



## City Council Staff Report

**From: City Manager**

**Report Type: CONSENT CALENDAR**

**Lead Department: Community Services**

**Meeting Date: December 9, 2024**

Report #:2410-3626

### **TITLE**

FIRST READING: Adoption of an Ordinance Approving a Plan for Park Improvements at the City's Baylands for Santa Clara Valley Water District's Palo Alto Flood Basin Tide Gate Structure Phase 1: Seismic: Retrofit and Rehabilitation Project; Approval of Addendum to the Mitigated Negative Declaration for the Project Prepared by Santa Clara Valley Water District (SCH # 2020090237).

### **RECOMMENDATION**

Staff and the Parks and Recreation Commission recommend that the City Council:

1. As a responsible agency under CEQA, consider and approve the addendum to the Mitigated Negative Declaration (MND) prepared and approved by lead agency Santa Clara Valley Water District (Valley Water); and
2. Adopt a Park Improvement Ordinance (Attachment A) authorizing Santa Clara Valley Water District Palo Alto Flood Basin Tide Gate Structure Phase 1: Seismic Retrofit and Rehabilitation Project (Project), which will seismically retrofit and rehabilitate the existing tide gate structure (Structure) in the Baylands.

### **EXECUTIVE SUMMARY**

The Palo Alto Flood Basin's tide gate structure, built in 1957, is crucial for flood protection, environmental conservation, and recreation. Over time, structural issues were identified, prompting Valley Water to initiate a replacement project. After emergency repairs in 2012, a shift in 2018 led to the decision to fully replace the aging structure. However, in 2023, due to funding limitations and delays with the US Army Corps of Engineers' Shoreline II Project, the replacement was put on hold. Instead, a phased approach was adopted. Phase 1 focuses on seismic retrofitting and rehabilitation to extend the structure's service life, while Phase 2 will address a long-term replacement.

The project will include installing a deep foundation, repairing cracks, applying a concrete deck overlay, replacing fencing, improving access, and mitigating environmental impacts through

new plantings. Public outreach, stakeholder tours, and community meetings took place throughout this year.

Construction is planned for September 2025 to January 2026, requiring temporary closures of the Adobe Creek Loop Trail. The City will not bear construction costs, and post-construction maintenance will remain consistent with current operations.

## **BACKGROUND**

The levees forming the Palo Alto Flood Basin (Flood Basin) were built by the City of Palo Alto (City) in the 1940s and the associated tide gate structure (Structure) was constructed in 1957 by the former Santa Clara County Flood Control and Water Conservation District (now Santa Clara Valley Water District, also known as Valley Water), Santa Clara County and the City. The Structure is located along the Bay shoreline, east of the Palo Alto Municipal Airport and Palo Alto Baylands Nature Preserve. The floodwater stored in the Flood Basin is released to the Bay through eight cells with 16 tide gates (15 passive gates and one sluice gate) that comprise the overall tide gate structure. The purpose of the passive tide gates is to regulate water elevation in the Flood Basin such that when the water elevation in the basin is higher than the tidal elevation of the Bay, the passive tide gates are pushed open by water pressure and discharge water from the Flood Basin to the Bay. When the water surface elevation in the Flood Basin is lower than the Bay, the passive tide gates are held shut by water pressure from the Bay, to prevent full tidal inundation.

The Tide Gate Structure has been regularly inspected and maintained by Valley Water. In 2011, Valley Water discovered that water was flowing beneath the Structure, undermining the function of the tide gates and potentially its structural stability. In 2012, Valley Water completed emergency repairs to stop seepage flow beneath the Structure. As part of that effort, staff prepared a post-construction report (as required by the United States Army Corps of Engineers Emergency Permit) which detailed the emergency work and recommended the replacement of the Structure.

In 2014, Valley Water retained the services of Mark Thomas & Company (MT) to perform structural inspections and prepare an assessment report for the Structure. The report concluded that the Structure was generally in fair condition and recommended minor structural repairs.

In 2017, Valley Water retained a construction contractor to perform minor repairs. The work was complicated due to the inability to dewater for the repair work, which resulted in the contract being terminated without completing the work. Subsequently, a visual structural assessment was performed by MT in October 2017 which concluded that the structure would be functional for a couple more years and recommended the Structure be replaced.

In 2018, after project objectives were changed to replace, rather than repair, the Structure, a new team was assigned to the Project to commence planning and design of the new Structure.

The new Project team also prepared an Emergency Action Plan in coordination with the City of Palo Alto in 2019 to provide guidance for potential flooding emergencies in the interim. MT was engaged to perform additional structural assessments annually starting in January 2020. All Structure assessments performed to date concluded that the Structure should still be able to function for several more years.

On June 24, 2020, Valley Water held a Planning Phase Public Outreach Virtual Meeting for the Structure Replacement Project. Valley Water also presented a Project update at the City of Palo Alto Sea Level Rise Public Virtual Meeting on September 9, 2020. Recordings of these two virtual meetings are available.<sup>1</sup> During these two public meetings, Valley Water stated that the Project would need to be coordinated with the South San Francisco Bay Shoreline Phase II Project (Shoreline II Project), which relied on federal participation of the United States Army Corps of Engineers (USACE) as the lead agency. The location and elevation of the new tide gate structure in the Project would need to match the chosen levee alignment and elevation of the USACE Shoreline II Project.

In late 2022, the USACE expressed no federal interest within the foreseeable future to pursue the Shoreline II Project and placed the said project on hold indefinitely. During this time, Valley Water's project team had secured final regulatory permits for the Project from various agencies and was working to complete the 100% Design Phase. A significant construction cost increase was estimated at this phase that exceeded Valley Water's available funds for the Project.

Following the USACE's decision pertaining to the Shoreline II Project, and the Project's need for additional funding, the Project was put on hold indefinitely by Valley Water's Board of Directors at the January 10, 2023 Board meeting. Subsequently, Valley Water evaluated the potential to pursue and implement a lesser scope project in the short-term to address seismic vulnerabilities and rehabilitate the aging tide gate structure while the long-term project plan is being developed. The evaluation resulted in the Project being divided into two phases. Phase 1 work consists of designing and constructing a seismic retrofit and rehabilitation of the Structure to extend its service life. Phase 2 work involves working with the USACE on a long-term structure replacement project to ensure alignment and elevation compatibility with the Shoreline II Project. Valley Water is currently focusing efforts on Phase 1.

## **ANALYSIS**

The 1957-built tide gate Structure provides critical flood protection, environmental conservation, and recreational benefits to the City, Valley Water, and the public. The Structure is located along the northern tip of the Adobe Creek Loop Trail (Trail), approximately 0.5 miles northeast of the Byxbee Park parking lot. City and Valley Water staff have been working

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<sup>1</sup> Valley Water Community Meetings, June 24, 2020 and September 9, 2020, <https://www.valleywater.org/pafbtidegates>

together on this Project since 2018 when the objective was to replace the aging Structure. After being rescoped in 2023, the new Project objectives included Phase 1 work by retrofitting and rehabilitating the Structure to reduce seismic vulnerabilities and extend its service life. Exhibit A is an in-progress design.

Phase 1 work for the Project consists of the installation of a deep foundation system on each end of the existing structure, large crack repairs and application of Polyester Polymer Concrete (PPC) deck overlay, replacement of existing fences with taller and slightly longer fences, and creation of improved maintenance access to the Flood Basin side of the Structure. To mitigate the Project's environmental impacts, new planting will be installed followed by a multi-year plant establishment period, and maintenance will commence post-construction in the  $\pm 0.35$  acres area adjacent to the west end of the Structure.

Once construction is complete, the existing tide gate structure will continue to provide coastal flood protection as well as wildlife and habitat protection. Furthermore, trail users will continue to enjoy the Adobe Creek Loop Trail with an improved concrete deck surface and enhanced safety features of the Structure. Lastly, the new maintenance access would reduce trail closures when Valley Water staff needs to access the area below the Structure deck.

Once final regulatory permits are secured, onsite construction is expected to take place between September 2025 and January 2026 (5 months).

The Project will require temporary closures of approximately 0.8 miles of the Adobe Creek Loop Trail to accommodate construction work. An exhibit illustrating the anticipated trail closures is included in Exhibit B. There will be no parking impacts to the Byxbee Park parking lot during construction. Construction workers will park their vehicles at the designated staging areas for the Project within the closed  $\pm 0.8$  miles trail portions.

Most heavy equipment and trucks carrying construction materials will access the Project site through the gate located next to the Byxbee Park parking lot. Flaggers will be present during mobilization and demobilization of heavy equipment to ensure trail users' safety.

The contractor will be required to perform in-kind repairs to the trail surface, if necessary, during construction. To prevent levee damage, the contract documents will specify a maximum vehicle weight. Furthermore, the contractor's use of the trail following significant rain events will be limited to prevent damage to the levee and trail surface. At the completion of the Project, the contractor will be required to provide a final trail surface that meets or exceeds the pre-construction conditions to the satisfaction of the City and Valley Water.

Maintenance post construction will be similar to current operations, the City would continue to monitor, operate, and maintain the sluice gate and water elevation sensors. Valley Water staff will continue to support debris removal from the trash racks and/or tide gates as needed. Valley Water will also monitor and conduct annual condition assessments of the existing structure.

This project was reintroduced to the Parks and Recreation Commission (Commission) as a discussion item during their June 25, 2024, meeting.<sup>2</sup> This item returned to the Commission as an action item on August 27, 2024. During that meeting, there was a formal discussion about incorporating art and possibly creating nesting areas for birds on or near the structure. However, it was determined that creating nesting areas for birds could disrupt operations and restrict access during the nesting season. Valley Water also clarified at the meeting that they understand that the Regional Shoreline Adaptation Plan by the San Francisco Bay Conservation and Development Commission (BCDC) is currently in draft form and when completed it will be a region-wide plan for the entire Bay shoreline. Currently, the plan is not at the implementation phase and so there is no guidance for actions at the project level yet. Therefore, at this time, the plan will not influence the on-going work for the Palo Alto Tide Gate Rehabilitation and Seismic Retrofit. At that meeting, the Commission passed a motion (4-0) recommending the Park Improvement Ordinance to the City Council, while approving the project with additional considerations regarding the heights and colors used, as well as the potential inclusion of public art.<sup>3</sup>

The project does not trigger the public art requirements under Municipal Code Chapter 16.61, and the design is currently 90% complete and therefore too late in the commissioning process for this project. However, staff is exploring how public art may be introduced at a later stage.

Based on the recommendations from the Parks and Recreation Commission, staff worked with Valley Water to reduce the fence height from the originally proposed 54 inches to 48 inches. Valley Water has also agreed keep the fence a natural color. Valley Water also held a community meeting at Mitchell Park Community Center on Wednesday, November 20 from 6-7:00 pm to solicit feedback there were 14 in-person attendees and 18 online.

### **FISCAL/RESOURCE IMPACT**

There are no resource impacts anticipated from the recommendations in this report. The City will not incur costs for the construction of this Project. Post-construction operations and maintenance costs are expected to be the same as those projected for existing conditions.

### **STAKEHOLDER ENGAGEMENT**

On April 2, 2024, Valley Water hosted a Baylands Tide Gate tour onsite with stakeholders, city staff, and members of the public to discuss the project and collect feedback. On November 20, 2024, Valley Water hosted an in-person and virtual meeting at Mitchell Park Community Center to discuss the project and collect more feedback.

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<sup>2</sup> Parks and Recreation Commission, June 25, 2025 Approved Minutes, [prc-approved-minutes-06.25.24.pdf](#) ([cityofpaloalto.org](#))

<sup>3</sup> Parks and Recreation Commission, August 27, 2024 Approved Minutes, [prc-approved-minutes-08.27.24.pdf](#)

The project was also discussed at the Parks and Recreation Commission meetings on June 25, 2024, and August 27, 2024.

### **ENVIRONMENTAL REVIEW**

Valley Water is the Lead Agency under California Environmental Quality Act (CEQA) and the City of Palo Alto is a Responsible Agency. The CEQA Final Mitigated Negative Declaration (MND) is available at the Valley Water Project website (SCH # 2020090237).<sup>4</sup> The Addendum to the Final MND was approved by the Valley Water Board on October 22, 2024. The First Addendum describes changes to the PATG Replacement Project, evaluates the potential impacts, and concludes that the PATG Replacement Project modifications, which focus on the seismic retrofit and rehabilitation work, would not result in any new significant environmental impacts, or substantially increase the severity of significant impacts beyond those identified in the adopted MND for PATG Replacement Project, approved by the Valley Water Board on April 27, 2021.

### **ATTACHMENTS**

Attachment A: Ordinance Approving a Plan for Park's Improvements at City's Baylands

### **APPROVED BY:**

Kristen O'Kane, Community Services Director

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<sup>4</sup> Valley Water Project Website: <https://www.valleywater.org/pafbtidegates>.