

OVERVIEW

The stone paving in the Plaza in front of SAAM has deteriorated significantly within the primary vehicle drive areas. Seattle Department of Parks and Recreation investigated repair alternatives and conducted an initial briefing with the Architectural Review Committee on August 13, 2021 to solicit ARC guidance on repair alternatives. This submittal presents the proposed repairs incorporating the ARC recommendations for final review and approval by the ARC and full Landmarks Preservation Board.

The existing stone within Volunteer Park Drive was installed in 1975 based on drawings by Richard Haag as an extension of the paving at the steps and entry to the Museum. Approximately 230 sf of stone pavers in the primary vehicle path were replaced with concrete previously (believed to be at least 10-15 years ago). Approximately 410 sf of the remaining stone in the primary vehicle drive area has failed and needs to be replaced. Together, the 640 sf of previously failed and currently failed stone represents 33% of all stonework within the primary vehicle drive area (1950 sf total). The overall stone area within the entire 1975 plaza area is over 7,000 sf, with relatively minor deterioration in the non-vehicular areas.



AERIAL VIEW (plaza area highlighted)

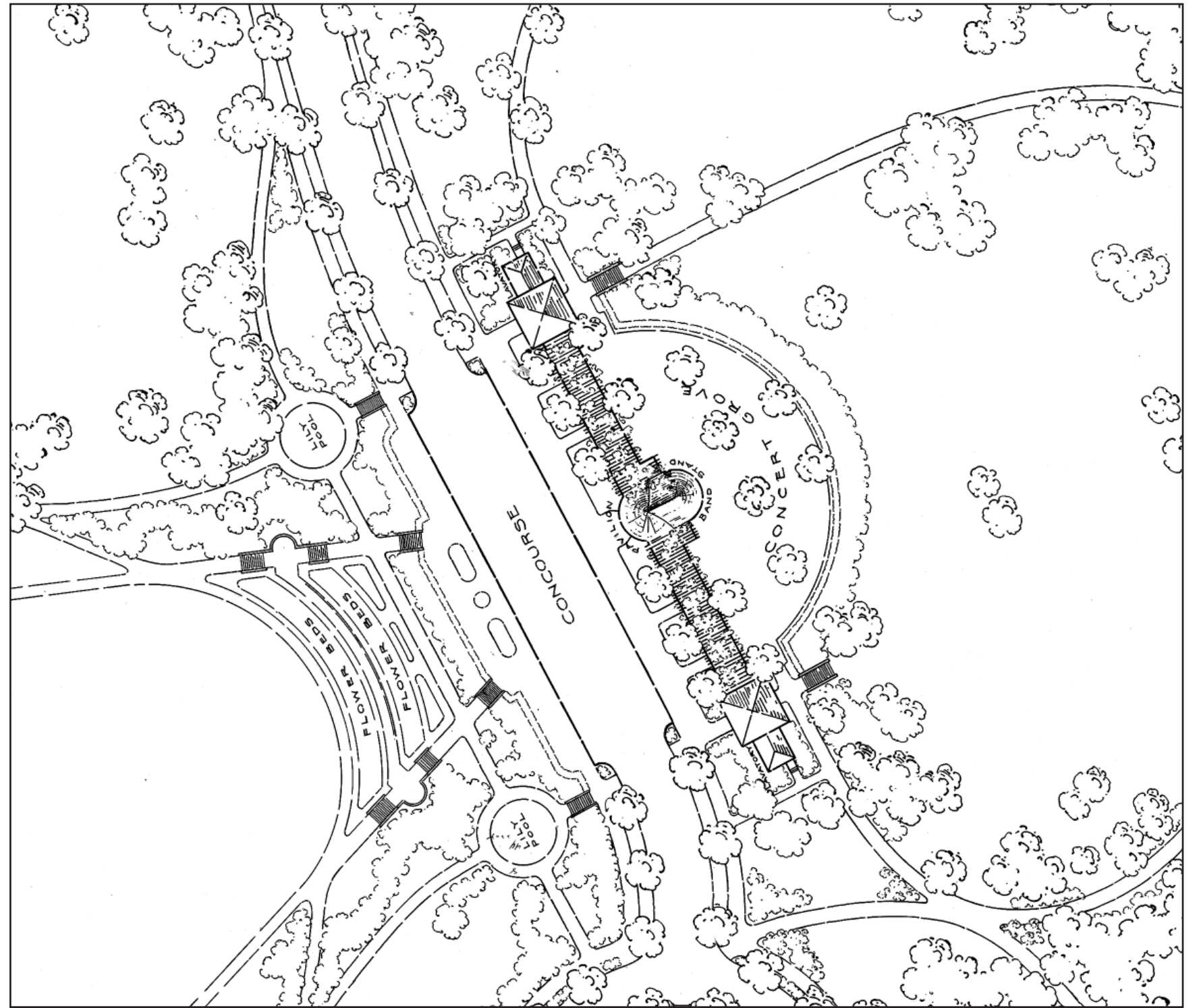
VOLUNTEER PARK DRIVE PLAZA PAVING

BACKGROUND

Site plan and view of Volunteer Park Drive as original designed and constructed.



1913 VIEW OF DRIVE FROM SOUTHWEST

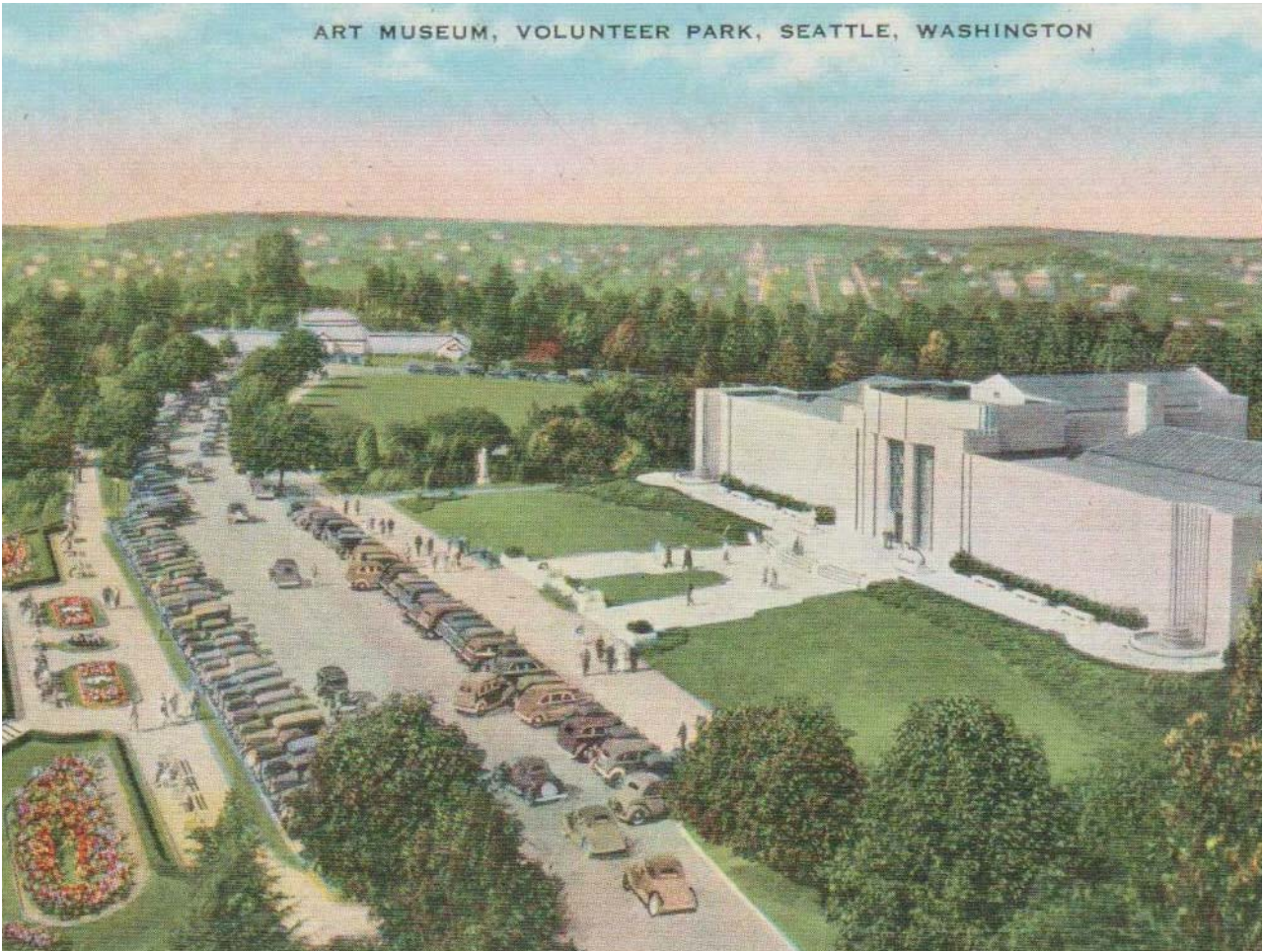


1909 OLMSTED PLAN 

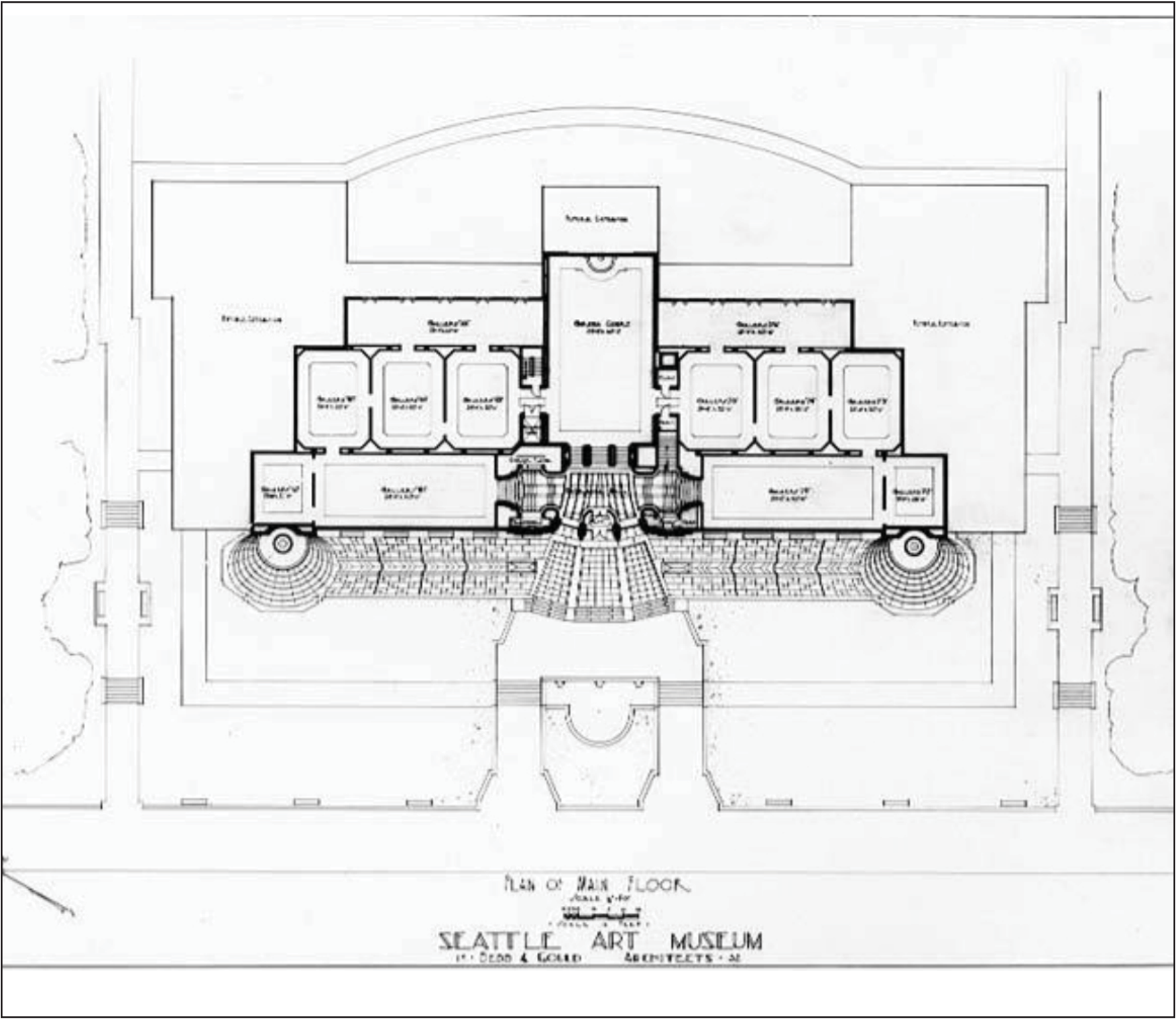
VOLUNTEER PARK DRIVE PLAZA PAVING

BACKGROUND

The 1931 Seattle Art Museum construction included stone paving at the exterior entry and stairs but did not include stone paving beyond the base of the stairs or within Volunteer Park Drive.



1935 VIEW OF DRIVE



1931 SAM SITE PLAN

VOLUNTEER PARK DRIVE PLAZA PAVING

The stone paving extension of the SAAM entry paving was constructed in 1975, based on drawings prepared by Richard Haag in 1974.



VOLUNTEER PARK DRIVE PLAZA PAVING



The extent of the 1975 stone paving is highlighted by the dotted red line.

The 30' wide center portion noted as "Flush" in plan is the full width of potential vehicle drive area, however only the central 22 feet width at the of the plaza which constitutes the central drive area has significantly deteriorated.

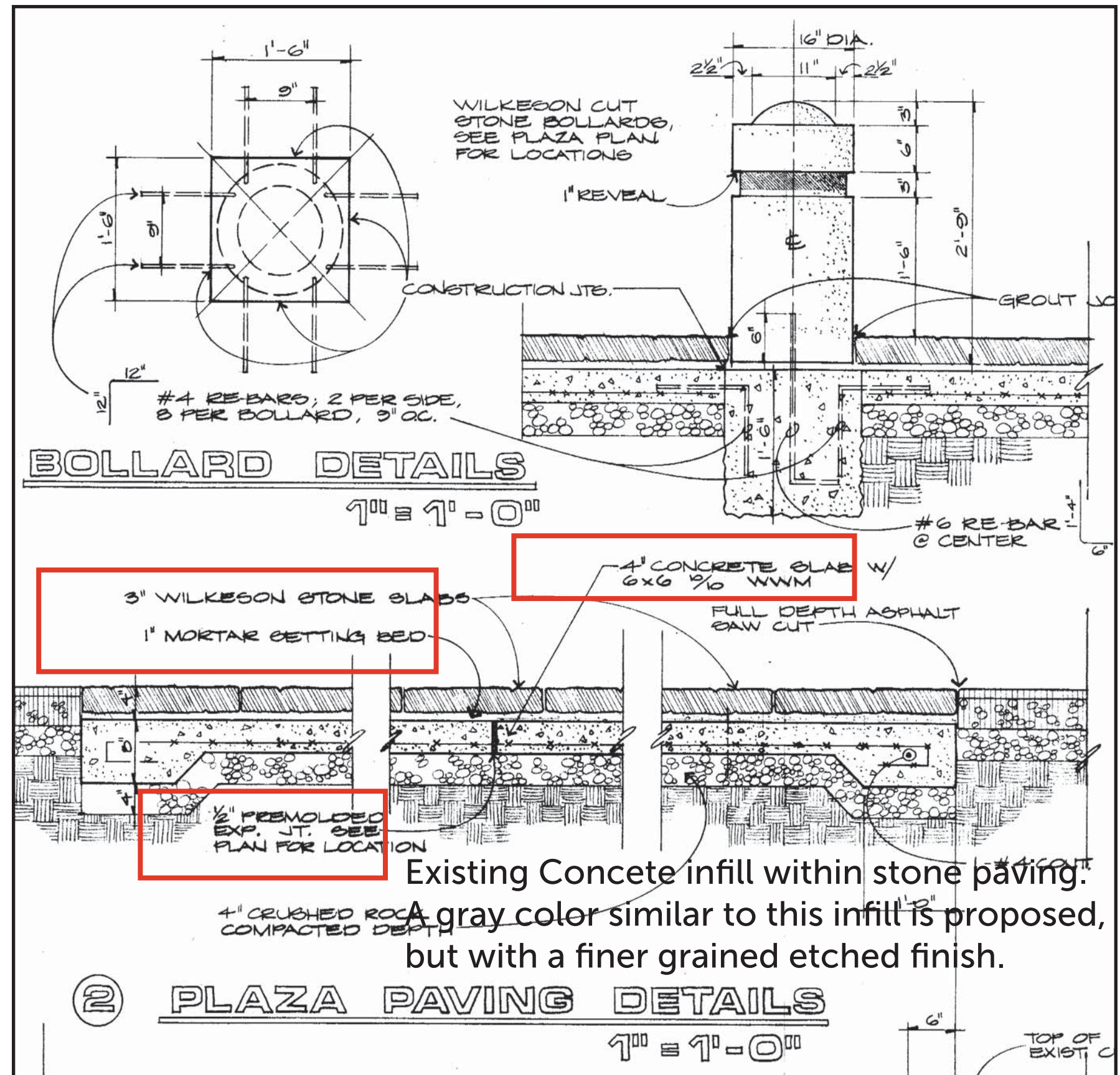


BACKGROUND

The as-built conditions appear to match the 1974 details, with the exception that several of the original 10 stone bollards have been replaced with precast concrete bollards to match the original stonework.

The Wilkeson quarry, the source of the original stone, is no longer in operation. SPR sought pricing and samples from Select Stone in Montana for replacement stone to visually match the existing stone, however Select Stone ultimately declined to provide pricing since they indicated the installation in a vehicle drive area was atypical and would require thicker material which they felt would be cost prohibitive.

SPR also consulted with Pioneer Masonry who completed repairs to the SAAM pedestrian stone paving which required relatively minor repairs as part of the recent SAAM renovations, Pioneer indicated that while stone replacement could be feasible, they did not recommend it given the high vehicle traffic conditions.



1974 PLAZA DETAILS

VOLUNTEER PARK DRIVE PLAZA PAVING

Volunteer Park Landmark Nomination – Overall Character:

Introductory Description of Character and Style (underlines added for emphasis)

“A. Overall Character and Style

Volunteer Park is an urban park designed in the naturalistic, pastoral/picturesque American romantic style that is closely associated with the Olmsted firm. The elements of this style include irregular open lawns bordered by shrub and tree plantings, carefully framed and modulated views, one or more circulation loops, and areas intended for crowds and social interaction which are treated in a more geometric and formal manner.”



Volunteer Park Landmark Nomination – Statement of Significance

-(Entire Statement of Significance – the non-Olmsted elements cited are underlined for emphasis)

The Plaza is not cited as contributing to the significance.

“Volunteer Park is the most articulated example of Olmsted design in Seattle and is associated with the city’s civic response to urban expansion and prosperity following the Klondike gold rush at the end of the 19th century, the City Beautiful movement promoting aesthetic urban design, and the development of urban park systems in the Pacific Northwest in the early 20th century. Volunteer Park is directly associated with landscape architect John Charles Olmsted, the senior partner in the firm Olmsted Brothers, Landscape Architects, at the height of his career. Olmsted carried forward and expanded upon the seminal work of his father, Frederick Law Olmsted, Sr.

The Volunteer Park Reservoir/Gate House and Water Tower preceded construction of the Olmsted design and are separately also significant as the sole remaining intact above-ground representatives within Seattle of the city's initial Cedar River water supply system. They are also directly associated with City Engineer Reginald H. Thomson, who planned, designed and oversaw construction of the first two phases of the system.

Other discrete elements of the park are individually significant as well. The Shelter House (1910) is the most intact of several such facilities in the city built or planned by the Olmsted firm. The Conservatory (1912) is the only historic example of a large glass house and tropical botanical collection in the city park system, and is already a City landmark, as is the Seattle Asian Art Museum (1932), considered by some to be architect Carl Gould’s finest buildings.”

Volunteer Park Landmark Nomination – Designation Report

-(The designation report cites Olmsted and the designers of SAAM and the Black Sun sculpture as outstanding works of their designers. Haag’s work is not cited.)

“A. Volunteer Park is the location of, or is associated in a significant way with, an historic event with a significant effect upon the community, City, state, or nation.

C. Volunteer Park is associated in a significant way with a significant aspect of the cultural, political, or economic heritage of the community, City, state, or nation.

D. Volunteer Park embodies the distinctive visible characteristics of an architectural style, period, or of a method of construction.

E. Volunteer Park is an outstanding work of its designers, the Olmsted Brothers. Other elements in the park, the Seattle Asian Art Museum and the Black Sun sculpture, are outstanding works of their respective designers.

F. Because of its prominence of spatial location, contrasts of siting, age, or scale, Volunteer Park is an easily identifiable visual feature of its neighborhood or the City and contributes to the distinctive quality or identity of such neighborhood or the City.”

The aerial survey plan was compiled from 70 stitched drone photographs to provide a high resolution plan, facilitating documentation of the extent of existing issues and necessary repairs. (The yellow X's visible in the survey are tape placed 40' apart by the survey company to facilitate scaling of the aerial photograph to a CAD drawing.)

Based on detailed site reviews, the plan highlights three areas as follows:

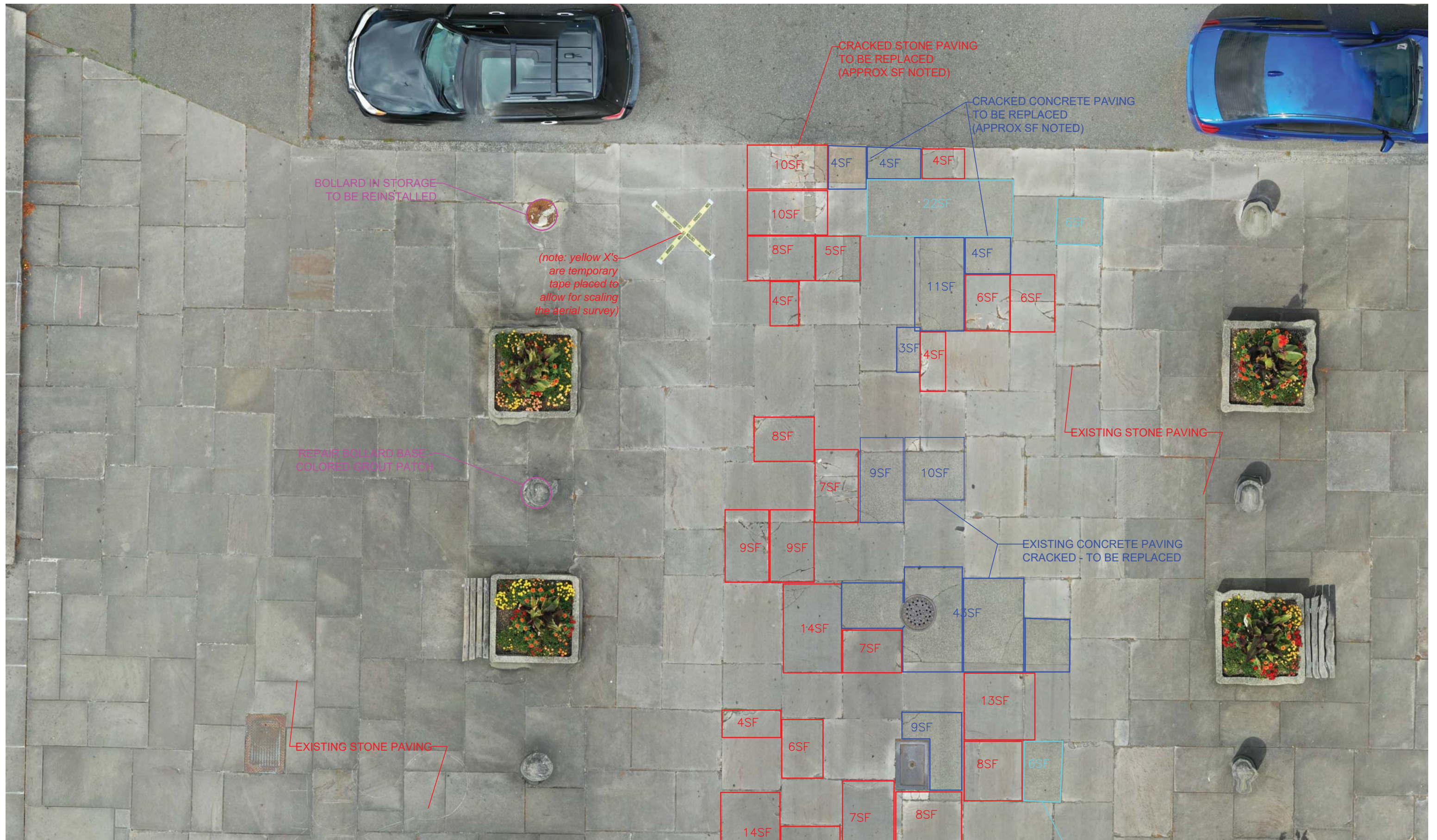
Red: stone pavers with significant deterioration and recommended to be replaced: (410 sf)

Blue: concrete paving with some cracking which is not as problematic as the disintegrating stones, but would ideally be replaced if feasible within the budget: (150 sf)

Light blue: other existing conc. paving infills without any cracking: (80 sf)







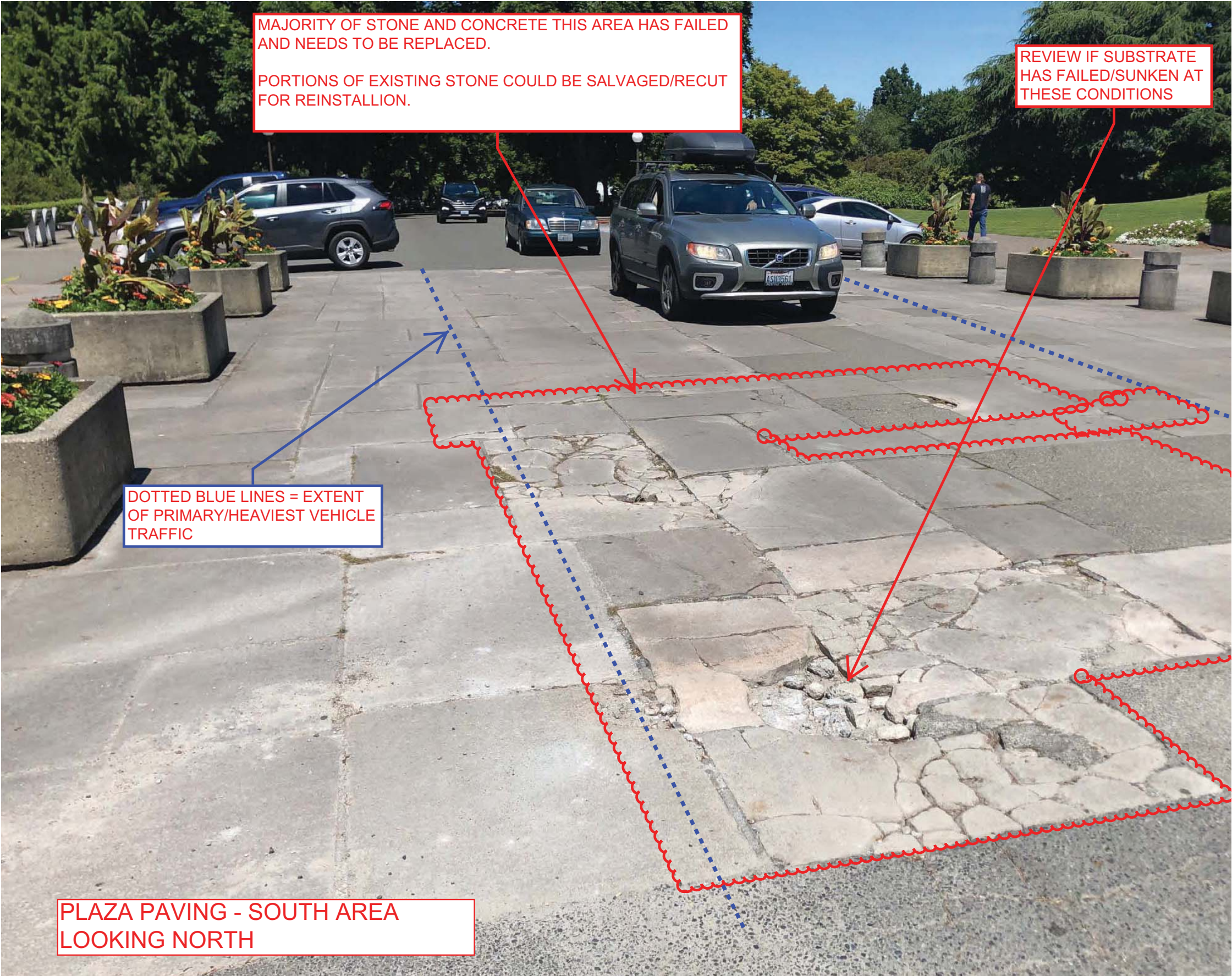
VOLUNTEER PARK DRIVE PLAZA PAVING



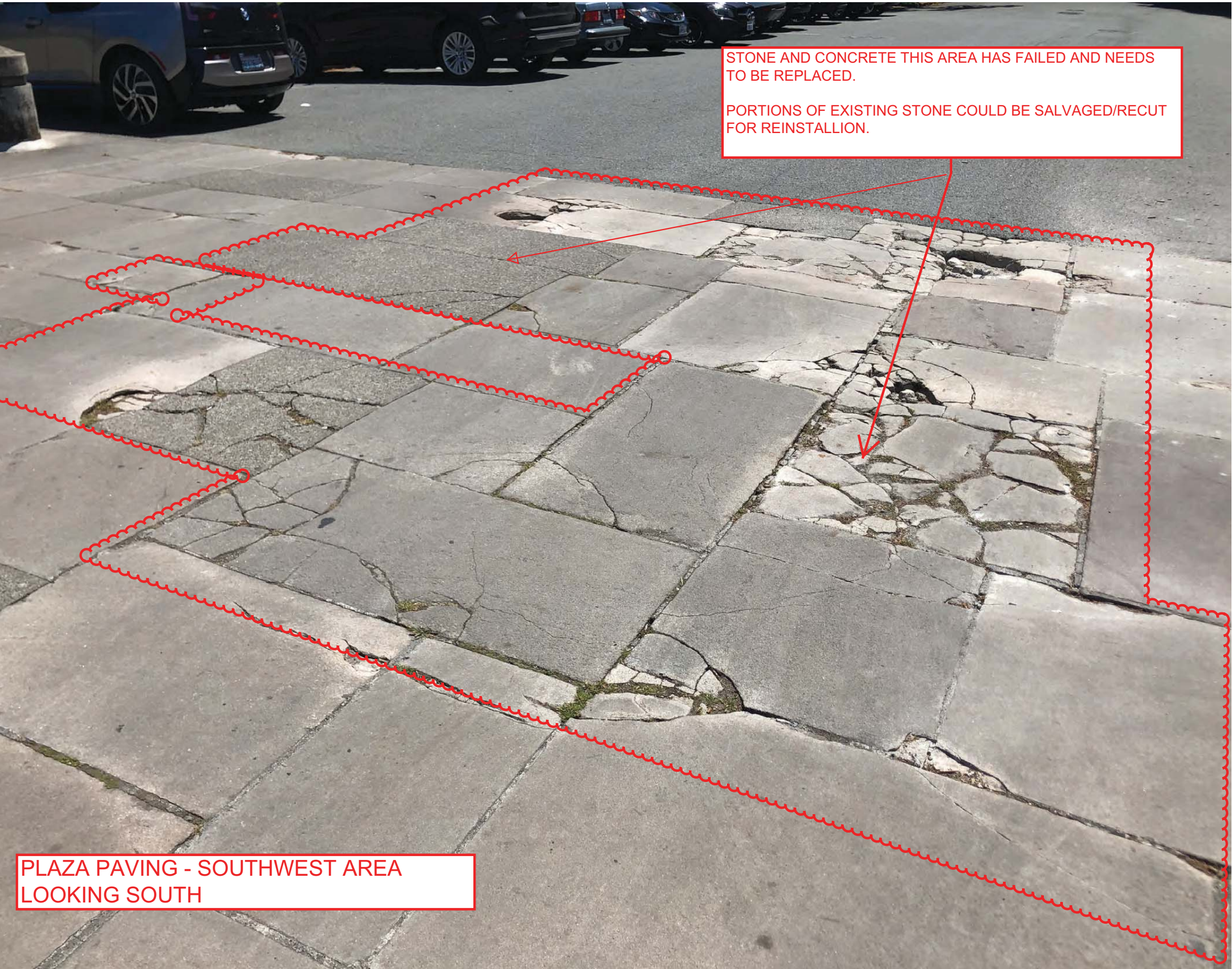
AERIAL SURVEY: PLAZA PLAN - NORTH

The Southwest portion of the plaza represents the most extreme area of deterioration, with numerous stones completely disintegrated.

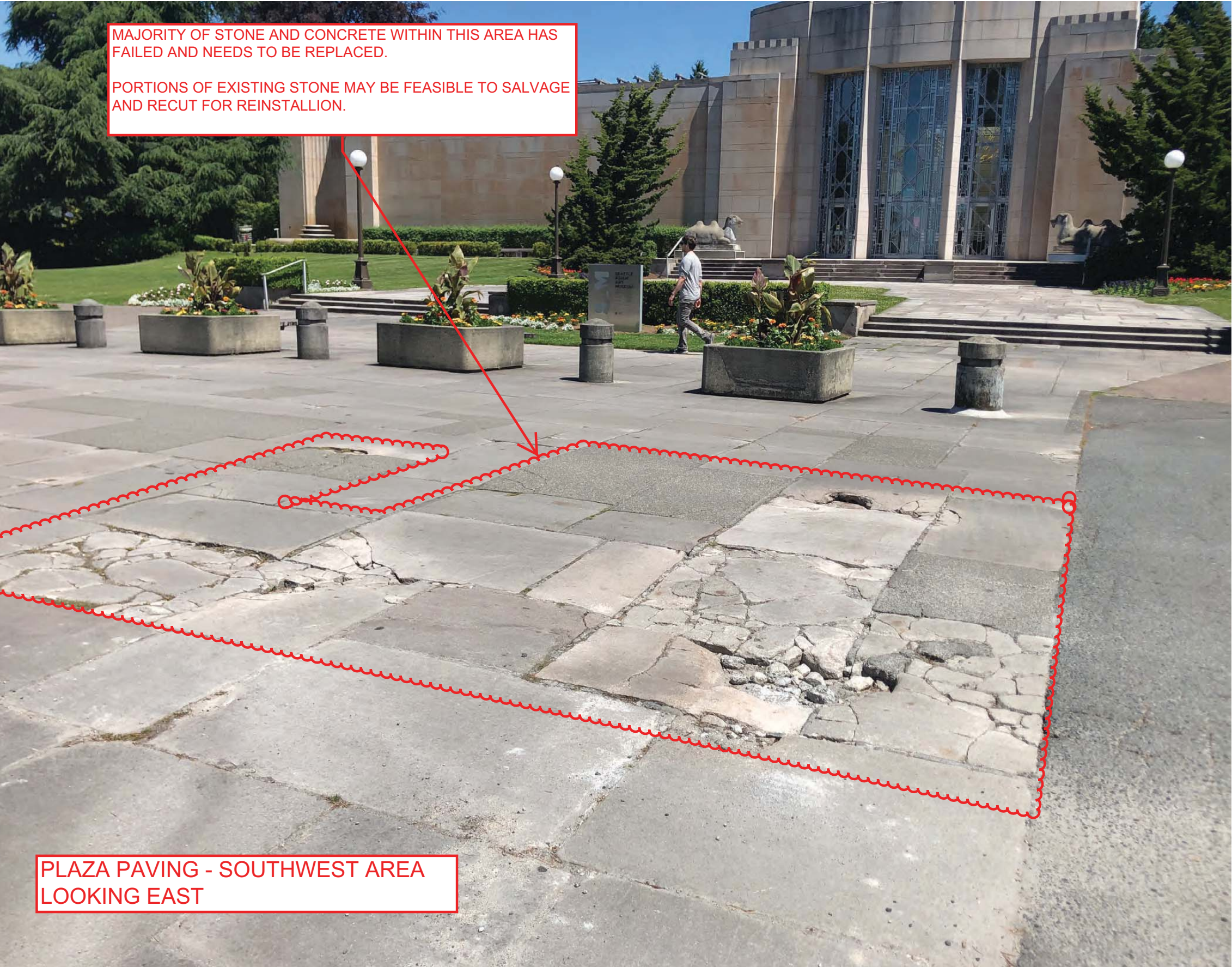
The blue dotted lines show the primary vehicle pathway which is where nearly all deterioration has occurred.



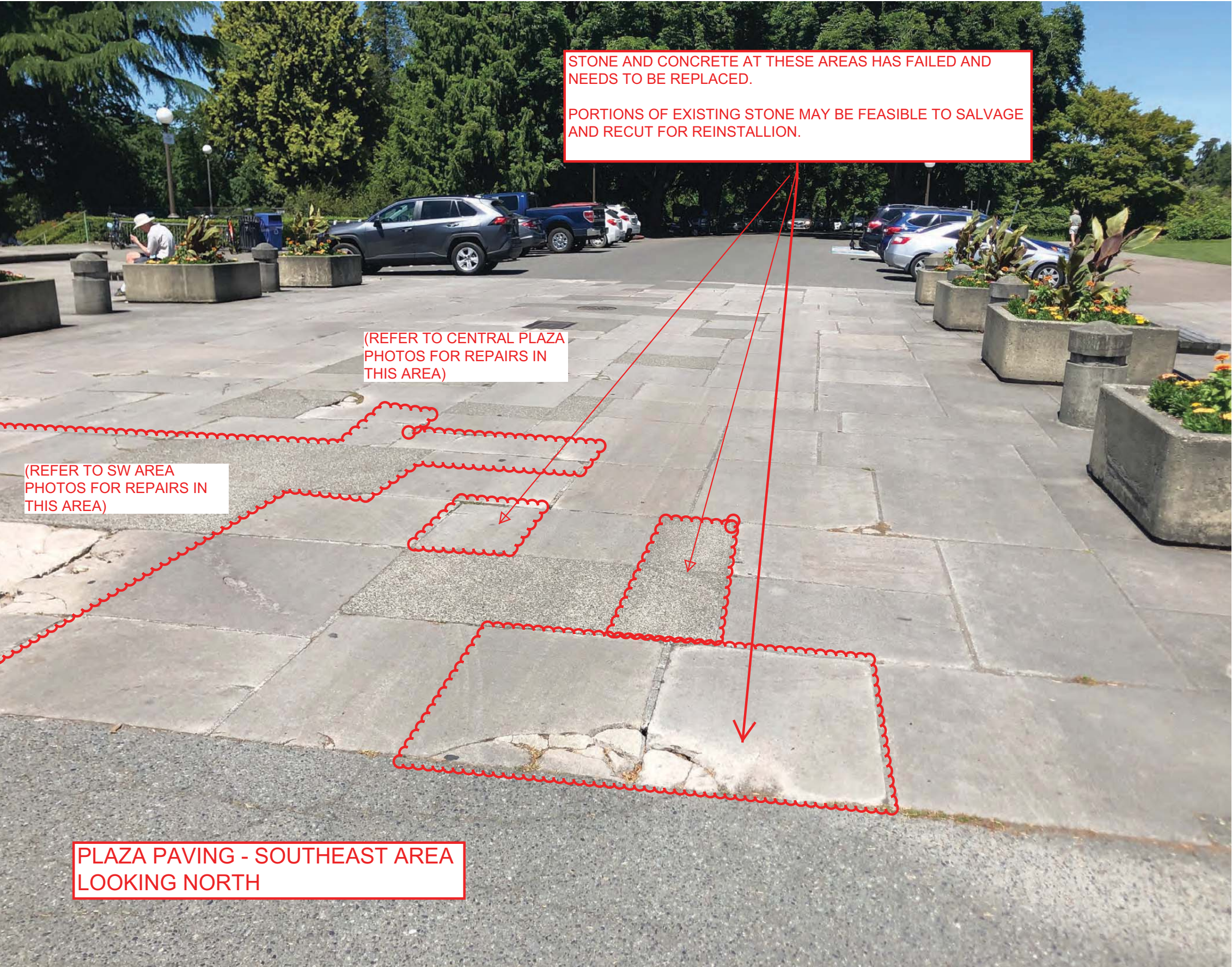
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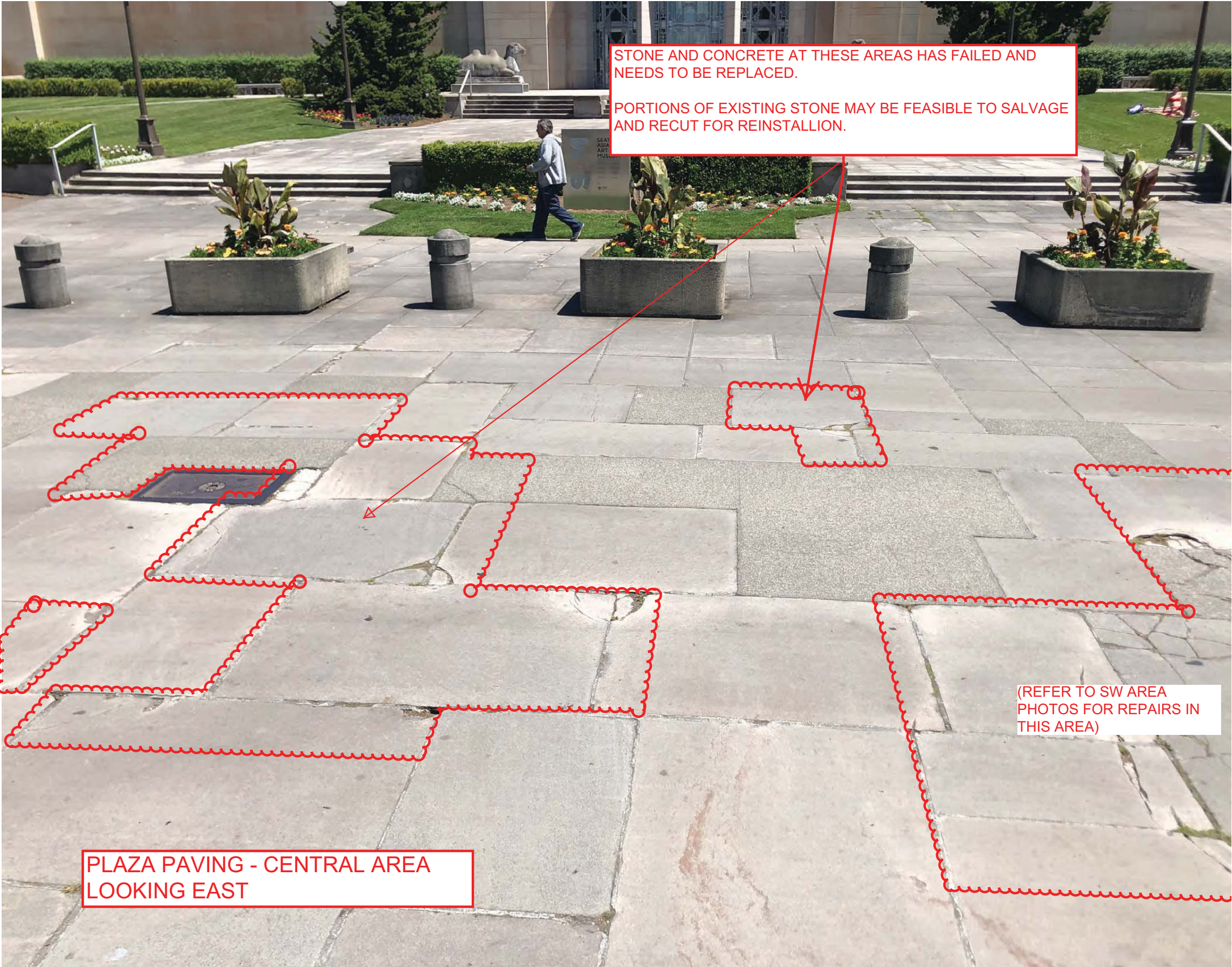
The Southwest portion of the plaza represents the most extreme are of deterioration, with numerous stones completely disintegrated.



The Southeast portion of the plaza has less extensive deterioration than at Southwest, but the stones closest to asphalt have failed, notably along the edge of asphalt paving. An adjoining concrete infill has minor cracks so is noted to ideally be replaced if feasible within the budget.

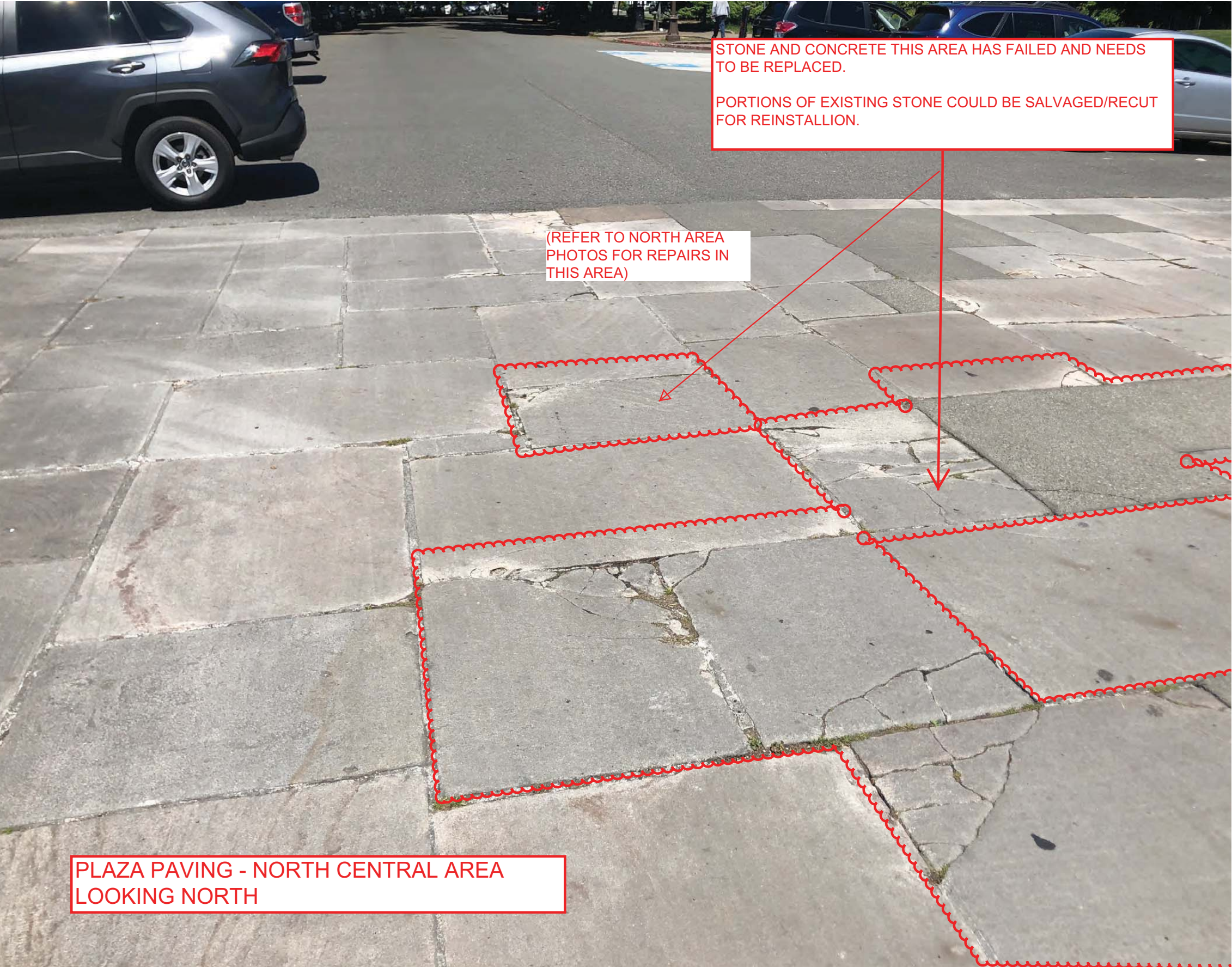


The central plaza area has numerous stones with edges and corners that have eroded or cracked to the extent that water accumulates in the pockets, resulting in further erosion and water infiltration below the stones, contributing to accelerated deterioration. The deterioration is exacerbated in winter by freeze thaw of ice and when snow removal has resulted in further damage to irregular stone edges.

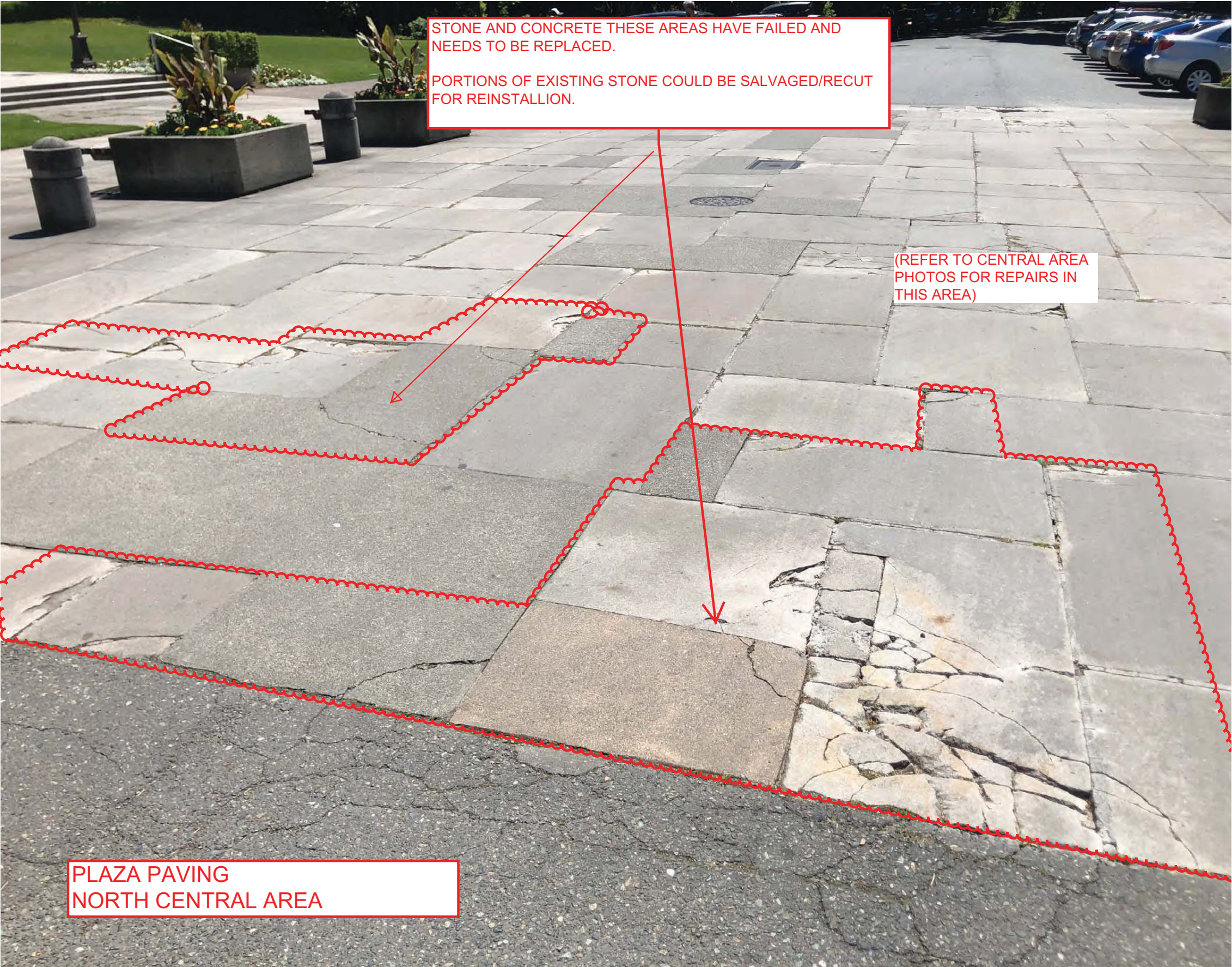


The North central plaza area also has extensive stone areas with edges and corners that have eroded or cracked to the extent that water is accumulating in the pockets and infiltrating below the stone, resulting in accelerated cracking and deterioration.

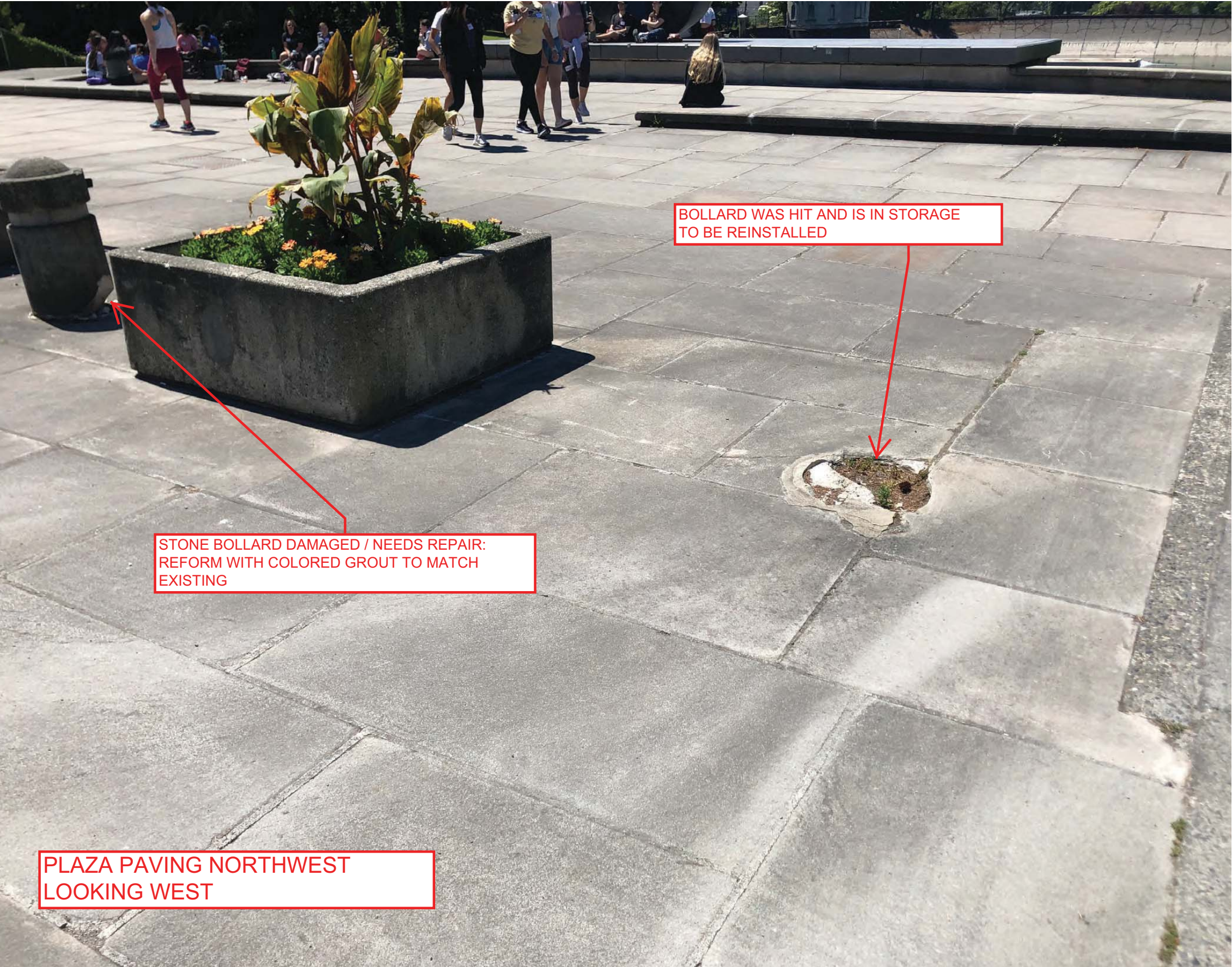
The concrete on the right-hand side of photo has some minor cracks which are not as problematic as the cracks in stone, but the concrete is proposed to be replaced here as well, if feasible within the budget.



The condition of the North plaza area is similar to the south area, with more extreme deterioration at the transition from asphalt. Note the previously replaced concrete sections evidently done at different times (one portion is colored brown while the remainder is gray.)



One existing bollard was knocked over by a vehicle and another was damaged by a vehicle. These will be reinstalled and restored to original condition.



Summary of Impacted Areas:

Red: stone needing replacement: 410 sf

Dark Blue: concrete needing replacement: 150sf

Light Blue: other concrete infills with no cracks: 80sf

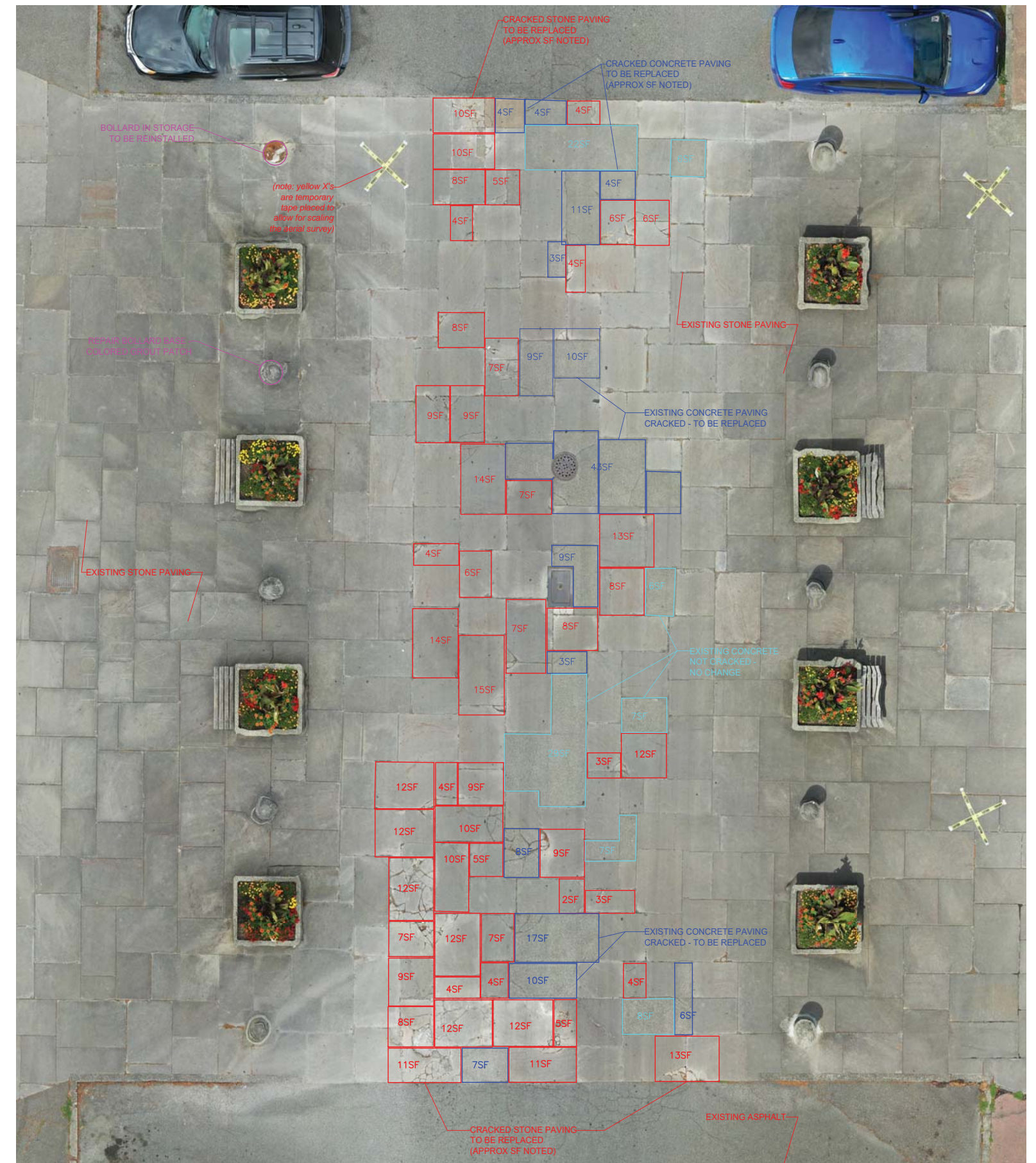
Drive area total area: 1950 sf

Total Plaza stone area: over 7,000 sf

ARC Guidance in August 13 Briefing:

1) Given the patchwork of prior concrete infills, the extent of additional deteriorated stone now needing replacement, and the poor performance of the sandstone in the primary vehicle drive area, the ARC recommended full replacement of the primary drive path with concrete constructed to maintain the scale and visual continuity of the plaza, while providing a more durable and appropriate material within the high vehicle drive areas.

2) If full concrete replacement was not feasible due to budget, the ARC indicated they would not endorse continued partial concrete replacement and would prefer limited replacement of stone with new stone.



Proposed Replacement Paving

The following pages document the proposed replacement of the central drive area with new concrete paving consistent with ARC recommendations.

The central 22 feet of the paving at the vehicle drive area is proposed to be removed, including the 3" stone plus 1" mortar bed and the 4" subgrade concrete. Existing adjacent stone will be protected during demo and new construction. New construction will consist of 8" thick concrete roadway per SDOT standards, with a control joint pattern at a scale to blend with the stone work. The concrete will be colored gray with a lightly etched finish to blend with the adjoining stone. The expansion joints isolating the concrete from the stonework will have a sanded finish to blend with the mortar, consistent with similar sanded sealant joints used in the SAAM project and elsewhere in Volunteer Park side-walks.

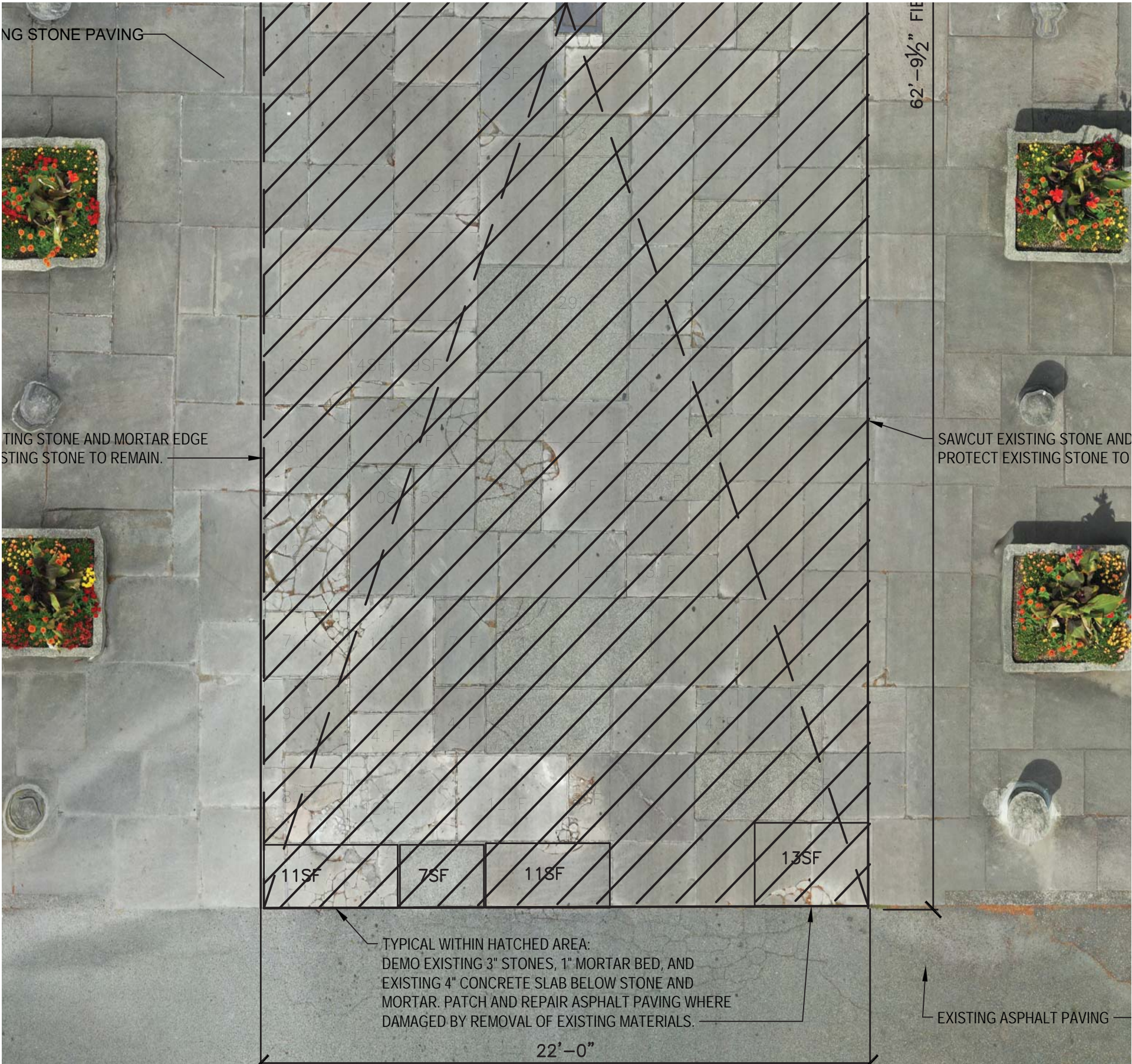
The documents presented on the following pages have been priced, and a contractor is mobilized to complete this work in Fall 2021, pending LPB approval.

VOLUNTEER PARK DRIVE PLAZA PAVING



PLAZA DEMO PLAN

The width of replaced stone is limited to the portions experiencing significant deterioration. The cut lines have been located to align well with the existing stone joints.



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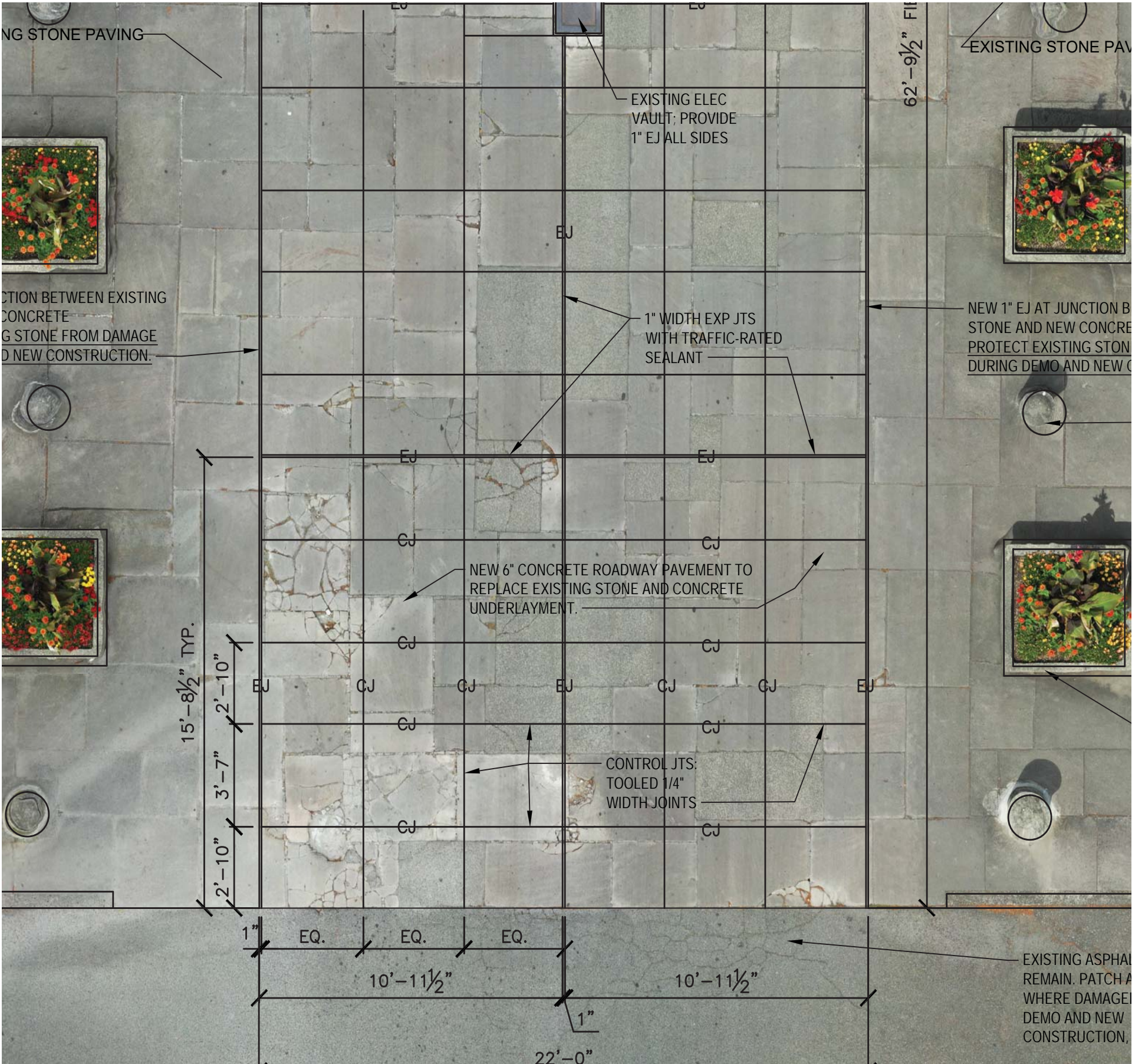
The new concrete paving is proposed to be constructed in a pattern that is similar scale to the stone without mimicing the irregular stone joint pattern.

The concrete will be colored gray with a lightly etched finish to blend with the adjoining stone.

The expansion joints isolating the concrete from the stonework will have a sanded finish to blend with the mortar, consistent with similar sanded sealant joints used in the SAAM project and elsewhere in Volunteer Park sidewalks.



The enlarged plan demonstrates the proposed concrete joint pattern which is nominally 3'-8" on center east-west spacing and alternating 2'-10" and 3'-7" spacing in the north-south direction. The scale of the panel is similar to the larger stone panels, the the alternating north-south dimensions gives some variation in scale, while avoiding a literal replication of the irregular joint patterns in the stone.



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Review Comments from Volunteer Park Trust and Friends of Seattle Olmsted Parks

Jennifer Ott, Chair of Volunteer Park Trust, reviewed the proposed changes and indicated support provided that the replacement paving was designed to blend well with the color and scale of the stone paving. She believes that extending the plaza across VP Drive was the most significant contribution by Haag to the Park, but the stone within the vehicle areas is not sustainable, and replacing the stone with concrete can maintain Haag's intent while addressing the poor performance of the stone in the traffic areas.

The Friends of Seattle Olmsted Parks were still assembling the review group to provide comments at the time of printing this presentation, and we anticipate being able to share their feedback in the ARC meeting. Preliminary review comments by a key member, Andy Mitton, was similar to Jennifer Ott's, feedback regarding support for the overall approach. He highlighted the importance of protecting the adjacent stone during the demolition and new construction.

VOLUNTEER PARK DRIVE PLAZA PAVING



Existing Concete infill within stone paving. A slightly lighter gray color than the existing infill is proposed, with a finer grained etched finish. Note the color variation in surrounding stones.



Existing pinkish concrete sidewalk at south edge of stone plaza shown as reference: apparent unsuccessful prior effort to match the pinkish cast in the stone.