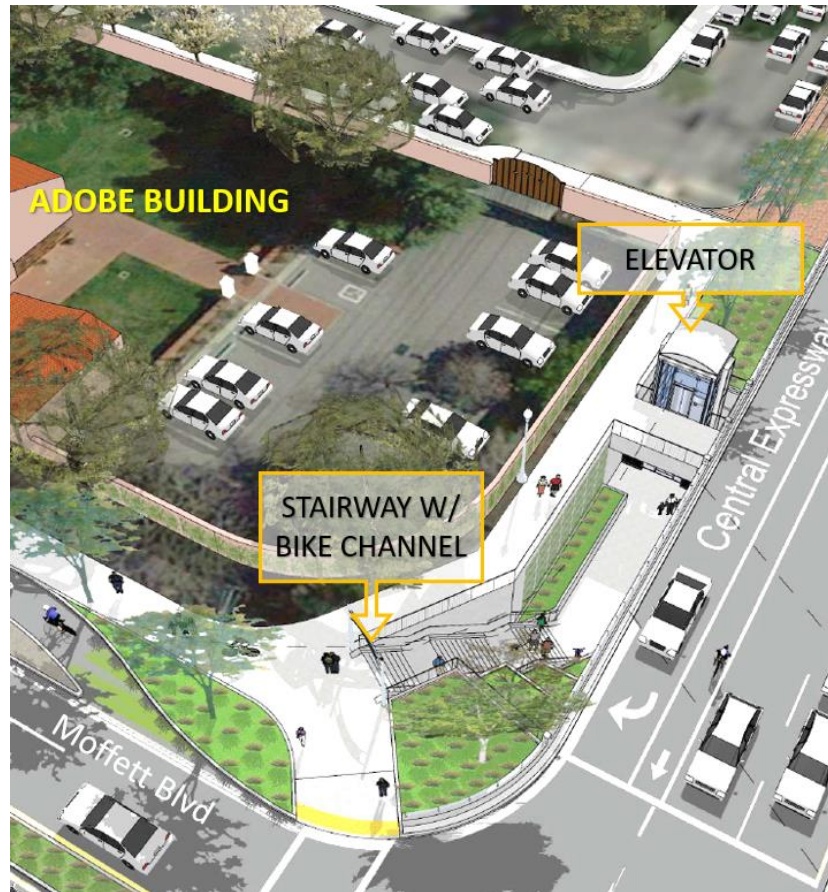
The negatives associated with elevators are primarily associated with ongoing maintenance and operation costs and the need for redundancy for another elevator or nearby ADA-compliant ramp in the event of elevator failure.

A detailed analysis of each access location was conducted for potential use of elevators, including at Adobe, Stierlin, Concourse, and Castro. The analysis did not recommend elevators at Stierlin, Concourse, or Castro locations as part of the current design due to the added cost, limited available space, and the need to retain the ADA-compliant ramps for redundancy in an event of power failure. The analysis did identify locations where there may be opportunities to add an elevator in the future. To accommodate many users, the ramp widths exceed the minimum width required for ADA compliance.

The analysis did recommend replacing the ramp at the Adobe entrance with an elevator (Figure 3) for the following reasons:

- Replaces the narrow ramp (6'8" wide due to Central Expressway right-of-way constraints) that may be uncomfortable for users and challenging for bicyclists and pedestrians to share;

- Widens the pedestrian path at-grade along Central Expressway; and
- Meets ADA requirements, with the ramp at the Stierlin access location providing an ADA-compliant alternative in the event of an elevator failure.



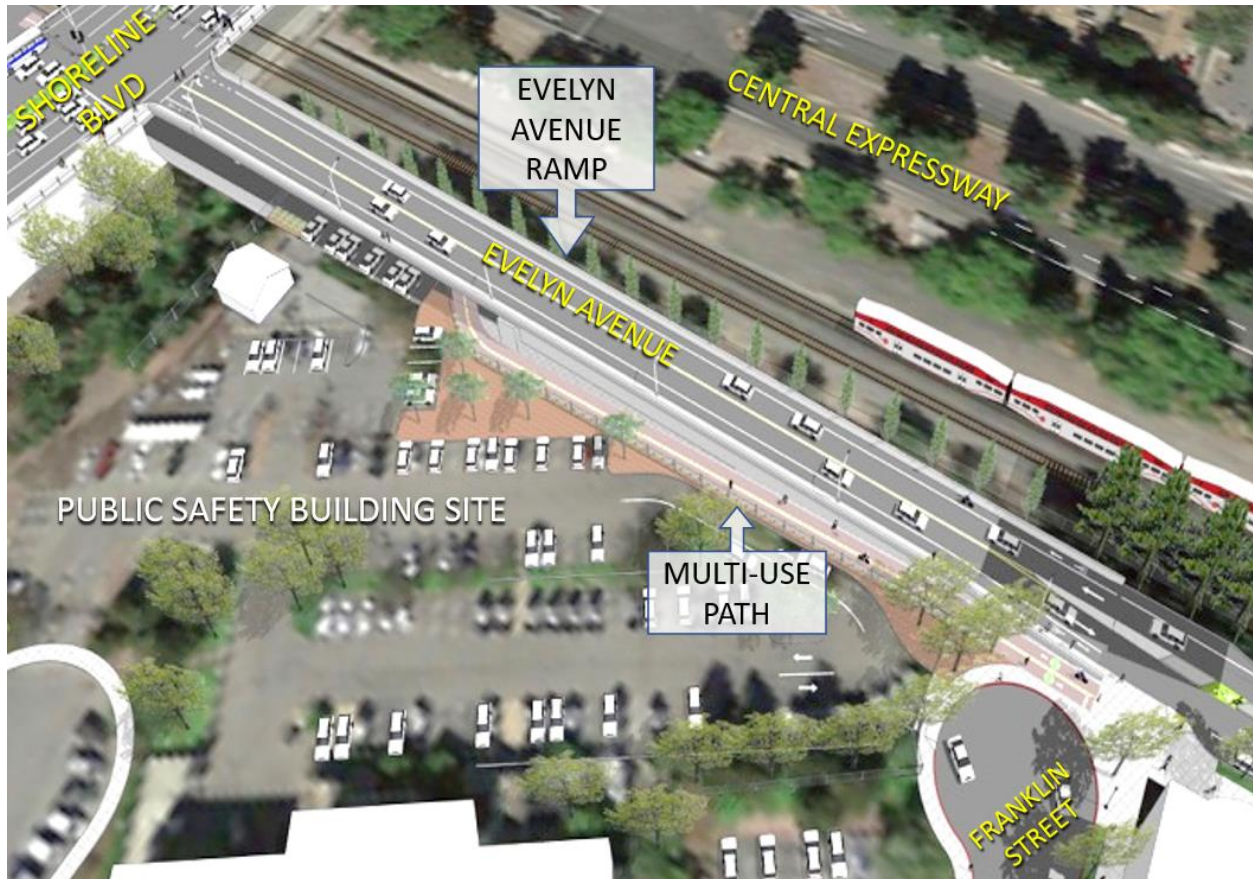
**Figure 3: Adobe Access with Elevator and Staircase**

Based on this analysis, the elevator alternative at the Adobe entrance was included in the final Preliminary Engineering plans and the CEQA Initial Study/Mitigated Negative Declaration approved by the City Council on [December 10, 2019](#), and the agreement for final design approved by City Council on [June 9, 2020](#).

### **Evelyn Avenue Ramp to Shoreline Boulevard**

The project will construct a new connection of Evelyn Avenue to Shoreline Boulevard to handle diverted traffic from the proposed vehicle closure of Castro Street at the Caltrain rail crossing (Figure 4). This connection will consist of a new ramp structure from Franklin Street to the Shoreline Boulevard bridge structure. A new partial traffic signal will be installed at the Evelyn Avenue/Shoreline Boulevard intersection allowing westbound Evelyn Avenue vehicles to turn

onto northbound Shoreline Boulevard and southbound Shoreline Boulevard vehicles to turn left onto eastbound Evelyn Avenue. The project will also construct a new multi-use pathway extending from Franklin Street under the Shoreline Boulevard bridge to connect to an existing multi-use path of the west side of Shoreline Boulevard.



**Figure 4: Evelyn Avenue Multi-Use Path and Ramp to Shoreline Boulevard**

Construction of the ramp connection is the initial GSAP priority. Construction is scheduled to begin in 2024 and is being coordinated closely with the Public Safety Building project, including interim access to the adjacent parking lots. Following completion of the ramp connection, a new alignment of Evelyn Avenue at Castro Street will be constructed, allowing Evelyn Avenue traffic to cross Castro Street in both directions, a movement not currently allowed. This new configuration of Evelyn Avenue, along with the ramp connection to Shoreline Boulevard, will support the full vehicle closure of Castro Street at the rail crossing.<sup>1</sup>

<sup>1</sup> With the closure of the 100 block of Castro Street during the pandemic, vehicular access to Castro Street from Central Expressway and Moffett Boulevard was closed to help prevent potential vehicle/train collisions. However, vehicles traveling westbound on Evelyn Avenue from the Transit Center currently can turn right on Castro Street and cross the train tracks to access Moffett Boulevard and Central Expressway.



Benefits of the ramp include the following:

- The new ramp connection to Shoreline Boulevard will shift approximately 200 peak-hour vehicle trips away from Villa Street, reducing pedestrian conflicts for the Castro Pedestrian Mall at Villa Street.
- A direct connection from Shoreline Boulevard via Evelyn Avenue will allow vehicles, especially larger buses and delivery vehicles, to bypass the downtown core to access the Transit Center and the Blossom Lane and Wild Cherry Lane service streets for parking and deliveries to businesses.

### **Evelyn Avenue Realignment**

On [October 25, 2022](#), the City Council adopted an ordinance establishing the Castro Pedestrian Mall on Castro Street between West Evelyn Avenue and California Street. With the permanent closure of the first three blocks of Castro Street to vehicle traffic, the project team has modified and continues to refine the realignment of Evelyn Avenue at Castro Street. This modification to the Evelyn Avenue alignment was presented to the Interim Castro Pedestrian Mall Ad Hoc Committee on September 21, 2022.

The current design includes the following adjustments from the 35% design (Figures 5 and 6):

- Elimination of the two 90-degree connections of Evelyn Avenue with Castro Street to an S-curve with a design speed of 15 to 20 miles per hour to provide a smooth transition of Evelyn Avenue at Castro Street;
- Elimination of multiple pedestrian crossings by consolidating the three crossings proposed into one wide signalized crossing with clear delineation for pedestrian and bicycle crossing;
- Shifting the access to the ADA-compliant curb ramp closer to the main stairway on Castro Street and curve along Evelyn Avenue;
- Widening the ADA-compliant ramp from Evelyn Avenue to the main undercrossing underneath Caltrain tracks from 9' wide to a minimum of 11' wide, consistent with the Concourse ramp width and better suited for many users.



Figure 5: Original Evelyn Avenue Alignment



Figure 6: New Evelyn Avenue Alignment

### **Moffett Boulevard Improvements**

In addition to adjustments to the alignment of Evelyn Avenue, the current design also includes adjustments or modifications to the 35% design of the Moffett Boulevard Improvements to accommodate the VTA request to relocate the bus stop locations closer to the intersection of Moffett Boulevard and Central Expressway to provide a more direct route to access the proposed undercrossings. The project team is currently refining the design of the proposed improvements on Moffett Boulevard to ensure safety of all mode users by minimizing conflicting points for the different users. Staff will return to the Council Transportation Commission in the fall with further updates on the project, including the potential design modifications for Moffett Boulevard to accommodate VTA's bus stop requests.

### **Central Expressway Improvements**

When initial planning for the Transit Center Master Plan was conducted, existing transit bus and corporate shuttle service connecting to and from the Transit Center was extensive and well used. Caltrain ridership was also at an all-time high. Use of existing Transit Center bus facility was above capacity and additional growth was expected as Caltrain service expanded. As a result, the Master Plan recommended a major expansion of the bus and shuttle facility and the following were included in the scope of the GSAP project:

- Intersection and traffic signal improvements at Central Expressway and Easy Street;
- Intersection and traffic signal improvements at Central Expressway and Shoreline Boulevard; and
- Expanded shuttle loading area along the south side of Central Expressway.

Over the past three years, Caltrain ridership has dropped significantly along with the demand for connecting shuttle service due to the COVID-19 pandemic. As a result, there is currently less need for additional shuttle loading facilities on Central Expressway and for the Central Expressway intersection and signal improvements at Easy Street and Shoreline Boulevard. These Central Expressway improvements add costs, do not affect the Caltrain operating right-of-way, and require permits from the County of Santa Clara, which can be a time-consuming process that could affect the schedule for the GSAP. For these reasons, these scope items were removed from Caltrain's project and will be delivered by the City as a separate project in the future, if and when needed.

### **Public Art and Architectural Elements**

On February 9, 2023, Public Works held an in-person, open house-style community meeting at the Adobe Building to provide an update and seek input on the architectural elements for the

project. The open house began with a short presentation, followed by members of the public visiting various stations set up to illustrate and receive feedback on numerous examples of architectural elements that could be incorporated into the project. Examples presented included treatments for walkways, walls, ceilings, stairways, railings, fixtures, accent lighting, landscaping, and wayfinding. The presentation and materials are available on the [project website](#).

Following the February 9 community meeting, staff engaged with the Visual Arts Committee (VAC) on March 8, 2023 to provide input into the requirements for a call for artists and to authorize a call for artists for the project. The VAC supported a two-step jurying process and for the call to be issued to artists in California.

The VAC selected two locations within the project area for public art—the upper concourse area between the Caltrain tracks and Central Expressway, and the main undercrossing underneath the Caltrain tracks combined with the main stairway leading to Castro Street. Staff will return to the VAC in fall 2023 to provide architectural design concepts to illustrate cohesiveness and harmony of the proposed architectural treatments with the public art element(s).

### **Tree Removal and Mitigation**

On [December 10, 2019](#), Council approved a Mitigated Negative Declaration for the project that identified a total of 185 trees, of which 24 are Heritage trees, would be removed in the project area. This was based on a Preliminary Arborist Report that was completed in 2019 after evaluation of 448 trees within the project area to determine species and suitability for preservation based upon each tree's age, health, structural condition, and ability to safely coexist within a development environment. The preliminary report is a conservative assessment based on the 15% preliminary design concept.

An updated Arborist Report is being prepared to identify any changed conditions over the last three years and number of trees previously identified for removal based on:

- Drought and recent atmospheric rivers;
- Reduction in scope of work on Central Expressway;
- Construction methods; and
- Latest version of the project design plans.

Once the updated Arborist Report is complete, staff will take a tree mitigation plan to the Parks and Recreation Commission/Urban Forestry Board later this year for recommendation to the City Council.

## **Funding and Schedule**

The project is currently in the final design phase. Construction is scheduled to begin July 2024 and continue through December 2026.

The current project cost estimate is \$136 million for design and construction. The current funding plan includes \$94 million from Measure B and \$8.715 million from the City. The City, along with Caltrain and VTA as partners, is pursuing grant funding opportunities, including the SB-1 Local Partnership Competitive Program and the California State Transportation Agency Transit and Intercity Rail and Capital Program, requesting \$25 million and \$5 million, respectively, to help close the construction funding gap. The project is also eligible to receive \$5 million from the California Public Utilities Commission Section 190 Grade Separation Program as it ranks 28th in the California Grade Separation Fund Priority List for Fiscal Year 2022-23.

## **NEXT STEPS**

As the project design progresses, staff will continue to coordinate with the major stakeholders, including VTA and Caltrain, and engage with the community, City Council, and advisory bodies to continue to provide status and update on the project.

Staff will continue to work with the Visual Arts Committee to evaluate and select the artist and public art for the project from April to June 2023, and will provide architectural design concepts in fall 2023 to illustrate that the architectural treatments and public art elements are cohesive and complementary. Staff will forward the recommendations from the VAC regarding public art and architectural treatments to Council by the end of 2023.

After the revised arborist report is completed, staff will take a tree mitigation plan to the Parks and Recreation Commission/Urban Forestry Plan when ready for a recommendation to the City Council.

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cc: PWD, APWD—Arango, APWD—Skinner, PCE—Gonzales, ACE—Houghton