



Project Description

The proposed project involves the Embarcadero Fountain by Armand Vaillancourt (the ‘Vaillancourt Fountain’) completed in 1971 as part of Lawrence Halprin’s Embarcadero Plaza design. The fountain has been inoperable since May 2024, when the last of its functioning pumps failed. For the reasons described below, the Recreation and Park Department (RPD) proposes to disassemble and store the fountain in order to remove a significant public safety risk and perform further investigation into the deteriorated structural integrity of the fountain.

Disassembly of the fountain would occur over a period of approximately two months, which includes safely dismantling the concrete arms with cranes and shoring, transporting and storing components off-site, and cataloguing and documenting each piece for assessment. This process will begin no sooner than 90 days after the SF Arts Commission takes its approval action, following the required notice to the artist and interested members of the community under state law.

Basis for Request

Studies commissioned by RPD have revealed significant structural deterioration of the fountain. This includes evidence that one of the cast concrete arms of the fountain has settled onto and is now being physically supported, in part, by another cast concrete section below it. This added weight, estimated at 10-11 tons, exceeds the weight that the lower arm was designed to support, stressing the supporting structure for both arms. Additionally, the reports indicate that cracking of the concrete tubes, missing members and other evidence visible from outside the fountain are indicators of potentially significant additional corrosion and damage inside the structure that cannot be examined without disassembling the fountain. The reports also showed asbestos containing materials and lead paint in the fountain and pump room. Together, the known and suspected structural damage to the fountain, along with the presence of hazardous materials, the leaking substructure and dangerous conditions of the electrical and plumbing systems of the fountain, create a significant public health and safety hazard. As a result, RPD immediately fenced off the fountain and added signage warning the public to keep away after receiving the reports.



The fountain, as originally designed, was intended to be physically interacted with by the public through the “lily pad” walking path and a metal staircase. Starting in the 1990’s, the fountain also became an attraction for skateboarders. Without water flowing through the fountain and into the catch basins, the fountain appears even more accessible for climbing, graffiti, skateboarding and even sleeping. As a result, the security fencing has been repeatedly breached, and the fountain accessed by the public despite RPD’s efforts to secure it. Because the fountain is located in a highly trafficked area of the City’s downtown, the likelihood that visitors or San Franciscans might interact with the fountain is high. And, because of the known and anticipated damage to the interior of the fountain and the hazardous materials in its members, the fountain currently poses a significant risk to public safety. Because the fountain is located in a marine environment, on unsuitable Bay Mud and unconsolidated fill, and was subject to 30,000 gallons of water passing through it for over 50 years leading to significant internal corrosion, that risk will continue to increase with time. As a result, RPD has concluded that waiting up to 18 months to perform an Environmental Impact Report in order to remove and further investigate the scope of the deterioration would pose an unacceptable risk to the public. RPD believes that the proposed project satisfies the requirements under CEQA for an emergency project, exempt from further CEQA review.

Background

As part of RPD’s capital planning for Embarcadero Plaza North and Sue Bierman Park East, RPD commissioned a series of reports which included a *Conditions Assessment* by Page & Turnbull, a *Structural Observation and Evaluation* by DCI Engineers, *Ground Penetrating Radar Survey* (Non-destructive Testing) by Applied Materials Engineering, and a *Hazardous Materials Survey* by North Tower Environmental, to evaluate the existing condition of the fountain (the “Conditions Assessment”). While RPD’s process for that potential project is still underway, the reports concluded that the fountain presents a risk to public health and safety for the following reasons:

- **Severe structural deterioration:** The pre-cast concrete “arms” of the fountain exhibit extensive cracking, spalling, and material loss caused by moderate to severe corrosion of internal reinforcing steel, reducing the fountain’s ability to support its own weight and resist seismic forces.

DCI Engineers identified a particularly critical condition involving the cane-shaped tube (T6), which has settled onto and is now physically bearing on the H-shaped (T4–T5) section below it.

According to the structural drawings, these large tubular elements were designed to act independently, with no direct load transfer between them. The current configuration means the T6 element—constructed of reinforced concrete and internal steel plates weighing 10-11 tons—is now imposing unintended forces on the T4–T5 assembly, which was not designed to carry this additional load.

DCI concluded that the stress cracks observed in the H-shaped section were likely caused by these unanticipated forces, resulting from the deformation and settlement of the cane-shaped tube due to yielding of the internal steel plates and corrosion of the reinforcing and post-tensioning rods that once stabilized the connections.

This unplanned load redistribution between structural members introduces a significant life-safety concern, as it demonstrates that one of the fountain’s massive concrete “arms” has already experienced partial structural failure and is now bearing weight in ways never intended in the original design.

Because the fountain’s other arms and joints contain similar concealed steel components—many showing comparable cracking and corrosion—engineers cannot rule out the possibility of similar deformations elsewhere without disassembly and inspection.

These conditions collectively indicate a risk of progressive or localized collapse under self-weight, environmental loading, or seismic activity.

- **Discontinuous reinforcing and missing rebar (Ground Penetrating Radar findings):** Ground-penetrating radar (GPR) testing confirmed the presence of reinforcing steel in some areas but revealed discontinuous or missing reinforcement patterns in others. The report indicated that the precast elements along the back-wall of the fountain are unreinforced. However, the original drawings indicate that these free-standing units are anchored to the mat foundation.

The GPR results also showed that in several locations, reinforcing was discontinuous and not connected between the tubes. The original structural drawings indicate that typical reinforcement, beyond the steel plates and tension rods, within the precast concrete sections is minimal. Since the reinforcement is not continuous or connected between the tubes, it does not provide strength to support the tubes. The scanning report correlates with this reinforcement design configuration.

The assessment team cautioned that the actual condition of the embedded steel cannot be verified without destructive exploration or disassembly, meaning the extent of missing or failed reinforcing remains unknown.

This uncertainty represents an additional life-safety risk, as the compromised reinforcement could lead to brittle failure or localized collapse under loading or seismic stress.

- **Missing structural element:** DCI Engineers confirmed that at least one of the primary post-tensioning rods—the critical steel elements that hold the massive precast concrete “arms” in tension and resist bending—is missing. Each of these rods helps anchor and stabilize the cantilevered sections, and the loss of even one reduces the load-bearing capacity of that section by roughly 25 percent. The exposed connection where the rod should be located shows advanced corrosion and deterioration of surrounding steel, suggesting that other internal tension rods and weld plates may also be partially failed, fractured, or detached. Because these structural members are embedded deep within the concrete tubes and enclosed by welded steel plates, their condition cannot be visually inspected or tested without disassembly.

This missing element is likely not an isolated failure, but rather an indicator of more widespread, hidden damage within the fountain’s internal framework.

Without dismantling the structure, it is not feasible to determine how many of these rods or internal plate connections have been compromised by corrosion, deformation, or loss of material.

This uncertainty poses a serious life-safety concern, as the fountain’s stability depends on the integrity of these concealed components. The failure of additional rods or connections could trigger progressive or localized collapse, especially under seismic loading or vibration from nearby activity.

- **Unsuitable foundation soils:** The fountain is built on unconsolidated fill and Bay Mud, which are highly susceptible to settlement and liquefaction during seismic events, further undermining structural stability.
- **Seismic non-compliance:** Even under ideal material conditions, structural engineers determined the fountain’s structure, which weighs an estimated 710 tons, does not meet current seismic or safety standards and is likely to yield or deform under both Design Basis and Maximum Considered Earthquake loads.

- **Corroded structural connections and supports:** Steel anchor plates, pedestal supports, and welded joints show advanced corrosion and section loss, indicating a risk of localized failure.
- **Flooded, non-compliant vault:** The underground pump vault is a confined space that does not meet OSHA standards and routinely floods due to failed waterproofing, creating electrical and structural hazards for maintenance personnel.
- **Failed waterproofing and ongoing water infiltration:** Water intrusion into structural components continues to accelerate corrosion, concrete cracking, and the degradation of electrical and mechanical systems.
- **Unseen corrosion of supporting elements.** In addition to the corrosion of internal steel connecting rods that was observed by DCI, the structural report notes that additional internal corrosion is also likely pervasive throughout the steel plate lining that is used to reinforce the precast concrete elements of the fountain, which significantly decreases the ability of the fountain to withstand future seismic events. The extent of this corrosion cannot be determined without disassembly of the affected elements of the fountain.

Taken together, these conditions represent a life-safety emergency: the fountain's structural system is failing, its subsurface environment is unstable, and its infrastructure cannot be safely accessed or maintained.

In addition, the Conditions Assessment revealed the presence of additional public health hazards. Specifically, the Hazardous Materials Investigation revealed that the fountain contains multiple regulated substances that pose health risks to workers and the public:

- **Lead-based paint** throughout the fountain structure and pump room on railings, doors, and equipment, much of it in deteriorated condition.
- **Asbestos-containing materials (ACM)** confirmed in pipe insulation, gaskets, and boiler components, and presumed ACM in the waterproofing membrane beneath the fountain basin and at the joints of structural steel connections.

The **combination of lead and asbestos** contamination means any future work on or near the structure requires specialized abatement and environmental remediation to protect workers and the public.

- In response to these findings, RPD fenced off the fountain in June 2025, installed mesh barriers on the open concrete tubes, and safety signage to restrict public access. Despite these measures, the security fencing has been repeatedly

breached. Staff have documented incidents of vandalism, graffiti, and evidence of individuals cutting through mesh panels to enter and sleep inside the fountain's concrete tubes.

- **June 9, 2025:** RPD installed mesh barriers on the open concrete tubes, fencing around the perimeter, and safety signage to restrict public access.
- **August 5, 2025:** Vandalism reported at the fountain where mesh screens blocking access to the tunnels were cut.
- **September 15, 2025:** Maintenance crews cleaned out interior tubes and replaced damaged mesh with reinforced material. Personal belongings—including a mattress and clothing—were recovered, indicating frequent occupancy within the structure.
- **September – October 2025:** Staff repaired gate and fencing surrounding perimeter
- **October 29, 2025:** Staff responded to an attempted breach at the main gate located behind the fountain.

The department has reinforced the perimeter and continues to monitor and repair damage across multiple trades. While the City has fenced off the fountain to restrict public access, the structure remains vulnerable to further deterioration and unauthorized entry, posing ongoing hazards to the public and City staff.

DBI has reviewed the Conditions Assessment and concurs with the finding that the fountain, in its current state, constitutes a public safety hazard. Both RPD and DBI have determined that the immediate priority is to eliminate the potential for injury and further deterioration. However, additional investigation into the full extent of corrosion, hazardous materials, and structural failure cannot be conducted safely without first dismantling the fountain.

With the concurrence of DBI, RPD is investigating more robust fencing and security coverage. However, these measures are not sustainable in the long term. Robust fencing and continuous security monitoring is prohibitively expensive; even the most secure fencing can be breached by determined individuals; and maintaining the fountain in a fully cordoned state would create a prolonged blighted condition in this highly visible civic space.

Construction activities are anticipated to occur over approximately two months and will include the careful disassembly of the fountain, transportation of components, and secure off-site storage for a period of three years. This process will allow for a thorough inspection

of the interior and exterior of the disassembled elements and a detailed evaluation of potential options for future rehabilitation or reinterpretation.

At this time, there is no proposal for the fountain's subsequent disposition—whether restoration, relocation, reinterpretation, or demolition. Any such proposal will be determined at a later date by the appropriate City bodies and will be subject to all applicable public review processes, including environmental review under the California Environmental Quality Act (CEQA).

Preliminary cost estimates developed by an independent third-party cost estimator in June 2025 indicate that full restoration of the fountain to its original intended function and a safe, code-compliant condition would cost approximately \$29 million in construction costs alone. This estimate includes seismic retrofitting, hazardous materials abatement, replacement of mechanical and electrical systems, construction of a new pump station, waterproofing, and accessibility upgrades. The Embarcadero Plaza North and Sue Bierman Park East project will be subjected to all required CEQA review when the proposal has been further articulated. RPD currently proposes only to address the life safety concerns posed by the fountain in its current state, and therefore requests analysis of this emergency project under CEQA. Any future restoration, relocation or repurposing of the fountain will be subject to further review and approval by the Arts Commission.

ATTACHMENTS:

Exhibit A: Plan

Exhibit B: Photos

Exhibit C: Background Reports

- Conditions Assessment
- Accessibility Assessment
- DBI Letter
- Cost Estimate
- Vaillancourt Fountain HRR