University of California, Berkeley Greek Theatre Safety and Restoration Improvements Project

Addendum Number 5 to the UC Berkeley 2021 Long Range Development Plan and Housing Projects #1 and #2 Environmental Impact Report State Clearinghouse Number 2020040078

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Project Title:	Greek Theatre Safety and Restoration Improvements Project
Location:	University of California, Berkeley Alameda County
LRDP Planning Zone:	Hill Campus West
Lead Agency:	The Regents of the University of California 1111 Franklin Street, 12 th Floor Oakland, CA 94607
Contact Person:	Marissa Cheng, Director of Planning University of California, Berkeley Physical & Environmental Planning planning@berkeley.edu
Project Sponsor:	University of California, Berkeley Capital Strategies Physical and Environmental Planning 200 A&E Building Berkeley, CA 94720-1382
Certified 2021 LRDP Program EIR:	This Addendum documents that none of the conditions described in CEQA Guidelines Section 15162 have occurred and that the Proposed Project will not have any significant effects that were not already disclosed, analyzed and mitigated, as necessary, in the 2021 LRDP EIR (State Clearinghouse No. 2020040078). The 2021 LRDP is a comprehensive land use plan that guides physical development on the UC Berkeley campus to accommodate projected UC Berkeley population increases and expanded and new program initiatives. The 2021 LRDP and associated EIR are available for review at https://Irdp.berkeley.edu.

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2.1 BACKGROUND, PURPOSE, AND PROJECT OVERVIEW

The University of California (UC) Berkeley 2021 Long Range Development Plan (2021 LRDP) is a comprehensive long-range land use plan that guides physical development on the UC Berkeley campus consistent with UC Berkeley's mission, priorities, strategic goals, and campus population projections through the 2036-37 academic year. On July 22, 2021, the UC Board of Regents (the Regents) certified the 2021 LRDP environmental impact report (2021 LRDP EIR), State Clearinghouse No. 2020040078, and approved the 2021 LRDP. The 2021 LRDP EIR provides a program-level analysis of the overall proposed development and campus population projections in the 2021 LRDP (up to 8,096,249 square feet of new building space for residential, academic life, campus life, and parking facilities and 11,731 new beds), as well as a project-level analysis for two student housing projects. The two student housing projects were approved by the Regents on July 22, 2021, and September 30, 2021, respectively.

The proposed Greek Theatre Safety and Restoration Improvements Project (Proposed Project), a project to improve the safety and comfort of the existing entrance plaza (Memorial Plaza) and lawn seating, temporary support facilities, and emergency access, was identified and analyzed in the 2021 LRDP EIR and is consistent with the land uses and intensities of development contemplated in the 2021 LRDP, which prioritizes development sites in the Hill Campus West for athletics and recreation, service facilities, and campus life space.

This Addendum uses a checklist format to document that project-specific activities are covered by the 2021 LRDP EIR pursuant to CEQA Guidelines Section 15168(c), which states that subsequent activities in a program, "must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared." This Addendum and attached supporting documents have been prepared to document that the Proposed Project is consistent with the 2021 LRDP and that its potential environmental impacts are within the scope of those addressed in the 2021 LRDP EIR, pursuant to CEQA Guidelines Section 15168. This Addendum also documents that none of the conditions described in CEQA Section 21166 or CEQA Guidelines Sections 15162 or 15163 calling for preparation of a subsequent or supplemental EIR have occurred. Pursuant to the provisions of CEQA and the CEQA Guidelines, the Regents, acting as the lead agency, are charged with the responsibility of deciding whether or not to approve the proposed action.

2.2 ENVIRONMENTAL PROCEDURES

Pursuant to CEQA Section 21166 and CEQA Guidelines Section 15162, when an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR or negative declaration shall be prepared for the project unless the lead agency determines that one or more of the following conditions are met:

- Substantial project changes are proposed that will require major revisions of the previous EIR or
 negative declaration due to the involvement of new significant environmental effects or a substantial
 increase in the severity of previously identified significant effects;
- Substantial changes would occur with respect to the circumstances under which the project is undertaken that require major revisions to the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- New information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified or the negative declaration was adopted shows any of the following:
 - The project will have one or more significant effects not discussed in the previous EIR or negative declaration.
 - Significant effects previously examined will be substantially more severe than identified in the previous EIR.
 - Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponent declines to adopt the mitigation measures or alternatives.
 - Mitigation measures or alternatives that are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponent declines to adopt the mitigation measures or alternatives.

Where none of the conditions specified in Section 15162¹ are present, the lead agency must determine whether to prepare an Addendum or whether no further CEQA documentation is required (CEQA Guidelines Section 15162[b]). An Addendum is appropriate where some minor technical changes or additions to the 2021 LRDP or the previously certified EIR are necessary, but there are no new or substantially more severe significant impacts (CEQA Guidelines Section 15164).

In accordance with the CEQA Guidelines, as demonstrated in Section 3, *Project Description*, and Section 5, *Environmental Analysis*, UC Berkeley has determined that an Addendum to the 2021 LRDP EIR is appropriate for the Proposed Project.

¹ See also Section 15163 of the State CEQA Guidelines, which applies the requirements of Section 15162 to supplemental EIRs.

3.1 LOCATION AND SETTING

The site for the Proposed Project is in the City of Berkeley in Alameda County. The site is part of the UC Berkeley campus, which is organized into five zones—the Campus Park, Hill Campus West, Hill Campus East, Clark Kerr Campus, and the City Environs Properties. The site is in the Hill Campus West. Major regional roadways serving the UC Berkeley campus include Interstate 580, State Route 13, and State Route 24. Gayley Road is the main local roadway serving the project site. Figure 1, *2021 LRDP EIR Study Area*, provides a regional location map.

The project site is located in the Hill Campus West along Gayley Road, near its intersection with University Drive. The project site is bounded by Gayley Road to the west; Foothill Residence Halls and Substation #6 to the north; the Foothill Parking Lot to the east; and Bowles Hall and Stadium Rim Way to the south. The project site has been continuously occupied by the Greek Theatre since its construction in 1903. Figure 2, *Aerial View of Project Site and Surroundings*, shows the site vicinity.

3.2 PROPOSED PROJECT

Figure 3, *Site Plan*, shows the site plan for the Proposed Project's lawn improvements. The Proposed Project would renovate the Greek Theatre's existing lawn (the upper bowl) to provide safer and more comfortable seating, including the addition of accessible seating; restore a portion of the original lawn that was temporarily occupied by the Residential & Student Service Programs associated with Foothill Residence Halls; provide areas for temporary storage and other support amenities; and reconfigure the existing emergency access lane to be code compliant. The Proposed Project would also repair the paving at the existing entrance plaza (Memorial Plaza) at Gayley Road and ensure that it is accessible and well lit. The area of the project site is approximately 71,000 square feet total (63,000 square feet for the lawn improvements, and 8,000 square feet for Memorial Plaza); the area of proposed lawn seating is approximately 20,000 square feet. No permanent interior, occupiable structures would be built as a part of the Proposed Project. The Proposed Project would not increase the Greek Theatre's current seating capacity.

The Proposed Project's goals include the following:

- Increase patron safety and circulation within the seating areas
- Provide accessible path of travel from drop-off to seating
- Repair Memorial Plaza to make it accessible
- Create a better audience experience
- Provide flexible areas for concession layouts and restrooms
- Increase patron comfort and visibility to the stage
- Create a code compliant fire lane for campus safety

The Proposed Project would regrade and renovate the existing lawn as a stepped lawn with concrete curbs. Regrading the lawn to a 4:1 slope (from the existing 2.6:1 slope) would require conversion of an existing gravel/wood-chip area to lawn. Two staircases would be embedded in the lawn from the eastern edge of the lower bowl, to provide additional direct circulation into the lawn seating. The emergency/fire access lane would be reconfigured to meet current codes, including the delineation of a dedicated hammerhead turnaround; the emergency access lane would be paved with concrete. Two temporary seating areas, located at the northern and southern corners of the upper bowl within areas planted with trees, would provide more seating options for theatre patrons. However, the Proposed Project would not increase the Greek Theatre's current maximum occupancy of 8,500 patrons and 225 performers and staff.

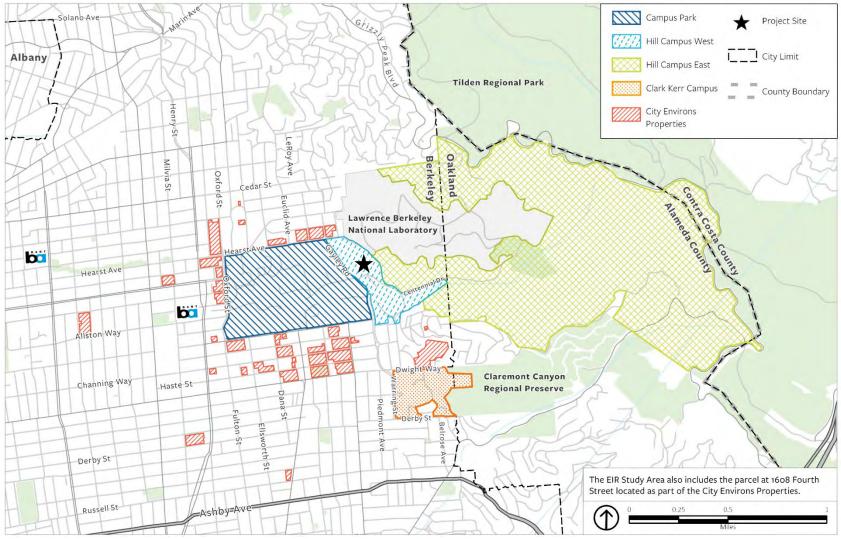
The Proposed Project would remove and replace the main entrance plaza (Memorial Plaza) to the Greek Theatre, in order to ensure that the plaza is accessible according to current codes, and to create an accessible path of travel. The existing paving would be partially replaced with concrete slabs to achieve the accessible path of travel, and would be similar in appearance to the existing paving. The Proposed Project would also improve existing lighting conditions to improve pedestrian safety, by replacing light fixtures as needed.

The proposed landscape, utility, and circulation plans would require removal of 23 trees and relocation of up to 27 trees associated with the upper bowl lawn improvements. Five trees would be protected in place, also associated with the upper bowl lawn improvements. One tree that would be removed has been determined to be a specimen tree. In accordance with UC Berkeley's Specimen Tree Policy, the Proposed Project would be required to plant three new trees; the Proposed Project would plant 34 new trees, thus exceeding the requirement. The new trees would include a mix of arbutus, deodar cedar, Brisbane box, and oak trees; the lawn area would be planted with fescue-bluegrass mix. All plantings would adhere to campus design standards and policies, such as using drought-tolerant plantings. An existing electrical shed structure would be removed and relocated to the northern side of the lawn bowl. No changes to trees are proposed for the plaza renewal portion of the Proposed Project. The Proposed Project would comply with the University of California Sustainable Practices Policy.

The Proposed Project includes the installation of the following lights: step lights on the side walls of the new staircases, bollard lights along the edge of walkways where side walls are not planned, and pole lights at the upper plaza. Pole lights along Gayley Road would be replaced based on existing lighting conditions and pedestrian safety considerations, and would be replaced with campus standard light poles.

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Figure 1 2021 LRDP EIR Study Area



Source: Alameda County, 2019; Sasaki and Page, 2019; ESRI, 2020; PlaceWorks, 2022.

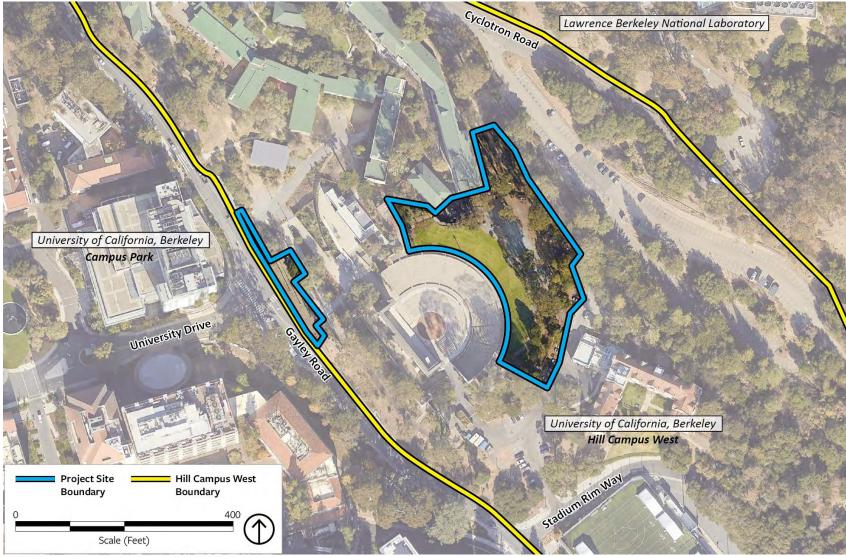
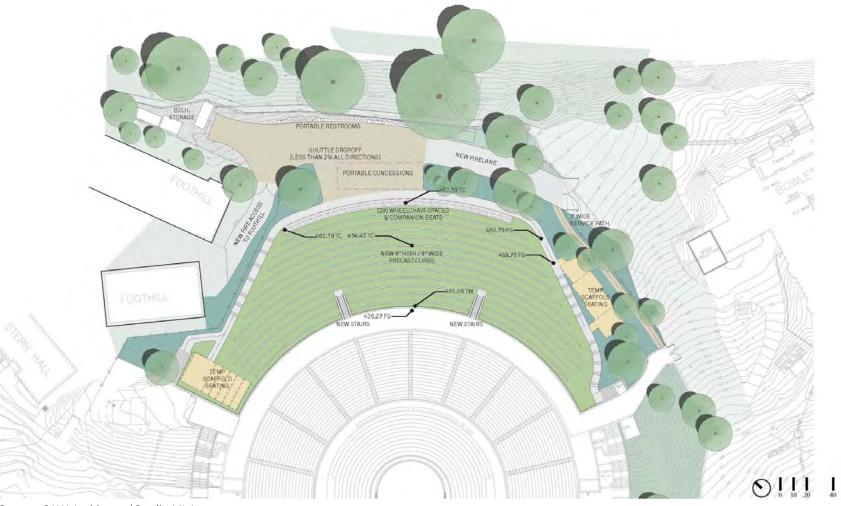


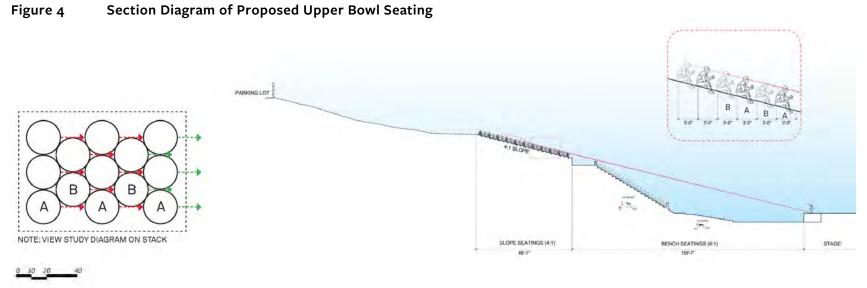
Figure 2 Aerial View of Project Site and Surroundings

Source: Google Earth, 2022 (imagery date: May 9, 2022); UC Berkeley, 2023.

Figure 3 Lawn Improvements Site Plan



Source: CAW Architects / Studio MLA, 2022.



Source: CAW Architects / Studio MLA, 2022.

4. Coverage under the 2021 LRDP EIR

To determine the Proposed Project's coverage under the 2021 LRDP EIR, this section addresses the following questions:

- 1. Is the Proposed Project consistent with the project objectives contained in the 2021 LRDP EIR?
- 2. Is the Proposed Project consistent with the UC Berkeley land uses evaluated in the 2021 LRDP EIR for the project area?
- 3. Is the amount of development associated with the Proposed Project within the development program in the 2021 LRDP EIR?
- 4. Have the conditions described in CEQA Guidelines Section 15162 calling for the preparation of a subsequent EIR occurred?

Questions one through three are addressed in the remainder of this section and question four is addressed in Section 5, *Environmental Analysis*. Section 5 contains a detailed analysis of the Proposed Project's potential environmental impacts and determines that none of the conditions in CEQA Guidelines Section 15162 calling for the preparation of a subsequent EIR have occurred.

4.1 OBJECTIVES CONSISTENCY

The 2021 LRDP EIR contains the following goals and objectives relevant to the Proposed Project.

- Goals:
- Maintain and enhance the image and experience of the physical campus, and support the continuing evolution of the campus's notable and historic landscapes and architecture.
- Plan every new project including renovations, additions, and new construction to support optimal investment of resources, meet space needs, address deferred maintenance, and reduce seismic risk.
- Objectives:
 - Modernize and adapt existing buildings through strategic renovation projects that support current and future needs and pedagogies, and to improve space utilization and efficiency. Take advantage of these opportunities to maximize long-term flexibility.
 - Support and maintain the existing housing and campus life facilities in the Hill Campus West with selective renovation, expansion, or redevelopment on previously developed sites. Land uses in this zone should leverage its proximity to the Campus Park.
 - Prioritize projects that improve the landscape and circulation in the area, and that address life-safety concerns, particularly those related to seismic safety and wildfire prevention.

- Steward historic resources while addressing long-term program needs in support of UC Berkeley's mission. To the extent possible, apply the Secretary of the Interior's *Standards for the Treatment of Historic Properties* to historically significant elements when making building improvements, and integrate flexibility into potential projects to allow buildings to adapt to uses that may evolve over time.
- Apply best practices when modifications are planned for buildings or landscapes that are listed on the National Register of Historic Places or that are eligible for listing. For modifications to historic resources, utilize the Secretary of the Interior's Standards for the Treatment of Historic Properties. Continue to prepare historic resource evaluations as needed for appropriate buildings and landscapes, including buildings that will be fifty or more years old by the LRDP EIR horizon year of 2036-2037.
- Preserve and strengthen campus landscape and open space systems, in coordination with new development and major renovations, and with mobility and infrastructure systems. Continue to invest in the maintenance, restoration, and renewal of landscape and open space features, and consider opportunities to reinforce and expand areas that contribute to interaction, recreation, and research.
- Develop legible, convenient, accessible, and safe circulation networks that prioritize pedestrian, bicycle and transit access to the campus, and that are integrated with broader regional transportation networks.
- o Incorporate universal design within all capital projects to the greatest extent feasible.
- Continue to plan for emergency access and response to address major events that impact campus facilities.

The Proposed Project would support these goals and objectives as follows:

- The Proposed Project would renew and renovate the existing entrance plaza (Memorial Plaza) and upper bowl seating area at the Greek Theatre, in the Hill Campus West. It would also bring the existing fire lane access into compliance with current building codes.
- The Proposed Project would improve life safety, accessibility, and user comfort at the Greek Theatre, while respecting character-defining features of this historic resources in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties*. The Proposed Project would restore a small portion of the lawn that was part of the Greek Theatre when originally built, but was temporarily in use by the Residential & Student Services Programs. The Proposed Project would also renew Memorial Plaza while making it accessible.
- The Proposed Project would maintain and renew the tree canopy by relocating and replacing trees that conflict with accessibility and emergency access code requirements. The Proposed Project would also minimize wildfire hazards by removing existing eucalyptus trees in the Wildland Urban Interface, and by replacing them with species that are more resistant to wildfire, including arbutus trees, deodar cedar, Brisbane box trees, and multiple species of oak trees.
- The Proposed Project has been designed to improve circulation within the Greek Theatre's seating areas and within Memorial Plaza.

4.2 UC BERKELEY LAND USE CONSISTENCY

The 2021 LRDP organizes UC Berkeley campus land uses into the following categories: residential, academic life, campus life, parking, and open space. The Proposed Project would not change the Greek Theatre's existing land use of campus life. The Proposed Project is therefore consistent with the land uses evaluated in the 2021 LRDP EIR.

4.3 DEVELOPMENT PROGRAM CONSISTENCY

The 2021 LRDP plans for up to 8,096,249 net new gross square feet (GSF) of residential, academic life, campus life, and parking facility space to be developed within the area governed by the 2021 LRDP, including up to 22,000 net new GSF of new campus space in the Hill Campus West. The Proposed Project would construct no net new permanent interior, occupiable space. Therefore, the Proposed Project would result in total development within levels anticipated in the 2021 LRDP EIR. The 2021 LRDP also projected a total UC Berkeley campus population of 67,200 students and employees. The Proposed Project would not increase the current maximum occupancy of the Greek Theatre at any given event. Therefore, the UC Berkeley campus population would remain within levels analyzed in the 2021 LRDP EIR.

With respect to site-specific projections, the Proposed Project was included in the 2021 LRDP EIR as a potential redevelopment project. Specifically, the Proposed Project was identified as project HW3 in the Hill Campus West and was conceptually planned for 15,000 GSF of campus life space with up to two stories above grade. Table 1, *Comparison of 2021 LRDP EIR Buildout and Proposed Project*, compares the Proposed Project to project HW3 in the 2021 LRDP EIR. As shown in Table 1, the Proposed Project would result in total development within levels anticipated in the 2021 LRDP EIR.

Project Description	2021 LRDP EIR Buildout	Proposed Project
Project Characteristics		
Type of Project	Redevelopment	Redevelopment
Uses	Campus Life	Campus Life
Maximum Occupancy (patrons)	8,500	8,500
Average Maximum Occupancy (performers/staff)	225	225
Project Dimensions		
Net New Square Footage	15,000	0
Beds	0	0
Parking Spaces	0	0
Stories Above Grade	2	n/a*

TABLE 1 COMPARISON OF 2021 LRDP EIR BUILDOUT AND PROPOSEI	D PROJECT
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Note: All numbers represent total buildout numbers, not net new, unless otherwise specified.

^{*} The Proposed Project does not include any permanent interior space.

Source: UC Berkeley, 2022.

5.1 ENVIRONMENTAL EVALUATION OF THE PROPOSED PROJECT

This Addendum documents that the Proposed Project would not result in any new significant environmental impacts, an increase in the severity of significant impacts previously identified and studied in the 2021 LRDP and 2021 LRDP EIR, or require the adoption of any new or considerably different mitigation measures or alternatives. Accordingly, this Addendum is the appropriate form of environmental review for the Proposed Project. This Addendum has been prepared to satisfy the requirements of CEQA Guidelines Sections 15164(a), 15164(d), and 15164(e).

The sections below provide an evaluation of the environmental impacts of the Proposed Project and are organized to correspond with the standards of significance in the 2021 LRDP EIR, consistent with Appendix G, *Environmental Checklist Form*, of the CEQA Guidelines. Each section contains a summary of the findings of the evaluation, organized into the following columns:

- Level of Impact for the 2021 LRDP in the 2021 LRDP EIR presents the level of significance identified for the 2021 LRDP in the 2021 LRDP EIR, using the following acronyms:
 - NI = no impact. For these topics, there is no adverse effect on the environment.
 - LTS = less than significant. These effects are noticeable but do not exceed established or defined thresholds, and no mitigation is required.
 - LTS/M = less than significant with mitigation. For these circumstances, an established or defined threshold would be exceeded and a significant impact would occur; mitigation is required and would reduce the impact to a less-than-significant level.
 - SU = significant and unavoidable. For these topics, a significant impact would occur, and continuing best practices (CBPs) and/or feasible mitigation measures would not diminish these effects to less-than-significant levels.
- Environmental Effects of the Proposed Project presents the level of significance identified for the Proposed Project based on the evaluation in this Addendum, using the following categories:
 - New Less-than-Significant Impact. The Proposed Project would have a noticeable but less-thansignificant effect on the environment that was not identified for the 2021 LRDP in the 2021 LRDP EIR.
 - Same Impact as 2021 LRDP. The Proposed Project would create the same level of impact identified for the 2021 LRDP in the 2021 LRDP EIR.
 - Less Impact than 2021 LRDP. The Proposed Project would create a noticeable effect on the environment, with a lesser level of impact than was identified for the 2021 LRDP in the 2021 LRDP EIR.
 - **Topic Not Applicable to the Proposed Project**. The Proposed Project would not have the potential to create an impact on an environmental topic that was evaluated in the 2021 LRDP EIR.

The Proposed Project is subject to all mitigation measures and continuing best practices (CBPs) in the 2021 LRDP EIR, as applicable. Please see Appendix A, *Applicable Program-Level Mitigation Measures and Continuing Best Practices*, of this Addendum.

5.1.1 AESTHETICS

Would the Proposed Project:

	Level of	Enviro	nmental Effects	of the Propos	ed Project
Environmental Issues	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project
Topics Determined to Have No Impact in the 2021 LRDI	P EIR				
Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	NI		x		
Topics Evaluated in the 2021 LRDP EIR					
AES-1: Have a substantial adverse effect on a scenic vista?	LTS		х		
AES-2: In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	LTS		x		
AES-3: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	LTS/M		x		
AES-4: In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact?	LTS		х		

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable

Summary of Analysis

No new significant or more severe impact than analyzed in the 2021 LRDP EIR.

Discussion

Topics Determined to Have No Impact in the 2021 LRDP EIR

The topic of scenic highways has been screened out from further evaluation in this Addendum because the EIR Study Area is not on or within the viewshed of a State scenic highway.² Consequently, there would be no impacts to scenic highways. See Section 7.1.1, *Aesthetics*, of the 2021 LRDP EIR.

Topics Evaluated in the 2021 LRDP EIR

AES-1: The 2021 LRDP EIR identified a less-than-significant impact at the program level for the 2021 LRDP with respect to adverse effects on scenic vistas. Scenic vistas are limited to those accessible by the general public; within the EIR Study Area, these include views from fire roads and vehicle turnouts within the Hill Campus East and West, which provide views toward the San Francisco Bay from a higher elevation than the rest of the City of Berkeley. The Proposed Project would result in adverse effects related to scenic quality if it were to result in a substantial adverse effect on a scenic vista or conflict with applicable zoning or other regulations governing scenic quality. The Proposed Project was evaluated by a historic preservation architect and was found to maintain the significant historic character of the Greek Theatre's Upper Landscape area and of the Upper Promenade retaining wall. The repairs to Memorial Plaza would maintain the historic character of the 1957 Born addition paving materials (exposed aggregate concrete and basalt accent strips) and design. The Proposed Project would plant 11 more trees than it would remove, improving the appearance of the Upper Landscape area. Additionally, the Proposed Project would not be visible from public areas off site, and it would not impact off-site views to the west toward the San Francisco Bay from the upper bowl and lawn area. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact

AES-2: The 2021 LRDP EIR identified a less-than-significant impact at the program level for the 2021 LRDP with respect to adverse effects on visual character of the site. The Proposed Project would result in adverse effects related to scenic quality if it were to conflict with applicable zoning or other regulations governing scenic quality. The Proposed Project conforms with UC Berkeley's Physical Design Framework, consistent with CBP AES-1. It would improve accessibility through site improvements, and maintain an appropriate landscape buffer around the Greek Theatre lawn to preserve the character of the site. The Proposed Project would enhance the Greek Theatre's landscape resilience by replacing eucalyptus trees with native, drought-tolerant, and fire-resilient species, consistent with CBP AES-3 to enhance the visual quality of mapped high fire risk zones. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

AES-3: The 2021 LRDP EIR identified a less-than-significant impact with mitigation at the program level for the 2021 LRDP with respect to new sources of substantial light or glare. The Proposed Project would result

² California Department of Transportation California Scenic Highways Program, Scenic Highway System Lists, List of eligible and officially designated State Scenic Highways, https://dot.ca.gov/programs/design/lap-landscape-architecture-and-communitylivability/lap-liv-i-scenic-highways, accessed February 28, 2020.

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in an adverse effect if it created a new source of substantial light or glare which would adversely affect day or nighttime views in the area. The Proposed Project's lighting includes the replacement of four existing mast type lights with multiple heads at the western edge of the lawn; step lights on the side walls of new stairs; bollard lights along walkways where side walls are not planned; and pole lights at the upper plaza. The goal of the Proposed Project's lighting fixtures is to provide appropriate lighting for egress at Memorial Plaza and the lawn area, and to provide general low-level lighting within the lawn area and environs during events. Consistent with CBP AES-6 and CBP AES-7, all fixtures would comply with Dark Sky guidelines and the lighting design includes shields and cut-offs that minimize light spillage onto unintended surfaces, and minimize atmospheric light pollution. Tree locations have been selected for the eastern side of the upper bowl such that they provide additional screening. Overall, lighting fixtures and tree locations would limit glare into the adjacent Foothill Residence Hall. Therefore, the Proposed Project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area, and would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

AES-4: The 2021 LRDP EIR identified a less-than-significant cumulative impact for the 2021 LRDP with respect to aesthetic impacts. The cumulative setting for the Proposed Project is buildout under the 2021 LRDP, and the Proposed Project would not result in additional development beyond what was analyzed in the 2021 LRDP EIR. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

5.1.2 AGRICULTURE AND FORESTRY RESOURCES

	Level of	Level of Environmental Effects of the Proposed Project			ed Project
Environmental Issues Topics Determined to Have No Impact in the 2021 LRD	Impact for the 2021 LRDP in the 2021 LRDP EIR P FIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project
Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	NI		x		
Conflict with existing zoning for agricultural use, or a Williamson Act contract?	NI		х		
Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	NI		x		
Result in the loss of forest land or conversion of forest land to non-forest use?	NI		x		

Would the Proposed Project:

Would the Proposed Project:

	Level of	Enviro	nmental Effects	of the Propos	ed Project
Environmental Issues	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project
Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	NI		x		

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable

Summary of Analysis

No new significant or more severe impact than analyzed in the 2021 LRDP EIR.

Discussion

Topics Determined to Have No Impact in the 2021 LRDP EIR

The 2021 LRDP EIR did not analyze impacts to agriculture and forestry resources because the EIR Study Area is primarily in an urbanized setting, and approval and implementation of the 2021 LRDP, including the Proposed Project, would have no impact on agriculture and forestry resources. Accordingly, this issue is not discussed further in this Addendum. See Section 7.1.2, *Agricultural and Forestry Resources*, of the 2021 LRDP EIR.

5.1.3 AIR QUALITY

Would the Proposed Project:

		Level of	Enviro	nmental Effects	of the Propos	ed Project
	Environmental Issues	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project
	s Evaluated in the 2021 LRDP EIR		1	n	n	
AIR-1:	Conflict with or obstruct implementation of the applicable air quality plan?	SU		х		
AIR-2:	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	SU		×		
AIR-3:	Expose sensitive receptors to substantial pollutant concentrations?	SU		х		
AIR-4:	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	LTS		х		

Would the Proposed Project:

	Level of	Environmental Effects of the Proposed Project			
Environmental Issues	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project
AIR-5: In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact.	LTS		x		

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable

Summary of Analysis

No new significant or more severe impact than analyzed in the 2021 LRDP EIR.

Discussion

Topics Evaluated in the 2021 LRDP EIR

AIR-1 and AIR-2: The 2021 LRDP EIR identified a significant and unavoidable impact at the program level regarding consistency with the Bay Area Air Quality Management District's *2017 Clean Air Plan: Spare the Air, Cool the Climate* (2017 Clean Air Plan) because the 2017 Clean Air Plan does not directly account for UC Berkeley's development program. Because the Proposed Project would not result in additional development beyond what was analyzed in the 2021 LRDP EIR, the Proposed Project would improve safety and patron comfort at the existing Greek Theatre facility without increasing its current maximum occupancy. Thus, the Proposed Project would not substantially affect housing, employment, or population projections in the region that are the basis of the 2017 Clean Air Plan projections.

The 2021 LRDP EIR identified significant and unavoidable impacts at the program level associated with the generation of fugitive dust, construction equipment exhaust, and reactive organic gases (ROG) emissions during construction and operation of development under the 2021 LRDP. The Proposed Project would not result in additional development beyond what was analyzed in the 2021 LRDP EIR. Construction and operation of the Proposed Project would result in criteria air pollutant emissions. As required by 2021 LRDP EIR Mitigation Measure AIR-2.1, off-road diesel-powered construction equipment with more than 50 horsepower used for the Proposed Project would meet the United States Environmental Protection Agency Tier 4 Final emissions standards or higher, where commercially available. In addition, construction of the Proposed Project would adhere to CBP AIR-2 and CBP AIR-3, which require control measures for fugitive dust control and to reduce emissions of diesel particulate matter and ozone precursors. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

AIR-3: The 2021 LRDP EIR identified a significant and unavoidable impact at the program level associated with construction-related health risks. Mitigation Measure AIR-3.1, which requires a construction health risk

assessment (HRA) to be prepared, is not applicable to the Proposed Project because the project would not involve more than 12 months of active construction. However, as described above, the Proposed Project would comply with Mitigation Measure AIR-2.1, which requires off-road diesel-powered construction equipment with more than 50 horsepower to meet the United States Environmental Protection Agency Tier 4 Final emissions standards or higher, where commercially available. With mitigation, the Proposed Project would not expose off-site sensitive receptors to substantial concentrations of air pollutant emissions during construction. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

AIR-4: The 2021 LRDP EIR identified a less-than-significant impact associated with the generation of substantial odors that would affect a substantial number of people. The type of facilities that are typically considered to have objectionable odors include wastewater treatment plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities. The Proposed Project's uses are not associated with foul odors that constitute a public nuisance. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

AIR-5: The 2021 LRDP EIR identified a less-than-significant cumulative impact for the 2021 LRDP with respect to toxic air contaminants. The cumulative setting for the Proposed Project is buildout under the 2021 LRDP, and the Proposed Project would not result in additional development beyond what was analyzed in the 2021 LRDP EIR. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

5.1.4 BIOLOGICAL RESOURCES

Would the Pro	posed Project:
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	Level of	Environmental Effects of the Proposed Project					
Environmental Issues	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project		
Topics Determined to Have No Impact in the 2021 LRD	PEIR	r	1	1	1		
Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	NI		x				
Topics Evaluated in the 2021 LRDP EIR	Topics Evaluated in the 2021 LRDP EIR						
BIO-1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	LTS		x				

Would the Proposed Project:

		Level of	Environmental Effects of the Proposed Project			
	Environmental Issues	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project
BIO-2:	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	LTS		x		
BIO-3:	Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	LTS		х		
BIO-4:	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	LTS/M		х		
BIO-5:	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	NI		х		
BIO-6:	In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact?	LTS		х		

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable

Summary of Analysis

No new significant or more severe impact than analyzed in the 2021 LRDP EIR.

Discussion

Topics Determined to Have No Impact in the 2021 LRDP EIR

Since the 2021 LRDP was approved and the EIR was certified, no local, regional, or State conservation plans have been approved that encompass the EIR Study Area, including the site of the Proposed Project. Accordingly, no further analysis regarding this standard of significance and the Proposed Project is required, and this issue is not discussed further in this Addendum. See Section 7.1.3, *Biological Resources*, of the 2021 LRDP EIR.

Topics Evaluated in the 2021 LRDP EIR

BIO-1 through BIO-3: The 2021 LRDP EIR identified less-than-significant impacts for the 2021 LRDP with respect to special-status plant species, riparian habitat or other sensitive natural communities, and federally protected wetlands. No special-status plant species, riparian habitat, other sensitive natural communities, or

regulated waters occur within the Proposed Project site due to the extent of past development and its location in an urbanized setting. Furthermore, the Proposed Project would adhere to CBP BIO-1 to avoid disturbance or removal of bird nests protected under the federal Migratory Bird Treaty Act and California Department of Fish and Game Code. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

BIO-4: The 2021 LRDP EIR identified a less-than-significant impact with mitigation concerning movement of wildlife species, wildlife corridors, and native wildlife nursery sites. Given the urbanized location of the Proposed Project, no adverse impacts on wildlife movement opportunities are anticipated. There are no known native or protected wildlife species or their habitat documented within the Proposed Project's site, and the facility is fully enclosed by fencing. Also, the Proposed Project does not include any interior spaces or glazing that might cause bird collisions. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

BIO-5: The 2021 LRDP EIR identified no conflict with any local policies or ordinances protecting biological resources. The Proposed Project would have no impact in the same regard because UC Berkeley is not subject to local regulations. The Proposed Project would remove 23 trees and relocate 27 trees within the lawn area; the majority of the trees that would be removed are not suitable for preservation³. No trees would be affected by the Memorial Plaza area of work. The Proposed Project would plant 34 new trees comprising native, drought-tolerant, and more fire-resilient species, including arbutus trees, deodar cedars, Brisbane box trees, and multiple species of oak trees (coast live oak, blue oak, California black oak, valley oak, and cork oak). Five existing trees would be protected in place, within the lawn area. Therefore, the Proposed Project would result in a net new addition of 11 trees. As required through the implementation of CBP BIO-9, the Proposed Project would comply with the Campus Specimen Tree Program and the Campus Design Standards, which protect sensitive habitat, trees, and waterways on the UC Berkeley campus. Specifically, implementation of CBP BIO-9 requires replacement landscaping where specimen resources are adversely affected, either through salvage and transplanting of existing trees or shrubs or through new horticulturally appropriate replacement plantings, as directed by the Campus Landscape Architect. Two trees within the Proposed Project site have been designated as specimen trees: a valley oak tree and a coast redwood tree, located at the southeastern edge and southern edge of the Proposed Project site, respectively. The coast redwood tree would be removed as part of the Proposed Project. In accordance with UC Berkeley's Specimen Tree Program, the Proposed Project would be required to plant three new trees to replace the removed specimen tree. The Proposed Project would exceed the required number of new trees by planting 34 new trees. Furthermore, the Proposed Project would also adhere to CBP BIO-10 for the implementation of the recommendations of the Landscape Master Plan and subsequent updates; and CBP BIO-11's requirement for routine maintenance of trees and other vegetation. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

BIO-6: The 2021 LRDP EIR identified a less-than-significant cumulative impact for the 2021 LRDP with respect to biological resources. The cumulative setting for the Proposed Project is buildout under the 2021

³ HortScience | Bartlett Consulting, August 2022, Arborist Report, Greek Theater Upper Bowl Safety and Lawn Restoration.

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LRDP, and the Proposed Project would not result in additional development beyond what was analyzed in the 2021 LRDP EIR. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

5.1.5 CULTURAL RESOURCES

Would the Proposed Project:

	Level of	Environmental Effects of the Proposed Project				
Environmental Issues	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project	
Topics Evaluated in the 2021 LRDP EIR						
CUL-1: Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	SU		x			
CUL-2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	LTS/M		x			
CUL-3: Disturb any human remains, including those interred outside of formal cemeteries?	LTS		x			
CUL-4: In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact?	SU		x			

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable

Summary of Analysis

No new significant or more severe impact than analyzed in the 2021 LRDP EIR.

Discussion

Topics Evaluated in the 2021 LRDP EIR

CUL-1: The 2021 LRDP EIR identified a significant and unavoidable impact at the program level for the 2021 LRDP regarding a substantial adverse change in the significance of a historical resource. Because of the programmatic nature of the 2021 LRDP, future projects could result in the demolition of one or more historical resources and/or modification of one or more historical resources in a manner not in conformance with the Secretary of the Interior's Standards for Rehabilitation. The Proposed Project site is the existing Greek Theatre, which is listed on the National Register for Historic Places (NR #82004644) as part of the California Multiple Resource Area (NR #64000062). The 2021 LRDP EIR listed the Greek Theatre as a designated historic resource identified as a potential area of redevelopment or renovation in Table 5.4-8. The Proposed Project includes a permanent change to the upper bowl lawn area, which is a character-defining element of the Greek Theatre; it would regrade this area, resulting in a shallower slope and a larger lawn area. The Proposed Project has been evaluated by a historic preservation architect, and found that the Proposed Project is consistent with the Secretary of the Interior's Standards for the Treatment of Historic

Properties (see Appendix B). The following character-defining features are associated with the Upper Landscape area (the area including the lawn seating and paths, lighting booth, spectator service area, and service entrances) of the Greek Theatre:

- Retaining wall of Upper Promenade (the walkway between the concrete seating and lawn seating areas)
- Sloping grass lawn / seating area beginning at Upper Promenade retaining wall and extending eastward to the break in slope
- 23 significant trees within the Upper Landscape area, including 20 eucalyptus trees and three pine trees⁴
- Concrete north and south staircases accessing the Upper Landscape area

The Proposed Project's scope includes altering a historic structure to improve visitor accessibility, safety and emergency vehicle access. Accordingly, the Secretary of the Interior's *Standards for Rehabilitation* are applicable to the Proposed Project. The Proposed Project is in compliance with all ten Rehabilitation Standards. A summary of the analysis is included below:

• <u>Standard 1:</u> A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.

The existing Greek Theatre has been continuously used as a theater for the performing arts since its completion in 1903, and the Proposed Project would continue that use.

• <u>Standard 2:</u> The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

The Proposed Project would alter three character-defining features of the Upper Landscape area: the sloped seating area, the Upper Promenade retaining wall, and existing trees. The sloped seating area would be regraded, and two eight-foot-wide sections of the Upper Promenade retaining wall would be removed to provide more direct access to the sloped seating area. Trees would be removed and relocated from the Upper Landscape area to facilitate its regrading, and new trees would be planted to the northeast, east, and southeast of the sloped seating area, resulting a net increase of 11 trees. Therefore, the alterations included in the Proposed Project would retain the historic character of the Upper Landscape area and the Upper Promenade retaining wall.

• <u>Standard 3:</u> Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.

The concrete curbs (associated with the terraced sloped seating area) and new staircases included in the Proposed Project would be simple in design and would not include conjectural features or architectural elements from other buildings or structures.

• <u>Standard 4</u>: Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.

The Proposed Project would not involve removal of changes or new elements which have acquired historic significance since construction of the Greek Theatre in 1903.

⁴ Some trees identified in the significant tree survey in 2007 may no longer be extant at the site due to their condition.

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• <u>Standard 5</u>: Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.

Distinctive features that characterize the Upper Landscape area include its sloped, grassy seating area; treed setting with a visually indeterminate eastern boundary; and clear western boundary at the Upper Promenade retaining wall. The Proposed Project would substantially maintain the character of these distinctive features.

• <u>Standard 6:</u> Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

The Proposed Project would not replace or repair deteriorated historic features.

• <u>Standard 7</u>: Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

The Proposed Project does not include chemical or physical treatments to historic materials.

- <u>Standard 8:</u> Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
 The Proposed Project would be subject to 2021 LRDP EIR Mitigation Measure CUL-2, which includes procedures to be implemented in the event of discovery of archaeological resources during project activities.
- <u>Standard 9</u>: New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

The Proposed Project includes the installation of concrete curbs at the sloped seating area; two concrete staircases to provide access to the sloped seating area; two concrete staircases at the north and south sides of the sloped seating area; a concrete accessible seating area to the east of the sloped seating area; and a paved emergency vehicle access route at the far east of the Upper Landscape area. These features would be colored to approximate the shade of the existing historic amphitheater and Upper Promenade retaining wall, but would not precisely match the coarse texture of the existing, historic features. The existing vehicle circulation area, which would be replaced by a paved emergency vehicle access route, is not a historic feature.

• <u>Standard 10:</u> New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

If the features identified in the discussion for Standard 9 were removed in the future, the sloped character of the Upper Landscape area, and the ability of the Upper Promenade retaining wall to serve as a visual boundary between the amphitheater and the Upper Landscape area, would be unimpaired.

The Proposed Project includes the repair of the entrance plaza (Memorial Plaza) to make it accessible. Memorial Plaza is the main entrance to the Greek Theatre and is paved with exposed aggregate concrete and basalt accent strips. The plaza is surrounded by concrete retaining walls on three sides, and the eastern concrete wall has a black marble commemorative plaque affixed to it. Memorial Plaza was part of the 1957 Ernest Born addition to the original 1903 John Galen Howard design, and the plaza, the exposed aggregate concrete paving and basalt accent strips, and the marble plaque are historically significant at the local level⁵. The repair of Memorial Plaza would involve replacement of existing paving with similar materials and paving pattern, including concrete paving and basalt accent strips; the plaza would be regraded to ensure that all cross slopes are accessible and compliant with applicable codes. Any necessary light poles that are added to ensure pedestrian safety would be consistent with site lighting at the edge of the landscaped area north and east of Memorial Plaza. The Proposed Project does not include any changes to the retaining walls that enclose the plaza, or to the marble commemorative plaque.

The proposed repairs to Memorial Plaza would not change the plaza's existing use, as it will remain the main entrance to the Greek Theatre. By using materials that are consistent with existing materials, the Proposed Project would maintain distinctive materials and finishes that characterize Memorial Plaza. Therefore, the Proposed Project's plaza repairs would not alter the historic character of the plaza.

The Proposed Project is in compliance with all ten Rehabilitation Standards, as determined by the Campus Architect, as follows:

- <u>Standard 1:</u> A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment. The existing Greek Theatre has been continuously used as a theater for the performing arts since its completion in 1903, and the Proposed Project would continue that use.
- <u>Standard 2:</u> The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided. The Proposed Project would not significantly alter the character-defining Memorial Plaza, including its exposed aggregate concrete paving with basalt accent strips. Therefore, the alterations included in the Proposed Project would retain the historic character of Memorial Plaza.
- <u>Standard 3:</u> Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.

The Proposed Project would repair the existing paving using similar materials and patterning, and would not include conjectural features or architectural elements from other buildings or structures.

• <u>Standard 4</u>: Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.

The Proposed Project would not involve removal of changes or new elements which have acquired historic significance since construction of the Greek Theatre in 1903.

⁵ University of California Berkeley, 2007, Historic Structure Report, The Hearst Greek Theatre, pages 96-97.

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• <u>Standard 5</u>: Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.

Distinctive features that characterize Memorial Plaza include the exposed aggregate concrete paving and basalt accent strips, and the marble commemorative plaque. The Proposed Project would substantially maintain the character of the paving. The Proposed Project does not include any changes to the marble commemorative plaque.

• <u>Standard 6:</u> Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

The Proposed Project would replace the existing paving with similar materials and patterning.

• <u>Standard 7</u>: Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

The Proposed Project does not include chemical or physical treatments to historic materials.

- <u>Standard 8:</u> Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
 The Proposed Project would be subject to 2021 LRDP EIR Mitigation Measure CUL-2, which includes procedures to be implemented in the event of discovery of archaeological resources during project activities.
- <u>Standard 9</u>: New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

The Proposed Project would replace the existing paving with similar materials and patterning that would protect the historic integrity of Memorial Plaza.

• <u>Standard 10:</u> New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

The Proposed Project's Memorial Plaza repairs do not include any new additions or new construction.

Implementation of 2021 LRDP EIR Mitigation Measure CUL-1.1e would ensure that construction vibration does not negatively affect any nearby historic structures. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

CUL-2: The 2021 LRDP EIR identified a less-than-significant impact with mitigation concerning archaeological resources. The archaeological sensitivity analysis for the 2021 LRDP EIR identified 5 percent of the Hill Campus (West and East combined) as moderately to extremely sensitive. The Proposed Project

site is considered to have a low sensitivity for subsurface prehistoric-era archaeological resources⁶ However, soils beneath the project site could contain potentially significant prehistoric archaeological resources, which the Proposed Project has the potential to disturb. As required by 2021 LRDP EIR Mitigation Measure CUL-2, the Proposed Project would implement control measures during ground-disturbing activities to ensure that potential impacts to archaeological resources will be less than significant. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

CUL-3: The 2021 LRDP EIR identified a less-than-significant impact with respect to the disturbance of human remains. Though ground-disturbing activities, such as site grading and trenching for utilities, have the potential to disturb human remains interred outside of formal cemeteries, the Proposed Project would adhere to CBP CUL-1, under which any human remains encountered during ground-disturbing activities would be required to be treated in accordance with California Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98, and the California Code of Regulations Section 15064.5(e) (CEQA). Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

CULT-4: The 2021 LRDP EIR identified a significant and unavoidable cumulative impact for the 2021 LRDP with respect to cultural resources. The cumulative setting for the Proposed Project is buildout under the 2021 LRDP, and the Proposed Project would not result in additional development beyond what was analyzed in the 2021 LRDP EIR. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

5.1.6 ENERGY

	Level of	Enviro	onmental Effects of the Proposed Project			
Environmental Issues	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project	
Topics Evaluated in the 2021 LRDP EIR						
ENE-1: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	LTS		×			
ENE-2: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	NI		x			
ENE-3: In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact?	LTS		x			

Would the Proposed Project:

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable

⁶ University of California Berkeley, July 2021, UC Berkeley 2021 Long Range Development Plan and Housing Projects #1 and #2 Environmental Impact Report, State Clearinghouse No. 2020040078, page 5.4-14.

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Summary of Analysis

No new significant or more severe impact than analyzed in the 2021 LRDP EIR.

Discussion

Topics Evaluated in the 2021 LRDP EIR

ENE-1 and ENE-2: The 2021 LRDP EIR identified a less-than-significant impact at the program level for the 2021 LRDP regarding wasteful, inefficient, or unnecessary consumption of energy resources, and no impacts concerning conflicts with State or local plans for renewable energy or energy efficiency. The Proposed Project would comply with the University of California Sustainable Practices Policy. The Proposed Project would incorporate electrification and would not involve the addition of any hot water service or space heating, and thus would not use natural gas for hot water generation or space heating, to comply with the fossil-fuel-free provision of the Sustainable Practices Policy. During construction, the Proposed Project would use a combination of gas- or diesel-powered and electric equipment. Transportation energy use during construction would come from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction employee vehicles that use diesel fuel and/or gasoline. Overall, use of all construction equipment would cease upon completion of project construction. Thus, impacts related to electricity and transportation fuel use during construction would be temporary and would not require expanded energy supplies or the construction of new infrastructure. Furthermore, to limit wasteful and unnecessary energy consumption, the construction contractors would minimize nonessential idling of construction equipment, in accordance with Section 2449 of the California Code of Regulations, Title 13, Article 4.8, Chapter 9, and as required by CBP AIR-3. Such required practices would limit wasteful and unnecessary energy consumption during construction.

Electrical service to the Proposed Project would be provided by campus substation #6 through connections to existing off-site electrical lines and new on-site infrastructure. The Proposed Project would add minimal electricity demand for egress. Step lights on the side walls of the new staircases, and bollard lights along the edge of walkways where side walls are not planned, would be added, and would not be brighter than one foot-candle. Pole lights at the upper plaza would provide low-level lighting during events. Improvements to existing pole lights along Gayley Road or within the entrance plaza would provide lighting for pedestrian safety. The Proposed Project has been designed to minimize energy demand to the extent feasible. The Proposed Project would, at minimum, comply with the current Building Energy Efficiency Standards and the California Green Building Standards Code (CALGreen). In addition, the Proposed Project proposes to obtain a minimum LEED[™] Gold rating.⁷ Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

⁷ Leadership in Energy and Environmental Design or LEED provides a framework for healthy, efficient, carbon and cost-saving green buildings. LEED certified buildings save money, improve efficiency, lower carbon emissions and create healthier places for people.

ENE-3: The 2021 LRDP EIR identified a less-than-significant cumulative impact for the 2021 LRDP with respect to energy. The cumulative setting for the Proposed Project is buildout under the 2021 LRDP, and the Proposed Project would not result in additional development beyond what was analyzed in the 2021 LRDP EIR. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

5.1.7 GEOLOGY AND SOILS

Would the Proposed Project:

		Level of	Enviro	nmental Effects	of the Propos	ed Project
	Environmental Issues	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project
Topics	Determined to Have No Impact in the 2021 LRD	P EIR				
septic ta	ils incapable of adequately supporting the use of anks or alternative wastewater disposal systems ewers are not available for the disposal of ater?	NI		x		
Topics	Evaluated in the 2021 LRDP EIR					
GEO-1:	 Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: a) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. b) Strong seismic ground shaking? c) Seismic-related ground failure, including liquefaction? d) Landslides? 	LTS		x		
GEO-2:	Result in substantial soil erosion or the loss of topsoil?	LTS		x		
GEO-3:	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	LTS		x		
GEO-4:	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	LTS		x		
GEO-5:	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	LTS/M		х		

Would the Proposed Project:

		Level of	Environmental Effects of the Proposed Project			
	Environmental Issues	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project
GEO-6:	In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact?	LTS		x		

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable

Summary of Analysis

No new significant or more severe impact than analyzed in the 2021 LRDP EIR.

Discussion

Topics Determined to Have No Impact in the 2021 LRDP EIR

The topic of alternative wastewater disposal systems has been screened out from further evaluation because the potential future development under the 2021 LRDP, including the Proposed Project, would not include the use of septic tanks or alternative wastewater disposal systems. Therefore, no impact would occur regarding soil capability to adequately support the use of septic tanks or alternative wastewater disposal systems, and this issue is not discussed further in this Addendum. See Section 7.1.4, *Geology and Soils*, of the 2021 LRDP EIR.

Topics Evaluated in the 2021 LRDP EIR

GEO-1 though GEO-4: The 2021 LRDP EIR identified less-than-significant impacts at the program level for the 2021 LRDP with respect to the creation or exacerbation of fault rupture, earthquake ground shaking, liquefaction and related ground failure, and landslides; substantial soil erosion; location on an unstable geologic unit; or location on expansive soil. The Proposed Project site is not subject to landslide hazards, and the probability of subsidence impacts is generally low due to the generally uniform vertical movement in the area surrounding the project site. The Proposed Project site is located within the Alquist-Priolo Earthquake Fault Zone (AP Zone) that surrounds the Hayward fault. As noted in the Proposed Project's geotechnical assessment⁸, previous subsurface investigations indicate that the main active traces of the Hayward fault are located east of the locations where the Proposed Project's temporary structures would be located. The Proposed Project site would not be subject to landslide hazards. The Proposed Project would be required to implement construction phase best management practices (BMPs) as well as post-construction site design, source-control, and treatment control measures in accordance with applicable permit requirements, such as low-impact development (LID) measures. The Proposed Project would adhere to CBP GEO-1, CBP GEO-2, CBP GEO-6, CBP GEO-9, and CBP GEO-10. These CBPs require compliance with

⁸ A3GEO, February 2021, Geotechnical Investigation Report, Greek Theatre Upper Lawn Project, page 2.

the California Building Code (CBC) and the UC Seismic Safety Policy; incorporation of recommendations for geotechnical hazard prevention in required site-specific geotechnical studies; review of all seismic and structural engineering designs; use of site-specific seismic ground motions for analysis and design; and implementation of programs and projects in emergency planning, training, response, and recovery. Furthermore, the Proposed Project would be required to comply with the Campus Design Standards, which contain regulatory and other requirements for construction-phase and post-construction stormwater management to reduce erosion, as described in CBP GEO-9.

The expansion potential of the clay soils in the 2021 LRDP EIR Study Area varies from low to critically high.⁹ Therefore, the Proposed Project has potential to expose people to hazards associated with expansive soils. However, such impacts would be avoided through compliance with the CBC and the University of California Seismic Safety Policy, as required by CBP GEO-1. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

GEO-5: The 2021 LRDP EIR identified a less-than-significant impact with mitigation concerning paleontological resources. The project site is previously developed, which contributes to the low likelihood of unearthing a paleontological resource. The project site is located in the Undivided Great Valley complex, dating to the Cretaceous period, which is considered a sensitive geologic formation for paleontological resources. As required by 2021 LRDP EIR Mitigation Measure GEO-5, UC Berkeley would provide a paleontological resources awareness training program to all construction personnel active on the project site during earth-moving activities. Furthermore, the Proposed Project would adhere to the procedures in CBP GEO-10, to be followed in the event that a unique paleontological resource is discovered. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

GEO-6: The 2021 LRDP EIR identified a less-than-significant cumulative impact for the 2021 LRDP with respect to geology and soils. The cumulative setting for the Proposed Project is buildout under the 2021 LRDP, and the Proposed Project would not result in additional development beyond what was analyzed in the 2021 LRDP EIR. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

⁹ University of California Berkeley, July 2021, UC Berkeley 2021 Long Range Development Plan and Housing Projects #1 and #2 Environmental Impact Report, State Clearinghouse No. 2020040078, page 5.6-33.

UC BERKELEY 2021 LONG RANGE DEVELOPMENT PLAN AND HOUSING PROJECTS #1 AND #2 EIR ADDENDUM NO. 5

5.1.8 GREENHOUSE GAS EMISSIONS

Would the Proposed Project:

		Level of	Enviro	nmental Effects	s of the Propos	ed Project
	Environmental Issues	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project
Topics I	Evaluated in the 2021 LRDP EIR					
GHG-1:	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	LTS		х		
GHG-2:	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	LTS/M		x		
GHG-3:	In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact?	LTS		х		

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable

Summary of Analysis

No new significant or more severe impact than analyzed in the 2021 LRDP EIR.

Discussion

Topics Evaluated in the 2021 LRDP EIR

GHG-1: The 2021 LRDP EIR identified less-than-significant impacts at the program level for the 2021 LRDP regarding the generation of greenhouse gas (GHG) emissions. The Proposed Project does not include an increase in the facility's current maximum occupancy, so there would not be any increase in transportation sources, water demand, or overall waste generation. Construction and operation of the Proposed Project would not generate an increase in GHG emissions from transportation sources (passenger vehicles, trucks, delivery vehicles), water use and wastewater generation, or solid waste generation. GHG emissions associated with the Proposed Project are included in the 2021 LRDP emissions forecast, which was determined not to contribute a significant amount of GHG emissions or contribute to existing cumulative emissions impacts. Furthermore, UC Berkeley conducts annual GHG emissions inventories and implements the University of California Office of the President and UC Berkeley sustainability and policy initiative, which would apply to the Proposed Project. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

GHG-2: The 2021 LRDP EIR identified less-than-significant impacts with mitigation concerning conflict with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions. Such plans include California Air Resources Board's Scoping Plan outlining the State's strategies to reduce GHG emissions in accordance with the targets established under Assembly Bill (AB) 32 and Senate Bill (SB) 32, as well as Metropolitan Transportation Commission/Association of Bay Area Governments' Plan Bay Area 2040

to achieve the passenger vehicle emissions reductions identified under SB 375. The Proposed Project does not include any new parking, and site users would access the site through current modes of transportation, including public transit, vehicular, and non-vehicular modes. The Proposed Project would not change the Greek Theatre's current maximum occupancy, and is thus not anticipated to generate new vehicle trips to the Proposed Project site. Because the Proposed Project would not change the current maximum occupancy, the UC Berkeley campus population would remain within levels analyzed in the 2021 LRDP EIR and the Proposed Project would not be a significant growth-inducing project. Thus, it would be consistent with the overall goals of Plan Bay Area 2040 in concentrating new development in locations where there is existing infrastructure. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

GHG-3: The 2021 LRDP EIR identified a less-than-significant cumulative impact for the 2021 LRDP with respect to GHG emissions. The cumulative setting for the Proposed Project is buildout under the 2021 LRDP, and the Proposed Project would not result in additional development beyond what was analyzed in the 2021 LRDP EIR. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

5.1.9 HAZARDS AND HAZARDOUS MATERIALS

		Level of	Environmental Effects of the Proposed Project			
	Environmental Issues Determined to Have No Impact in the 2021 LRD	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project
For a pro where su miles of safety ha	oject located within an airport land use plan or, uch a plan has not been adopted, within two a public airport or public use airport, result in a azard or excessive noise for people residing or in the project area?	NI		x		
Topics I	Evaluated in the 2021 LRDP EIR					
HAZ-1:	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	LTS		х		
HAZ-2:	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	LTS		x		
HAZ-3:	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	LTS				х

Would the Proposed Project:

Would the Proposed Project:

		Level of	Environ	mental Effects	of the Propose	ed Project
	Environmental Issues	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project
HAZ-4:	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	LTS			x	
HAZ-5:	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	LTS		x		
HAZ-6:	In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact?	LTS		x		
*Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			See Section 4.1.	20, Wildfire, of	this Addendur	n

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable

* Note: Impacts related to exposing people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires are fully discussed in the Draft EIR in Chapter 5.18, Wildfire, and in this Addendum in Section 5.1.20, Wildfire. Therefore, this standard is not discussed in this section.

Summary of Analysis

No new significant or more severe impact than analyzed in the 2021 LRDP EIR.

Discussion

Topics Determined to Have No Impact in the 2021 LRDP EIR

The topic of airport-related hazards has been screened out from further evaluation because the EIR Study Area is not within an airport land use plan or within two miles of an airport. The nearest public airport is the Oakland International Airport, roughly ten miles south of the planning area. Therefore, no impact would occur regarding hazards related to the Proposed Project's location within an airport land use plan area or within two miles of a public airport or public use airport. Consequently, this issue is not discussed further in this Addendum. See Section 7.1.5, *Hazards and Hazardous Materials*, of the 2021 LRDP EIR.

Topics Evaluated in the 2021 LRDP EIR

HAZ-1 through HAZ-4: The 2021 LRDP EIR identified less-than-significant impacts at the program level for the 2021 LRDP with respect to the hazards associated with the use, handling, disposal, and release of hazardous materials. The closest sensitive receptors to the Proposed Project are the Foothill Residence Halls, located immediately north of the Proposed Project; and a few private residential facilities located

between Foothill Residence Halls and Lawrence Berkeley National Laboratory, located north of the Proposed Project across Hearst Avenue. No existing or proposed schools are located within one quarter mile of the Proposed Project site. These receptor locations could be potentially exposed to hazardous materials from the proposed construction and operation of the Proposed Project.

Construction activities for the Proposed Project would include the use of materials such as fuels, lubricants, and greases in construction equipment and coatings. The potential exists for these materials to spill or to create hazardous conditions. However, the materials used would not be in such quantities or stored in such a manner as to pose a significant safety hazard to nearby sensitive receptors. Fugitive dust would be generated primarily from ground-disturbing and material-loading activities in addition to vehicles traveling over unpaved surfaces. However, fugitive dust associated with construction activities would not expose off-site sensitive receptors to substantial concentrations of air pollutants because the Proposed Project would adhere to CBP AIR-2, which requires compliance with current Bay Area Air Quality Management District basic control measures for fugitive dust. To prevent hazardous conditions, existing UC Berkeley, State, and federal laws would be enforced at the construction site. Furthermore, these activities would also be short term or one time in nature and would cease upon completion of the construction phases for the Proposed Project.

No use of biohazardous materials, radioactive materials, transgenic material, and production of wastes associated with laboratory research activities would occur at the Proposed Project site. However, operation of the Proposed Project would involve the use of small amounts of hazardous materials, such as cleansers, paints, fertilizers, and pesticides, for cleaning and maintenance purposes. Hazardous materials stored and handled on the UC Berkeley campus would not exist in quantities sufficient to pose a risk to occupants of nearby sensitive receptors, in case of an accidental release, and a risk management plan would be prepared in accordance with the State of California's Accidental Release Prevention program requirements, if necessary. The use, storage, transport, and disposal of hazardous materials would be governed by existing regulations of several agencies, including the Environmental Protection Agency, Department of Toxic Substances Control, U.S. Department of Transportation, International Air Transport Association, California Division of Occupational Safety and Health, and UC Berkeley Office of Environmental Health & Safety programs and policies.

The Proposed Project would adhere to CBP HAZ-1, which requires the continued implementation of equivalent health and safety plans, programs, practices, and procedures related to the use, storage, disposal, or transportation of hazardous materials and wastes.

The Proposed Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and would result in no impact to the public or the environment. Regardless, the Proposed Project would adhere to CBP HAZ-5 concerning performing site histories and due diligence assessments to assess the potential for soil and groundwater contamination. The Proposed Project's site has been in use continuously as a theater facility since the Greek Theatre's construction in 1903, and prior to that as an undeveloped, natural amphitheater set within a grove of eucalyptus trees. These uses do not generally involve the potential for soil and groundwater contamination. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

HAZ-5: The 2021 LRDP EIR identified less-than-significant impacts concerning adopted emergency response plans or emergency evacuation plans. The Proposed Project would be required to comply with the provisions of the California Fire Code (CFC) and the CBC, which would ensure that building and life safety measures are incorporated into the Proposed Project and would facilitate implementation of emergency response plans. During construction, the Proposed Project would be required to comply with all applicable provisions of the CFC to ensure fire safety during the construction phase. The Proposed Project would not involve physical components that would interfere with the ability of UC Berkeley, the City of Berkeley, Alameda County, or emergency response service providers to implement emergency response activities within the project site or vicinity; the Proposed Project would provide a benefit by bringing the emergency access lane into compliance with all applicable codes. In addition to this improvement, Cal Performances, which manages the Greek Theatre, maintains emergency procedure guidelines for the Greek Theatre public assembly events, which document the chain of command, communications, and evacuation procedures associated with different levels of emergencies, including earthquakes, fire, power outages, gas leaks, and bomb threats. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

HAZ-6: The 2021 LRDP EIR identified a less-than-significant cumulative impact for the 2021 LRDP with respect to hazards and hazardous materials. The cumulative setting for the Proposed Project is buildout under the 2021 LRDP, and the Proposed Project would not result in additional development beyond what was analyzed in the 2021 LRDP EIR. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

5.1.10 HYDROLOGY AND WATER QUALITY

		Level of	Enviro	nmental Effects	of the Propos	ed Project
	Environmental Issues	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project
Topics	Evaluated in the 2021 LRDP EIR	•				· · · · · ·
HYD-1:	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	LTS		х		
HYD-2:	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	LTS		х		

Would the Proposed Project:

Would the Proposed Project:

		Level of	Enviro	nmental Effects	of the Propos	ed Project
	Environmental Issues	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project
HYD-3:	 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: a) Result in substantial erosion or siltation on- or off-site? b) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; c) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or d) Impede or redirect flood flows? 	LTS		x		
HYD-4:	In flood, hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	LTS		x		
HYD-5:	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	LTS		x		
HYD-6:	In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact?	LTS		x		

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable

Summary of Analysis

No new significant or more severe impact than analyzed in the 2021 LRDP EIR.

Discussion

Topics Evaluated in the 2021 LRDP EIR

HYD-1 through HYD-5: The 2021 LRDP EIR identified less-than-significant impacts at the program level for the 2021 LRDP with respect to hydrology and water quality. Because the Proposed Project would involve the disturbance of more than one acre of land, it would be required to comply with the requirements of the Construction General Permit, which includes submitting Permit Registration Documents to the State Water Resources Control Board and preparing and implementing a Stormwater Pollution Prevention Plan that includes measures to reduce the potential for erosion, siltation, and pollutants to enter the storm drain

system. The UC Berkeley Office of Environment, Health & Safety (EH&S) or a designated third party would also verify that the Proposed Project complies with all applicable requirements and BMPs.

The Proposed Project's stormwater management strategy is designed to manage runoff and treat and remove pollutants prior to discharge. Furthermore, East Bay Municipal Utility District (EBMUD) does not use groundwater for water supply, and therefore implementation of the project would not decrease groundwater supplies. The groundwater basin that extends under the Proposed Project site is not currently the local water supply and does not serve local or planned land uses. The Proposed Project site is not in a 100-year floodplain or within a dam or tsunami inundation zone.

The Proposed Project does not include any construction dewatering. The Proposed Project would adhere to CBP HYD-1, CBP HYD-2, CBP HYD-5, CBP HYD-7, and CBP HYD-13. In implementing these CBPs, UC Berkeley reviews each development project to determine whether project runoff would affect rainwater infiltration to groundwater or increase pollutant loading and verify that the Proposed Project complies with all applicable requirements and BMPs. UC Berkeley also continues to manage runoff into storm drain systems to avoid no net increase in runoff over existing conditions, and maintains a campuswide educational program regarding safe use and disposal of facilities maintenance chemicals and laboratory chemicals to prevent the discharge of these pollutants. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

HYD-6: The 2021 LRDP EIR identified a less-than-significant cumulative impact for the 2021 LRDP with respect to hydrology and water quality. The cumulative setting for the Proposed Project is buildout under the 2021 LRDP, and the Proposed Project would not result in additional development beyond what was analyzed in the 2021 LRDP EIR. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

5.1.11 LAND USE AND PLANNING

		Level of	Level of Environmental Effects of the Proposed Project				
	Environmental Issues	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project	
Торіс	s Evaluated in the 2021 LRDP EIR						
LU-1:	Physically divide an established community?	LTS		х			
LU-2:	Cause a significant environmental impact due to a conflict with any land use plan, or policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	LTS		х			
LU-3:	In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact?	LTS		х			

Would the Proposed Project:

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable

Summary of Analysis

No new significant or more severe impact than analyzed in the 2021 LRDP EIR.

Discussion

Topics Evaluated in the 2021 LRDP EIR

LU-1: The 2021 LRDP EIR identified less-than-significant impacts at the program level for the 2021 LRDP with respect to established communities. The Proposed Project would be a renovation of an existing facility within the Hill Campus West zone, and would not change the layout of existing roadways or create features that would divide established communities. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

LU-2: The 2021 LRDP EIR identified less-than-significant impacts concerning conflict with any land use plan, or policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. UC Berkeley is constitutionally exempt from local regulations whenever using property under its control in furtherance of its educational mission. The Proposed Project is consistent with the land uses and intensities of development contemplated in the 2021 LRDP for the Hill Campus West zone. Moreover, the Proposed Project would support 2021 LRDP goals by modernizing an existing facility to improve life safety, accessibility, and flexibility. The Proposed Project would adhere to CBP LU-2, which requires new projects in the Hill Campus West, Hill Campus East, and City Environs to be assessed for potential significant land use impacts not anticipated in the LRDP. The Proposed Project would not change the existing land use of the project site. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

LU-3: The 2021 LRDP EIR identified a less-than-significant cumulative impact for the 2021 LRDP with respect to land use and planning. The cumulative setting for the Proposed Project is buildout under the 2021 LRDP, and the Proposed Project would not result in additional development beyond what was analyzed in the 2021 LRDP EIR. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

5.1.12 MINERAL RESOURCES

	Level of	Level of Environmental Effects of the Proposed Project			
th LRD	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project
Topics Determined to Have No Impact in the 2021 LRD	P EIR				
Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	NI		х		

Would the Proposed Project:

UC BERKELEY 2021 LONG RANGE DEVELOPMENT PLAN AND HOUSING PROJECTS #1 AND #2 EIR ADDENDUM NO. 5

Would the Proposed Project:

	Level of	Enviro	nmental Effects	ts of the Proposed Project		
Environmental Issues	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project	
Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	NI		x			

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable

Summary of Analysis

No new significant or more severe impact than analyzed in the 2021 LRDP EIR.

Discussion

Topics Determined to Have No Impact in the 2021 LRDP EIR

The 2021 LRDP EIR did not analyze impacts to mineral resources because there are no areas in the EIR Study Area, including the Proposed Project site, with development potential that contain mineral resources where there is adequate information indicating significant mineral deposits or the high likelihood of significant mineral deposits. Accordingly, this issue is not discussed further in this Addendum. See Section 7.1.6, *Mineral Resources*, of the 2021 LRDP EIR.

5.1.13 NOISE

Would the Proposed Project:

	Level of	Enviro	nmental Effects	of the Propos	ed Project
Environmental Issues	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project
Topics Determined to Have No Impact in the 2021 LRD	P EIR	1		r	
For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	NI		x		
Topics Evaluated in the 2021 LRDP EIR					
NOI-1: Generate substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	SU		x		

Would the Proposed Project:

	Level of	Environmental Effects of the Proposed Project			
Environmental Issues	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project
NOI-2: Generate excessive groundborne vibration or groundborne noise levels?	LTS/M		х		
NOI-3: In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact?	SU		x		

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable

Summary of Analysis

No new significant or more severe impact than analyzed in the 2021 LRDP EIR.

Discussion

Topics Determined to Have No Impact in the 2021 LRDP EIR

The topic of airport-related noise has been screened out from further evaluation because the EIR Study Area is not within two miles of an airport. The nearest public airport is the Oakland International Airport, roughly ten miles south of the planning area. Therefore, no impact would occur regarding noise hazards due to proximity to airports. Consequently, this issue is not discussed further in this Addendum. See Section 7.1.7, Noise, of the 2021 LRDP EIR.

Topics Evaluated in the 2021 LRDP EIR

NOI-1: The 2021 LRDP EIR identified significant and unavoidable impacts at the program level for the 2021 LRDP with respect to ambient noise levels because construction activities associated with potential future projects may occur near noise-sensitive receptors, and noise disturbances may occur for prolonged periods or during the more sensitive nighttime hours or may exceed UC Berkeley's adopted construction noise standards, even with project-level mitigation. Two types of short-term noise impacts could occur during construction of the Proposed Project: (1) mobile-source noise from the transport of workers, material deliveries, and debris/soil hauling and (2) stationary-source noise from use of construction equipment. The transport of workers and materials to and from the construction site would incrementally increase noise levels along local roadways. Anticipated construction equipment would include, but is not limited to, excavation equipment, dump trucks, compactors, cranes, bobcats, concrete pump trucks, asphalt equipment, circular saws, rebar benders, generators, compressors, and minor hand tools. Construction of the Proposed Project would temporarily increase the noise level of the ambient noise environment and would have the potential to affect noise-sensitive land uses in the vicinity of the Proposed Project site. However, no off-site noise-sensitive receptors exist within 800 feet of the project. Any potentially sensitive receptors beyond 800 feet would have noise attenuated below levels of concern as a result of distance,

existing vegetation, and buildings. Therefore, the Proposed Project would not require any mitigation or temporary noise barriers to reduce construction noise levels.

Similar to the construction phase, two types of noise impacts could occur during operation of the Proposed Project: (1) mobile-source noise from vehicles traveling to and from the Proposed Project (from visitors and deliveries) and (2) stationary-source noise from people and equipment (including amplified music) on the Proposed Project site. Based on the program-level traffic noise analysis conducted for the 2021 LRDP EIR, traffic noise along Gayley Road at University Drive under full buildout of the 2021 LRDP is anticipated to increase from 64.6 dBA by up to 0.3 dBA (A-weighted decibels),¹⁰ well under the 1.5 dBA threshold identified in the 2021 LRDP EIR as the minimum level of noise increase considered to represent a significant impact, depending on the ambient noise environment.¹¹ Traffic noise increases associated with the operation of the Proposed Project are expected to be minimal because the Proposed Project would not include any parking, and would not increase the Greek Theatre's current maximum occupancy. Moreover, the Proposed Project would have no impact on the acoustics of the Greek Theatre during live events. The Proposed Project would include minor physical improvements and would not change current theater operations relative to performances, or to noise associated with those operations.

Regarding stationary noise sources, the Proposed Project would adhere to CBP NOI-2, which lists required measures to be implemented for all construction projects to minimize site disruptions. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

NOI-2: The 2021 LRDP EIR identified less-than-significant impacts with mitigation concerning groundborne vibration levels associated with construction. Vibration generated by construction equipment has the potential to damage or annoy nearby receptors. As required by 2021 LRDP EIR Mitigation Measure NOI-2, the Proposed Project would implement steps concerning the use of vibration-causing construction activities/equipment and, depending on construction activity/equipment and distances to receptors, would implement alternative methods/equipment and a construction vibration monitoring program, as required. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

NOI-3: The 2021 LRDP EIR identified a significant and unavoidable cumulative impact for the 2021 LRDP with respect to noise. The cumulative setting for the Proposed Project is buildout under the 2021 LRDP, and the Proposed Project would not result in additional development beyond what was analyzed in the 2021 LRDP EIR. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

¹⁰ University of California Berkeley, July 2021, UC Berkeley 2021 Long Range Development Plan and Housing Projects #1 and #2 Environmental Impact Report, State Clearinghouse No. 2020040078, Table 5.11-11, page 5.11-27.

¹¹ University of California Berkeley, July 2021, UC Berkeley 2021 Long Range Development Plan and Housing Projects #1 and #2 Environmental Impact Report, State Clearinghouse No. 2020040078, page 5.11-26.

5.1.14 POPULATION AND HOUSING

Would the Proposed Project:

	Level of	Environmental Effects of the Proposed Project				
Environmental Issues	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project	
Topics Evaluated in the 2021 LRDP EIR						
POP-1: Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	LTS/M			x		
POP-2: Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	LTS/M				х	
POP-3: In combination with past, present, and reasonably foreseeable projects, result in significant cumulative impacts?	LTS		x			

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable

Summary of Analysis

No new significant or more severe impact than analyzed in the 2021 LRDP EIR.

Discussion

Topics Evaluated in the 2021 LRDP EIR

POP-1 and POP-2: The 2021 LRDP EIR identified less-than-significant impacts with mitigation at the program level for the 2021 LRDP with respect to unplanned population growth and displacement of people and housing. The Proposed Project is the renovation of the upper bowl lawn area and emergency access lane and improvement of the existing entrance plaza at the Greek Theatre, and would not increase the facility's current maximum occupancy. It is planned for nonresidential uses and does not involve new homes or businesses. The Proposed Project site is currently occupied by the Greek Theatre, and does not include any residential facilities; it would thus not displace people or housing. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

POP-3: The 2021 LRDP EIR identified a less-than-significant cumulative impact for the 2021 LRDP with respect to population and housing. The cumulative setting for the Proposed Project is buildout under the 2021 LRDP, and the Proposed Project would not result in additional development beyond what was analyzed in the 2021 LRDP EIR. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

5.1.15 PUBLIC SERVICES

Would the Proposed Project:

		Level of	Enviro	nmental Effects	s of the Propos	ed Project
	Environmental Issues	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project
Topic	s Evaluated in the 2021 LRDP EIR	1		1	1	1
PS-1:	Result in substantial adverse physical impacts associated with the need for new or physically altered police facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police services?	LTS		x		
PS-2:	In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact to police services?	LTS		x		
PS-3:	Result in substantial adverse physical impacts associated with the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services?	LTS		x		
PS-4:	In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact to fire protection services?	LTS		x		
PS-5:	Result in substantial adverse physical impacts associated with the need for new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable performance objectives for school services?	LTS		x		
PS-6:	In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact to schools?	LTS		x		
PS-7:	In order to maintain acceptable service ratios or other performance objectives, the Proposed Project would result in the provision of or need for new or physically altered library facilities, the construction or operation of which could cause significant environmental impacts?	LTS		x		
PS-8:	In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact to public services?	LTS		x		

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable

Summary of Analysis

No new significant or more severe impact than analyzed in the 2021 LRDP EIR.

Discussion

Topics Evaluated in the 2021 LRDP EIR

PS-1, PS-3, PS-5, and PS-7: The primary purpose of the public services impact analysis is to examine the impacts associated with physical improvements to public service facilities required to maintain acceptable service ratios, response times, or other performance objectives. Public service facilities need improvements (i.e., construction, renovation, or expansion) as demand for services increases. Increased demand is typically driven by increases in population. A project would have a significant environmental impact if it would exceed the ability of public service providers to adequately serve the population, thereby requiring construction of new facilities or modification of existing facilities.

The 2021 LRDP EIR identified less-than-significant impacts at the program level for the 2021 LRDP with respect to public services. The Proposed Project would not result in a more intense use of the Proposed Project site when compared to its existing state, as the Proposed Project is a renovation of the existing Greek Theatre, and would not increase its current maximum occupancy. As such, the UC Berkeley campus population would remain within levels analyzed in the 2021 LRDP EIR. Accordingly, the Proposed Project would not require the construction, renovation, or expansion of police services, fire protection services, school services, or library facilities in the project area. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

PS-2, PS-4, PS-6, and PS-8: The 2021 LRDP EIR identified less-than-significant cumulative impacts for the 2021 LRDP with respect to public services. The cumulative setting for the Proposed Project is buildout under the 2021 LRDP, and the Proposed Project would not result in additional development beyond what was analyzed in the 2021 LRDP EIR. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

5.1.16 PARKS AND RECREATION

Would the Proposed Project:

	Level of	Enviro	nmental Effects	of the Propos	ed Project
Environmental Issues Topics Evaluated in the 2021 LRDP EIR	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project
REC-1: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks facilities, need for new or physically altered parks facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks services?	LTS		x		
REC-2: Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	LTS		×		
REC-3: Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	LTS		x		
REC-4: In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact related to parks and recreation?	LTS		x		

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable

Summary of Analysis

No new significant or more severe impact than analyzed in the 2021 LRDP EIR.

Discussion

Topics Evaluated in the 2021 LRDP EIR

REC-1 through REC-3: The 2021 LRDP EIR identified less-than-significant impacts at the program level for the 2021 LRDP with respect to parks and recreational facilities. The Proposed Project does not involve housing that would induce population growth and would not remove any existing parks or recreational space. Therefore, implementation of the Proposed Project is not anticipated to create a need for new or altered parks or recreational facilities or increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration would occur or be accelerated. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

REC-4: The 2021 LRDP EIR identified a less-than-significant cumulative impact for the 2021 LRDP with respect to parks and recreation. The cumulative setting for the Proposed Project is buildout under the 2021 LRDP, and the Proposed Project would not result in additional development beyond what was analyzed in the 2021 LRDP EIR. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

5.1.17 TRANSPORTATION

Would the Proposed Project:

		Level of	Environmental Effects of the Proposed Project			ed Project
	Environmental Issues		New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project
Topics E	valuated in the 2021 LRDP EIR	1	1	1	1	1
TRAN-1:	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	LTS/M			x	
TRAN-2:	Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	LTS		x		
TRAN-3:	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	SU			×	
TRAN-4:	Result in inadequate emergency access?	LTS			Х	
TRAN-5:	In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact?	SU		x		

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable

Summary of Analysis

No new significant or more severe impact than analyzed in the 2021 LRDP EIR.

Discussion

Topics Evaluated in the 2021 LRDP EIR

TRAN-1: The 2021 LRDP EIR identified less-than-significant impacts with mitigation at the program level for the 2021 LRDP with respect to conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The Proposed Project would be a renovation of an existing facility and would not increase its current maximum occupancy; thus it would not result in an increase to the UC Berkeley campus population. Furthermore, the Proposed Project would adhere to CBP TRAN-1 by improving circulation within the Greek Theatre facility for visitors and emergency access vehicles. Bicycle, pedestrian, and transit access to the facility would remain at their current levels.

Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

TRAN-2: Pursuant to CEQA Guidelines Section 15064.3(b)(1), projects within half a mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less-than-significant transportation impact. Accordingly, the 2021 LRDP EIR did not evaluate impacts for projects within this screening distance. Due to its location within half a mile of AC Transit Line 52 stop at Gayley Road and the Greek Theatre, and within half a mile of a TPA, transportation impacts related to vehicle miles traveled (VMT) from the Proposed Project are presumed to be less than significant. Accordingly, no quantified VMT analysis is presented in this Addendum. See Section 7.1.8, *Transportation*, of the 2021 LRDP EIR.

TRAN-3: The 2021 LRDP EIR identified significant and unavoidable impacts in regard to hazards due to a geometric design feature or incompatible uses because of the unknowns of future buildings and structures at the time of analysis. The Proposed Project would be a renovation of the existing upper bowl lawn area and emergency access lane and improvement of the existing entrance plaza at the Greek Theatre, and therefore would not introduce an incompatible use with the potential to create a transportation hazard. The Proposed Project would improve circulation in and around the upper bowl lawn area and entrance plaza, including accessible routes and paths that would be designed and constructed based on the applicable design standards and guidelines so as not to substantially increase hazards due to a geometric design feature related to roadway or sidewalks.

The 2021 LRDP EIR identifies a significant impact associated with pedestrian (ground) level wind hazards for new buildings that are 100 feet or more in height and includes Mitigation Measure TRAN-3, which requires a wind hazards analysis for buildings of this height. The Proposed Project is primarily a landscape and site project, and does not include any development that is 100 feet or more in height; therefore, no mitigation is required.

Furthermore, the Proposed Project would adhere to CBP TRAN-5 through CBP TRAN-8, which require UC Berkeley to reimburse the City of Berkeley for its fair share of costs associated with damage to city streets from UC Berkeley construction activities; manage project schedules to minimize the overlap of excavation or other heavy truck activity periods that have the potential to combine impacts on traffic loads and street system capacity; and require contractors working on major new construction or major renovation projects to develop and implement a Construction Traffic Management Plan.

Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

TRAN-4: The 2021 LRDP EIR identified less-than-significant impacts concerning inadequate emergency access. The Proposed Project would improve the existing emergency access lane at the eastern side of the Greek Theatre, and would make the access lane code compliant, including widening the access lane, providing a turnaround, and grading the lane to meet slope requirements in the applicable codes. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

TRAN-5: The 2021 LRDP EIR identified a significant and unavoidable cumulative impact for the 2021 LRDP with respect to transportation. The cumulative setting for the Proposed Project is buildout under the 2021 LRDP, and the Proposed Project would not result in additional development beyond what was analyzed in the 2021 LRDP EIR. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

5.1.18 TRIBAL CULTURAL RESOURCES

Would the Proposed Project:

	Level of	Environmental Effects of the Proposed Project			ed Project
Environmental Issues Topics Evaluated in the 2021 LRDP EIR	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project
 TCR-1: Cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is: a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1 In applying the criteria set forth in subdivision (c) of the Public Resource Code Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance to a California Native American tribe? 	LTS/M		x		
TCR-2: In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact to tribal cultural resources?	LTS		х		

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable

Summary of Analysis

No new significant or more severe impact than analyzed in the 2021 LRDP EIR.

Discussion

Topics Evaluated in the 2021 LRDP EIR

TCR-1: The 2021 LRDP EIR identified less-than-significant impacts with mitigation at the program level for the 2021 LRDP with respect to tribal cultural resources. The Proposed Project site does not currently contain any known tribal cultural resources, and UC Berkeley did not receive information as a result of the tribal consultation process that the 2021 LRDP would potentially impact a known tribal cultural resource. However, development on-site could impact unknown tribal cultural resources, including Native American artifacts and human remains. The Proposed Project would implement 2021 LRDP EIR Mitigation Measure TCR-1, which requires implementation of Mitigation Measure CUL-2, described in the Cultural Resources section of this Addendum. Therefore, the Proposed Project would not result in any new or more severe impacts than were identified in the 2021 LRDP EIR, and no new mitigation measures would be required.

TCR-2: The 2021 LRDP EIR identified a less-than-significant cumulative impact for the 2021 LRDP with respect to tribal cultural resources. The cumulative setting for the Proposed Project is buildout under the 2021 LRDP, and the Proposed Project would not result in additional development beyond what was analyzed in the 2021 LRDP EIR. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

5.1.19 UTILITIES AND SERVICE SYSTEMS

		Level of	Enviro	nmental Effects	of the Propos	ed Project
	Environmental Issues Topics Evaluated in the 2021 LRDP EIR		New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project
UTIL-1:	Require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects?	LTS		x		
UTIL-2:	Not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	LTS		x		
UTIL-3:	In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact related to water supply?	LTS		x		
UTIL-4:	Require or result in the relocation or construction of new or expanded wastewater treatment or facilities, the construction or relocation of which could cause significant environmental effects?	LTS		х		

Would the Proposed Project:

		Level of	Environmental Effects of the Proposed Project			ed Project
	Environmental Issues	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project
UTIL-5:	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	LTS		x		
UTIL-6:	In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact related to wastewater?	LTS		x		
UTIL-7:	Require or result in the relocation or construction of new or expanded stormwater drainage facilities, the construction or relocation of which could cause significant environmental effects?	LTS		х		
UTIL-8:	In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact related to stormwater?	LTS		x		
UTIL-9:	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	LTS		x		
UTIL-10:	Not comply with federal, State, and local management and reduction statutes and regulations related to solid waste?	LTS		x		
UTIL-11:	In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact related to solid waste?	LTS		х		
UTIL-12:	Require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	LTS		x		
UTIL-13:	In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact related to electric power, natural gas, or telecommunications?	LTS		х		

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable

Summary of Analysis

No new significant or more severe impact than analyzed in the 2021 LRDP EIR.

Discussion

Topics Evaluated in the 2021 LRDP EIR

UTIL-1 and UTIL-2: The 2021 LRDP EIR identified less-than-significant impacts at the program level for the 2021 LRDP with respect to water facilities and supply. The Orinda Water Treatment Plant has maximum capacity of 200 million gallons per day (MGD). Full implementation of the 2021 LRDP would increase demand by 348 MG/year or approximately 1 MGD, which would amount to less than 1 percent of the plant's capacity and would not have an adverse effect on the plant's operation.¹² With a combination of water conservation measures and acquisition of supplemental supplies, EBMUD would be able to accommodate water demand in normal, single dry years, and multiple dry years. The Proposed Project would adhere to CBP USS-3, which requires UC Berkeley to incorporate specific water conservation measures into project design. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

UTIL-4 and UTIL-5: The 2021 LRDP EIR identified less-than-significant impacts in regard to wastewater treatment. EBMUD's wastewater treatment plant has a residual capacity of 57 MGD and can accommodate the increase of 0.70 MGD in wastewater generation from the 2021 LRDP.¹³ The increased wastewater demand would represent about 0.67 percent of the wastewater treatment plant's excess capacity, and the average annual daily flow is well below the permitted capacity. The Proposed Project would not generate any new water demand or wastewater production, because it would not increase the Greek Theatre's current maximum occupancy. Furthermore, since the Proposed Project would connect to the UC Berkeley sewer system, it is included in UC Berkeley's annual payment of fees to the City of Berkeley. Wastewater discharge would also be required to comply with EBMUD's wastewater control ordinance, EBMUD Wastewater Discharge Permit for UC Berkeley, and the UC Berkeley sewer system management plan. The Proposed Project would adhere to CBP USS-3 to incorporate specific water conservation measures into project design to reduce water consumption and wastewater generation. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impacts.

UTIL-7: The 2021 LRDP EIR identified less-than-significant impacts concerning stormwater facilities. The Proposed Project will occur in an urbanized and developed area. The Proposed Project would comply with the requirements of the Phase II MS4 Permit and implement LID BMPs and site design BMPs, which effectively minimize the impact of impervious surfaces by retaining or detaining stormwater on-site, decreasing surface water flows, and slowing runoff rates. In addition, UC Berkeley manages runoff into storm drain systems so that the aggregate effect of new projects creates no net increase in runoff over existing conditions. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

¹² University of California Berkeley, July 2021, UC Berkeley 2021 Long Range Development Plan and Housing Projects #1 and #2 Environmental Impact Report, State Clearinghouse No. 2020040078, page 5.17-15.

¹³ University of California Berkeley, July 2021, UC Berkeley 2021 Long Range Development Plan and Housing Projects #1 and #2 Environmental Impact Report, State Clearinghouse No. 2020040078, page 5.17-32.

UTIL-9 and UTIL-10: The 2021 LRDP EIR identified less-than-significant impacts regarding solid waste generation and regulation. The Proposed Project would comply with the 2019 CALGreen Building Code Standards, the requirements of AB 341, AB 1826, SB 1383, SB 1335, the State Agency Buy Recycled Campaign, the City of Berkeley's Single Use Foodware Ordinance, and University of California's Sustainable Practices policies. The Keller Canyon Landfill would be able to accommodate projected solid waste from buildout of the 2021 LRDP until its closure date in 2030. If UC Berkeley has not yet met its zero-waste goal at that date, then an alternate landfill, such as Altamont Landfill, would be able to accommodate solid waste from UC Berkeley. Furthermore, the Proposed Project would adhere to CBP USS-6 and CBP USS-7, which require UC Berkley to continue implementing zero waste requirements, and contractors working for UC Berkeley to report their solid waste diversion. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

UTIL-12: The 2021 LRDP EIR identified less-than-significant impacts related to electric power, natural gas, and telecommunications. The 2021 LRDP would result in an increase in electricity consumption. The Proposed Project is a renovation of an existing facility, with no permanent, interior occupiable spaces. The project site is already served by electrical infrastructure and would not result in the relocation or construction of new or expanded electric power facilities. The 2021 LRDP would result in a net decrease in natural gas usage over the buildout horizon because University of California and UC Berkeley energy policies prohibit new natural gas connections in new construction or large renovation projects on sites that are not in the cogeneration plant system, which currently uses natural gas. UC Berkeley is already served by telecommunications infrastructure, and the Proposed Project is anticipated to connect to existing telecommunications facilities off-site. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

UTIL-3, UTIL-6, UTIL-8, UTIL-11, and UTIL-13: The 2021 LRDP EIR identified a less-than-significant cumulative impact for the 2021 LRDP with respect to utilities and service systems. The cumulative setting for the Proposed Project is buildout under the 2021 LRDP, and the Proposed Project would not result in additional development beyond what was analyzed in the 2021 LRDP EIR. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

5.1.20 WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Proposed Project:

	Level of	Environmental Effects of the Proposed Project			
Environmental Issues	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project
Topics Evaluated in the 2021 LRDP EIR					
WF-1: Substantially impair an adopted emergency response plan or emergency evacuation plan?	LTS		х		

UC BERKELEY 2021 LONG RANGE DEVELOPMENT PLAN AND HOUSING PROJECTS #1 AND #2 EIR ADDENDUM NO. 5 If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Proposed Project:

Level of Environ				onmental Effects of the Proposed Project			
	Environmental Issues	Impact for the 2021 LRDP in the 2021 LRDP EIR	New Less-Than- Significant Impact	Same Impact as 2021 LRDP	Less Impact Than 2021 LRDP	Topic Not Applicable to the Proposed Project	
WF-2:	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	SU		x			
WF-3:	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	SU		х			
WF-4:	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	SU		×			
WF-5:	In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact related to wildfire?	SU		x			

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable

Summary of Analysis

No new significant or more severe impact than analyzed in the 2021 LRDP EIR.

Discussion

Topics Evaluated in the 2021 LRDP EIR

WF-1: The 2021 LRDP EIR identified a less-than-significant impact at the program level for the 2021 LRDP with respect to impairment of an adopted emergency response plan or emergency evacuation plan. The Proposed Project is in a designated Fire Hazard Severity Zone (FHSZ), California Public Utilities Commission high-fire-threat district, and Wildland Urban Interface (WUI). The Proposed Project is in an urbanized area surrounded by existing development; the Proposed Project site is already developed, and the Proposed Project is the renovation of an existing facility and is not new development. The City of Berkeley General Plan identifies Hearst Avenue and Oxford Street, two roadways near the Proposed Project, as emergency evacuation routes; however, development of the Proposed Project would not alter these or other surrounding roadways. UC Berkeley has its own Emergency Preparedness Program and Emergency Operations Plan and coordinates emergency preparations, response, and recovery activities, such as those pertaining to wildfire, under its Office of Emergency Management. Cal Performances also maintains emergency guidelines for the Greek Theatre, which describe evacuation and communication procedures in

the event of an emergency. In addition, the Proposed Project would comply with applicable regulations that involve fire prevention and safety measures, such as the CBC and CFC. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

WF-2 and WF-4: The 2021 LRDP EIR identified significant and unavoidable impacts concerning exacerbation of wildfire risks due to steep terrain and heavy vegetation in the Hill Campus East. The project site is within the Hill Campus West. Because the project site is an already urbanized area, and involves renovation of an existing facility without any increase in its current maximum occupancy, the Proposed Project would not, from prevailing winds or other factors such as vegetation, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. In addition, the project site is not subject to landslide hazards and is not within a flood hazard zone. Under CBP WF-3, UC Berkeley will continue to plan and implement programs to reduce risk of wildland fires. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

WF-3: The 2021 LRDP EIR identified significant and unavoidable impacts concerning installation or maintenance of associated infrastructure in the Very High FHSZ that may exacerbate fire risk due to the potential unknown impacts from future development at the time of analysis. The Proposed Project is located within a Very High FHSZ, but would improve emergency access to the Proposed Project site; no gas service is currently provided at the Proposed Project site, and no new gas service would be installed as part of the Proposed Project. All existing electrical services are currently located underground, and any relocated services would also be located underground, as required by 2021 LRDP EIR Mitigation Measure WF-3. 2021 LRDP EIR Mitigation Measure WF-2a requires preparation and implementation of a Wildfire Management Plan for new UC Berkeley development within a Very High Fire Hazard Severity Zone. However, the Proposed Project is not new development, and therefore Mitigation Measure WF-2a is not applicable. The site is currently served by existing utility systems which are undergrounded, and the project would not require the installation of additional off-site utilities infrastructure. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impacts.

WF-5: The 2021 LRDP EIR identified a significant and unavoidable cumulative impact for the 2021 LRDP with respect to wildfire. The cumulative setting for the Proposed Project is buildout under the 2021 LRDP, and the Proposed Project would not result in additional development beyond what was analyzed in the 2021 LRDP EIR. Therefore, the Proposed Project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact.

5.2 MANDATORY FINDINGS OF SIGNIFICANCE

Would the Proposed Project:

	Environmental Issues	New Less-Than- Significant Impact	Topic Not Applicable to the Proposed Project
a)	Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	x	
b)	Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	x	
c)	Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	х	

Discussion

a) With respect to biological resources and cultural resources, development under the Proposed Project would not change from the 2021 LRDP. The Proposed Project would not increase the 2021 LRDP's development program and boundaries. As discussed throughout this Addendum, the Proposed Project would not result in a new impact or a substantial increase in magnitude of the existing impacts.

b) CEQA Guidelines Section 15355, Cumulative Impacts, defines cumulative impacts as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. Cumulative impacts may result from individually minor, but collectively significant projects taking place over a period of time. As described in Section 4.3, *Development Program Consistency*, buildout of the Proposed Project, in addition to past and pending projects since certification of the 2021 LRDP EIR, is within the net new buildout analyzed in the 2021 LRDP EIR.

Section 5.1, *Environmental Evaluation of the Proposed Project*, of this Addendum includes an evaluation of the Proposed Project's potential cumulative impacts. As discussed throughout Section 5.1, the Proposed Project would not create any new significant cumulative impacts. The Proposed Project would incrementally contribute to, but would not exceed, the cumulative impacts analyses in the 2021 LRDP EIR. Therefore, the Proposed Project would not be expected to contribute to significant cumulative impacts when considered along with other projects constructed under the 2021 LRDP.

c) Development under the Proposed Project would not change from the 2021 LRDP with respect to direct and indirect effects on human beings. The Proposed Project would not increase the 2021 LRDP's development program and boundaries. As discussed throughout this Addendum, the Proposed Project would not result in a new impact or a substantial increase in magnitude of existing impacts.

6. Conclusion

As summarized below, and for the reasons described in Section 5, *Environmental Analysis*, of this Addendum, UC Berkeley has concluded that the Proposed Project would not result in any new significant impacts not previously identified in the 2021 LRDP EIR; nor would it result in a substantial increase in the severity of any significant environmental impact previously identified in the 2021 LRDP EIR; not the 2021 LRDP EIR. For these reasons, a subsequent EIR is not required, and an Addendum to the 2021 LRDP EIR is the appropriate CEQA document to address the Proposed Project.

6.1 SUBSTANTIAL CHANGES TO THE PROJECT

The Proposed Project is not a substantial change to the 2021 LRDP because it is within the study area described in the 2021 LRDP EIR in Section 3.4, *EIR Study Area*, and shown on Figure 3-2, *EIR Study Area*, and because it is within the buildout and population projections described and evaluated in Section 3.5.1.8, *Development Program*, of the 2021 LRDP EIR. Consequently, there are no substantial changes proposed to the 2021 LRDP that will require major revisions of the 2021 LRDP EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

6.2 SUBSTANTIAL CHANGES IN CIRCUMSTANCES

As described in Section 5, *Environmental Analysis*, of this Addendum, the Proposed Project would not result in new significant environmental impacts beyond those identified in the 2021 LRDP EIR, would not substantially increase the severity of significant environmental effects identified in the 2021 LRDP EIR, and thus would not require major revisions to the 2021 LRDP EIR. The Proposed Project, therefore, is not substantial and does not require major revisions to the 2021 LRDP EIR or preparation of a subsequent EIR. In addition, the physical conditions within the UC Berkeley campus have not changed substantially since the certification of the 2021 LRDP EIR, although some structures have been improved and others have been demolished.

6.3 NEW INFORMATION

No new information of substantial importance, which was not known and could not have been known when the 2021 LRDP EIR was certified in 2021, shows that the Proposed Project would be expected to result in: 1) new significant environmental effects not identified in the 2021 LRDP EIR; 2) substantially more severe environmental effects than shown in the 2021 LRDP EIR; 3) mitigation measures or alternatives previously determined to be infeasible that would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project sponsor declines to adopt the mitigation or alternative; or 4) mitigation measures or alternatives that are considerably different from those identified in the 2021 LRDP EIR that would substantially reduce one or more significant effects of the project, but the project sponsor declines to adopt the mitigation measure or alternative.

APPENDIX A

APPLICABLE PROGRAM-LEVEL MITIGATION MEASURES AND CONTINUING BEST PRACTICES

Applicable Program-Level Mitigation Measures and Continuing Best Practices

The table below identifies mitigation measures and Continuing Best Practices (CBPs) from the 2021 LRDP EIR that are applicable to the Greek Theatre Safety and Restoration Improvements Project.

Торіс	Type of Measure	Mitigation/ CBP #	Mitigation / Continuing Best Practice Text	Source Document
Air Quality	Mitigation Measure	AIR-2.1	 UC Berkeley shall use equipment that meets the United States Environmental Protection Agency Tier 4 Final emissions standards or higher for off-road diesel-powered construction equipment with more than 50 horsepower, unless it can be demonstrated to UC Berkeley that such equipment is not commercially available. For purposes of this mitigation measure, "commercially available" shall mean the availability of Tier 4 Final engines similar to the availability for other large-scale construction projects in the city occurring at the same time and taking into consideration factors such as (i) potential significant delays to critical-path timing of construction and (ii) geographic proximity to the project site of Tier 4 Final equipment. Where such equipment is not commercially available, as demonstrated by the construction contractor, Tier 4 interim equipment to use Tier 4 Final equipment or higher for engines over 50 horsepower shall be identified in construction bids and the following shall also be completed: Prior to construction, the project engineer shall ensure that all demolition and grading plans clearly show the requirement for United States Environmental Protection Agency Tier 4 Final or higher emissions standards for construction equipment over 50 horsepower. During construction, the construction contractor shall maintain a list of all operating equipment in use over 20 hours on the construction site for verification by UC Berkeley. The construction equipment is available and cost-effective, contractor shall use electric, hybrid, or alternate-fueled off-road construction equipment. Contractors shall use electric construction tools, such as saws, drills, and compressors, where grid electricity is available. Construction activities shall be prohibited when the Air Quality Index (AQI), as measured by the closest Bay Area Air Quality Management District monitoring station (e.g., Berkeley Aquatic Center), is greater than 150 for particulates and ozone in the pr	2021 LRDP EIR Table 6-1, Mitigation Monitoring and Reporting Program for the Long Range Development Plan
Cultural	Mitigation	CUL-1.1e	Implement Mitigation Measure NOI-2.	2021 LRDP EIR
Resources	Measure			Table 6-1, Mitigation

Торіс	Type of Measure	Mitigation/ CBP #	Mitigation / Continuing Best Practice Text	Source Document
				Monitoring and Reporting Program for the Long Range Development Plan
Cultural Resources	Mitigation Measure	CUL-2	 For construction projects that include substantial ground-disturbing activities (including, but not limited to, soil removal, parcel grading, new utility trenching, and foundation-related excavation), UC Berkeley shall implement the following steps to ensure impacts to archaeological resources will be less than significant. All Projects with Ground-Disturbing Activities. Prior to soil disturbance, UC Berkeley shall confirm that contractors have been notified of the procedures for the identification of federal- or State-eligible cultural resources, and that the construction crews are aware of the potential for previously undiscovered archaeological resources or tribal cultural resources on site, of the laws protecting these resources and associated penalties, and of the procedures to follow should they discover cultural resources during project-related work. If a resource is discovered during construction (whether or not an archaeologist is present), the following measures shall be implemented: All soil disturbing work within 35 feet of the find shall cease. UC Berkeley shall contact a qualified archaeologist to provide and implement a plan for survey, subsurface investigation as needed to define the deposit, and assessment of the remainder of the site within the project area to determine whether the resource is significant and would be affected by the project. Any previously undiscovered resources found during construction activities shall be recorded on appropriate California Department of Parks and Recreation forms and evaluated for significance in terms of the California Environmental Quality Act (CEQA) criteria by a qualified archaeologist. If the resource is a tribal cultural resource, the consulting archaeologist, approved by UC Berkeley in consultation with the appropriate tribe to evaluate the significance of the resource and to recommend appropriate and feasible avoidance, testing, preservation or mitigation measures, in light of	2021 LRDP EIR Table 6-1, Mitigation Monitoring and Reporting Program for the Long Range Development Plan
			 If the resource is a non-tribal resource determined significant under CEQA, a qualified archaeologist shall prepare and implement a research design and archaeological data recovery plan that will capture those categories of data for which the site is significant. The archaeologist shall also perform appropriate technical analyses; prepare a comprehensive report complete with methods, results, and recommendations; and provide for the permanent curation of the recovered resources if appropriate. 	

Торіс	Type of Measure	Mitigation/ CBP #	Mitigation / Continuing Best Practice Text	Source Document
			 The report shall be submitted to the relevant city (if it falls under Berkeley or Oakland boundaries), California Historic Resources Information System Northwest Information Center, and the State Historic Preservation Office, if required. 	
			Areas with High Archaeological Sensitivity. In addition to the requirements above for all construction projects with ground-disturbing activities, for projects in areas with moderately high to extreme archaeological sensitivity (as shown on the confidential Figure 11, Prehistoric Cultural Sensitivity Overlay Analysis Results, prepared for the 2021 LRDP Update EIR) ground-disturbing activities shall be monitored from the outset. Monitoring shall occur for soil removal, parcel grading, new utility trenching, and foundation-related excavation in those areas that extend into previously undisturbed soils. If the resources are tribal, archaeological monitoring must be undertaken by a qualified archaeologist approved by UC Berkeley in consultation with the appropriate tribe as determined by the Native American Heritage Commission or the appropriate tribe, who is familiar with a wide range of prehistoric archaeological or tribal remains and is conversant in artifact identification, human and faunal bone, soil descriptions, and interpretation. Based on project-specific daily construction schedules, field conditions, and archaeological	
			observations, full-time monitoring may not be warranted following initial observations.	
			 Sites with Known Archaeological Resources. In the event the disturbance of a site with known archaeological or tribal cultural resources cannot be avoided, in addition to the requirements above for all construction projects with ground-disturbing activities, for project sites with known on-site archaeological or tribal cultural resources, the following additional actions shall be implemented prior to ground disturbance: UC Berkeley, in consultation with the appropriate tribe, will retain a qualified archaeologist to conduct a subsurface investigation of the project site, and to ascertain the extent of the deposit of any buried archaeological materials relative to the project's area of potential effects. The archaeologist shall prepare a site record and, upon tribal approval, it shall be filed with the California Historical Resource Information System. If the resource extends into the project's area of potential effects, the resource shall be evaluated by a qualified archaeologist approved by UC Berkeley in consultation with the appropriate tribe. UC Berkeley shall consider this evaluation in determining whether the resource qualifies as a historical resource or a unique archaeological resource under the criteria of California Environmental Quality Act (CEQA) Guidelines Section 15064.5. If the resource does not qualify, no further mitigation is required unless there is a discovery of additional resources during construction (as required above for all construction projects with ground-disturbing activities). If a resource is determined to qualify as an historical resource or a unique archaeological resource with CEQA, UC Berkeley shall consult with the appropriate tribe (in the case of Native American sites) and a qualified 	
			archaeologist, approved by UC Berkeley in consultation with the appropriate tribe, to mitigate the effect through data recovery if appropriate to the resource or, if data recovery is infeasible, to consider means of avoiding or reducing ground disturbance within the site boundaries, including where and if feasible, minor modifications of building footprint, landscape modification, the placement of protective fill, the establishment of a preservation easement, or other means that would permit avoidance or substantial preservation in place of the resource. A written report of the results of investigations shall be prepared by a qualified archaeologist and, upon tribal approval, filed with the University Archives/ Bancroft Library and the California Historic Resources Information System Northwest Information Center.	

Торіс	Type of Measure	Mitigation/ CBP #	Mitigation / Continuing Best Practice Text	Source Document
Geology and Mitigation GEO-5 Soils Measure	GEO-5	 For ground-disturbing activities within highly sensitive geologic formations (i.e., Franciscan Assemblage, Great Valley Sequence, Orinda Formation, Claremont Chert, unnamed mudstone, or older alluvium, as shown on Figure 5.6-1, Geologic Map, of the 2021 LRDP Update EIR), if pre-construction testing does not take place, ground-disturbing activities shall implement the following measures. "Ground-disturbing activities" shall include soil removal, parcel grading, utility trenching, and foundation-related excavation in those areas that extend into previously undisturbed soils. UC Berkeley shall provide a paleontological resources awareness training program to all construction personnel active on the project site during earth moving activities. The first training will be provided prior to the initiation of ground-disturbing activities by a qualified paleontologist. The program will include relevant information regarding fossils and fossil-bearing formations that may be encountered. The training will also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site. If any paleontological resources are encountered during ground-disturbing activities, the contractor shall ensure that activities in the immediate area of the find are halted and that UC Berkeley is informed. UC Berkeley shall retain a qualified paleontologist to evaluate the discovery and recommend appropriate treatment options pursuant to guidelines developed by the Society of Vertebrate Paleontology, including development and implementation of a paleontological resources may include, but not be limited to the following: salvage of unearthed fossil remains and/or traces (e.g., tracks, trails, burrows); screen washing to recover small specimens; preparation of salvaged fossils to a point of being ready for curation (e.g., removal of enclosing matrix, stabilization and repair of specimens, and construction of reinforced support cradles	2021 LRDP EIR Table 6-1, Mitigation Monitoring and Reporting Program for the Long Range Development Plan	
Noise	Mitigation Measure	NOI-2	If any vibration causing construction activities/equipment are anticipated to be used for future development projects, UC Berkeley shall implement the following steps to ensure impacts from vibration causing construction activities/equipment will be less than significant.	2021 LRDP EIR Table 6-1, Mitigation Monitoring and Reporting Program for the Long Range Development Plan

Торіс	Type of Measure	Mitigation/ CBP #	Mitigation / Continuing Best Practice Text	Source Document
			Step 1 (Activity/Equipment Screening Distances): UC Berkeley shall use the construction vibration screening	
			standards shown below based on Federal Transit Administration criteria to determine if the construction	
			activity/equipment is within the vibration screening distances that could cause building damage/human annoyance or	
			sensitive equipment disturbance. If the construction activity/equipment is within the screening distance, then Step 2	
			(Alternative Methods/Equipment) shall be implemented.	

• Step 2 (Alternative Methods/Equipment): When the anticipated vibration-causing construction activity/equipment

	Reference Vibration Levels (in/sec PPV) at	Screening Level Distance in feet for	Screening Level Distance in feet for
Activity/Equipment	25 feet	0.20 in/sec PPV a	0.12 in/sec PPV b
Pile Driving	1.518	97	136
Caisson Drilling	0.089	15	21
Vibratory Roller	0.21	26	37
Large Bulldozer	0.089	15	21
Screening Distance to Vo	B Threshold: Human Annoyan	ce and Sensitive Equipme	ent Disturbance
Activity/Equipment	Reference Vibration Levels (VdB) at 25 feet	Screening Level Distance in feet for 72 VdB ^c	Screening Level Distance in feet for 65 VdB ^d
Pile Driving	112	520	890
Caisson Drilling	87	80	140
caisson Drining			
Vibratory Roller	94	140	240

Notes: Peak Particle Velocity inches per second (PPV in/sec); Vibration Decibel (VdB).

a. FTA Building Category III, Non-engineered timber and masonry buildings (residential).

b. FTA Building Category IV, Buildings extremely susceptible to vibration damage (historic).
 c. FTA Land Use Category 2, Residences and buildings where people normally sleep.

d. FTA Land Use Category 2, Residences and buildings where people normany sleep.
 d. FTA Land Use Category 1, Buildings where vibration would interfere with interior operations.

Source: Federal Transit Administration, 2018, Transit Noise and Vibration Impact Assessment.

is within the screening standards in Step 1 (Activity/Equipment Screening Distances), UC Berkeley shall consider whether alternative methods/equipment are available and shall verify that the alternative method/equipment is shown on the construction plans prior to the beginning of construction. Alternative methods/equipment may include, but are not limited to:

- For pile driving, the use of caisson drilling (drill piles), vibratory pile drivers, oscillating or rotating pile installation methods, pile pressing, "silent" piling, and jetting or partial jetting of piles into place using a water injection at the tip of the pile shall be used, where feasible.
- For paving, use of a static roller in lieu of a vibratory roller shall be implemented.
- For grading and earthwork activities, off-road equipment shall be limited to 100 horsepower or less.
 Where alternative methods/equipment to vibration causing activities/equipment are not feasible, then Step 3 (Construction Vibration Monitoring Program) shall be implemented.
- Step 3 (Construction Vibration Monitoring Program): Prior to any project-related excavation, demolition or construction activity for projects within the screening distances listed in Step 1 (Activity/Equipment Screening Distances) and where alternative methods/equipment to vibration causing activities/equipment are not feasible pursuant to Step 2 (Alternative Methods/Equipment), UC Berkeley shall prepare a construction vibration monitoring program. The program shall be prepared and implemented by a qualified acoustical consultant or structural engineer. Where the vibration sensitive receptors are historic resources, the program shall be prepared and implemented by a

Торіс	Type of Measure	Mitigation/ CBP #	Mitigation / Continuing Best Practice Text	Source Document
Topic			 Mitigation / Continuing Best Practice Text structural engineer with a minimum of five years of experience in the rehabilitation and restoration of historic buildings and a historic preservation, Professional Qualifications Standards. The program shall include the following: Prepare an existing conditions study to establish the baseline condition of the vibration sensitive resources in the form of written descriptions with a photo survey, elavation survey, and crack-monitoring survey for the vibration-sensitive building or structure. The photo survey shall include internal and external crack monitoring in the structure, settlement, and distress, and document the condition of the foundation, walls and other structural elements in the interior and exterior of the building or structure. Surveys will be performed prior to, in regular intervals during, and after completion of all vibration-generating activity. Where receptors are historic resources, the study shall describe the physical characteristics of the resources that convey their historic significance. Determine the number, type, and location of vibration sensors and establish a vibration velocity limit (as determined based on a detailed review of the proposed building), method (including locations and instrumentation) for monitoring vibrations during construction, and method for alerting responsible persons who have the authority to halt construction should limits be exceeded or damaged observed. Perform monitoring surveys prior to, in regular intervals during and after completion of all vibration-generating activity and report any changes to existing conditions, including, but not limited to, expansion of existing cracks, new spalls, other exterior deterioration, or any problems with character-defining features of a historic resource are discovered. UC Berkeley shall establish the frequency of monitoring and reporting based the qualified acoustical consultant or structural engineer. Somitoris and active are histor	Document
			to the relevant government body with jurisdiction over the neighboring historic resource, as necessary.	

Торіс	Type of Measure	Mitigation/ CBP #	Mitigation / Continuing Best Practice Text	Source Document
			 Conduct a post-survey on the structure where either monitoring has indicated high levels or complaints of damage and make appropriate repairs where damage has occurred as a result of construction activities. Prepare a construction vibration monitoring report that summarizes the results of all vibration monitoring and submit the report after the completion of each phase identified in the project construction schedule. The vibration monitoring report shall include a description of measurement methods, equipment used, calibration certificates, and graphics as required to clearly identify vibration-monitoring locations. An explanation of all events that exceeded vibration limits shall be included together with proper documentation supporting any such claims. The construction vibration monitoring report shall be submitted to UC Berkeley within two weeks upon completion of each phase identified in the project construction schedule. Designate a person responsible for registering and investigating claims of excessive vibration. The contact information of such person shall be clearly posted in one or more locations at the construction site 	
Tribal Cultural Resources	Mitigation Measure	TCR-1	Implement Mitigation Measure CUL-2.	2021 LRDP EIR Table 6-1, Mitigation Monitoring and Reporting Program for the Long Range Development Plan
Wildfire	Mitigation Measure	WF-3	Electrical lines associated with future electrical infrastructure shall be undergrounded, where feasible. UC Berkeley shall verify compliance with this measure as part of plan review prior to construction.	2021 LRDP EIR Table 6-1, Mitigation Monitoring and Reporting Program for the Long Range Development Plan

Торіс	Type of Measure	Mitigation/ CBP #	Mitigation / Continuing Best Practice Text	Source Document
Aesthetics	Continuing Best Practice	AES-1	New projects will as a general rule conform to the Physical Design Framework. While the guidelines in the Physical Design Framework would not preclude alternate design concepts when such concepts present the best solution for a particular site, UC Berkeley will not depart from the Physical Design Framework except for solutions of extraordinary quality.	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring
Aesthetics	Continuing Best Practice	AES-2	Major new campus projects will continue to be reviewed at each stage of design by the UC Berkeley Design Review Committee. The provisions of the LRDP, as well as project-specific design guidelines prepared for each such project, will guide these reviews.	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring
Aesthetics	Continuing Best Practice	AES-3	To the extent feasible, UC Berkeley will enhance the visual quality of mapped high fire risk zones by focusing fuel management practices that promote landscape resilience, native habitats, and biodiversity.	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring
Aesthetics	Continuing Best Practice	AES-6	Lighting for new development projects will be designed to include shields and cut-offs that minimize light spillage onto unintended surfaces and minimize atmospheric light pollution. The only exception to this principle will be in those areas where such features would be incompatible with the visual and/or historic character of the area.	Table 7-1, Continuing Best Practices Implementation and Monitoring
Aesthetics	Continuing Best Practice	AES-7	As part of UC Berkeley's design review procedures, light and glare will be given specific consideration and measures will be incorporated into the project design to minimize both. In general, exterior surfaces will not be reflective; architectural screens and shading devices are preferable to reflective glass.	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring
Air Quality	Continuing Best Practice	AIR-2	 UC Berkeley will continue to comply with the current Bay Area Air Quality Management District basic control measures for fugitive dust control. The requirement to comply with the basic control measures will be identified in construction bids. The Bay Area Air Quality Management District's current basic control measures include: Water all active construction areas at least twice daily, or as often as needed to control dust emissions. Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water will be used whenever possible. Pave, apply water twice daily or as often as necessary to control dust, or apply (nontoxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer). 	Table 7-1, Continuing Best Practices Implementation and Monitoring

Торіс	Type of Measure	Mitigation/ CBP #	Mitigation / Continuing Best Practice Text	Source Document
Air Quality	Continuing Best Practice	AIR-3	 Sweep daily (with water sweepers using reclaimed water if possible) or as often as needed all paved access roads, parking areas and staging areas at the construction site to control dust. Sweep public streets daily (with water sweepers using reclaimed water if possible) in the vicinity of the project site, or as often as needed, to keep streets free of visible soil material. Hydroseed or apply nontoxic soil stabilizers to inactive construction areas. Enclose, cover, water twice daily, or apply nontoxic soil binders to exposed stockpiles (dirt, sand, etc.). Limit vehicle traffic speeds on unpaved roads to 15 miles per hour. Replant vegetation in disturbed areas as quickly as possible. UC Berkeley will continue to implement the following control measures to reduce emissions of diesel particulate matter and ozone precursors from construction equipment exhaust: 	2021 LRDP EIR Table 7-1,
			 Equipment will be properly serviced and maintained in accordance with the manufacturer's recommendations. Construction contractors will also ensure that all nonessential idling of construction equipment is restricted to five minutes or less, in compliance with Section 2449 of the California Code of Regulations, Title 13, Article 4.8, Chapter 9. 	Continuing Best Practices Implementation and Monitoring
Biological Resources	Continuing Best Practice	BIO-1	 Avoid disturbance or removal of bird nests protected under the federal Migratory Bird Treaty Act and California Department of Fish and Game Code when in active use. This will be accomplished by taking the following steps. If tree removal and initial construction is proposed during the nesting season (February 1 to August 31), a focused survey for nesting raptors and other migratory birds will be conducted by a qualified biologist within 14 days prior to the onset of tree and vegetation removal in order to identify any active nests on the site and surrounding area within up to 500 feet of proposed construction, with the distance to be determined by a qualified biologist based on project location. The site will be resurveyed to confirm that no new nests have been established if vegetation removal and demolition has not been completed or if construction has been delayed or stopped for more than seven consecutive days during the nesting season. If no active nests are identified during the construction survey period, or development is initiated during the non- breeding season (September 1 to January 31), tree and vegetation removal and building construction may proceed with no restrictions. If bird nests are found, an adequate setback will be established around the nest location and vegetation removal, building demolition, and other construction activities shall be restricted within this no-disturbance zone until the qualified biologist has confirmed that birds have either not begun egg-laying and incubation, or that the juveniles from those nests are foraging independently and capable of survival outside the nest location. Required setback distances for the no-disturbance zone will be based on input received from the California Department of Fish and Wildlife and may vary depending on species and sensitivity to disturbance. As necessary, the no-disturbance zone will be fenced with temporary orange construction fencing if construction is to be initiated on the remainder of the sit	Table 7-1, Continuing Best Practices Implementation and Monitoring

Торіс	Type of Measure	Mitigation/ CBP #	Mitigation / Continuing Best Practice Text	Source Document
Biological Resources	Continuing Best Practice	BIO-9	Adverse effects to specimen trees and plants will be avoided. UC Berkeley will continue to implement the Campus Specimen Tree Program to reduce effects to specimen trees and flora. Replacement landscaping will be provided where specimen resources are adversely affected, either through salvage and transplanting of existing trees and shrubs or through new horticulturally appropriate replacement plantings, as directed by the Campus Landscape Architect.	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring
Biological Resources	Continuing Best Practice	BIO-10	Implementation of the recommendations of the Landscape Master Plan and subsequent updates, and project-specific design guidelines, will provide for stewardship of existing landscaping, and use of replacement and expanded tree and shrub plantings to improve the important open space characteristics and resilience of the Campus Park. Native plantings and horticulturally appropriate species will continue to be used in future landscaping, serving to partially replace any trees lost as a result of development.	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring
Biological Resources	Continuing Best Practice	BIO-11	Trees and other vegetation require routine maintenance. As trees age and become senescent, UC Berkeley will continue to undertake trimming, thinning, or removal, particularly if trees become a safety hazard. Vegetation in the Hill Campus East requires continuing management for fire safety, emergency evacuation, habitat enhancement, and other objectives. This may include removal of mature trees such as native live oaks and non-native plantings of eucalyptus and pine. The Landscape Master Plan, Landscape Heritage Plan and their subsequent updates will provide guidance on potential species to replace trees that are removed, where appropriate.	Table 7-1, Continuing Best Practices Implementation and Monitoring
Cultural Resources	Continuing Best Practice	CUL-1	UC Berkeley will follow the procedures of conduct following the discovery of human remains that have been mandated by Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98 and the California Code of Regulations Section 15064.5(e) (California Environmental Quality Act [CEQA]). According to the provisions in CEQA, if human remains are encountered at the site, all work in the immediate vicinity of the discovery shall cease and necessary steps to ensure the integrity of the immediate area shall be taken. The County Coroner shall be notified immediately. The Coroner shall then determine whether the remains are Native American. If the Coroner determines the remains are Native American, the Coroner shall notify the California Native American Heritage Commission (NAHC) within 24 hours, who will, in turn, notify the person the NAHC identifies as the Most Likely Descendant (MLD) of any human remains. Further actions shall be determined, in part, by the desires of the MLD. The MLD has 48 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the NAHC is unable to identify an MLD, the MLD fails to make a recommendation within 48 hours after being notified, or the landowner rejects the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the landowner, the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance.	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring
Geology and Soils	Continuing Best Practice	GEO-1	UC Berkeley will continue to comply with the California Building Code and the University of California Seismic Safety Policy.	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring

Торіс	Type of Measure	Mitigation/ CBP #	Mitigation / Continuing Best Practice Text	Source Document
Geology and Soils	Continuing Best Practice	GEO-2	Site-specific geotechnical studies will be conducted under the supervision of a California Registered Certified Engineering Geologist or licensed geotechnical engineer and UC Berkeley will incorporate recommendations for geotechnical hazard prevention and abatement into project design.	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring
Geology and Soils	Continuing Best Practice	GEO-6	UC Berkeley will continue to implement programs and projects in emergency planning, training, response, and recovery. Each campus Building Coordinator will prepare, and update as needed, building response plans and coordinate education and planning for all building occupants.	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring
Geology and Soils	Continuing Best Practice	GEO-9	Campus construction projects must comply with the Campus Design Standards, which contain regulatory and other campus requirements for construction-phase and post-construction stormwater management.	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring
Geology and Soils	Continuing Best Practice	GEO-10	In the event that a unique paleontological resource is identified during project planning or construction, the work will stop immediately in the area of effect, and the find will be protected until its significance can be determined by a qualified paleontologist. If the resource is determined to be a "unique resource," a mitigation plan will be formulated pursuant to guidelines developed by the Society of Vertebrate Paleontology and implemented to appropriately protect the significance of the resource by preservation, documentation, and/or removal, prior to recommencing activities in the area of effect. The plan will be prepared by the qualified paleontologist and submitted to the UC Berkeley project manager for review and approval prior to initiation or recommencement of construction activities in the area of effect.	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring
Hazards and Hazardous Materials	Continuing Best Practice	HAZ-1	 UC Berkeley will continue to implement the same (or equivalent) health and safety plans, programs, practices, and procedures related to the use, storage, disposal, or transportation of hazardous materials and wastes (including chemical, radioactive, and biohazardous materials and waste) during the LRDP planning horizon. These include, but are not limited to: Requirements for safe transportation of hazardous materials UC Berkeley Office of Environment, Health & Safety training programs and oversight The Hazard Communication Program Publication and promulgation of the Water Protection Policy, the drain disposal guidelines, the Wastewater Toxics Management Plan, and the Slug Control Plan Requirements that laboratories have Chemical Hygiene Plans and a chemical inventory database The Aboveground Storage Tank Spill Prevention Control and Countermeasure Plan and monitoring of underground storage tanks Implementation of the hazardous waste disposal program and policies 	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring

Торіс	Type of Measure	Mitigation/ CBP #	Mitigation / Continuing Best Practice Text	Source Document
			The Biosafety Program	
			The Medical Waste Management Program	
			The Laser Safety Program	
			The Radiation Safety Program	
			The Drain Disposal Restrictions	
			These programs may be subject to modification as regulations or UC Berkeley policies are developed or if the programs become obsolete through replacement by other programs that incorporate similar or more effective health and safety protection measures. However, any modifications must incorporate similar or more effective health and safety protection measures.	
Hazards and Hazardous Materials	Continuing Best Practice	HAZ-5	UC Berkeley will continue to perform site histories and due diligence assessments of all sites where ground-disturbing construction is proposed, to assess the potential for soil and groundwater contamination resulting from past or current site land uses at the site or in the vicinity. The investigation will include review of regulatory records, historical maps and other historical documents, and inspection of current site conditions. UC Berkeley will act to protect the health and safety of workers or others potentially exposed should hazardous site conditions be found.	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring
Hydrology and Water Quality	Continuing Best Practice	HYD-1	During the plan check review process and construction phase monitoring, UC Berkeley Office of Environment, Health & Safety will review each development project to determine whether project runoff would increase pollutant loading and verify that the proposed project complies with all applicable requirements (e.g., Regional Water Quality Control Board and Campus Design Standards requirements) and best management practices (e.g., those described in the California Stormwater Quality Association's Construction BMP Handbook).	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring
Hydrology and Water Quality	Continuing Best Practice	HYD-2	UC Berkeley will continue implementing an urban runoff management program containing best management practices, as published in the Strawberry Creek Management Plan, and as developed through the Stormwater Permit Annual Reports completed for the Phase II municipal separate storm sewer system (MS4) permit. UC Berkeley will continue to comply with the MS4 stormwater permitting requirements by implementing construction and post-construction control measures and best management practices required by project-specific Stormwater Pollution Prevention Plans (SWPPPs) and by the Phase II MS4 permit to control pollution. SWPPPs will be prepared by the project contractor as required to prevent discharge of pollutants and to minimize sedimentation resulting from construction and the transport of soils by construction vehicles.	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring
Hydrology and Water Quality	Continuing Best Practice	HYD-5	Landscaped areas of development sites will be designed to absorb runoff from rooftops and walkways. Open or porous paving systems will be included in project designs, where feasible, to minimize impervious surfaces and absorb runoff.	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring
Hydrology and Water Quality	Continuing Best Practice	HYD-7	UC Berkeley will continue to review each development project, to determine whether rainwater infiltration to groundwater is affected. If it is determined that existing infiltration rates would be adversely affected, UC Berkeley will design and implement the necessary improvements to retain and infiltrate stormwater. Such improvements could include retention basins to collect and retain runoff, grassy swales, infiltration galleries, planter boxes, permeable pavement, or other retention methods. The goal of the improvement should be to ensure that there is no net decrease in the amount	2021 LRDP EIR Table 7-1, Continuing Best Practices

Торіс	Type of Measure	Mitigation/ CBP #	Mitigation / Continuing Best Practice Text	Source Document
			of water recharged to groundwater that serves as freshwater replenishment to Strawberry Creek. The improvement should maintain the volume of flows and times of concentration from any given site at pre-development conditions.	Implementation and Monitoring
Hydrology and Water Quality	Continuing Best Practice	HYD-13	UC Berkeley will continue to manage runoff into storm drain systems such that the aggregate effect of projects implemented pursuant to the LRDP creates no net increase in runoff over existing conditions.	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring
Land Use	Continuing Best Practice	LU-2	Each individual project built in the Hill Campus West, Hill Campus East, or the City Environs Properties under the LRDP will be assessed to determine whether it could pose potential significant land use impacts not anticipated in the LRDP, and if so, the project would be subject to further evaluation under the California Environmental Quality Act.	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring
Noise	Continuing Best Practice	NOI-2	 UC Berkeley will require the following measures for all construction projects: Construction activities will be limited to a schedule that minimizes disruption to uses surrounding the project site as much as possible. Construction outside the Campus Park will be scheduled within the allowable construction hours designated in the noise ordinance of the local jurisdiction to the full feasible extent, and exceptions will be avoided except where necessary. As feasible, construction equipment will be required to be muffled or controlled. The intensity of potential noise sources will be reduced where feasible by selection of quieter equipment (e.g., gas or electric equipment instead of diesel powered, low noise air compressors). Functions such as concrete mixing and equipment repair will be performed off-site whenever possible. Stationary equipment such as generators and air compressors will be located as far as feasible from nearby noise-sensitive uses. At least 10 days prior to the start of construction activities, a sign will be posted at the entrance(s) to the job site, clearly visible to the public, that includes contact information for UC Berkeley's authorized representative in the event of a noise or vibration complaint. If the authorized contractor's representative receives a complaint, they will investigate, take appropriate corrective action, and report the action to UC Berkeley. During the entire active construction period and to the extent feasible, the use of noise-producing signals, including horns, whistles, alarms, and bells, will be for safety warning purposes only. The construction manager will use smart back-up alarms, which automatically adjust the alarm level based on the background noise level, or switch off back-up alarms and replace with human spotters in compliance with all safety requirements and laws. 	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring

Торіс	Type of Measure	Mitigation/ CBP #	Mitigation / Continuing Best Practice Text	Source Document
			 Pile drivers with the best available noise control technology will be used. For example, pile driving noise control may be achieved by shrouding the pile hammer point of impact, by placing resilient padding directly on top of the pile cap, and/or by reducing exhaust noise with a sound-absorbing muffler. Alternatives to impact hammers, such as oscillating or rotating pile installation systems, will be used where feasible. 	
Transportation	Continuing Best Practice	TRAN-1	UC Berkeley will implement bicycle, pedestrian, and transit access and circulation improvements as part of new building projects, major renovations, and landscape projects. Improvements will address the goal of increasing non-vehicular commuting and safety; improving access from adjacent campus or city streets and public transit; reducing multi-modal conflict; providing bicycle parking; and providing commuter amenities.	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring
Transportation	Continuing Best Practice	TRAN-5	UC Berkeley will require contractors working on major new construction or major renovation projects to develop and implement a Construction Traffic Management Plan that reduces construction-period impacts on circulation and parking within the vicinity of the project site. The Construction Traffic Management Plan will address job-site access, vehicle circulation, bicycle and pedestrian safety, and be coordinated with the City of Berkeley Public Works Department when projects require temporary modifications to city streets.	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring
Transportation	Continuing Best Practice	TRAN-6	 For each construction project, UC Berkeley will require the prime contractor to prepare a Construction Traffic Management Plan which will include the following elements: Proposed truck routes to be used, consistent with the City truck route map. Construction hours, including limits on the number of truck trips during the morning (AM) and evening (PM) peak traffic periods (7:00 to 9:00 a.m. and 4:00 to 6:00 p.m.), if conditions demonstrate the need. Proposed employee parking plan (number of spaces and planned locations). Proposed construction equipment and materials staging areas, demonstrating minimal conflicts with circulation patterns. Expected traffic detours needed, planned duration of each, and traffic control plans for each. Identifying bicycle and pedestrian detours and safety plan, including solutions to address impacts to accessible routes. 	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring
Transportation	Continuing Best Practice	TRAN-7	UC Berkeley will manage project schedules to minimize the overlap of excavation or other heavy truck activity periods that have the potential to combine impacts on traffic loads and street system capacity, to the extent feasible.	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring
Transportation	Continuing Best Practice	TRAN-8	UC Berkeley will reimburse the City of Berkeley for its fair share of costs associated with damage to City streets from UC Berkeley construction activities, provided that the City adopts a policy for such reimbursements applicable to all development projects within Berkeley.	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring

Торіс	Type of Measure	Mitigation/ CBP #	Mitigation / Continuing Best Practice Text	Source Document
Utilities and Service Systems	Continuing Best Practice	USS-3	UC Berkeley will continue to incorporate specific water conservation measures into project design to reduce water consumption and wastewater generation. This could include the use of special air-flow aerators, water-saving shower heads, flush cycle reducers, low-volume toilets, weather-based or evapotranspiration irrigation controllers, drip irrigation systems, and the use of drought resistant plantings in landscaped areas, and collaboration with the East Bay Municipal Utility District to explore suitable uses of recycled water.	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring
Utilities and Service Systems	Continuing Best Practice	USS-6	UC Berkeley will continue to implement the Zero Waste requirements of the UC Sustainability Policy designed to reduce the total quantity of campus solid waste that is disposed of in landfills.	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring
Utilities and Service Systems	Continuing Best Practice	USS-7	In accordance with the CalGreen Code, and as required for Leadership in Energy and Environmental Design certification, contractors working for UC Berkeley will be required under their contracts to report their solid waste diversion according to UC Berkeley's waste management reporting requirements.	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring
Wildfire	Continuing Best Practice	WF-3	UC Berkeley will continue to plan and implement programs to reduce risk of wildland fires, including plan review and construction inspection programs that ensure that its projects incorporate fire prevention measures.	2021 LRDP EIR Table 7-1, Continuing Best Practices Implementation and Monitoring

APPENDIX B

HEARST GREEK THEATRE UPPER BOWL SAFETY AND LAWN RESTORATION PROJECT, PROPOSED PROJECT ANALYSIS





HEARST GREEK THEATRE UPPER BOWL SAFETY AND LAWN RESTORATION PROJECT PROPOSED PROJECT ANALYSIS

BERKELEY, CALIFORNIA [22121]

PREPARED FOR CAPITAL PROJECTS UNIVERSITY OF CALIFORNIA, BERKELEY

June 2022



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I. INTRODUCTION

This Proposed Project Analysis has been prepared at the request of University of California, Berkeley Capital Projects for proposed improvements to sightlines and accessibility at the Upper Landscape area to the east of the main amphitheater of the Hearst Greek Theatre. The proposed project involves regrading the existing slope; installing new concrete curbs, staircases, and accessible seating areas; and improving an existing fire lane at the rear of the property **(Figure 1)**. Built in 1903 and renovated in 1957, the Hearst Greek Theatre is listed on the National Register of Historic Places and is a California State Historical Landmark and City of Berkeley Landmark.

Summary of Determination

Page & Turnbull evaluated the proposed project using the *Secretary of the Interior's Standards for Rehabilitation*.¹ The proposed project was found to comply with all ten standards. As designed, the proposed project would not affect the historic integrity or status of the Hearst Greek Theatre as a designated historical resource at the national, state, and local level. Therefore, the proposed project would not have a substantial adverse effect on the significance of a historical resource under the California Environmental Quality Act (CEQA).



Figure 1. Aerial view of the Hearst Greek Theatre, with proposed project area shaded yellow. Source: Google Maps. Edited by Page & Turnbull.

¹ National Park Service, Technical Preservation Services: Rehabilitation Standards and Guidelines, electronic resource at <u>https://www.nps.gov/tps/standards/rehabilitation.htm</u>, accessed May 21, 2022.

Methodology

This report includes a summary of the current historic status of the Hearst Greek Theatre, a brief description of the structure, its significance, a list of character-defining features that enable the property to convey its historic significance, and photographs taken of the property during a site visit on May 11, 2022. Page & Turnbull staff reviewed proposed project drawings, dated April 2022 and prepared by CAW Architects, as well as previous documentation of the individual property and the University of California, Berkeley campus. The potential impact of the proposed project on the Hearst Greek Theatre, as an individual historical resource, was evaluated using the *Secretary of the Interior's Standards for Rehabilitation*. Unless otherwise noted, all photographs were taken by Page & Turnbull on May 11, 2022.

II. HISTORIC STATUS OF RESOURCES IN THE PROJECT SITE

The following section examines the national, state, and local historic ratings currently assigned to the Hearst Greek Theatre.

National Register of Historic Places

The National Register is the nation's most comprehensive inventory of historic resources. The National Register is administered by the National Park Service and includes buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level.

The Hearst Greek Theatre is listed on the National Register (NR #82004644) as part of the University of California Multiple Resource Area (NR #64000062), designated in 1982.

California Register of Historical Resources

The California Register is an inventory of significant architectural, archaeological, and historical resources in the State of California. Resources can be listed in the California Register through a number of methods. State Historical Landmarks and National Register-listed properties are automatically listed in the California Register. Properties can also be nominated to the California Register by local governments, private organizations, or citizens. The evaluative criteria used by the California Register for determining eligibility are closely based on those developed by the National Park Service for the National Register.

The Hearst Greek Theatre is listed on the California Register as it is listed as an individual resource on the National Register and is part of California State Historical Landmark No. 946, the University of California, Berkeley Campus.

California Historical Resource Status Codes

Properties listed by, or under review by, the State of California Office of Historic Preservation (OHP) are assigned a California Historical Resource Status Code (Status Code) between "1" and "7" to establish their historic significance in relation to the National Register of Historic Places (National Register or NR) or California Register of Historical Resources (California Register or CR).² Properties with a Status Code of "1" or "2" are either eligible for listing in the California Register or the National Register, or are already listed in one or both of the registers. Properties assigned Status Codes of "3" or "4" appear to be eligible for listing in either register, but normally require more research to support this rating. Properties assigned a Status Code of "5" have typically been determined to be locally significant or to have contextual importance. Properties with a Status Code of "6" are not eligible for listing in either register. Finally, a Status Code of "7" means that the resource either has not been evaluated for the National Register or the California Register, or needs reevaluation.

The Hearst Greek Theatre is listed in the Office of Historic Preservation (OHP) Built Environment Resource Directory (BERD) for Alameda County, most recently updated on March 3, 2020, with status codes of 1CL, indicating its status as a California State Historical Landmark, and 1S, indicating its listing as an individual resource on the National Register.

City of Berkeley Landmarks and Structures of Merit

The City of Berkeley maintains a list of properties designated as local Landmarks and Structures of Merit under Chapter 3.24 of the Berkeley Municipal Code. Much like the National and California Registers, the Municipal Code provides a number of criteria that must be met in order for a property to gain Landmark or Structure of Merit designation. Properties may be landmarked if they meet standards of architectural, cultural, educational, or historical significance, or if they are already listed in the National Register. A property may be designated as a Structure of Merit if it does not rise to the level of Landmark status, but has contextual importance and is worthy of preservation as part of a neighborhood, block or street frontage, or group of buildings that includes Landmark properties.³ The City of Berkeley's list of designated Landmarks and Structures of Merit meets the requirements of a local register of historical resources under CEQA.

The Hearst Greek Theatre is a City of Berkeley Landmark, designated in 1991.

 ² State of California, Office of Historic Preservation, California Historical Resource Status Codes (March 1, 2020). Electronic resource at https://ohp.parks.ca.gov/pages/1068/files/Resource-Status-Codes.pdf, accessed May 24, 2022.
 3 City of Berkeley Municipal Code Landmarks Preservation Ordinance, 3.24.110 Landmarks, historic districts and structures of merit--Designation--Criteria for consideration. Electronic resource at https://berkeley.municipal.codes/BMC/3.24.110, accessed May 24, 2022.

Hearst Greek Theatre: Brief Development History and Character-Defining Features⁴

The Hearst Greek Theatre is a reinforced concrete structure designed by John Galen Howard and constructed in 1903. The theater structure consists of an amphitheater, orchestra circle, stage, and ramps framing the stage (**Figure 2**). The site consists of "the Gayley Road landscape area on the west, the north gate and south gate areas bracketing the main structure on the west side, and the Upper Landscape area on the east side." (**Figure 3**)⁵

The original 1903 structure was constructed at the location of a natural amphitheater, called Ben Weed's Theater, set amidst a grove of eucalyptus trees. While Howard's design included many design elements which were omitted from construction due to budget constraints, the resulting theater evokes an elemental Greek simplicity which complemented the more ornate Beaux Arts classicism of Howard's subsequent campus buildings, such as California Hall (built 1905) and the Hearst Memorial Mining Building (built 1907).



Figure 2. Hearst Greek Theatre stage and amphitheater, view west from the Upper Landscape area.

 ⁴ Adapted from Frederic Knapp, *Historic Structure Report: The Hearst Greek Theatre, University of California, Berkeley, California* (San Francisco: Prepared for the University of California, Berkeley, April 2007).
 ⁵ Frederic Knapp, *Historic Structure Report: The Hearst Greek Theatre*, 41.

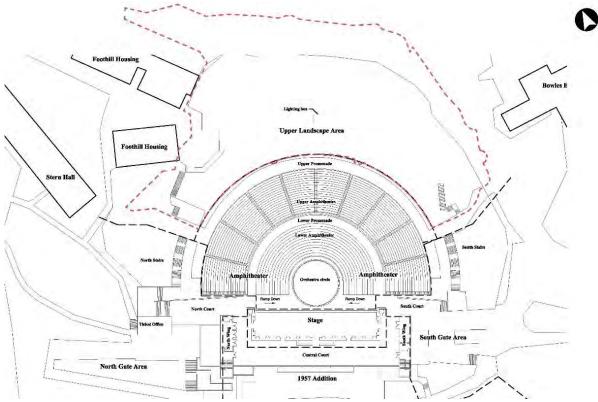


Figure 3. Sketch showing different areas of the Hearst Greek Theatre site, proposed work area indicated with dashed line. Source: Knapp 2007, edited by Page & Turnbull.

By the middle of the 20th century, the Hearst Greek Theatre was in need of repair and expansion to better serve the backstage needs of performers and experience of audience members. Architect Ernest Born was selected in March 1952 and worked in collaboration with landscape architect Lawrence Halprin, appointed in 1953 to the position of Supervising Landscape Architect at the Berkeley campus, to develop alterations and additions to site features at the renovated theater. Completed in 1957, the backstage addition is a one- and two-story C-shaped concrete structure. The outdoor North Gate, South Gate, North Court, and South Court areas were developed to include several large planters and raised beds, with trees and shrubs softening the visual impact of the otherwise austere concrete structures. The Upper Promenade, a level, asphalt path which encircles the upper amphitheater to the west, and the Upper Landscape area were developed as part of the alterations designed by Ernest Born and Lawrence Halprin. At least one version of Born's proposed alterations to the site envisioned an additional formal seating circle and upper concourse to the east of the current upper amphitheater, features that were not included in the renovation.⁶

⁶ Undated drawing by Ernest Born for "Proposed Improvements, William Randolph Hearst Greek Theatre, University of California, Berkeley, California," Ernest and Esther Born Collection, 1924-1985 (No. 2001-16, 2015-04), University of California, Berkeley Environmental Design Archives.

Aerial photographs taken in 1928 and 1965 display the extent of landscape modification to the east of the theater as part of the 1957 work, with the trees originally near the eastern extent of the amphitheater, particularly at the south side, giving way to a more open grassy area (Figure 4 and Figure 5).

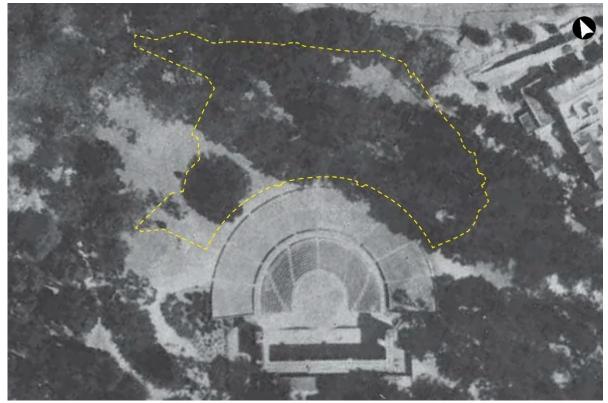


Figure 4. Detail from 1928 aerial photograph of the University of California, Berkeley, with approximate location of proposed project area indicated by dashed yellow line. Source: Photographed by 15th Section Air Corps, collection of UC Berkeley Library, edited by Page & Turnbull.

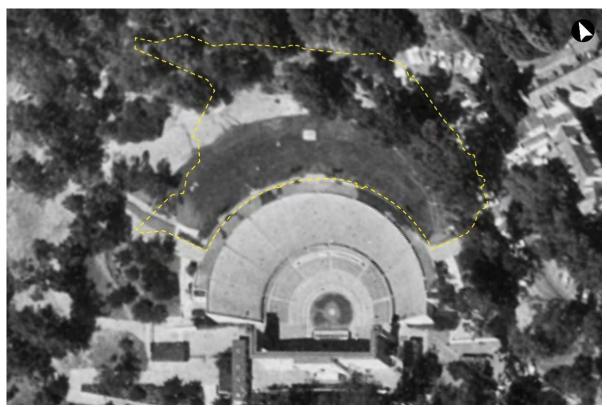


Figure 5. Detail from 1965 aerial photograph of the University of California, Berkeley, with approximate location of proposed project area indicated by dashed yellow line. Source: Cartwright Aerial Surveys, Flight CAS-65-130, Frame 6-189, collection of University of California, Santa Barbara Libraries, edited by Page & Turnbull.

The Upper Landscape Area, where the proposed project is to be located, was described by Knapp as follows:

The upper landscape area consists of the retaining wall for the upper promenade, the spectator service area, service entrances, lighting booth, and lawn seating and paths. The upper landscape area has a variety of large trees (including eucalyptus, redwood, and pine) grouped along its south edge; some of the trees predate the 1957 addition, some additional eucalyptus were called in for the 1957 planting plan, and some appear (based on their size) to have been planted after 1957. A grass lawn forms the groundcover in this area (as specified in the 1957 planting plan) **[Figure 6 and Figure 7]**. [...]

The circumferential upper promenade retaining wall is approximately four feet high and has recessed lights embedded in the wall which are supplemented by four lights on tall steel stanchions **[Figure 8]**. The asphalt upper promenade is serviced by a southern entrance from Bowles Hall Parking Lot; a mirror-image opening leads to a flat area of

bare earth at the chain link enclosure fence on the north side. Lawn seating access paths consist of two flights of ancillary stairs going east from these paths. On the north side, a low retaining wall supports a path and concrete stair which skirt the side of Building D of the Foothill Student Housing Complex; a high, solid wood fence separates the path from a grass lawn next to the dormitory **[Figure 9]**. A row of three eucalyptus trees is located to the east of the east end of this fence; they appear to have been planted around the time the fence was built.

One the south side, a new wood railroad tie stair extends from the concrete ancillary stairs east to the lawn seating and spectator service area **[Figure 10]**. The sloped grass lawn seating is circumferential and essentially adds another tier of seating above the original amphitheater. Approximately an acre of nearly level ground immediately above (east of) the lawn seating serves as the spectator service area **[Figure 11]**. South and north entrances allow vehicles into this area. There are several large eucalyptus trees in this area. (These trees are part of the stand of trees that have historically been located to the east of the theater site; today, the chain link fence along the east side of the site has created an artificial boundary between these trees and those on the east side of the fence.)

At the central crest of the lawn seating is a partly subterranean lighting control booth, which has the appearance of a pill box due to its blocky low profile design and flat concrete roof with a metal hatch for access **[Figure 12]**. [...] The entire area is enclosed by a chain link fence draped with material to provide a visual baffle, obstructing direct views of the state from outside the paid area. The spectator service area extends east of the fence to the concrete retaining wall of the Foothill Parking Lot. An asphalt path across this area connects the Bowles Hall parking lot with the Foothill Student Housing complex; it has a concrete stair to the Bowles Hall parking lot.⁷

Beginning with construction of the Women's Dormitory (Stern Hall) to the north of the Hearst Greek Theatre in 1941 and continuing through the development of the east side of campus into the 1960s, the area surrounding the theater changed from one of a relatively remote, wooded hillslope to that of a more developed campus. Construction of campus buildings to the west altered views from the amphitheater, while the development of student housing on the slope adjacent to the theatre reduced the size of the surrounding grove.

⁷ Frederic Knapp, *Historic Structure Report: The Hearst Greek Theatre*, 67-68.



Figure 6. Upper landscape area, view southeast from north side. Upper Promenade and retaining wall are at lower right.



Figure 7. Upper landscape area, view north from south side. Upper Promenade and retaining wall are at the left.



Figure 8. Upper Promenade Retaining Wall, view north.



Figure 9. Non-historic wood staircase and fence at north side of Upper Landscape area, view north.



Figure 10. Non-historic wood staircase at south side of Upper Landscape area, view northeast from spectator service area.



Figure 11. Upper spectator service area, view north. Sloped seating area is at right. The non-historic crushed rock surface facilitates vehicle circulation and parking in this area.



Figure 12. Lighting control booth located at crest of sloped seating area, view northwest. The wood screen visible at the far right is a concession booth within the upper spectator service area.



Figure 13. View from floor of amphitheater toward sloped seating area, looking northeast.

The 2007 Historic Structure Report prepared for the Hearst Greek Theatre clarifies the significance of the structure and site according to the criteria for the National Register to a fuller extent than is provided in the National Register Nomination form which supported the structure's 1982 designation. Based on Knapp's evaluation, the theater is eligible at the state level under Criterion A (Events) for its role in the early 20th-century development of the University of California, Berkeley campus, and as the site of "important campus ceremonies and events" and at the local level as the site of "cultural events and entertainment."⁸ The theater's state-level significance under Criterion B is related to its association with the Hearst family, including Phoebe Apperson Hearst's role, as regent, in facilitating its design and construction, and that of William Randolph Hearst in funding the project. Under Criterion C, the 2007 evaluation found the structure significant at the national level as one of the earliest and least-altered of John Galen Howard's campus buildings, which "exhibits his use of classical precedent without programmatic influences of contemporary academic needs" and which "fully articulates the ideal concept of a classical amphitheater" constructed "as a core building of the University when it consciously sought to become the Athens of the West."⁹ Further, Knapp writes:

The Born additions of 1957 are significant at the local level under Criterion C because they illustrate how Modernist architects adapted contemporary forms, detailing, and use of materials to Beaux-Arts buildings. The landscape designed in consultation with Lawrence Halprin is also significant for the use of Modernist landscape principles in circulation and planting design.¹⁰

The period of significance for the Hearst Greek Theatre, under all three National Register criteria is 1903-1957. Designed and constructed as part of the 1957 renovations to the Hearst Greek Theatre, the Upper Landscape area was completed within the theater's period of significance, and is identified by Knapp as a significant feature of the resource, described as follows:

[...] the upper lawn seating area and inner circumference of the Upper Landscape Area and site are Significant. This includes the north and south stairs and the outer wall of the upper promenade. This portion of the property is significant for architecture and landscape architecture, was built in the period of significance, and is in good condition, overall. It is of secondary architectural and historical importance when compared to the original Howard structure.¹¹

⁸ Frederic Knapp, *Historic Structure Report: The Hearst Greek Theatre*, 90.

⁹ Frederic Knapp, *Historic Structure Report: The Hearst Greek Theatre*, 90

¹⁰ Frederic Knapp, *Historic Structure Report: The Hearst Greek Theatre*, 90

¹¹ Frederic Knapp, *Historic Structure Report: The Hearst Greek Theatre*, 96.

Character-Defining Features

For a property to be eligible for national, state, or local designation under one or more significance criteria, the essential physical features (or character-defining features) that enable the property to convey its historic identity must be evident. To be eligible, a property must clearly contain enough of those characteristics, and these features must also retain a sufficient degree of integrity. Characteristics can be expressed in terms such as form, proportion, structure, plan, style, or materials. Significance for architecture is supported by the retention of features that relate to design, materials, workmanship, location, setting, feeling, and association.

Based on Knapp's 2007 Historic Structure Report and Page & Turnbull's May 11, 2022 site visit, the following character-defining features are associated with the Upper Landscape area of the Hearst Greek Theatre **(Figure 14)**:

- retaining wall of Upper Promenade;
- sloping grass lawn / seating area beginning at Upper Promenade retaining wall and extending eastward to the break in slope;
- 23 significant trees within the Upper Landscape area identified by Knapp, including 20 eucalyptus trees and three pine trees. Six of the significant eucalyptus trees were estimated in 2007 to pre-date the 1957 development of the Upper Landscape area;¹²
- concrete north and south staircases accessing Upper Landscape area.¹³

¹² The presence of specific trees identified as significant in the 2007 Historic Structure Report could not be confirmed based on the information provided in the proposed project plans.

¹³ The north and south staircases referred to here are the concrete staircases flanking the amphitheater on its north and south sides, which are outside of but provide access to the Upper Landscape area. The wood railroad tie staircases located at the north and south sides of the Upper Landscape area are not character-defining features.

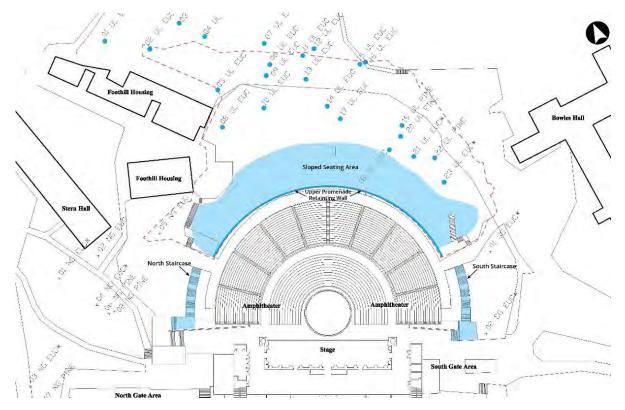


Figure 14. Locations of character-defining features associated with Upper Landscape area shaded blue. Blue dots indicate significant tree locations identified by Knapp. Source: Knapp 2007, edited by Page & Turnbull.

III. PROPOSED PROJECT ANALYSIS

Project Description

Page & Turnbull reviewed drawings, including plans and renderings for the proposed Hearst Greek Theatre Upper Bowl Safety and Lawn Restoration Project, prepared by CAW Architects, dated April 19, 2022.

The proposed project involves regrading the Upper Landscape surface from the outer retaining wall of the Upper Promenade to the eastern extent of the theater property, and removing all existing grass on the slope, gravel on the vehicle access route at the top of the slope, and exposed dirt areas to the east of the current vehicle access route (Figure 15). The sloped seating area would be terraced with a series of low, curved, concrete curbs bracketing sloped areas which would be planted with a new grass mix (Figure 16). The curbs and sloped grass sections would provide a more structured seating area than is currently present, with a reduced slope angle. A paved row of accessible seat and companion seat space would be installed at the top of the sloped seating area. The maximum height of the slope would be raised by approximately six feet, and the crest of the slope extended to the east by approximately 50 feet (Figure 17). A concrete footwell would be installed at the base of the slope, adjacent to the Upper Promenade retaining wall. Two segments, each approximately eight feet wide, would be removed from the outer retaining wall of the Upper Promenade to provide access to two new concrete staircases to be constructed at the first four terrace levels of the Upper Landscape seating area (Figure 18). The existing wood railroad tie staircases to the north and south of the Upper Landscape area would be removed and replaced with new concrete staircases and accessible concrete ramps. Nineteen existing trees would be removed from their current locations, some of which would be relocated within or adjacent to the Upper Landscape area. Twenty new trees, including Deodar Cedar, Blue Oak, California Black Oak, and Coast Redwood, would be planted near the outer circumference of the Upper Landscape area to the northeast, east, and southeast of the amphitheater. The existing vehicle access route above and to the east of the seating area would be paved with porous concrete and asphalt paving to provide required fire department access. Existing utilities, poles, footings, concrete aprons, and vault structures would be removed from the area of the new terraced seating area and relocated within the site, with rerouted utilities.

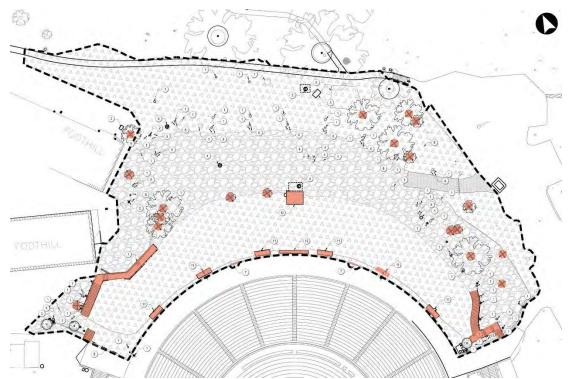


Figure 15. Proposed demolition plan for the for Greek Theater Upper Bowl Safety and Lawn Restoration Project, by CAW Architects. Structures and trees to be removed shaded red by Page & Turnbull.

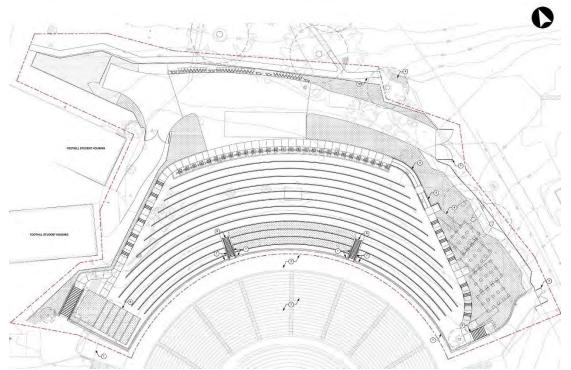


Figure 16. Proposed site plan for the Greek Theater Upper Bowl Safety and Lawn Restoration Project, by CAW Architects.

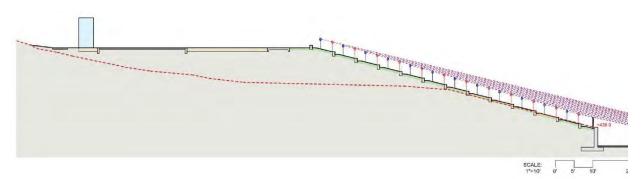
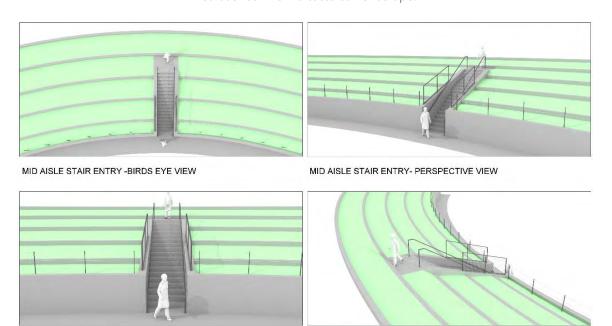


Figure 17. Proposed slope detail for the Greek Theater Upper Bowl Safety and Lawn Restoration Project, from a sight line study prepared as part of drawings by CAW Architects. The section spans from the proposed emergency vehicle circulation area at left to the Upper Promenade at right. Red dashed line indicates current slope.



MID AISLE STAIR ENTRY -FRONT VIEW MID AISLE STAIR ENTRY- TOP VIEW Figure 18. Proposed configuration of staircases at the Upper Promenade Retaining Wall, by CAW Architects.

California Environmental Quality Act

The California Environment Quality Act (CEQA) is state legislation (Pub. Res. Code §21000 et seq.), which provides for the development and maintenance of a high-quality environment for the present day and future through the identification of significant environmental effects.¹⁴ For public agencies, the main goals of CEQA are to identify and inform decision makers and the public about the significant environmental effects of projects; and either avoid or mitigate those significant environmental effects, where feasible.

CEQA applies to "projects," defined as "...an activity which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment" and which are undertaken, financially supported, or permitted by a public agency.¹⁵ Historical and cultural resources are considered to be part of the environment. In general, the lead agency must complete the environmental review process as required by CEQA. The basic steps are:

- Determine if the activity is a "project;"
- Determine if the project is exempt from CEQA;
- Perform an Initial Study to identify the environmental impacts of the Project and determine whether the identified impacts caused by a project would be "significant." Based on the finding of significant impacts, the lead agency may prepare one of the following documents:
 - a) Negative Declaration for findings of no "significant" impacts;
 - b) Mitigated Negative Declaration for findings of "significant" impacts that may revise the Project to avoid or mitigate those "significant" impacts;
 - c) Environmental Impact Report (EIR) for findings of "significant" impacts.

The University of California is the lead agency for review of the proposed project under CEQA.

Status of Historical Resources at the Project Site

In completing an analysis of a project under CEQA, it must first be determined if the project site possesses any historical resource. A site may qualify as a historical resource if it falls within at least one of four categories listed in CEQA Guidelines Section 15064.5(a). The four categories are:

1. A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4850 et seq.).

¹⁴ State of California Natural Resources Agency, California Environmental Quality Act, electronic resource at <u>http://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=PRC&division=13.&title=&part=&chapter =&article=</u>, accessed May 244, 2022.

¹⁵ Ibid., Chapter 2.5. Definitions.

- 2. A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- 3. Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4852)
- 4. The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.

In general, a resource that meets any of the four criteria listed in CEQA Guidelines Section 15064.5(a) is considered to be a historical resource unless "the preponderance of evidence demonstrates" that the resource is not historically or culturally significant."¹⁶

As the Hearst Greek Theatre is listed on the National Register, is part of a State Historical Landmark, and is a City of Berkeley Landmark, it is a historical resource for the purposes of CEQA review.

Threshold for Substantial Adverse Change

According to CEQA, a "project with an effect that may cause a substantial adverse change in the significance of an historic resource is a project that may have a significant effect on the environment."¹⁷ Substantial adverse change is defined as: "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of

¹⁶ Pub. Res. Code SS5024.1, Title 14 CCR, Section 4850 et seq.

¹⁷ CEQA Guidelines subsection 15064.5(b).

an historic resource would be materially impaired."¹⁸ The historic significance of an historical resource is materially impaired when a project "demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance" and that justify or account for its inclusion in, or eligibility for designation at the national, State, or local level.¹⁹ Thus, a project may cause an adverse change in a historic resource but still not have a significant effect on the environment as defined by CEQA as long as the impact of the change on the historic resource is determined to be less-than-significant, negligible, neutral, or even beneficial.

In other words, a project may have an impact on a historic resource, and that impact may or may not impair the resource's eligibility for inclusion in the National Register, California Register, or a local register. If an identified impact would result in a resource that is no longer able to convey its historic significance and is therefore no longer eligible for designation, then it would be considered a significant effect under CEQA.

According to CEQA Guidelines subsection 15064.5(b)(3), a project which is found to comply with the appropriate standards within the *Secretary of the Interior's Standards for the Treatment of Historic Properties* is "considered as mitigated to a level of less than a significant impact on the historical resource."

The following section analyzes the project-specific impacts of the proposed Greek Theatre Upper Bowl Safety and Lawn Restoration Project on the environment, as required by CEQA. The analysis includes the proposed project's compliance with the Secretary of the Interior's Standards for Rehabilitation.

Project Impacts on the Hearst Greek Theatre

The Hearst Greek Theatre is an outdoor theatre built in reinforced concrete in the style of a ca. fourth century BCE Greek amphitheater. The original amphitheater and stage were designed by architect John Galen Howard and completed in 1903. Additional backstage areas, repairs to the amphitheater, the Upper Promenade, and the Upper Landscape area were designed by architect Ernest Born and landscape architect Lawrence Halprin in 1957. The proposed project would be limited to the Upper Promenade retaining wall and Upper Landscape area, and may impact the resource through alteration of these significant features. The compliance of proposed project activities with respect to the *Secretary of the Interior's Standards for the Treatment of Historic Properties* is analyzed in this section.

¹⁸ CEQA Guidelines subsection 15064.5(b)(1).

¹⁹ CEQA Guidelines subsection 15064.5(b)(2).

Secretary of the Interior's Standards

The Secretary of the Interior's Standards for the Treatment of Historic Properties are used by federal agencies in evaluating work on historic properties, and have been adopted by state and local government bodies across the country for reviewing proposed rehabilitation work on historic properties under state and local preservation ordinances. These standards are a useful analytic tool for understanding and describing the potential impacts of substantial changes to historic resources. Under CEQA, projects that comply with the standards benefit from a regulatory presumption that they would have a less-than-significant adverse impact on a historic resource.²⁰ Projects that do not comply with the standards may cause either a substantial or less-than-substantial adverse change in the significance of a historic resource.

The Secretary of the Interior's Standards for the Treatment of Historic Properties offers four sets of standards to guide the treatment of historic properties: Preservation, Rehabilitation, Restoration, and Reconstruction. The four distinct treatments are defined as follows:

Preservation: The Standards for Preservation "require retention of the greatest amount of historic fabric, along with the building's historic form, features, and detailing as they have evolved over time."

Rehabilitation: The Standards for Rehabilitation "acknowledge the need to alter or add to a historic building to meet continuing or new uses while retaining the building's historic character."

Restoration: The Standards for Restoration "allow for the depiction of a building at a particular time in its history by preserving materials from the period of significance and removing materials from other periods."

Reconstruction: The Standards for Reconstruction "establish a limited framework for recreating a vanished or non-surviving building with new materials, primarily for interpretive purposes."²¹

Typically, one treatment (and the appropriate set of standards) is chosen for a project based on the project scope. The proposed project scope seeks to alter a historic structure to improve visitor accessibility and emergency vehicle access. The *Secretary of the Interior's Standards for Rehabilitation & Guidelines for Rehabilitating Historic Buildings* provide guidance for reviewing proposed work on historic properties, with the stated goal of making possible "a compatible use for a property through

²⁰ CEQA Guidelines, subsection 15064.5(b)(3).

²¹ Anne E. Grimmer, *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (Washington, D.C.: National Park Service, 2017).

repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values."²² Therefore, the *Standards for Rehabilitation* will be applied.

Standards for Rehabilitation

The following analysis applies each of the applicable *Standards for Rehabilitation* to the proposed project at the Hearst Greek Theatre, and is based on April 2022 drawings prepared by CAW Architects.

Rehabilitation Standard 1: *A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.*

Discussion: The subject property has been continuously used as a theater for the performing arts since its completion in 1903. Proposed alterations seek to facilitate the safe and accessible use of the Hearst Greek Theatre by providing improvements to accessible audience seating and emergency vehicle access.

As designed, the proposed project <u>would be in compliance</u> with Rehabilitation Standard 1.

Rehabilitation Standard 2: The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

Discussion: The proposed project would alter three character-defining features of the Upper Landscape area of the Hearst Greek Theatre: the sloped seating area, the Upper Promenade retaining wall, and 19 existing trees. Alterations to the sloped seating area would include regrading the slope to reduce its overall angle and produce up to 13 stepped terraces. The maximum height of the slope would be raised by approximately six feet, and the crest of the slope would be extended to the east by approximately 50 feet. A concrete curb echoing the curvature of the amphitheater, each approximately eight inches in height with a rectangular cross section, would be installed at each terraced seating level. The sloped areas between the concrete curbs would be planted with a grass mix to retain the lawn surface of the sloped seating area. The existing non-historic wood railroad tie staircases, located to the north and south of the sloped seating area would be removed and replaced with new concrete staircases, landings, and walkways connecting the accessible seating area with the Upper Promenade and Upper Amphitheater.

²² National Park Service, "Rehabilitation as a Treatment," electronic resource at <u>https://www.nps.gov/tps/standards/four-treatments/treatment-rehabilitation.htm</u>, accessed May 24, 2022.

Two new concrete staircases would be installed at the western side of the sloped seating area, located opposite two of the original Upper Amphitheater staircases. These staircases, which would extend through the lower four seating terraces, would provide more direct access than is currently available from the Upper Promenade to the Upper Landscape area. Installation of these staircases would require removal of two approximately eight-foot-wide sections of the Upper Promenade retaining wall. A new cable rail would be installed at the top of the Upper Promenade retaining wall, to replace the existing cable rail.

To facilitate regrading of the sloped seating area, 19 existing trees would be removed from within the Upper Landscape area, and 20 new trees would be planted to the northeast, east, and southeast of the sloped seating area.

The significant historic character of the Upper Landscape area of the Hearst Greek Theatre, developed as part of the 1957 renovations designed by Ernest Born and Lawrence Halprin, is conveyed by the sloped, grassy area which extends eastward and upward from the Upper Promenade retaining wall toward the tree-covered Berkeley Hills. The Upper Landscape area provides a backdrop for the more significant original amphitheater, continuing the slope of the basin and retaining the treed setting of the basin in which the original structure was constructed. While Knapp's 2007 Historic Structure Report for the Hearst Greek Theatre identifies 23 significant trees within the upper landscape area, it was not possible using the information reviewed for this analysis to determine which specific existing trees proposed for relocation or removal correspond to those identified as significant in the 2007 report. The most significant feature that the existing and historic trees have provided to the theater site is as a visual barrier and partial canopy at the rear of the property, marking the transition from the formal theater to its natural setting. The proposed project would allow this significant character to remain, as the regraded and terraced seating area would remain predominantly an open, grassy slope bordered by mature trees. The distribution and concentration of trees would be largely unchanged, though the balance of species would shift from predominantly eucalyptus to a mix of cedar, oak, and redwood. This is a reasonable change with respect to the fire safety of the area. Though two segments of the character-defining Upper Promenade retaining wall would be removed for installation of new staircases, the majority of the wall would remain unaltered and its visual relationship to the amphitheater would not change.

As the proposed project would retain the historic character of the Upper Landscape area and Upper Promenade retaining wall, the proposed project <u>would be in compliance</u> with Rehabilitation Standard 2.

Rehabilitation Standard 3: *Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.*

Discussion: New construction associated with the proposed project, including the terraced slope with concrete curbs, new staircases at the north and south of the Upper Landscape area, and new staircases at the west side of the sloped seating area, would be simple in design and would not include conjectural features or architectural elements from other buildings or structures. No Greek-inspired stylistic features would be incorporated into the altered or new elements of the Upper Landscape area, and concrete would be colored to be compatible but would not match exactly, in color or texture, that of the 1957 or 1903 portions of the Hearst Greek Theatre.

As designed, the proposed project <u>would be in compliance</u> with Rehabilitation Standard 3.

Rehabilitation Standard 4: *Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.*

Discussion: The proposed project would not involve removal of changes or new elements which have acquired historic significance since construction of the Hearst Greek Theatre in 1903. The Upper Landscape Area, which is a significant feature and 1957 addition to the theater, would retain its character as a predominantly grassy, sloped area bordered by mature trees. Elements to be removed, including utility enclosures and the later 20th-century wood railroad tie staircases to the north and south of the Upper Landscape area, have not acquired historic significance as changes to the property.

As designed, the proposed project <u>would be in compliance</u> with Rehabilitation Standard 4.

Rehabilitation Standard 5: *Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.*

Discussion: The most distinctive features which characterize the Upper Landscape Area are its sloping, grassy seating area, treed setting with a visually indeterminate eastern boundary, and clear western boundary at the Upper Promenade retaining wall. As landscape features, these elements of the Upper Landscape area provide examples of Lawrence Halprin's approach to creating an outdoor space which links the formality of John Galen Howard's 1903 amphitheater with the more loosely-defined eastern site boundary, which visually connects the site to the natural landscape of the Berkeley Hills. The proposed project would alter the profile of the sloped seating area, and would extend some of the visual structure of the amphitheater into the seating area with the installation of concrete curbs supporting the terraced slope. The lawn seating area would remain predominantly grassy, and would substantially retain its character as a landscape element. The informality of the site's eastern boundary would be maintained with the proposed asymmetry of tree plantings and access routes to the east of the accessible seating row.

As designed, the proposed project <u>would be in compliance</u> with Rehabilitation Standard 5.

Rehabilitation Standard 6: Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

Discussion: The project does not propose to replace or repair deteriorated historic features.

As designed, the proposed project <u>would be in compliance</u> with Rehabilitation Standard 6.

Rehabilitation Standard 7: *Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.*

Discussion: Chemical and physical treatments to historic materials, such as surface cleaning, are not proposed as part of the project.

As designed, the proposed project <u>would be in compliance</u> with Rehabilitation Standard 7.

Rehabilitation Standard 8: *Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.*

Discussion: The proposed project would be subject to Mitigation Measure CUL-2 as defined by the UC Berkeley 2021 Long Range Development Plan and Housing Projects #1 and #2 Draft Environmental Impact Report.²³ This mitigation measure describes requirements for contractor notification and procedures to be implemented at locations of known sites or high archaeological sensitivity, or in the event of discovery of archaeological resources during project activities.

As designed, the proposed project <u>would be in compliance</u> with Rehabilitation Standard 8.

Rehabilitation Standard 9: New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

²³ PlaceWorks, *UC Berkeley 2021 Long Range Development Plan and Housing Projects #1 and #2 Draft Environmental Impact Report* (Berkeley: Prepared for the University of California, Berkeley, State Clearinghouse No. 2020040078, March 8, 2021), 5-4-42 through 5-4-44.

Discussion: The proposed project would include the installation of new concrete curbs to support terracing of the sloped seating area within the Upper Landscape area, new staircases to provide access from the Upper Promenade to the sloped seating area, a new concrete accessible seating area to the east of the sloped seating area, new concrete staircases at the north and south sides of the sloped seating area, and a new paved emergency vehicle access route at the far east, rear of the Upper Landscape area. Constructed in concrete, the curbs, staircases, and accessible seating area would be colored to approximate the shade of the existing historic concrete comprising the historic amphitheater, completed in 1903, and the Upper Promenade retaining wall, built in 1957. However, the coarse texture of the historic concrete features would not be matched exactly in the new construction. Set to the rear of the historic concrete features, the new elements would be compatible in materials, scale, and style with the relatively austere, Greek-inspired amphitheater, while remaining visually subordinate to the historic features. Installation of the staircases at the Upper Promenade retaining wall would require removal of two approximately eight-foot-wide sections of the 1957 wall. The majority of the approximately 320-foot long Upper Promenade retaining wall would remain intact, and its visual character as a line of demarcation between the formal concrete amphitheater and grassy, treed slope to the east would not be impacted. The new paved emergency vehicle access routes at the eastern extent of the Upper Landscape area would replace an existing, non-historic crushed rock vehicle circulation area which is minimally visible from within the historic sloped seating area and not visible from within the amphitheater. Due to the sloped character of the landscape surrounding the Hearst Greek Theatre, this feature would also be minimally visible to observers outside the property and from other areas of the University of California, Berkeley campus.

As designed, the proposed project <u>would be in compliance</u> with Rehabilitation Standard 9.

Rehabilitation Standard 10: *New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.*

Discussion: As discussed regarding Standard 9, new construction proposed as part of the project at the Upper Landscape area of the Hearst Greek Theatre would include new concrete curbs at the sloped seating area, two new staircases at the Upper Promenade retaining wall, a new concrete accessible seating area to the east of the sloped seating area, new concrete staircases at the north and south sides of the sloped seating area, and a new paved emergency vehicle access route at the far east, rear of the Upper Landscape area. If these features were removed in the future, the sloped, vegetated character of the Upper Landscape area would be unimpaired, as would the ability of the Upper Promenade retaining wall to serve as a visual boundary between the amphitheater and Upper Landscape area.

As designed, the proposed project <u>would be in compliance</u> with Rehabilitation Standard 10.

Analysis of Impacts Under CEQA

As designed, the proposed Greek Theatre Upper Bowl Safety and Lawn Restoration Project would adhere to all 10 of the *Secretary of the Interior's Standards for Rehabilitation*. The project would improve the safety and accessibility of the audience areas of the Upper Landscape area while allowing the significant historic character of the Hearst Greek Theatre to remain intact.

IV. CONCLUSION

On behalf of the University of California, Berkeley, Page & Turnbull assessed the potential impacts of the Hearst Greek Theatre Upper Bowl Safety and Lawn Restoration Project on historical resources. The project proposes to regrade the existing sloped seating area, install new concrete curbs, staircases, and accessible seating areas, and improve an existing fire lane at the rear of the property. The Hearst Greek Theatre, built in 1903 and designed by John Galen Howard, is listed as an individual resource on the National Register and is a California State Historical Landmark and City of Berkeley Landmark. The Upper Landscape area, developed in 1957 as part of a renovation designed by architect Ernest Born and landscape architect Lawrence Halprin, is a historically significant area of the theater's site. Page & Turnbull assessed the proposed project according to the *Secretary of the Interior's Standards for Rehabilitation*, and found that it would comply with all 10 standards. If implemented as designed, the project would cause no significant impacts to historical resources for the purposes of CEQA.

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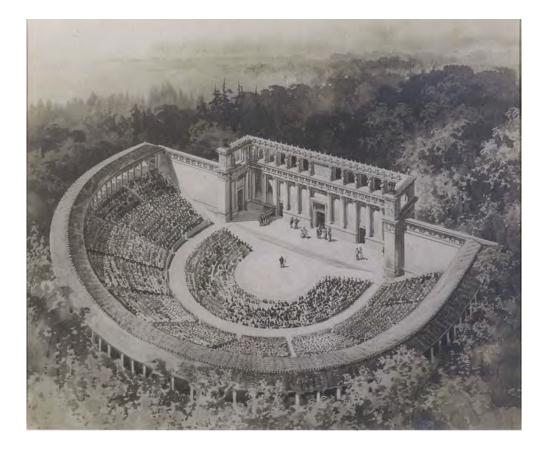
Imagining change in historic environments through design, research, and technology

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HISTORIC STRUCTURE REPORT THE HEARST GREEK THEATRE

Historic Structure Report The Hearst Greek Theatre

University of California Berkeley, California



Prepared by Frederic Knapp Architect, Inc. San Francisco, California

April 2007

It is Greece!

-Sarah Bernhardt

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I. Historic Structure Report

University of California

A. Executive Summary

Commissioned by the Physical and Environmental Planning unit of Capital Projects (PEP) in connection with the Haas School of Business Executive Education Center, this document summarizes historical information and observations of current conditions to provide a convenient reference conveying the significance of the William Randolph Hearst Greek Theatre. While intended primarily as a resource for understanding what makes this property historically important, this document also addresses historical considerations related to management and development. This Historic Structure Report (HSR) treats the Greek Theatre as a single property; it has three primary components: the classical 1903 amphitheater designed by John Galen Howard, the 1957 backstage complex designed by Ernest Born and landscape improvements designed by Ernest Born (with some level of consultation by Lawrence Halprin), and the site which is an integral element in the identity of an outdoor structure such as this. While the original site was a loosely defined but extensive portion of the lower hills east of the main Campus Park, subsequent developments on all sides have reduced it to the relatively discrete bounds described and illustrated in this report.

This report traces the development of the theater itself and its site as well as its major architectural influences, and provides capsule biographies of the handful of individuals most closely associated with it. It includes a description of the property today, a statement of historical significance, designation of the significance of major components of the property, and a discussion of important materials and repairs issues. While this document is not a Historic Landscape Report or Cultural Landscape Report, it does consider the landscape elements important to the character and significance of the Greek Theatre.

The Greek Theatre is listed in the National Register of Historic Places as part of the 1977 multiple resource nomination which encompassed 17 of the most significant resources on the campus. It is significant at the local, state, and national level for its association with important events, persons, and construction/design values. It is noteworthy for several reasons: as an excellent example of a classical amphitheater; as a site that represents the development of the Berkeley campus from the 19th Century period, the Hearst Competition and John Galen Howard, and the post-World War II era; and as a venue for important campus events and famous performances and figures from the larger culture. An outdoor space known as "Ben Weed's Amphitheatre" was used for some campus gatherings on the same site before Phoebe Hearst, Emile Benard and John Galen Howard reshaped the campus and set the stage for Howard's 1903 classical structure which survives today with a high degree of historical integrity. Howard's original design was notably more elaborate than the theater as built, with a roofed colonnade at the upper promenade, but as executed the Greek Theatre embodied the essentials of a classical theater, following fairly closely the model at Epidaurus, Greece built in the second half of the Fourth Century B.C.¹ Howard's use of a spare Doric order, executed in cast-in-place concrete with a thin cement parging visually complements the relatively unadorned project as executed. Set in the hills above the main campus, it expressed the contemporary ambitions of establishing a new expression of Western civilization in the unspoiled landscape of the West.²

The structure underwent relatively little change from its construction until after World War II. Although Bowles Hall (1928), the Women's Dormitory (now Stern Hall, 1941), and Gayley Road (1946) circumscribed a site which was previously defined by the surrounding grove of trees, the character of the theater (including the vistas to the west through the trees of the campus located below the site and in the distance of the Bay, San Francisco, and the Golden Gate) changed very little. In 1957, the only significant alteration occurred, adding a layer of Modernist architecture and landscape architecture which has become an essential element in the property. Architect Ernest Born deftly flanked Howard's original stage backdrop, or skene, on the north, west, and south with largely subterranean backstage buildings and with landscape architect Lawrence Halprin tied the site and circulation on the north and south with a series of terraces, ramps, planting areas, and service spaces. The project reinforced the classical definition of the amphitheater, its spaces, and vistas, while using a very distinct visual language that allows the 1903 design to read clearly. Few exterior changes have occurred in the half century since the Born design was executed.

The Greek Theatre continues in use for campus ceremonies and cultural uses scheduled by Cal Performances. While it has been maintained consistently, there has been some deterioration of

¹ Robertson, Greek and Roman Architecture, p 166.

² Helfand, The Campus Guide, p 17.

note, including cracking in the west walls of the amphitheater; deterioration of the concrete in the seating area and the stone *prohedria*, or ornamental seats; significant water leaks in the ground floor of the 1957 addition; cracks through the center of amphitheater; and displacement of north and south quarter spheres. The site has been affected by construction of the Foothill Student Housing project, which seriously compromised the historical integrity of the theater on the northeast and east side and reduced the size of the eucalyptus grove; by the construction of the parking lot on the south side of the theater, which resulted in the removal of some of the trees from the eucalyptus grove and as a result reduced the overall effect of the grove on this side of the theater; and by construction of high-rise academic buildings west of Gayley Road which have changed the setting, altered views (to the west), and compromised the potential for acoustic performances.

Future concerns center on the need for a capital project to rehabilitate construction that is fifty to one hundred years old and the potential for new construction around the property to impact the setting which is important to the identity and experience of the theater.

B. Introduction

This Historic Structure Report follows a general format used for decades in the United States to compile and evaluate information relating to the significance of historic buildings and structures. Similar report formats for landscapes and sites guided the consideration of the Greek Theatre site, though this document is not a full-fledged landscape or cultural landscape study. The purpose of a historic structure report is to research and analyze information about a historic property to convey what it is, explain why it is historically significant, and facilitate informed decisions on how to manage the property. While an HSR is not encyclopedic and does not answer every question about a property, it does strive to identify relevant resources and suggest where additional study, investigation, or testing is needed. Ideally, it therefore functions as the historic baseline document and should be useful for decades.

Organization and Media

This historic structure report begins by laying out the history of the site and outdoor theaters to establish the context of this property. Information about the individuals most important to the Greek Theatre rounds out this background. A description of the existing theater and its site, including a discussion of how the site was established for this report, follows. The major components, zones, and spaces that comprise the Greek Theatre, along with the primary materials, are classified according to their historical significance, with a list of features which should be preserved. Then the report traces the major alterations to help the reader understand the identity and role of different elements. A construction chronology provides a simple reference.

Following this history and evaluation of the Greek Theatre is a discussion of the current condition. The report recommends where additional study is merited, and recommends the repairs and rehabilitation necessary to maintain historical integrity. The report also provides planning, landscape, and architectural and recommendations.

Methodology

This report was compiled from site observations conducted by the primary preparers, background documents and information provided by the University of California (UC), Berkeley, office of Physical and Environmental Planning (PEP), and archival research. The study team observed the site, using digital cameras and survey forms on paper to record conditions. The survey did not include physical testing or use sensing instruments. The study team did not perform research about the condition and modes of deterioration of the materials used in the Greek Theatre. Where recommendations are offered for rehabilitation or further study, they are based on general experience in architecture and landscape architecture. Testing, structural evaluations, and conservation assessments where recommended in this study would provide the information needed to identify specific causes of damage and materials and methods for correcting it. While this report includes much information which would be useful in devising a maintenance program, it is not a maintenance plan. No hydrological or geological research or expertise was included in preparing this report.

The UC Berkeley Capital Projects division and Cal Performances provided drawings of the property from their respective plan rooms and archives. The study team obtained additional photographs, drawings, and written accounts from the following repositories:

Sonoma State University, Rohnert Park, California:

CHRIS Northwest Information Center

University of California on-line resources:

Landscape Master Plan Landscape Heritage Plan New Century Plan 2020 LRDP

University of California, Berkeley:

College of Environmental Design Archives and Library

The Bancroft Library

Earth Sciences & Map Library

California Historical Society, San Francisco

Berkeley Architectural Heritage Association, Berkeley

University of Iowa, Iowa City, Iowa:

Main Library

Archive of aerial photographs from Pacific Aerial Survey.

The research included primary and secondary documents at the above repositories. While primary research conveyed below traces the development of the 1957 design by Ernest Born and certain other topics, this report relies on secondary sources, especially the dissertations by Wardrip and Palmer, in many places. Readers should consult the primary sources for a full understanding of specific parts of the property or aspects of its development. The references cited in this report are not exhaustive; future study and design may require use of specialized information not consulted or not available for this report, especially studies and operational information held by UC Berkeley Capital Project and Cal Performances.

This study generally follows the National Register of Historic Places Criteria. The National Register is the official federal roster of historic properties worthy of preservation; the Keeper of the Register and the National Park Service (NPS) prepare the criteria under which potential resources are evaluated for inclusion in the register. The NPS, state agencies, and other government and professionals in private practice have relied on the National Register Criteria for decades to determine whether properties are historically significant, and to identify the level of significance, area(s) of significance, and historical context(s) of eligible properties. The criteria provide invaluable guidance and authoritative consistency in determining whether resources retain their historical integrity and what their character-defining features are.

The National Register Criteria underlie the hierarchy of significance and the assessment of condition used in this HSR for components and elements. When evaluating the significance and condition of buildings, architectural historians typically use a rating scale to rank the architectural and historic value of the building, its rooms or spaces, as well as individual features. The typical rating scale employs four categories: "Very Significant," "Significant," "Contributing," and "Non-Contributing." The use of the terms "Very Significant" or "Significant" here does not necessarily equate to the same meaning for those words as they are used in the context of the California Environmental Quality Act (CEQA). The fact a space or feature is called "Very Significant" or "Significant" in the Historic Structure Report does not of necessity mean that the alteration or removal of that space or the entire structure would meet the CEQA criteria for what is called a "Significant impact on the environment." For this HSR, the four categories are defined as follows:

Very Significant (VS) - The element was built during the period of significance.

Historic Structure Report	Greek Theatre	University of California	
	- It is architecturally significan	ıt.	
	- It contributes significantly to	It contributes significantly to the overall character.	
	- It remains intact or with only	minor alterations.	
	- It is in good condition.		
	- VS elements are highly sensit	ive to change.	
Significant (S)	- The element was built during	the period of significance, but	
	It is of secondary importance	,	
	It has been altered, and/or		
	It is in fair or poor condition,	or	
	- The element was not bu	ilt during the period of	
	significance, but is architectu	rally significant.	

- S elements are sensitive to change. -
- Contributing (C) The element was built during the period of significance, but is not architecturally significant, or
 - The element was not built during the period of significance, but is architecturally compatible with the original.
 - C elements are less sensitive to change. _
- Non-Contributing (NC) The element was not built during the period of significance, - \mathbf{or}
 - It has been subjected to major additions or incompatible alterations, or
 - It is incompatible in style, material, scale, character or use with the original building, or
 - It is in poor condition.
 - NC elements are not particularly sensitive to change. _

Condition

A visual appraisal of the current condition of the site, landscape, and building elements:

Historic Structure Report	Greek Theatre	University of California
Good (G)	- The element is mostly intact.	
Fair (F)	- The element is showing signs of v	vear or deterioration.
Poor (P)	- The element is badly damaged, n	nissing, or not functioning.
Unknown (U)	- The element is not accessible for	inspection. ³

Preparers

Frederic Knapp Architect, Inc. of San Francisco researched and prepared this report. Frederic Knapp, AIA, was principal in charge; Melissa Bleier was historical researcher and Will Dickinson acted as researcher, GIS technician, and CAD drafter. Jill R. Johnson was consulting architectural historian, and Denise A. Bradley, ASLA was landscape historian. Kerry O'Banion was project manager for PEP. Planning Analyst Steven Finacom acted as researcher and document coordinator for PEP.

³ University of California, Greek Theatre HSR Request for Proposals, October 24, 2006.

C. Site and Building History

Historical Context: The University of California

The University of California was one of the sixty-eight land grant colleges established to benefit from the federal Morrill Land Grant Act of 1862. Created by the State of California, the University also benefited from a simultaneous gift of assets of the private College of California. The private College, founded in the 1850s, was located in Oakland. The College planned a new campus to be located north of Oakland, in what was then an area of open farmland and acquired the site, but did not have the funds to construct buildings there or relocate. In 1866 the College named this site "Berkeley," which later was adopted as the name for not only the campus but the town which grew up around it. With funding scarce for the private college, a decision was made to dissolve the institution and donate the land holdings to the State of California. In 1868, Governor Henry Haight signed what is now known as the Organic Act of the University of California, which established the University itself, The Regents as its governing body and the requirement that they make immediate permanent improvements to the plan and landscape of the new university.⁴

Frederick Law Olmsted had been commissioned to plan the College of California campus at its new Berkeley site in 1866. This original plan was never implemented since no buildings were constructed and the College never shifted operations to the Berkeley site, but its design influenced the architects who helped the campus grow in the early years.⁵ The need for a new master plan was underscored by the fact that the original Olmsted design had been created for a small college campus, and the needs of a full-fledged state university were quite different. A competition was held in 1868, with local architects John Wright and George Sanders being the winners.

Though their plan was "enthusiastically adopted" by The Regents, the architects were dissatisfied with the amount of money they were being paid and subsequently removed

⁴Helfand, The Campus Guide, p 6.

⁵Ibid., p 4.

themselves from the project.⁶ The years following saw a number of architects involved in the growth of the University. David Farquharson and Henry Kenitzer were hired by The Regents to continue the architectural development of the University in 1869. Farquharson and Kenitzer were responsible for South Hall, the first permanent building of the new University of California campus, developed for the College of Agriculture.

The Regents, as well as the architects whom they hired, continued to use Frederick Law Olmsted's original plans for the college site. However, by 1874, when William Hammond Hall was hired to develop the landscape of the University, the original drawing of Olmsted's final campus plan had quite literally been lost.⁷ Hall, who had also drafted the primary design for San Francisco's Golden Gate Park, produced a revised plan for the Berkeley campus, building on Olmsted's concepts.

By the close of the 19th Century, the University of California was disjointed architecturally and the design of the campus as a whole was losing its cohesiveness. Wooden and brick buildings of various styles and sizes had been sited about the grounds as funding and need dictated. By 1895, University enrollment had grown to "more than 1300 students, about seven times that when the campus opened in 1873"⁸ and the need for a comprehensive campus plan and new facilities was great.

The resources to create an enduring and ambitious plan came from a philanthropist who would not only influence the direction of the University campus with a world-wide architectural competition, but who would also become the first female regent. Phoebe Apperson Hearst was the widow of Senator George Hearst and funded the International Competition for the Phoebe Hearst Architectural Plan of the University of California.

Phoebe Hearst was born in Franklin County, Missouri, and moved to California with her husband in 1862.⁹ George Hearst was extraordinarily lucky in the California gold fields, and also

⁶ Helfand, The Campus Guide, p 7.

⁷Ibid., p 8.

⁸ Ibid., p 9.

⁹ www.hearstcastle.org,Phoebe Hearst.

invested in the larger and more successful mines throughout the West. Hearst was elected to the US Senate in 1887, and served until his death in 1891.¹⁰ His only son, William Randolph Hearst, was born in 1863 and grew up traveling the world with his mother, Phoebe. William got an early start to his future media empire when his father handed him control of the San Francisco *Examiner*, which George had acquired as payment for a gambling debt.

When George died in 1891, Phoebe was the sole heir to the fortune that her husband had amassed over the years. She returned to California from Washington, DC, maintained residences in several locations including Pleasanton, San Francisco and, for a time, Berkeley, and renewed her dedication to the philanthropic support of educational programs.¹¹

Already active on the University campus creating support and scholarships for women students, Phoebe Hearst approached University President Martin Kellogg with the idea of constructing a building for the College of Mining in order to honor her late husband. She also wanted to fund a second building, Hearst Hall. Hearst Hall was to be a "reception and women's social hall"¹² that would complement the Hearst Memorial Mining Building. Kellogg approached the only architect on the faculty, Bernard Maybeck. Once Maybeck had sketched a building concept for Mrs. Hearst, the question arose as to where on the campus it should be placed.

Maybeck and Regent Jacob Reinstein encouraged the creation of an overall plan for the campus to guide the siting of such new permanent structures. Considering the disparate architectural design of the campus so far, Phoebe Hearst stepped forward and offered to sponsor an architectural competition that would establish a "comprehensive and permanent plan for the buildings and grounds of the University."¹³ Phoebe Hearst agreed to fund the two buildings she had originally planned for, and to fund the competition fully so that "the architect will simply design" while others "must provide the cost."¹⁴ The competition called for a total of 28 buildings

¹⁰ www.hearstcastle.org,George Hearst.

¹¹ www.hearstcastle.org,Phoebe Hearst.

¹² Helfand, *The Campus Guide*, p 10.

¹³Ibid., p 10.

¹⁴ Helfand, *The Campus Guide*, p 11.

which would ignore the campus buildings that were already in existence but enhance the natural beauty of the campus itself.

This competition was announced in 1897 and was open to an international field of competitors, who had January through June of 1898 to submit their designs. There were eleven final entrants considered for the honor of designing the new campus plan. The first round of judging for the competition was held in Antwerp, and yielded no architect local to California. The final stage and announcement of the winner was held at the Ferry Building in San Francisco in the fall of 1899. The French architect Henri Jean Emile Benard was awarded the prize, with all the runners up being American firms from the East Coast.¹⁵ Benard's design was deemed beautiful, but his attitude and reluctance to work with Phoebe Hearst soon took its toll. Benard had refused to come and visit the Berkeley site during the competition, and when his plans won the Hearst prize, he found that a complete revision was necessary. Rather than continue to work around these conflicts, The Regents dismissed Benard, even though they had adopted his revised plans in 1900. (See Image 4.)

John Galen Howard, an architect from Boston, whose firm had placed fourth in the competition and who was originally appointed as a consultant for the University's implementation of Benard's design, replaced Benard. Howard was favored by many local architects such as Bernard Maybeck, as well as by Phoebe Hearst, who had chosen him to design the Hearst Memorial Mining Building. By 1901, when Howard was hired, Phoebe Hearst had already become the University's first woman regent, and Howard had already begun the design for the Hearst Memorial Mining Building.

Born in Chelmsford, MA in 1864, John Galen Howard studied first at the Massachusetts Institute of Technology, which at the time had the only architecture program in the United States. He left before he completed his degree, and went on to apprentice under Henry Hobson Richardson.¹⁶ Howard worked for Richardson's successors and traveled to California where he sketched missions and adobe buildings, becoming familiar with the vernacular character of the

¹⁵ Ibid., p 12.

¹⁶ www.geocities.com/SiliconValley/Orchard/8642/jghoward.html.

Greek Theatre

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local architecture.¹⁷ Upon returning to the East Coast, Howard took a position with the prestigious firm of McKim, Mead and White. With the financial support from Charles McKim, Howard attended the Ecole des Beaux Arts in Paris from 1890 to 1893. Though he once more abandoned his education before he could complete the degree, Howard brought back the influence and training of those three years and established a private practice with Samuel Cauldwell in New York in 1894.¹⁸

After being appointed supervising architect to the University of California, John Galen Howard moved his family to California in 1902, and by 1903, the University had allocated funds to establish a department of architecture, of which Howard was appointed lead professor.¹⁹ In 1903, Howard's first project, the Hearst Greek Theatre was completed, and by 1913, he was appointed director of the School of Architecture. Howard is responsible for many buildings on campus, including the Hearst Memorial Mining Building, the Greek Theatre, Durant (formerly Boalt) Hall, California Hall, Wellman (formerly Agriculture) Hall, the University Library, Sather Tower (the Campanile), Sather Gate, Wheeler Hall, Hilgard Hall, Gilman Hall, Hesse Hall, (old) Le Conte Hall, Senior Hall, and elements of the Faculty Club, the Women's Faculty Club and Haviland Hall.²⁰All these were planned as permanent structures. Howard also designed numerous "temporary" buildings, some of which have survived, including North Gate Hall, Naval Architecture, and the first unit of the Dwinelle Annex.

During Howard's tenure as Supervising Architect at the University, Julia Morgan worked under Howard as his assistant. She helped draw the elevations for the master plan and assisted Howard during the construction of the Greek Theatre. While Morgan worked for Howard and was involved in the design and construction management of the project, Howard was the design

¹⁸ Ibid.

¹⁹ Ibid.

²⁰ Ibid.

¹⁷ Helfand, The Campus Guide, p 14.

 $^{^{18}} www.geocities.com/SiliconValley/Orchard/8642/jghoward.html.$

architect for the Greek Theatre. One year after the completion of the Greek Theatre, Julia Morgan opened her own practice.²¹

In 1898, with the final stages of the Phoebe Hearst Competition under way, President Kellogg retired from the University. Though he had suggested several local candidates, The Regents thought that it would be more beneficial to bring an Eastern influence to their growing University. Benjamin Ide Wheeler of Cornell University was appointed president of the University of California in July of 1899 and served for twenty years, until 1919.²² Under his guidance, the University not only tripled in size, but began to establish its reputation as one of the finest universities in the nation.²³ A graduate of Brown University, Wheeler came to Berkeley directly following a sabbatical in Athens. Wheeler, who had been a been a professor of both comparative philology and Greek during his tenure at Cornell, brought with him a "love of classical antiquity"²⁴ which matched well with the Athens of the West image that the University was developing.²⁵ President Wheeler was also instrumental in encouraging John Galen Howard to come to the University. He was interested in having him not only as the supervising architect but as a professor as well. Phoebe Hearst had already hired Howard as the architect for the Hearst Memorial Mining Building, and in 1901 he accepted the position as supervising architect, and began incorporating his own ideas and more importantly fiscal realities on the University plan.²⁶ Howard had a simpler, Greek plan for the University and worked to incorporate that into the design that had been left from Benard.²⁷ (See Image 4.)

Historical Context: Mediterranean Ideals in California and Berkeley

²¹ www.hearstcastle.org, Julia Morgan.

²² Wardrip, A Western Portal of Culture, p 26.

²³ www.berkeley.edu/about/history/#brief.

²⁴Helfand, *The Campus Guide*, p 15.

²⁵ Cal Performances Centennial, p 9.

²⁶ Wardrip, A Western Portal of Culture, p 31.

²⁷ Ibid., p 32.

In his book, Americans and the California Dream, Kevin Starr explores in detail the idea that California was the classical Mediterranean reborn. To the minds of many recent immigrants, the climate, the fruits and vineyards, along with the experiences of the earliest Californians, created an atmosphere that echoed the Mediterranean. The association of California with the temperate and classical influences of the Mediterranean can be traced as far back as John Fremont. In 1845, in his *Report of the Exploring Expedition to Oregon and North California*, Fremont "made extended use of the Italian comparison and was especially sensitive to Mediterranean products in mission gardens."²⁸ He solidified the comparison by using Italy as "the central analogue for his topographical description" in the Geographical Memoir upon Upper California.²⁹

At the end of the 19th Century, California was still considered the untamed American West, while at the same time becoming a cultural and intellectual center with the development of major cities and universities such as Stanford and the University of California. Greece was seen as the more fitting Mediterranean mirror for California since "there was something half wild about Greece" and California had yet to tame itself into complete civilization.³⁰ In spirit and in landscape, Starr focuses the Mediterranean comparison down from the entirety of the state of California to the University of California, where that same untamed landscape surrounded the structured civilization of the campus.

The allusions to ancient Greece dovetailed with the architectural influences from France which strongly affected America at the time, displacing the Gothic and Romanesque themes of the 19th Century with Renaissance principles of the 1893 World's Columbian Exposition in Chicago and the City Beautiful movement which followed it. Emile Benard had studied at the Ecole des Beaux Arts in Paris. His winning design reflected not only the strong classical influences of that school, but also the influence of the "historical and allegorical" principles that the architect brought to his own work.³¹ In fact, the finalists for the competition were those who were "most

²⁸ Starr, Americans and the California Dream, p 366.

²⁹ Ibid., p 375.

³⁰ Ibid., p 379.

³¹ Helfand, The Campus Guide. p 11.

in the shadow of the Ecole des Beaux Arts.³² John Galen Howard had also studied at the Ecole and was influenced by that same classical heritage. His use of classical motifs did not come as a surprise to professional colleagues such as William C. Hays, who had observed that "Howard knew what architecture was. It began in Greece, and then there was some in Rome.³³ Howard was inspired by the similarities between Greece and Berkeley, and his fellow architects knew that he was "a profound classicist, not just in the Beaux Arts manner.³⁴

Wheeler himself saw Berkeley as the perfect space for bringing together the intellectual and philosophical ideals that the University should possess. "[T]hese magnificent hills, remind me of my beloved Greece. Greece looked out toward the old Oriental world, Berkeley looked out to the Oriental world which has meaning today."³⁵ In the February 1900 edition of the *Overland Monthly*, journalists set forth their story of how Berkeley had indeed become the western mirror for Greece, "The prophecy has often been made that it was destined to become a second Greece. The art, the love of beauty, the passion for culture are all here in the germ."³⁶ The connection to art, Greece, and nature was made even stronger with the growing number of outdoor festivals, pageants and civic events. The Greek Theatre on the University campus became a physical manifestation of this movement.

The Greek Theatre's first visitor of importance saw this relationship, too. Theodore Roosevelt spoke of the similarities to a classical tradition and the new theater, "For the first time...are now in your state placed in conditions of scenery and climate like those of the Greeks, and much is to be expected from them in culture and art."³⁷ Governor Newton Booth, during his speech at the dedication of the new campus in 1873, may well have been the first to use the phrase Athens of the West, but it was embraced and expanded upon throughout the University's development. By

³⁴ Ibid.

³² Woodbridge, John Galen Howard and the University of California, p 34.

³³ Winter, Toward a Simpler Way of Life, p 33.

³⁵ Wardrip, A Western Portal of Culture, p 39.

³⁶ Ibid., p 40.

³⁷ Ibid., p 54.

fulfilling the vision of a city of learning, The Regents of the University were expected to complete the vision of the classical world reborn.³⁸

Any discussion of Greek revivalism in academia must be placed in context with broader cultural trends amongst groups of free-thinking Americans in various parts of the country who reexamined the aesthetics and ideals of ancient Greece during the first two decades of the 20th Century and Berkeley, in particular, as a nexus for this renewed interest in classical civilization. Interest in Greek revivalism³⁹ was widespread among artists and their audience in the Bay Area. In Berkeley, it was perhaps synonymous with Isadora Duncan (1878–1927), whose dance revealed her interest in Hellenic statuary and vase painting. Her theory of expressive movements was designed to free the body and spirit. After Isadora Duncan had decamped to Europe in the early 1900s, a childhood friend of Isadora Duncan's, Florence Treadwell Boynton, had a Greco-Roman open-air temple form, called the Temple of Wings, built in Berkeley to serve as a house and dance school. There, she introduced generations of Berkeley's children to Duncan's theories, becoming a notable local cultural figure in her own right.

The Hearst Competition scheme showed nothing on the Greek Theatre site; a domed auditorium was meant to sit at the head of the University Axis, in a position reminiscent of Jefferson's plan for the University of Virginia.⁴⁰ Howard, early in the adaptation of Benard's plans, rotated the original axis of the University to match more closely an orientation towards the Golden Gate that Olmsted had originally proposed, and drew up plans for an auditorium which could possibly be adapted into an open air concourse.⁴¹ The Greek Theatre was not part of the original plan, but it was the first building completed by John Galen Howard and the plans subsequently incorporated it into the formal order which characterized them.⁴² Howard's 1908 adaptation of

³⁸ Ibid., p 23.

³⁹ Greek Revivalism was intrinsically tied to the theatre movement of the late nineteenth and early twentieth century that experimented with new types of performances and productions of Greek tragedies and epics. This theater movement and the construction of outdoor theaters based upon ancient Greek structures are discussed elsewhere in this HSR.

⁴⁰ Helfand, The Campus Guide, p 16.

⁴¹ Ibid., p 17.

⁴² Ibid., p 254.

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the University's plan still called for the central auditorium, and in 1914, a second smaller amphitheater had been drawn in on the hillside to the north of the Greek Theatre and northeast of the proposed auditorium. However, by 1924 when Howard was dismissed from his position, neither the auditorium nor the second amphitheater had been built.

By the turn of the century, the University was growing at a record pace. The University had outgrown the original Harmon Gymnasium, its largest indoor gathering space, and a new facility needed to be found for public events as well. President Wheeler was looking for a way to pay for the expansion of the physical campus and as well as new academic programs. A public space that was large enough to be rented out, accessible to all, was deemed the perfect answer. Though Benjamin Wheeler is credited with the idea and execution of the Greek Theatre, it was the director of the Greek department at the time who might have really been the catalyst. With his letter to Wheeler in 1899, Edward B. Clapp was the first person on record with the idea of not only the Greek Theatre, but the idea of using Ben Weed's Amphitheatre as the site. By this time, the University was comfortable turning to its benefactor and only female regent to discuss the funding for such an undertaking. ⁴³ President Wheeler took Phoebe Hearst on a tour of Ben Weed's Amphitheatre and she was immediately impressed with the location.⁴⁴ Hearst, in turn, made a move to associate her son with the University, resulting in his initial gift of \$42,000, his name given to the theater and, decades later, support from his company which gave the property its shape today.

William Randolph Hearst, after dropping out of Harvard and purchasing several publications, married a young actress by the name of Millicent Wilson. His mother disapproved not only of his lifestyle, but of his lack of interest in any sort of philanthropic activity.⁴⁵ There is no record of Hearst's desire or intention to fund the Greek Theatre, but rather the implication that "it was necessary to find some means of appeasing his mother, and second because of his political involvement, it was to his advantage to demonstrate a public spirited nature."⁴⁶ Though his

⁴³ Wardrip, A Western Portal of Culture, p 45.

⁴⁴ Cal Performances Centennial, p 33.

⁴⁵ Wardrip, A Western Portal of Culture, p 42.

⁴⁶ Ibid., p 44.

name is on the theater and he spoke at the 1903 dedication ceremonies, William Randolph Hearst was not really personally involved until the renovations in the 1940s. At the 1903 commencement speech, Hearst remarked that "My mother is responsible for the interest that I have taken in this particular project."⁴⁷ The donation of \$42,000 was extraordinarily generous for the time and set a precedent for future donations to the arts.⁴⁸

Wheeler expressed his enthusiasm for using Ben Weed's Amphitheatre, then an informal amphitheater surrounded by a eucalyptus grove. (See Image 10.) Created by the senior class in order to perform their yearly rituals, the amphitheater was in a natural hollow surrounded by mature eucalyptus trees (probably planted in the 1870s).⁴⁹ The class simply cut down a eucalyptus tree in the center of the area and used the stump as a podium. In a letter to William Randolph Hearst, Wheeler extols the perfect match of the existing landscape to the project: "The slope of the ground is almost exactly that of the Dionysiac Theater at Athens, and the seats can be anchored to the ground with a minimum of excavation."⁵⁰ However, comparing photographs of the landscape of Ben Weed's Amphitheatre (see Image 10.) with that of the area as work on the Greek Theatre was being completed in 1903 (see Image 13.), it is easy to see that the clearing did not make as much of a natural amphitheater as was first thought. In April of 1902, the official notification for the plan of the Greek Theatre was announced in the *Daily Californian*. The eucalyptus grove with its tree stump podium was to be transformed into a dignified amphitheater and meeting space. "On April 17, 1902, *The Daily Californian* carried the notice that Ben Weed's Amphitheatre would be remodeled by the University" into a more

⁴⁷ Ibid., p 50.

⁴⁸ Cal Performances Centennial, p 33.

⁴⁹ The exact date when eucalyptus trees were planted is not known, but Harry Butterfield, a horticultural specialist with the University of California cooperative extension service during the first half of the 20th century, noted that Joseph Rowell, a former archivist for the campus, told him that "all of the eucalyptus trees by the Greek Theatre and along the slope near the Library were growing when he came to campus in September of 1873" (Taylor and Butterfield, p 116). Butterfield credited the Reverend Samuel Wiley, who began a nursery on his property (at present-day College and Dwight Way) in 1863-64, with planting the trees: "... Reverend Wiley used to refer to the trees on the slope near the Greek Theatre with a sweep of his hand, saying 'All of these came from my planting'' (pp 116-17).

⁵⁰ Cal Performances Centennial, p 18.

formalized meeting place for open air functions. Not only would a permanent structure be placed in the grove, but the new amphitheater would include seats to accommodate 8,000 spectators.⁵¹

The construction of the Greek Theatre did not go smoothly, and the rushed time frame imposed upon the University was made more urgent when Wheeler convinced his good friend President Theodore Roosevelt to speak at the University's commencement ceremonies during a planned presidential tour of California. Since Wheeler, Roosevelt, and Phoebe Hearst expected the theater to be complete in May of 1903, the initial clearing of brush and trees in December of 1902 did not bode well. Phoebe Hearst, however, had signed a contract with the construction company of Lindgrin-Hicks that guaranteed that not only would the theater be completed by July 1st, but that "enough of the theatre would be complete to accommodate the President's appearance."⁵² Once excavation had begun, it was discovered that the ground was much more irregular than had been originally thought and "considerably more earth had to be removed to achieve the symmetry necessary to maintain the acoustics as well as the even curve of the architectural plan."53 So much time was spent digging out the land and leveling off the stage location that construction for the tiers and the seats did not begin until April of 1903.54 Though work was being done as quickly as possible, no concrete had been poured by the middle of April. The first concrete was finally brought in via donkey cart on April 18^{th.55} Preparations for the 1903 Commencement aside, there was still a large amount of construction to be done before the Greek Theatre could be declared complete. Despite the "crew of fifty workmen (who) labored overtime hours and weekends"⁵⁶ much of the structure was temporary. The weight and size of the foundation required to support the performance area was so massive that the contractors did not even try to complete the concrete work for the commencement. Rather, a temporary stage of

⁵⁴ Ibid.

⁵⁵ Ibid.

⁵⁶ Ibid.

⁵¹ Ibid., p 41.

⁵²Wardrip, A Western Portal of Culture, p 50.

⁵³ Berkeley Daily Gazette, April 23, 1903, quoted in Wardrip, p 51.

wood was erected, and a "skeletal suggestion of the finished product" was created with the wooden forms.⁵⁷ (See Image 12.)

Theodore Roosevelt was slated to speak at the commencement; however, the first performance held at the Greek Theatre was somewhat less dignified than The Regents had planned. Two days prior to graduation, on May 12, 1903 the senior class took over the temporary stage to present their Extravaganza: Knight of Ye Burnt Pretzel. The production, a satire based on Beaumont and Fletcher's Knight of the Burning Pestle which had been presented in Harmon Gymnasium by the Stanford English Club a few months earlier. ⁵⁸ Though some of the seats in the middle sections were too wet to sit on, the impromptu audience made do with the nearly complete theater.

By the 14th of May, decorations from the senior class *Extravaganza* were taken down, and although the theater itself was still not competed, it was temporarily costumed for the ceremonies in which Roosevelt was to give his dedication. In fact, it was architect Julia Morgan who was responsible for the Greek Theatre being presentable at all. Morgan, who with the assistance of "millions of yards of muslin to cover up the unfinished parts managed to create an impressive setting for the commencement, even though it little resembled the actual theater plan."⁵⁹ Every effort went into the preparation and presentation at the Greek Theatre's opening day. Morgan had installed her decorations and "…garlands had been hung and a covered platform had been erected for the guest speakers. The concrete tiers of seats had all dried sufficiently to be used."⁶⁰

In a letter dated June 9,1903, Wheeler wrote to William Randolph Hearst to inform him that the "forms on the stage were well ready for pouring the concrete."⁶¹ Construction had continued on through the spring and into summer. The official date for the dedication ceremonies was announced as September 22nd and the furious pace of construction continued. In an article dated

⁶⁰ Ibid., p 53

⁵⁷ Wardrip, A Western Portal of Culture, p 51.

⁵⁸ Wardrip, A Western Portal of Culture, p 52.

⁵⁹ Ibid., p 52.

September 5, 1903 the *Berkeley Gazette* reported that Ben Greet's production of *Everyman* could not be performed at the Greek Theatre because the stage and theater were still not complete. Wheeler sent a letter to Phoebe Hearst explaining that it was "protocol and not construction" that stood in the way of Greet's production.⁶² Wheeler had decided that the dedication should occur before any performances. Later, Ben Greet was on hand to produce the performance of *The Birds* for the official dedication. Even then, a letter to William Randolph Hearst suggested that the Greek Theatre might have been incomplete for its dedication as well.

John Galen Howard's initial vision and what the Greek Theatre became when executed are two very different things. A rendering of Howard's design conveys what the Greek Theatre was supposed to become and early photographs show what it did become due to lack of funding. Howard intended to "crown the back wall with caryatids, encircle the seating area...with a double colonnade, and cover all exterior surfaces with marble."⁶³ (See Image 11.) The essential form remained, despite the removal of most of the decorative features, echoing the form of classical prototype at Epidaurus. The amphitheater bowl had "inner and outer tiers of seats (which) have different slopes. The lower seating is built on a shallow slope... and a 254-foot diameter semi-circle defines the upper 19 rows."⁶⁴ (See Images 30 and 63.)

The completed structure lacked much of the architectural detail described in Howard's original watercolor and the details that are represented in the final working drawing were never applied, either. Large bronze oil lamps were meant to be placed at the end walls of the stage, but these, too, were left off due to financial constraints.⁶⁵ While many details succumbed to budget cuts, contemporary observers judged the outcome to have survived with a sense of elegance, referred to as "stark, predominantly Greek simplicity."⁶⁶

- ⁶⁵ Wardrip, A Western Portal of Culture, p 49.
- 66 Ibid.

⁶¹ Ibid., p 55.

⁶² Ibid., p 56.

⁶³ National Register of Historic Places Inventory-Nomination Form, p 92.

⁶⁴ Griffith and Jewell, The Greek Theatre, p 3.

The seeming lack of interest from William Randolph Hearst had changed by 1946 when the Hearst Greek Theatre was in need of repairs. (See Image 20.) Repairs needed to be made to the structure because of "years of exposure" to the elements and rally fires; also needed were basic improvements and expansions to accommodate actors and performers.⁶⁷ Conditions at the theater had become a hindrance to performances; the admittedly unfinished Greek Theatre had lost some of its original aesthetic qualities with the removal of a portion of the stand of trees to the north of the site, when Stern Hall was built (1941), and most of the stand of trees to the west of the site, to build Gayley Road (1946). An increase in noise from the machinery of campus buildings, the city of Berkeley, and even San Francisco Bay was disruptive. The Greek Theatre no longer offered the finest performance space, but rather "little more than a place for audiences to sit, and artists to perform."⁶⁸

⁶⁷ Griffith and Jewell, *The Greek Theatre*, p 4.

⁶⁸ Wardrip, A Western Portal of Culture, p 275.

D. Theater in Antiquity

Classical Greek theater has its origins in Athens between c. 550 and c. 220 BC; plays were performed during the festival period to celebrate the god Dionysios. Now viewed as a foundation of Western culture and literature, theater in ancient Greece also commented on social issues in an entertaining and educational way, making it a popular social activity not seen as purely an abstract and erudite exploration of questions about humanity and existence. The tragedians Aeschylus, Sophocles, and Euripides are best known from this era as well as comic writer Aristophanes. The Greek plays and the literature they inspired were passed down through the writings of historians and philosophers such as Aristotle.

The outdoor theaters of ancient Greece, such as the one at Epidaurus in the Peloponnese, were among the largest public assembly structures of the ancient world. (See Images 2-3.) The traditional design of the theater required that it be built on a terrace or at the foot of a hill. The bowl of the hill produced a natural *theatron* or watching place. The modern word 'theater,' derived from *theatron*, refers to the entire building, including the orchestra, stage, and audience seating.

Theaters were built to accommodate large numbers of actors and performers on stage and in the orchestra. Up to fifty people in the chorus sang, danced, and played music in the orchestra. Theaters in the ancient world seated up to fourteen thousand people; front seats or *prohedria* were reserved for priests and a few of the most respected citizens.

Theater design was mathematically calculated to create acoustics that would have relatively the same quality throughout the whole theater, including the top row of seats. These time-tested acoustics are comparable to the best modern arenas. The orchestra, a circular space about eighty feet in diameter, was the traditional location for acting speaking and singing.

The *skene* or stage was traditionally a backdrop to conceal costume changes and prepare for performances, but after the Peloponnesian Wars and especially during the Hellenistic period, it served as the location for performance. This new location created a separation between the audience and the actors. The actors performed on a raised platform or stage called the *logeion* or *proskenion*. The *skene* often had *paraskenia* or wings wrapping around the stage, framing it.

The Modern Outdoor Theater Movement, 1900-1920

In the late Victorian Britain, classical revivalism was seen as a strong element in empire building and solidity. An element of this movement was the revival of classical drama. In the 1880s the first performances were recorded.⁶⁹

A revival of ancient Greek drama was, in part, originated and performed at Bradfield College in England, where, in 1882 a small outdoor amphitheater in the Greek tradition was built. The Bradfield "Greek Play" has been staged at approximate three year intervals since. Classic Greek drama was also performed at Cambridge. The Bradfield structure may have been the first theatre in modern times to be built on the general form of the ancient Classical theatres.

Erudite English acting troupes traveled the world performing Greek and Elizabethan plays. In the United States, the origins of outdoor theater stemmed from this latest British trend. Based on the primary tenets of classicalism, it touched the origins of democracy and was seen as especially important heritage building in frontier regions such as California.

Theater historian Thomas Dickinson remarked:

open-air theatre means an outlet into new and healthier values. Today this theater represents much that the established theatre does not do, and much that society needs. On account of its size the open-air theatre is almost necessarily a democratic thing. On account of its character its use represents a spontaneous social demand. By its nature, and the conditions of its building, it belongs to all the people.⁷⁰

The introduction of the British commercial company known as the Ben Greet Players is generally recognized as one of the most important early milestones for the outdoor theater movement in the United States.

⁶⁹ Palmer, *The Outdoor Theatre Movement*, p 17.

⁷⁰ Ibid., p 253.

Ben Greet Players

The Ben Greet Players were the first commercial group to tour the United States successfully performing outdoor plays.⁷¹ Ben Greet built a reputation as a well versed classicist, which positioned him for making an impression on a new urban American populace starved for culture and sophistication. Ben Greet greatly impressed many that he met, to the extent that he was offered an academic position at the University of California and was invited to perform at the White House for President Theodore Roosevelt and his family.⁷² He later organized the inaugural performance in the Greek Theatre.⁷³

The earliest modern-era outdoor theaters in the United States were constructed on the East Coast. Generally they were built by private citizens eager to showcase traveling acting troupes. These were private and generally exclusive events and started in the 1890s.⁷⁴ The Coburn players, led by John Coburn, were the first successful American commercial touring performance company. The reputation of the Ben Greet performers unquestionably helped launch this American troupe.⁷⁵ Early theaters in California were connected with educational institutions, with the exception of the Bohemian Grove Theater.

College and University Venues

During the first years of the Twentieth Century, there was explosive growth on University and college campuses. A component of this growth was the incorporation of outdoor campus theaters and by the early 1920s there were over one hundred and fifty theaters on campuses.⁷⁶ Not all campuses built the type of amphitheater used by the ancients, however:

⁷⁵ Ibid., p 51.

⁷¹Palmer, The Outdoor Theatre Movement, p 23.

⁷² Ibid., p 27.

⁷³ Ibid., p 25.

⁷⁴ Ibid., p 101.

⁷⁶ School Life, *The Drama is a Recognized College Subject*, p 29.

Of the colleges without permanent open-air theatres, five basic methods of staging or combinations of these methods were used: the audience sat on the hillside of a natural amphitheatre and viewed the action on a green below; a natural background of trees was used to define an acting space; buildings, usually designed with a Greek motif, were used as backgrounds; the audience was seated in one end of a football stadium with the action on the playing field; or artificial sets or facades were constructed.⁷⁷

The most successful and longest lasting venues were built in California, which was desperate to shed its frontier image and embrace western tradition. The Greek Theatre was unquestionably the largest and most outstanding example of outdoor theaters on a United States university campus. Not only was the Greek Theatre one of the earliest examples of this type of outdoor theater, it was a bit of an experiment in the ways to present theatrical performance. Debate arose over the stage structure being too dominant, and it was frequently covered at the insistence of actors who felt that complex backdrops generally took away from the feeling of the theater.

Several other contemporary venues were built to various degrees of finish around California. The first, slightly predating Berkeley's theater, was the Greek theater at Point Loma near San Diego, built in 1901 by Katherine Tingley, a leader in the Theosophical movement. It is now part of Point Loma Nazarene University, and still used for performances and events. Later West Coast projects included outdoor theaters at Mills College in Oakland, Pomona College, and Bakersfield College.⁷⁸ Mills College has a semicircular auditorium where the side of a building acts as a stage. It has one stair and eight seating rows and can hold a little over a hundred people.⁷⁹ Pomona College's Greek theater has eight rows of seating and three stairs; its design is not as traditional as Mills and the stage structure was never completed. The amphitheater has a quite low profile, and Palmer suggests that it may be more suited to pageantry than drama.⁸⁰

⁷⁷ Ibid., p 77.

⁷⁸ Ibid., p 89.

⁷⁹ http://ark.cdlib.org/ark:/13030/tf1g5006zf/

⁸⁰ http://www.pomona.edu/tours/javatour/javainteractive/interactive_node32.shtml

The Bohemian Grove Theater

The Bohemian Grove Theater is the one of the earliest Western examples of an outdoor theater and was well known to influential men in the Bay Area when the Greek Theatre was built. The exclusive Bohemian Club had its first "summer encampment" near Lagunitas in Marin County in 1878, and claims to have organized the world's first outdoor performance of Shakespeare with its rendition of scenes in the Forest of Arden from *As You Like It* the next year.⁸¹ It presented the first play at the outdoor theater of the current Bohemian Grove, near Rio Vista on the Russian River, in 1902.⁸²

Redwood benches seated more than six hundred, the stage was framed by giant trees and the audience was separated from the stage by an orchestra pit. The setback offered by stages at various distances from the audience provided an opportunity for "composition in depth." Special effects were used extensively during the performances and rigging and cables allowed actors to swoop down the hill and disappear into the trees.

Palmer remarked:

An extraordinary stage, undoubtedly the most beautiful of any the "nature theatres" in this country and certainly the most latent with dramatic possibilities, was carved out of the Redwood Forest. The majority of the action took place on a main stage fifty feet wide and twenty feet deep...⁸³

However when the war temporarily drew the curtain on the outdoor theatre movement after 1917, it was essentially the final call for the touring alfresco companies. Colleges were beginning to build their own indoor theatres and every provincial town had a movie house. The outdoor theatre was entering a period of hibernation and when it reawakened it was no longer necessary to carry outdoor drama to the people, because the people were now going to the permanently

⁸¹ History, Constitution and By-Laws, p 32.

⁸² Greene, p 161.

⁸³ Palmer, The Outdoor Theatre Movement, p 114.

located open-air the atres concentrated around the vacation centers of the country. 84

⁸⁴ Ibid., p 73.

University of California

E. Late History: Planning and Construction

In March 1946, the Hearst Corporation presented the University with a monetary gift for the rehabilitation and completion of the William Randolph Hearst Greek Theatre. The building had deteriorated significantly during the previous 40 years as a result of soil erosion from natural springs, poor quality concrete, improper original detailing of the roof and concrete joints and a general lack of maintenance. The 1909 structure which had been built to house dressing rooms behind the stage was inadequate for the demands of period performances, lacking restrooms, a green room, weather protection for performers waiting to go on-stage, and storage. Further, there were no public amenities for the audience, such as toilet rooms.

Under President Robert Gordon Sproul's direction, a study was completed in mid-April 1946 that outlined the costs of repairs and improvements to the building. Repairs were estimated to cost \$25,000 and construction of a permanent dressing room and storage structure was estimated to cost \$125,000. The study suggested expanding the architectural program of the addition to include reception rooms, a formal entrance, terraces, and formal stairs rising from Gayley Road to the theater for a total of \$160,000 and a chromatic lighting system for \$30,000. The Hearst Corporation approved a gift of \$345,000 for the expanded scope of work and then rounded the figure upward to \$400,000.⁸⁵

Sproul contacted Julia Morgan and several other prominent architects and campus officials, requesting recommendations for an architect for the project. World War II and the post-war boom in University enrollment delayed the project until the spring of 1950, when Sproul approached William Wurster, the newly appointed dean of architecture at the University, for a recommendation. Wurster suggested Ernest Born, who "had a keen knowledge of scale and dignity" that would be required for the project. Federal restrictions on non-essential construction delayed the selection of the architect until March 28, 1952, when The Regents Committee on Grounds and Buildings approved Born as the architect for the repairs and addition.⁸⁶ Born prepared drawings for an addition following the 1946 expanded building program and The

⁸⁵ Wardrip, A Western Portal of Culture, p 276-277.

⁸⁶ Wardrip, A Western Portal of Culture, p 278-282.

Regents approved these drawings for further development on November 19, 1954. (See Images 33-34.)

The Hearst Corporation was not interested in financing the cost of the additional program. Ernest Born was copied on a confidential internal Hearst Corporation memo dated September 12, 1955, defining the company's interest in the scope of work as:

repairing and rehabilitating the Theatre and the stage, installing public toilets, constructing permanent dressing rooms, and landscaping around the Theatre, and construction approaches to it, but that they would not participate in any of the costs incidental to the new structure.

The 1955 memo continues, pointing out the original gift plus interest would still pay for the work for which the 1946 gift was intended. Sproul had asked the Hearst Foundation to contribute an additional \$200,000 to be matched by \$250,000 from the University for a substantially larger central section of the addition to house the expanded program developed in April 1946. The foundation's position, however, was the University should pay for any additional costs "in lieu of the repairs and maintenance that they should have been carrying on since the construction of the Theatre."⁸⁷

Without the Hearst matching funds, The Regents approved an additional \$100,000, for a total of \$558,000, minus the cost of the repair work, and requested Born revise his conceptual design on the basis of the following program:

Completion of repairs to the 1903 structure.

New approaches and entrances at the north and south.

New stairs to the upper portion of the amphitheater at the north and south.

New public toilet rooms on the north.

Modest performer dressing and toilet rooms.

⁸⁷ Hearst died on August 14, 1951, and the Hearst Corporation became the donor's representative. W.W. Murray, Sunical Land & Livestock Division, The Hearst Corporation, to M.F. Huberth, Sunical Land & Livestock Division, The Hearst Corporation, September 12, 1955. Ernest and Esther Born Collection, Environmental Design Archives, University of California, Berkeley.

A simple reception space, most of it an outdoor terrace, with minimal serving facilities.⁸⁸

On February 27, 1956, L.A. (Louis) DeMonte, Office of Architects and Engineers, recapped his conversations with the Hearst Corporation for President Sproul, stating the Hearst representative, William M. Murray, reluctantly approved Scheme G, but withheld his approval to proceed with construction. (See Images 35-38.) Scheme G, illustrated in drawings dated March 1956, is essentially the existing addition, but without rooms under the central court and slightly different room configurations and uses on the ground floor. Murray expressed his disappointment The Regents had not fully funded Scheme G including the connecting ground floor dressing and storage rooms that exist today.⁸⁹

Five schemes were bid in 1956 and all exceeded the amount available for construction, less \$70,000 for completed and ongoing repairs and architectural and engineering fees. The Hearst Corporation estimated the costs of depreciation of the buying power of the original gift, negligence to maintain the building properly, utilities, and services the Corporation deemed the responsibility of the University and incidental and administrative costs at \$300,000. In a letter to President Sproul, William Murray, writing for the Hearst, stated its opinion on funding the work:

In short ...the University has a moral obligation to The Hearst Foundation to supply any additional funds needed to complete this work, since if the original donation of \$400,000 had been utilized when it was made, the rehabilitation of the Greek Theatre would have been far more expansive and lend to greater utilization than what is contemplated under the base low Bid No. 5 (\$511,000)... You will recall that The Hearst Foundation's \$400,000 was for rehabilitation purposes, and we gladly consented to divert as much of these funds as possible to new construction, if in so doing the value of

⁸⁸ L.A. DeMonte to William W. Murray, The Hearst Corporation, December 28, 1955. Ernest and Esther Born Collection, Environmental Design Archives, University of California, Berkeley.

⁸⁹ L.A. DeMonte to President Sproul, February 27, 1956. Ernest and Esther Born Collection, Environmental Design Archives, University of California, Berkeley.

the project, when completed, would be enhanced, especially from the University's utilization standpoint.⁹⁰

The Regents approved Bid No. 3, which resembles the existing addition but without the central ground floor section linking the wings. Construction was underway by July 1956. (See Image 40.) Born's letter of July 5th, opining about the "mistake" that had been made by eliminating the central backstage area on the ground floor, may have precipitated a visit from William Murray of the Hearst Corporation six days later. Murray appropriates verbatim a statement Born made in his July 5th letter — "productions in the theatre will be severely handicapped" — in a letter to President Sproul, conveying his extreme distress over the lack of adequate facilities in the new addition to insure "the development of a dramatic and musical arts program for the Greek Theatre which Mr. Hearst envisioned." The letter was blind copied to Born, suggesting they were in working together to urge the University to reconsider their decision.⁹¹

By August, The Regents appropriated an additional \$61,000 to build the ground floor section linking the two wings, including rehearsal and teaching spaces and dressing and work rooms.⁹² It is not known what impact this program change had on the project, except that many of the detail drawings appeared to have been issued at regular intervals as single sheets rather than as part of the documents originally issued for construction.⁹³ Curiously, there were no detailed construction administration records for the project in the Esther and Ernest Born Collection at the Environmental Design Library and the only reference about the construction of the addition is to problems encountered with subsoil drainage and underpinning of the original structure that

⁹⁰ William W. Murray, The Hearst Corporation, to Robert Gordon Sproul, President, University of California, May 11, 1956. Ernest and Esther Born Collection, Environmental Design Archives, University of California, Berkeley.

⁹¹ Ernest Born to William W. Murray, Sunical Land & Livestock Division, The Hearst Corporation, July 5, 1956. William W. Murray, The Hearst Corporation, to Robert Gordon Sproul, President, University of California, July 11, 1956. Ernest and Esther Born Collection, Environmental Design Archives, University of California, Berkeley.

⁹² William W. Murray, The Hearst Corporation, to M.F. Huberth, Mr. R.E. Berlin, W.R. Hearst, Jr., August 27, 1956. Ernest Born to Robert Gordon Sproul, President, University of California, August 27, 1956. Ernest and Esther Born Collection, Environmental Design Archives, University of California, Berkeley.

⁹³ Ernest and Esther Born Collection, Environmental Design Archives, University of California, Berkeley.

resulted in unforeseen expenses during construction and, consequently, cut-backs in materials, detailing and landscaping.⁹⁴

Clearly, Born's design intent was to create an addition that was sensitive to the historic character of the theater, visually reinforcing Howard's original design in the materials and details of the addition. Prescient of today's *Secretary of the Interior's Standards for Rehabilitation* or perhaps inspired by the 1909 support building, Born held the addition back from the 1903 structure to retain the clarity of the original design. By physically separating the support spaces from the stage proper, he deviated from Howard's original scheme that showed two stories of support spaces immediately adjacent to the stage. Uncharacteristic of mid-century modernism, the addition was intended to enhance the original theater:

Walls, terraces, plant boxes, approaches, ramps, and buildings are taking shape and fitting into the landscape and into the original work of John Galen Howard to form an architectural composition of dignity, strength and beauty...⁹⁵

Ernest Born

Ernest Born (1898-1992) received undergraduate and graduate degrees in architecture from the School of Architecture, the University of California, Berkeley, in 1922 and 1923, respectively, where he studied with Howard. Born worked in Europe until the early to mid-1930s and then established an architectural practice in San Francisco. He taught architecture at the University of California, Berkeley, from 1953-1957, coincident with the design and construction of the Greek Theatre addition. He was a member of the A.I.A. and was inducted into the College of Fellows during the mid-1950s.

His early American architectural work, in collaboration with Thomas Church, was featured in Garden, Exhibition of Modern Landscape Architecture at the San Francisco Museum of Modern Art in 1937. Born and Bay Area architect Timothy L. Pflueger designed the San Joaquin Valley Building for the 1939-40 Golden Gate International Exposition in San Francisco. He designed

⁹⁴ Ernest Born to William W. Murray, Sunical Land & Livestock Division, The Hearst Corporation, November 14, 1956. Ernest and Esther Born Collection, Environmental Design Archives, University of California, Berkeley.

⁹⁵ Ibid.

numerous residences,⁹⁶ warehouses, offices, and showrooms and, later in his career, the Glen Park BART Station. The Environmental Design Library at the University of California, Berkeley, identified the Ernest and Esther Born Collection as well as the collections of John Funk, Hans U. Gerson, Henry Hill, John Kruser, Roger Lee, and Oakland & Imada as work that is representative of post-war design in the Bay Area.

Born's interests and talents were broad, extending to designs for furniture, exhibits, murals, publications and plaques; presentation renderings; oil and watercolor painting; illustrations and art prints; publishing; and architectural history. He wrote, with his wife, architectural photographer Esther Baum Born, and Justino Fernandez, *The New Architecture in Mexico*, in 1937. As an author, he is best known for his collaboration with architectural historian Water Horn on the seminal work, *The Plan of St. Gall: A Study of the Architecture and Economy and Life in a Paradigmatic Carolingian Monastery* of 1979. He devoted a decade to the design and illustration of the book. In addition, he collaborated with Horn on *The Barns of the Abby of Beaulieu at Its Granges of Great Coxwell and Beaulieu-St. Leonard* in 1965 and "Water Power and the Plan of St. Gall," in the *Journal of Medieval History* in 1975.⁹⁷

Walter T. Steilberg

Walter T. Steilberg (1887-1974) graduated from the University of California, Berkeley, in 1910 with a bachelor's degree in architecture and a minor in structural engineering. Before architecture school, he worked for Irving Gill in southern California and after architecture school, from 1910 to about 1920, Steilberg for worked briefly for John Galen Howard and Arthur Brown. He then left Brown's office to work with Julia Morgan. He worked with Morgan for almost a decade in the capacity of architect, office manager, and structural engineer. In 1920, he left Morgan's office to establish his own architectural and consulting practice. Through the

⁹⁶ Born and Serge Chermayeff designed a residence for Walter Horn and his wife in Richmond, California. http://www.columbia.edu/cu/lweb/eresources/archives/avery/chermayeff/chermayeff_project_photographs.xls

⁹⁷ http://www.ced.berkeley.edu/cedarchives/profiles/born.htm, http://www-

sul.stanford.edu/depts/spc/xml/m0344.xml,, http://www.earthstation9.com/index.html?1939_cal.htm and http://online.caup.washington.edu/courses/LARC353/30spriv.html.

1930s, Steilberg worked largely as an architect. After the late 1930s or early 1940s, he worked largely as a structural engineer, often collaborating with Julia Morgan and Gardner Dailey. Sharing an interest in concrete construction, Steilberg consulted to Morgan throughout most of her career and it is perhaps for this collaboration he is best known.

As an architect in private practice, Steilberg largely designed residences, first with subtle Mediterranean and Chinese influences and later with Moderne details. Working with Morgan and in private practice, Steilberg designed St. John's Presbyterian Church, Berkeley (1908), the Embarcadero Pergola and Colonnade, Lake Merritt, Oakland (1912), the Bancroft Hotel (formerly the College Women's Club, 1928), Berkeley, and the library of the Graduate School of Journalism, at North Gate Hall, University of California, Berkeley (formerly the Architecture Library, 1935-36).

His building material of preference was reinforced concrete, because he appreciated its fireresistance, ease of maintenance and modern appearance. In addition, Steilberg believed concrete structural systems performed well in earthquakes. During the Great Depression, Steilberg began to regard concrete construction as an economical residential building material for the working class and, after World War II, for war veterans. Steilberg developed and patented a system of wall construction called Fabricrete and a system for building low-cost, prefabricated housing from large pre-cast concrete components. He also conducted research concerning the effect of the 1923 Berkeley fire on local building materials and the effects of earthquakes on buildings, including the 1925 Santa Barbara Earthquake.⁹⁸

Lawrence Halprin and the Landscape Design for the 1957 Greek Theatre Addition

When he began work on the preliminary landscape design for the Greek Theatre in 1954, Lawrence Halprin, one of the 20th Century's most influential landscape architects, was in the first decade of his career. Halprin came to San Francisco at the end of World War II and worked in Thomas Church's office from 1945 to 1949, when he opened his own practice in San Francisco.⁹⁹

⁹⁸ http://www.ced.berkeley.edu/cedarchives/profiles/steilberg.htm and http://www.sfgate.com/cgibin/article.cgi?f=/c/a/2005/12/03/HOGU5G0P0G1.DTL&hw=morgan+engineer&sn=003&sc=558.

⁹⁹ Halprin, Lawrence Halprin, Changing Places, 1986, p.116.

The Bay Area was at the heart of the transformation of landscape architecture that occurred after the end of World War II. Ambitious young designers from all over the United States flocked to the Bay Area, in particular, to see the gardens publicized in *Sunset* and *House Beautiful* magazines, or to work with Church or his followers.¹⁰⁰ As with other landscape architects working in postwar California, Halprin's work during this early part of his career focused on residential commissions and the design of gardens. The garden was the medium through which new concepts were expressed; it reflected aesthetic developments in art and architecture and a new social order,¹⁰¹ or, in other words, the garden in California was one of the first and most visible expressions of what modernism could mean in terms of landscape design.

During the 1950s, Halprin worked with leading modernist architects on projects that exemplified the blending of modernist ideas for house and garden with the climate and lifestyle of northern California. In these early garden design projects, he began to develop a vocabulary that reflected his concern for the "relationship and integration between elements"¹⁰² – the integration of the natural and man-made landscape elements and the integration of the landscape and architecture. This concern was reflected in his collaboration with Ernest Born in the design of the circulation system and selection of the plant palette for the Greek Theatre. Some of the key characteristics of Modernism that Halprin's designs and those of other landscape architects during this post-World War II period exhibited – a straightforward spatial organization, an empathy for the site (its views, topography, surroundings, plant materials), and a concern with functionalism¹⁰³ – were also present in the new circulation system for the 1957 addition to the Greek Theatre. The ramps, retaining walls, and steps in the 1957 circulation system maintained the hillside character of the site while providing forms (linear rather than curved) and materials (the predominance of concrete) that were compatible with the architecture of the theater. The 1957 circulation system allowed pedestrians to navigate the changes in vertical elevation of the hillside while providing a design that could be visually integrated into the existing topography of the surrounding existing site.

¹⁰⁰ Walker, "The Practice of Landscape Architecture in the Postwar United States," 1993, p 251.

¹⁰¹ Laurie, "Thomas Church, California Gardens, and Public Landscapes," 1993, p 166.

¹⁰² Halprin, Lawrence Halprin, 1986, p 116.

Greek Theatre

Although, his practice focused on residential garden design in the first 10 years, Halprin's professional interests and ambitions were not limited to the dimensions of a residential garden, and he "hoped to apply their lessons to the larger world of cities and regions."¹⁰⁴ During the early 1950s, he accepted a number of commissions related to institutional landscapes including work at both the University of California's Berkeley and Davis campuses. At the Davis campus, Halprin working with the campus architect, Robert Evans, to develop a master plan and report.¹⁰⁵ At the Berkeley campus, Halprin was appointed as the Supervising Landscape Architect in 1953.¹⁰⁶

In September 1954, at the end of the first year in the Berkeley campus position, Halprin prepared a report for Chancellor Clark Kerr with his observations and recommendations for the campus; he attached a preliminary plan to illustrate his recommendations.¹⁰⁷ In the report, Halprin was concerned with "maintaining open space amidst a huge building program."¹⁰⁸ At the end of the report, he listed the projects he was currently involved with and "a preliminary landscape design for renovation [of the Greek Theatre] with Ernest Born" was one of these.¹⁰⁹ Halprin's general observations and recommendations, in the campus report, provide insight into the decisions he made for the planting plan at the theater. However, this connection must be inferred since the brief reference in the 1954 campus report ("preliminary landscape design for renovation [of the Greek Theatre] with Ernest Born"), his name listed as one of the consultants ("Lawrence Halprin, Landscape Architect"), and a brief mention by Born of "Lawrence Halprin my landscape consultant" in a letter was the extent of the information found on Halprin's involvement in the design for the 1957 addition to the theater. The nature of the collaborative

¹⁰³ Beatty et al., Landscape Heritage Plan, 2005, pp 15-16.

¹⁰⁴ Ibid., p 7.

¹⁰⁵ Ibid., p 118.

¹⁰⁶ Halprin, "Preliminary report on the landscape plan," 1954.

¹⁰⁷ Halprin's plan was "officially recorded" but never adopted.

¹⁰⁸ Halprin, Lawrence Halprin, 1986, p 119.

¹⁰⁹ Halprin, Preliminary report," 1954, p 29. In this report, Halprin noted that Gayley Road and its traffic blocked the eastern foothills area both visually and psychologically from the rest of the campus (Halprin 1954, p 8). He recommended that the road should be depressed and that pedestrian overpasses be built across the road connecting to the residence halls and Greek Theatre Halprin 1954, p 19).

process between Halprin and Born and the extent of Halprin's input into the design's circulation system of sidewalks, stairs, ramps, and retaining walls is not known. However, providing input to Born on these features would have been consistent with Halprin's experiences on other projects where he collaborated with architects to achieve a synthesis of the architecture and landscape.

In the campus report, Halprin noted that many areas of the "characteristic great tree masses have already passed their prime and an enormous and immediate program of reforestation should be started,"¹¹⁰ and in the 1957 planting plan for the theater, he specified additional trees (eucalyptus, pine, and redwood) be planted around the edges of the Greek Theatre site to reinforce the existing grove of trees. Halprin made recommendations in the campus report that "where possible landscape design should attempt to emphasize low maintenance,"¹¹¹ and he wrote that "shrubbery areas present constant maintenance problems of weeding, pruning and with hedges ever continuing trimming" and recommended that the use of shrubbery "be markedly curtailed."¹¹² He seems to have followed this advice at the Greek Theatre. The 1957 planting plan was marked by the general lack of a mid-layer of plant material – or shrubs. Shrubs (California laurel) were planted in the planter boxes located inside the stairs that lead up from both the north and south courts; in this location the California laurel, which can be pruned to control its form, were planted under olive trees and provided a more formal form than was found elsewhere on the site. Otherwise, the predominant plant materials were large trees and groundcover. Plants were used to create a uniform ground plane (ivy, juniper, or grass lawn) within individual planting beds or areas. The trees, both the existing eucalyptus trees and the new trees that Halprin specified on the 1957 planting plan, provided an overhead plane with their canopies when located either in the planting beds or next to the circulation system. At the edges of the Greek Theatre site, the trees visually surrounded or framed the site. The majority of the plant materials that Halprin specified in the 1957 planting plan for the Greek Theatre were among the palette he recommended in the 1954 campus report (Monterey pine, eucalyptus species, coast

¹¹⁰ Ibid., p 12.

¹¹¹ Ibid., p 17.

¹¹² Ibid., p 17.

redwood, native California oaks, ivy, and juniper).¹¹³ He chose plants that reflected or were complementary to the native plant palette and that were appropriate to the Mediterranean climate of the region. The plants chosen (olive trees, English laurel, eucalyptus, pines, redwoods, oaks, juniper, ivy) provided various shades of green (and tended to be evergreen). The only plants chosen for their flowers were the two *Prunus* "Thundercloud" trees used on the west sides of both the north and south courts.

¹¹³ Ibid., p 25.

F. Description

The Greek Theatre consists of two primary elements: the site and the structure in the foothills at the northeast section of the University of California campus in Berkeley. The site is a wooded hillside, bounded generally by Gayley Road on the west, Bowles Hall on the south, the Foothill Parking Lot on the east, and the Foothill Student Housing – Stern Hall complex on the north. The structure consists of the 1903 amphitheater and stage designed by John Galen Howard and the 1957 addition designed by Ernest Born, which wraps around the original stage. The 1957 site design includes stairs, landscaped areas and paths. (See Appendix A ii for a site diagram showing the primary nomenclature used for the Greek Theatre in this HSR.)

Site Description

The site is divided for the purposes of this description into four areas surrounding the structure: the Gayley Road landscape area on the west, the north gate and south gate areas bracketing the main structure on the west side, and the upper landscape area on the east side. The structure consists of the following main parts: the amphitheater; the orchestra circle between the amphitheater and the stage; the stage (or *skene* in Greek); the backstage building, most of which is tucked into the sloping grade below the elevation of the stage; the central court behind the stage and on top of the ground level of the backstage building; and toilet rooms and terraced landscaping structure of the north and south stairs which connect the lowest and highest levels of the amphitheater.

Amphitheater

The amphitheater consists of the bowl, the flat orchestra circle at the center, and the ramps fronting the stage.

Ramps

An identical pair of ramps (or *eisodoi* in Greek)¹¹⁴ frames the base of the stage to the north and the south sides, descending to the orchestra circle, running parallel to and below the stage itself. The ramps descend at a gentle slope toward the center. They are paved in concrete with six rows

 $^{^{114}\} www.lilt.ilstu.edu/DRJCLASSICS/lectures/theater/ancient_greek_theater.shtm$

of basalt stones placed at intervals. The ramps are approximately 15 feet wide, with a drain running down the side of the ramp. The concrete has a rough aggregate similar to that used throughout the 1957 addition. The ramps meet the orchestra level at approximately five feet from the orchestra circle itself.

Orchestra Circle

The orchestra circle is 50 feet in diameter, and is hard packed with red stone sand. A drain with iron grates runs along the edge of the orchestra circle. The orchestra circle is set off from the lower amphitheater (shallowly terraced concentric rings used either for performers or seating) by a small first raised ring, echoing the traditional *paradoi* of a Greek theater.¹¹⁵ This first ring is approximately four inches wide, and sectioned into pieces about two and a half feet long. Next come the 12 tiers of the lower amphitheater, adjoining the lower promenade (*diazoma* in Greek) between the upper and lower amphitheaters. The tiers of the lower amphitheater allow an entrance and exit into the orchestra for the actors. They can also be used for temporary seating, as shown in historic and contemporary photographs of the Greek Theatre.

Facing the stage, on the front edge of the lower promenade at the center is a set of seats of honor, stone chairs dedicated to figures important to the University. These 30 *prohedriai* echo the Greek tradition:

(T)he first few rows at the bottom of the viewing area just before the orchestra were reserved for state officials and public benefactors such as victorious generals and athletes. Foreign dignitaries could also be given this privilege. Some offices conferred this honor on the holder, while the Assembly could vote it for certain individuals. This privilege is called *prohedria* ('front-seating'), a term which referred both to the privilege and the location of the seat.¹¹⁶

Wheeler encouraged the graduating classes to dedicate a marble chair in order to honor people associated with the University. The chairs are not all of marble; there are several of cast stone, as well as some made of granite. The chairs are uniform in size, though the detailing is unique on

 $^{^{115}\} www.lilt.ilstu.edu/DRJCLASSICS/lectures/theater/ancient_greek_theater.shtm.$

¹¹⁶ www.depthome.brooklyn.cuny.edu/classics/dunkle/tragedy/intr9.htm.

each. The scrolling at the arms, and lion's paw feet along with the top rail decorated in an egg and dart pattern with acanthus leaves at the corners, reflect the ones at Epidaurus.¹¹⁷

An excellent example of a seat of honor can also be found in Athens at the Theatre of Dionysios. The first chair was dedicated to Phoebe Hearst, but her son, whose name is on the theater, does not have one. A full listing of those honored can be found in IV Appendix f.

They generally represent faculty and administrative staff, including deans and the University Physician, with some notable alumni of the University—such as author Frank Norris—also honored. The range of names and inscriptions implies that recipients did not necessarily receive the honor of a chair simply because of their title or position, but because they were beloved and respected in the University community, and because a student class, or group of their personal friends, carried through an effort to raise funds and dedicate a chair in their memory.

Above the lower promenade (*diazoma*) is the upper amphitheater, the steeply stepped concentric rings and radial stairs which embodies the main bowl shape. This spectator seating is divided into ten upper sections, each separated from the lower promenade by a wall. (See Image 63.) These ten walls separate each *kerkis*, or upper amphitheater seating area, from the lower promenade. These walls are board form concrete with rough aggregate six feet high with a concrete bench on the inner side along the lower promenade. These benches will seat one hundred and sixty people total.¹¹⁸ The stepped seating and stairs of the upper amphitheater are monolithic concrete with rough aggregate, with a smoother finish at the seating surfaces. This concrete is similar to that used throughout the portions of original theater other than the stage. Nineteen rows of stepped seats rise to the upper promenade (*diazoma*), which marks boundary of the amphitheater. At the time of construction, William Dallam Armes describes the seating of the Greek Theatre:

¹¹⁷ www.whitman.edu/theatre/theatretour/epidaurus/introduction/epidaurus.intro2.htm.
¹¹⁸Wardrip, A Western Portal of Culture, p 49.

As each of these steps serves as a seat, it is sixteen inches high and two and a half feet deep. Eleven aisles with steps but eight inches high divide this portion of the auditorium into ten edges that will accommodate four thousand persons.¹¹⁹

Each row has a varying number of informal "seats" numbered with white paint. Throughout most of the history of the structure spectators at the Greek Theatre in the tiers of benches simply chose their own seating area along the level benches. Individual seats were not demarcated, except in the case of chairs of benches temporarily set up on the shallow tiers of the lower amphitheater, immediately above and adjacent to the orchestra.

In the early 1980s, numbers — initially red, on a square of white — were painted on the benches, creating for the first time the potential for, and practice of, assigned seats in the upper levels of the theatre. On some occasions and for some events seats are assigned; on other occasions, particularly more informal gatherings such as student rallies, seating is general admission and spectators choose their own benches and spread out — or crowd together — as their preferences or the size of the crowd dictates.

Between the top row of seating and the upper promenade, each section has a concrete wall six feet high, made of the same board form concrete as the lower walls. These walls are original to the construction of the Greek Theatre. At the two west edges of the amphitheater is a sloping concrete wall similar to the ones at the top and bottom of each *kerkis*. These concrete walls, unpainted on the amphitheater side, continue as retaining walls to the grade of the orchestra; they are parged with cement on the west side.

Beyond the upper walls is the upper promenade (*diazoma*) which surrounds the amphitheater. It has asphalt paving. Although Howard's drawings showed it extending the full semi-circle to the western walls, it stops short, with a plant box at each west end. A concrete wall, which is a retaining wall on the east where the grade slopes up, bounds the outer edge of the upper promenade. This wall has openings on the north and south leading to site access paths in the upper landscape area. At the west end, this wall turns and joins the original western wall of the amphitheater, with a built-in concrete bench.

¹¹⁹Wardrip, A Western Portal of Culture, p 50.

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Stage

The stage (*skene*) is a concrete C-shaped structure, consisting of one long wall with two wings which wrap around the stage surface on which players can perform. Its location at the foot of the amphitheater makes it the central feature of the complex, its sole purpose to provide a classically appropriate backdrop for the actors performing on the stage or in the orchestra. The flat roofed *skene* is about forty feet high, but has walls only two feet thick through most of its central section. The illusion of monumentalism is conveyed by engaged columns around twenty five feet high and three and half wide, which wrap around the stage, providing support to the cornice and freeze, enabling the rear walls to be relatively thin.

Howard used a mutulary Doric style, simple and powerful, and a fortunate choice in light of budget constraints which eliminated the use of marble and could have made a more ornamental order unconvincing in concrete. The columns are fluted and there are roundels at the metopes, but otherwise the order is simplified to its basic elements. The cornice wraps unbroken around the stage, returns, and backstage. The frieze continues around all three sides of the returns, or pylons, which project to the outside of the flanking wings. The columns have no base, and are seated directly on the pedestal, which has a plinth, an elongated cove between two fasciae, an unadorned dado, and a broad cap over a cyma reversa above a fascia molding. The pedestal has a slightly slanted top for drainage. Between the engaged columns, there are simple two-stepped recessed panels below a molding which continues the abacus of the columns.

The columns are seated on a pedestal about six feet high, which is punctuated by five doorways: two large openings on the wings, two small doorways on and one monumental central doorway on the main wall. Projecting on the front and outer side of the two end wings are the returns, or pylons, which have no pilasters, giving them a more monumental presence.

Of the five doorways, only one is ornamented, the twenty-foot-high monumental central door. The central door has two corbels supporting an ornamented cornice. It has two courses of eggand-dart moldings over smaller bead-and-reel moldings. Within the central doorway are interior alcoves with barrel vaulting. These passages may have been a design feature incorporated in order to give the stage a deeper, more monumental appearance. The passages extend into the structure only about ten to twelve feet and are gated with wooden doors; currently they serve as maintenance closets for stage cleaning. The two smaller doors on either side of the central door offset it with their reduced scale. They contain no ornament. The large doors on both wings are of nearly the same scale as the central door, but do not have any of its ornament. Although Howard's drawings show paneled door leaves, it appears none was ever built.

The stage floor is made of granite terrazzo, with integrally-cast metal sleeves to anchor equipment. The terrazzo was installed with the 1957 addition, one of the few elements of that project which changed a central feature of John Galen Howard's design. The stage platform wall is made of concrete with a commemorative plaque to John Galen Howard.

The cornice and the pedestal extend around the returns of the wings and across the backstage (west) elevation of the stage. The west wall contains no ornamentation, but has anchors for the cables of the canopy and awning structure of the 1957 addition. (See image 64.) A projecting bay at the center creates a thick wall, containing the alcoves, storage closets with wood gates. This thickened wall is a vestige of Howard's original design, representing the thickness of the three stage walls and the width of the walkway at the second level of the unrealized design. At the base of the back wall, a concrete gutter, flashed with copper sheet metal in 1957 and recently covered with an epoxy liquid waterproofing, was installed to direct water toward drains. The rear elevation is mostly painted, hiding most cracking and deformations on in the wall.

Inside the returns or pylons at the north and south ends of the main façade of the stage are cylindrical access shafts to the roof, about six feet in diameter. Entry to the shafts is gained by a small door on the reentrant angle. These shafts were originally designed to house a ladder or stair to the roof level. Currently, there is only a wire ladder in the south shaft and it was likely installed to access the roof for maintenance and lighting. The ladder extends to a horizontal beam at the roof level. In order to crawl onto the roof this beam must be mounted.

The flat standing seam copper roof directs water into interior drains. The roof condition was not documented at close range because of limited access. Roof deterioration is implied by the leakage and water damage that is visible.

1957 Addition

Back of house at the Greek Theatre is a one and two-story C-shaped addition that was built into the hillside to be subservient in design as well as function to the historic theater. (See the drawings for the 1957 addition included in Appendix IV e.) The addition wraps around the 1903 structure on three sides. Oriented east-west, the two-story north and south wings block views into the back of house area from the public paths. With the walls on the west end of the upper amphitheater, they create entrances to the amphitheater. (See Images 44, 48 and 51.) The main (upper) floor of the wings contains staircases and an elevator that descend to the floor below, an electrical room and production office, and a first aid station with accessible toilet rooms. The main floors of the two wings are separated by the central court; the only interior connection between them is through the lower level. The continuous lower, one-story portion of the addition, located below the central court, girdles the north, south and west walls of the 1903 structure. Because of a lack of funds, only a modified ground (lower) floor of Born's original twostory scheme was built. (See Images 33, 34, 36 and 37.) The existing addition was designed and built to accommodate a two-story addition—following the 1954 design approved by The Regents in 1954—in the future. The ground floor of the building contains support spaces, including mechanical rooms, kitchen, dining room, and dressing rooms. The paved roof of the one-story portion of the addition (central court) serves as a transitional space—essentially, the wings of a stage—during performances. (See Image 46.)

In terms of its siting, orientation and massing, the addition both defers to the 1903 structure and works in concert with it to create important program elements, such as the north and south entrances to the amphitheater and back of house screening.

Central Court

Like the 1957 addition, the central court is C-shaped, defined by the 1903 structure, the north and south wings and the line formed by the awning and cable structure, terrace wall and planter boxes on the west side of the addition.

The central court has concrete paving with large, exposed aggregate poured between wood paving strips. (See Image 46.) Many of the wood paving strips have rotted or are altogether missing and dirt and weeds fill the crevices between the concrete pours. Asphalt, installed to compensate for subsidence, was poured over portions of the south court and the concrete paving to the south of the 1903 structure.

The canopy and awning structure, located at the center of the west wall of the central court, consists of framework of eight steel columns terminating in a steel beam at the west site wall of the 1957 addition. (See Images 35 and 46.) Cables are suspended between the metal rings imbedded in the rear wall of the stage structure and the steel framework to support canvas awnings when required for shade. Originally designed to pivot on central supports, painted wood and plywood baffles, now fixed, block the openings between the columns on the west wall. To the north and south of the canopy and awning structure are low concrete walls, coated with California Stucco, and planter boxes with wide concrete ledges designed for seating. Original concrete drinking fountains with exposed aggregate finish and bowls of turquoise ceramic tile are located at the joint between the planter box ledges and the wings.

Building Structure

The structural system is reinforced concrete. Walls were cast using both board and plywood forms, whereas the court and wing roof decks were poured using board forms only.

Exterior, General

The exterior of the building is clad in cement plaster with a finish coat of California Stucco Product Co.'s Exterior Waterproof Float. The roof line of the north and south wings are delineated by recessed bands of bare concrete, suggesting a fascia, and projecting roof decks, clad in standing seam copper sheet metal, to match the new standing seam copper roof installed during the 1954-55 repair work to the 1903 structure. In terms of its design elements, the addition is distinguished by a spare classical vocabulary of 1950s modernism.

Exterior, North Wing

The smooth stucco of the walls is uncoated, expect for localized patches of paint, probably applied to conceal graffiti on the east and south walls. There are cracks at the bottom of the east wall, crazing on the north wall, copper and water staining below the roofline on the north wall and abrasion and small stucco losses at the corners of the building. Recessed light boxes are located in the walls to illuminate adjacent paving. (See image 65.) There are an assortment of abandoned fasteners, piping, and receptacles on the exterior walls of the wing. The stucco walls are unornamented, except for a belt course which, beginning at the planter box to the north of the north wing, wraps around the west elevation to the corresponding planter box immediately south of the south wing.

Four doors, three with two-leaf, double-width openings, in the south wall open onto the central court. There is a door at the ground floor stair landing on the north.

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Exterior, West Elevation

The composition of the west elevation is centered on the awning and cable structure which functions as a classical pergola, reduced to the most minimal expression. The awning and cable structure is supported on concrete piers, below the line of the belt course and slightly recessed behind the line of the west addition wall and the partial height court walls. Wood and plywood baffles, which are now fixed but originally pivoted on a central post, fill the openings between the steel posts. The west wall terminates at the north and south in classical pavilions, here broken down into a series of smaller blocky masses, in much the same way the landscape plant boxes are designed. The components that lie between the central portion of the west elevation, described above, and the end walls of the wings are low blocks that contain plant boxes at level of the central court. There are pre-cast concrete grilles in the lower portion of the walls. These blocks and the plant boxes that bracket the west wall are the same length and in the same plane, creating symmetry around the north and south wings.

Exterior, South Wing

Like the north wing, the smooth stucco of the walls of the south wing is uncoated, expect for localized areas of paint, probably applied to conceal graffiti on the north, east and west walls. There is a fine network of cracks in the stucco on the west wall, horizontal cracks at the bottom of the west wall and abrasion and small stucco losses at the corners. There are terra cotta pipe penetrations in the south wall near the roof line and an assortment of abandoned fasteners, piping, receptacles, mastic residue from tape and equipment on the exterior of the building.

Three double-width doors, including a metal freight elevator door, are located in the north wall and there is a flush metal exit door at the stair landing on the south wall of the wing. Three recessed light boxes are located in the north and south walls to illuminate the central and south courts.

There is a white marble plaque more than three-by-six feet, with bonze letters, affixed to metal bars that are in turn bolted to the wall, adjacent to the south entrance to the amphitheater. (See Image 48.) Oxidation of the bronze has stained the marble. The lettering reads, "The Greek Theatre/Gift of/William Randolph Hearst."

University of California

Roof

The wings have built-up flat roofs penetrated by skylights to illuminate the interior rooms naturally. There are flood lights and receptacles, presumably for supplemental lighting for special events, mounted on the roof. The edge of the roof deck is covered with copper sheet metal, with ribbed or standing steam joints, like the standing seam roof on the stage.

Interior, General

The interior finishes are almost uniform throughout, including bare concrete floors, walls and ceilings in the mechanical rooms and support spaces, and painted concrete floors, walls and ceilings in the public rooms. In most of the public rooms and rooms without full-height partition walls, the ceilings and the upper portion of the full-height walls are painted black to de-accentuate surface-mounted building systems; these systems include exposed mechanical ducts and grilles for the heating and air conditioning system, electrical conduit and sprinklers. The original interior doors are flat, birch veneered doors with bronze plated door hardware. The original hinges appear to be five-knuckle bronze plated hinges. Other original door hardware, such as kick and push plates, appears to have varied depending upon its proximity to highly trafficked areas. The original light fixtures in the public rooms and service rooms appear to be green enamel pendant shades, many of which remain.

To the extent possible, only finishes which differ from the typical finishes or materials described above are discussed below.

Interior Rooms, General

The first room numbers listed below are those shown on the 1956 drawings and the second room numbers listed for the rooms are the current room numbers, where observed. The room names indicated on the drawings are listed first followed by room names developed for this report on the basis of the apparent uses of the rooms. If a name or number is not known, a dash is indicated.

Ground Floor Rooms, From North to South

--/Storage (Room 111A/--): Located below the stair landing and accessed by a short run of stairs contained in the stairwell, this storage room shows signs of standing water. Although there is a clean-out in the floor, the base of the walls are water stained, the bottom of the steel door

surround and the lowest hinge are corroded and the bottom of the door is rotted. A receptacle, mounted low in the wall, is in danger from possible flooding. Cal Performances staff indicated the water level in the room is about three inches when it floods.

Men's Toilet Room/ Men's Toilet Room (Room 119/101): Like the women's toilet room, the men's toilet room is a multiple-occupancy room with a shower stall. It is located off the north stair landing at the ground floor. The floor and baseboard are clad in ³/₄" x ³/₄" unglazed ceramic mosaic tile — Velvetex by Mosaic Tile Co. — with a 4-1/2" x 4-1/2" salt and pepper glazed tile wainscot above. The shower is clad with Granitex, also by the Mosaic Tile Co. The top of the wall is painted plaster. The ceiling is an acoustical lay-in tile ceiling with fluorescent light fixtures. The sanitary fixtures are white porcelain floor-mounted water closets and urinals, screened by painted metal toilet partitions, and a stainless steel counter with three lavatories. A janitor's closet with a mop sink opens off the toilet room.

"Shop Dressing"/Kitchen (Room 115/--): Although the room was labeled "shop dressing" in the construction drawings, a floor drain was shown in the room and a fixture, resembling a commercial sink with integral drain boards, was shown in the northwest corner of the room. (See Image 70.) Now used as a kitchen to prepare meals for performers, the room has painted concrete and gypsum board walls. The ceiling is board formed concrete from which exposed ductwork, piping and fluorescent light fixtures are hung. There is a stainless steel sink in the northwest corner with three basins and two drain boards and a separate cast iron sink with two basins. A storage room with plywood walls has been created in the southeast corner of the kitchen. Like the corresponding room on the south end of the ground floor, there are sizeable cracks in the concrete ceiling and poorly graded aggregate and water and salt stains are apparent in the visible cross section.

--/Pantry (Room 113/--): The walls are painted concrete and gypsum board and the ceiling is painted concrete. A pendant fixture illuminates the room.

Utility Room/Fan Room (Room 109/104): The south wall, between the fan room and the Cal Performances office, is a stud wall finished with gypsum board. This wall is original, appearing on the 1956 plan. The room contains mechanical equipment.

Play Director's Office/Cal Performance Office (Room 107/--): The flooring is vinyl tile, the only application of this material in the building. The walls are gypsum board and painted concrete

and the ceiling is unpainted, board formed concrete. The room is naturally illuminated by a hopper window in the west wall. The window frame and sash are wood and are set behind a precast concrete grille. In addition, the room is illuminated by a pendant light fixture.

--/North Lobby (Room 117/--): Like the south lobby, the floors, walls and ceiling of the north lobby are painted concrete, with the upper portion of the walls, ceiling and exposed mechanical ducts and piping painted black. An exit sign, security lights with battery back-up and an electrical panel are mounted on the walls. The four original pendant light fixtures are supplemented by spot lighting.

--/Dining Commons (Room 121/--): The northern portion of the hall merges with the space labeled Room 121 on the 1956 plan to create the Dining Commons. (See Image 71.) The south wall is finished with gypsum board and the east and north walls are finished with diagonally oriented wood boards. The ceiling is clad with adhered acoustical tiles. The room is illuminated by a combination of pendant fixtures and strip lighting. Three ceiling fans are used to ventilate the space.

Storage Room/Cal Bears Room (Room 123/--): The walls of the rooms are full-height and a combination of plywood and gypsum board with a vinyl baseboard at the north, south and west. The east wall is concrete. The door opening contains a double leaf door with a pine or birch veneer and a wood surround. The ceiling, which appears to be lower than the other ceilings on the ground floor, is finished with adhered acoustical tile. Pendant fixtures illuminate the room.

--/Dressing Rooms (Room 122/--): Shown undivided on the 1956 ground floor plan, this space is now six dressing rooms with carpeted concrete floors. (See Image 72.) The east and south walls of this area and the ceiling are painted black to reduce the visibility of the exposed ductwork and piping. The south wall is plywood, applied over concrete. The partition walls that separate the dressing rooms are partial height, clear-finished aluminum and gypsum board walls, like the partitions that separate the dressing rooms from the hall. The doors are painted, hollow core doors. The dressing rooms are illuminated by track lighting and there are two ceiling fans located in this area.

--/Hall (Room --/--): The hall and rooms opening off the hall are shown as one large undivided space on the 1956 drawing, perhaps because there was insufficient time to develop this area after

The Regents' sudden decision to add the central section of the ground floor after construction was already underway on the rest of the addition.

The hall is defined on one side by the concrete west wall with five door openings and one window opening that were infilled as part of the 1956-57 construction. The rebar in the concrete was laid out surrounding these areas so that, if the two-story addition that was originally part of the 1954 design is ever built, the infill would be removed to link the existing addition to the new construction. The concrete surfaces are painted, employing the same paint scheme used in the lobbies: the upper portions of the walls, ceiling, exposed mechanical ducts and piping are painted black. The east wall of the hall consists of partial-height (approximately 8' +/-), clear-finished aluminum and gypsum board partition walls on the south and full height gypsum board walls in the center of the hall. The northern portion of the hall opens into the dining commons, described above. The hall is illuminated by fluorescent light fixtures. The doors at the north and south ends of the hall are shown on late drawings issued as part of the construction set. They were late additions to the contractor's scope of work during construction. The doors, hung in a frame wall clad with gypsum board, are flush, double-acting doors with birch or pine veneer and round lights.

Utility Room/-- (Room 108/141): The utility room is illuminated by an opening in the west wall. The opening contains a pre-cast concrete grille, in poor condition. Physical evidence indicates a wood sash was removed from the opening. Dirt and debris are visible on the window stool and floor, near the electrical components. The room contains a white porcelain janitor's sink, a large air handling unit on a raised concrete pad, a water heater, and several panels, including electrical, fan, sprinkler and fire alarm panels.

Equipment Dressing Room and Equipment Room/-- (Room 116-116A/145): Atypical of mechanical rooms, the concrete walls of this mechanical room are painted. The space is subdivided into a lobby and two equipment storage areas by chain link fencing. There are medium sized cracks in the concrete ceiling, some of which are water- and efflorescence-stained. The room is illuminated by the original and modern pendant fixtures. The room contains the hydraulic elevator equipment including the motor and two panels, air intakes, the main electric panel, four electric lighting panels, the fire alarm panel and the telephone panel.

The double birch veneer doors with modern hardware are not shown on the 1956 drawings and may have been added during construction or after.

--/Dressing Room (Room 112/--): There is one dressing room located off the south lobby. The color scheme is similar to the lobby, with the upper portion of the walls and the ceiling painted black. The room has a small white ceramic sink, which appears to be a recent vintage, and a modern, ornamental pendant light fixture.

--/South Lobby (Room 118/--): The floors, walls and the ceiling of the lobby adjoining the stair hall are painted concrete, with the upper portion of the walls, ceiling and exposed mechanical ducts and piping painted black. (See Image 73.) An exit sign, security lights with battery backup and an electrical panel are wall-mounted in the room.

Women's Toilet Room/ Women's Toilet Room (Room 120/143): The Women's Toilet Room is a multiple occupancy toilet room with a shower stall. It is located off the stair landing at the ground floor. The floor and baseboard are clad in ³/₄" x ³/₄" unglazed ceramic mosaic tile --Velvetex by Mosaic Tile Co.-- with a 4-1/2" x 4-1/2" salt and pepper glazed tile wainscot above. The shower is clad with Granitex, also by the Mosaic Tile Co. The top of the wall is painted plaster. The ceiling is an acoustical lay-in tile ceiling with fluorescent light fixtures. The sanitary fixtures are white porcelain floor-mounted water closets, painted metal toilet partitions and a stainless counter with three lavatories.

Steam Pump Room/-- (Room 110A/--): The steam distribution system is located below the stair landing and accessed by a short run of stairs contained in the stairwell.

Main Floor Rooms

North Wing

Public Ceremonies/First Aid Station (Room 215/--): This room has a coated concrete floor with a vinyl base. There is a hatch in the floor, the purpose of which is unknown. The interior walls are painted, board formed concrete and the ceiling is covered with glue-on acoustic tiles, with localized patches of unmatching tiles. The room is illuminated by a skylight, spot lights and recessed light fixtures. There is a small kitchenette on the west end of the room and two accessible, single occupancy, toilet rooms on the east.

There is a marble panel with Latin text on the north wall, flanked by two bas-reliefs donated by the Hearst Corporation.¹²⁰

Men's Toilet Room: Originally, there was a single occupancy toilet room in the northeast corner of the main floor of the north wing paired with a small storage room in the southeast corner of the floor. In 1996, these rooms were enlarged to meet accessibility needs. Both toilet rooms have vinyl floor tile, gypsum board and board form concrete walls, acoustical tile ceilings and fluorescent light fixtures.

Women's Toilet Room: See men's toilet room description above.

North Stair (Room 111-211/--): The walls in the stairwells are painted, board form concrete. The boards were oriented vertically to create rounded corners at the landings. (See Image 69.) The baseboards are also of concrete. The ceiling is clad with adhered acoustic tile. The stairwell is illuminated from above by a skylight—one of several in the north wing—and by decidedly recent light fixtures. The inner guardrail consists of a low, sloped concrete wall with a clear-finished, concave pine cap and the outer handrail is a painted pipe rail. Two fire hose cabinets and a fire alarm pull station are located in the stairwell. There is a strong smell of biological growth in the north stairwell, probably attributable to the persistent water problems in the closet.

--/Janitor's Closet (--/--): This janitor's closet is located off the main floor landing of the north stair. It contains a janitor's sink.

South Wing

Control Equipment/Cal Performances Office (Room 216/--): This room functions as a combined office for Cal Performances during shows, and an equipment area on the east, separated by a chain link room divider. The western portion of the room in carpeted over a concrete floor that is exposed in the equipment area. The walls are concrete, except for the west wall that is finished with plywood. The room is illuminated by two original pendant fixtures.

South Stair (Room 110-210/--): The south stairs are identical to the north stairs, described above.

¹²⁰ The stone bas-reliefs are Italian, 14th century (c. 1370) depictions of musicians.

First Aid/Storage (Room 212/--): Perhaps because the first use of this room was not for services or utilities, the floor in this storage room is painted. The ceiling is an acoustic lay-in ceiling with a pendant combination ceiling fan and light fixture.

G. Selected Architectural Elements

Concrete, (Original Theatre and 1957 backstage building)

The concrete used in the construction of the Greek Theatre varies in age, type of installation and composition. The 1903 concrete used for the stage structure is coated with stucco, a cementitious wash (see below) and, in some locations, paint. The composition of the stage concrete is not readily apparent, although Steilberg mentions the use of ferrous sheet metal in concrete pour joints. Where the amphitheater concrete is exposed, it reveals poor grading of aggregate and inadequate vibration of the mix in the form work. (See Image 55.)

The existing conditions notes, made by Born or Steilberg as a precursor to the 1954-55 repair program, make reference to existing repairs of the concrete amphitheater seating, which he theorized were made in the 1930s.¹²¹

Although the mid-1950s conditions survey of the stage structure references specifications for the repair project, these specifications have not been found. The mid-1950s repairs to the proposed auditorium seating were referred to as gunite, followed by sandblasting, and the auditorium crack repairs entailed cutting out cracks before patching.¹²² (See Image 30-32.) Paint and the cementitious coating applied over the stage repairs during the mid-1950s conceal these patches.

The constituents and mix for the two types of concrete used in the 1957 addition are described in the specifications for this work.¹²³ A two-inch cover for rebar is specified.

The specifications also call for form work consisting of 1 x 6 Douglas fir boards, sawn side to the concrete on the exterior and were concealed by plaster or suspended ceilings. Where the concrete is exposed on the interior, 1 x 6 Douglas fir "select merchantable or better" grade was specified with the smooth side to the concrete or plywood, as indicated on the drawings. Site preparation

¹²¹ During the 1930s, there was a Civilian Conservation Corps (CCC) camp in Berkeley and perhaps these repairs were undertaken by the CCC.

¹²² Walter T. Steilberg to Ernest Born, September 11, 1954. Ernest and Esther Born Collection, Environmental Design Archives, University of California, Berkeley.

¹²³ Water T. Steilberg to Ernest Born, July 7, 1956. Ernest Born to George A. Pettitt, December 12, 1956. Handwritten notes on Steilberg's slides of existing conditions. Ernest and Esther Born Collection, Environmental Design Archives, University of California, Berkeley.

for floor slabs and below-grade waterproofing are not fully discussed in the specifications and below-grade drainage details are not included in the drawings.

Pre-cast concrete grilles, textured and integrally colored to match the California Stucco finish, were included in the specification and four grilles were installed in three west-facing, ground floor rooms.

While there are no maintenance records for subsequent work, it is assumed that repairs have occurred during the past 50 years on an as-needed basis.

Coating: 1903 Stage Structure

The specifications dated April 1956 called for a cement wash for the existing building. The mix for the first coat consisted of one sack of Type I, Portland cement; one sack of fine sharp silica sand, 20-60 mesh; two pounds of A.C. Horn Company's Hydratite waterproofing compound; and color as directed by the architect. The second coat was the same as the first, except four pounds of Hydratite were used instead of two pounds. The wash was fog-sprayed with a pressure tank spray, the first coat allowed to cure before the second coat was applied.

The coating is a light-colored cementitious coating, resembling a smooth float or troweled plaster finish.

Stucco: Addition

The additions were parged with cement stucco base coat(s) with a finish coat of California Stucco Product Co.'s Exterior Waterproof Float. The specifications call for waterproofing, presumably a clear waterproofing, but the extent and location of the waterproofing is not indicated.

Copper Roofing

Standard market quality hard copper (cornice temper) was specified in 1956 for the roofing, in 16 oz. weight, to be installed following the technical directions of the Revere Copper & Brass Co., Inc.

Terrazzo

In 1957, gray terrazzo was used to replace the original scored concrete stage floor. The 3" terrazzo finish coat was poured over a 4" concrete that in turn was poured over a 4" gravel bed

atop compacted earth. The finish coat mix was 2 parts granite aggregate, selected by the architect, to 1 part Portland cement. The voids that typically appear in the surface of the material were to be left unfilled. The specified finish treatment was a two-step process with a honed surface as the first application, followed by a second machine rubbed finish using #80 grit stone. Brass strips were used to separate the terrazzo pours. Electrical receptacles and pipe sleeves to received stanchions were installed in the stage floor.

Marble (Chairs)

Melvin Earl Cummings, who also worked on sculptures for Sather Gate and the Doe Memorial Library, designed the original memorial chairs, though his original model and first two chairs were destroyed in his shop during the 1906 earthquake.¹²⁴ Drawings from John Galen Howard also show the chairs. Inspired by classical Greek chairs at locations such at Epidaurus, the chairs are uniform in size, with voluted arms, lion's paw feet along and an egg and dart embellished top rail.¹²⁵ (See Images 64-68.) Subtle variations in the detailing differentiate the chairs. The earliest chairs were made from white Vermont marble, whereas later chairs were made from other stones, including granite.

In a letter from Steilberg to Born dated December 7, 1956, the consulting architect discusses the alarming damage he observed to the white Vermont marble chairs from air pollution, rapid heating from bonfires during rallies and, possibly, original design flaws. In 1955, the chair backs of 16 of the 28 memorial chairs were cracked. Born recapped Steilberg's concerns to George A. Pettitt, Office of Architects and Engineers, University of California, stating the chairs show evidence of incipient to serious erosion from air pollution and cracking, some of it severe.

Steilberg suggested using granite, which is more resistant to air pollution and weathering, for future chairs or installing higher protection walls during rallies. While the chairs were not removed for the 1954-55 repairs, Born made several suggestions to preserve the chairs: permanently relocating them to a protected location, using other types of stone for future chairs, and installing memorial plaques on the lower amphitheater wall in lieu of memorial chairs. In a

¹²⁴ Helfand, The Campus Guide, p 254.

¹²⁵ www.whitman.edu/theatre/theatretour/epidaurus/introduction/epidaurus.intro2.htm

drawing in the Environmental Design Archives, Born illustrated an alternative location for the chairs at the top of the amphitheater where they would be far from rally bonfires, but curiously more exposed to weathering.¹²⁶

Doors and Windows

Most of the exterior doors were specified as flush Weldwood Staystrate 1-3/4" birch veneered doors with 20 pound density Weldrok mineral cores or approved equal set in cold rolled 16 gage steel frames. Special doors, which are either exterior or interior, are 1x6 clear, vertical grain redwood, tongue-and-groove, in Douglas fir frames. Typical interior doors are solid core, 1-3/4" thick with natural birch veneers.

The only window remaining in the building is located in the ground floor Cal Performances office. It is a Ponderosa pine sash in a Douglas fir frame. The window removed from the south utility room was identical to the existing window.

Hardware

Cast bronze door hardware was specified in an oil rubbed bronze finish (US 10B), except for the toilet room fixtures for which polished chromium (US 26) was specified. Russwin Hardware made by the Russell & Erwin Manufacturing Co. was selected and installed on typical interior doors.¹²⁷

Typical interior door hardware consists of a lockset with knobs and square escutcheons with rounded corners. There is an assortment of other door hardware, old and new, including, push plates, kick plates, closers, white metal double-acting hinges mounted in the floor and top of the door frames, flush bolts (hall doors), and panic hardware (stairwell exit doors).

The specifications contain hardware groups, keyed to the door numbers noted on the drawings.

¹²⁶ Water T. Steilberg to Ernest Born, July 7, 1956. Ernest Born to George A. Pettitt, December 12, 1956. Handwritten notes on Steilberg's slides of existing conditions. Ernest and Esther Born Collection, Environmental Design Archives, University of California, Berkeley.

¹²⁷ The Architect. 14 (August 1917): n.p.

H. Site

Gayley Road Landscape Area

The Gayley Road landscape area comprises the planting, paths, sidewalks, and the plaza between the backstage/north and south gate areas and Gayley Road. Intermediate areas between the hardscape elements have various species of trees, shrubs and groundcover. The Gayley Road sidewalk extends the length of this section (and the Greek Theatre property); the boundary used in this report begins at the inner (east) side of the sidewalk because this element is not particular to the theater.

The hardscape elements of the Gayley Road landscape area were constructed during the 1957 addition to the Greek Theatre. A concrete retaining wall about five feet high extends adjacent to the Gayley Road sidewalk. Between Gayley Road and the backstage building, an asphalt path divides the area longitudinally. The path is lit by several typical campus lamp posts on the upslope (east side). A low chain link fence is located on the down slope (west side) of the asphalt path and runs the length of the path. Stairs and landings extend from the path to the Gayley Road sidewalk on the southern section of the asphalt path. The stairs in this zone are smooth concrete, with the typical galvanized steel railings of the 1957 addition. At its southern terminus, the path switches back toward a south facing stair leading to the south gate area. At its northern terminus the path conjoins the Memorial Plaza ramp. There are two paths, symmetrical to the backstage building, which extend east from the longitudinal path to the west wall of the ground floor of the backstage building, and then north or south to the main path system. The paths lead to an exit door in the stair inside each wing of the backstage building.

Plant Materials in the Gayley Road Landscape Area

The asphalt path divides the Gayley Road landscape area into two planting areas: an area located between the asphalt path and the Gayley Road sidewalk and an area located between the asphalt path and the backstage area of the theater.

A hedge, planted on the west side of the chain link fence, forms a visual boundary along the east side of the planting area located between the asphalt path and the Gayley Road. This hedge was not a part of the 1957 Halprin planting plan and was added at some date after 1957. This area contains several isolated specimens of large eucalyptus trees (the remaining trees from the stand that surrounded the south side of the site prior to the construction of Gayley Road in 1946). Ivy forms the groundcover; there are pine trees, other shrubs, and a stand of oaks in the portion of the area to the south of the stairs. Although ivy was specified in the 1957 Halprin planting plan for the portion of the Gayley Road area between the asphalt path and the backstage area of the theater, no groundcover was specified for this area; this area may have been grass in 1957. The location of the present-day pines, in the area south of the stairs, corresponds to that of three pines that were specified in the 1957 planting plan.

In the area located between the asphalt path and the backstage area of the theater, ivy forms the groundcover; there are specimens of large eucalyptus; and a row of four trees is located along the east side of the bed. The trees were in place before the 1957 addition; the ivy, planted as a groundcover in the entire area east of the path, was a part of the 1957 planting plan.

The Memorial Plaza is the main entrance to the theater. The plaza is walled on three sides with concrete retaining walls and is open to and level with the sidewalk at the intersection of Gayley Road and University Drive. On the east wall a three paneled black granite plaque commemorates William Hearst's gift and notes the construction date as 1903 and the additions as 1957. The plaza has three flag poles and is paved with exposed aggregate concrete and basalt accent strips. The south facing ramp accesses the ramp and stairs to the North Gate Area.

North and South Gates

The original theater and backstage area are flanked on the north and south by a series of circulation and landscape features and service spaces added in the 1957 project. These areas function primarily as circulation and access control zones, and act spatially as buffers between the edge of the site and the core of the original theater and backstage area. The two gate zones adjoin the upper landscape area on the east, the original theater and backstage area at the center of the site, and the Gayley Road landscape area on the west. Each gate zone has four main sub-areas: a sidewalk and ramp connecting to Gayley Road (via a stair in the case of the South Gate), a central circulation and entry gate area (called the North Court and South Court on the Born plans), stairs to the upper promenade (*diazoma*) and a site apron on the east side.

The gate areas date from the Born addition and consist of concrete plant boxes and buildings edged into the landscape; concrete walks, ramps, and stairs; and steel gates and chain link fences. Although the south gate can accommodate cars and trucks, it also functions as a pedestrian access. The north gate does not have road access for vehicles and is the primary pedestrian access.

The north gate has a long ramp from the main plaza at Gayley Road, with two switch backs. Two flights of steps provide a shortcut to the main entry gate plaza at the south end of this sequence, bypassing two of the switchbacks. The ramps are paved with concrete with exposed aggregate and basalt ballast accent strips; the stairs consist of smooth concrete with the simple, unpainted galvanized steel pipe railings typical of the 1957 addition. Lining and separating the ramps are exposed aggregate concrete walls, articulated as retaining walls or edge walls less than a foot high, according to grade conditions. Between the ramps and south of the shortcut steps are planters with ivy and shrubs. Concrete walks to the south connect to service access to the backstage area and the Gayley Road landscape area.

Plant Materials in the North Gate Area

There is a narrow plant box located on top of the retaining wall along the west side of the ramp that leads up from the Memorial Plaza to the shortcut steps. Juniper (as specified in the 1957 Halprin planting plan) are planted in this area. At the south end of this narrow planter is a larger plant box that has one tree-form pittosporum and ivy planted as groundcover (as specified in the 1957 Halprin planting plan). On the opposite side (east side) of the sidewalk is another plant box with only ivy for groundcover; in the 1957 Halprin planting plan this planter mirrored the one on the west side of the sidewalk; however at some point the pittosporum in the planter on the east side of the sidewalk has been removed. Plant boxes, on several levels, are located between the south side of the shortcut steps and the theater. The plants in the lower plant boxes include two pine trees and juniper planted as a groundcover (as specified in the 1957 Halprin planting plan). The upper box has an oak tree and ivy is planted as the groundcover (these were specified in the 1957 Halprin planting plan; however a magnolia tree from that plan is missing).

Two, large, triangular-shaped, planting beds are located between the ramps from the Memorial Plaza to the north court. The lower (westernmost) bed is planted with ivy (as the groundcover) and has a group of pine trees with an oak tree in the south end of the bed and another one on the north end; the ivy and trees were all specified on the 1957 planting plan. The upper bed uses junipers as the ground cover; it has a group of pine trees on the south end, single specimens of oak and eucalyptus in the middle portion of the bed, and pine trees on the north end; again the Greek Theatre

juniper and trees were all specified in the 1957 planting plan; although it appears that several of the pines on the south end have died over the years since Halprin specified six trees. From a landscape perspective, these planting beds and the circulation features (ramps, stairs, and paths) provide a transitional or intermediate area between the architecture of the theater and the "natural" setting of the eucalyptus grove to the north.

East of the ramp from Gayley Road is the main entry plaza (called the North Court on the Born drawings), paved in exposed aggregate concrete with basalt paving stones and bisected by the steel entry gates used by most patrons. On the south side flanking the backstage complex is a planter with low concrete walls, crossed by an extension of the steel entry gates. Part of this is covered with a large, horizontal steel grate. On the east side is the ticket office, built into the slope of the site; ivy is planted in the plant box located on the top of this area. Its concrete walls have horizontal board forms and prominent aggregate but with more matrix left in place than the paving. Four simple rectangular openings punched in the main west wall of this structure allow patrons to buy tickets. These openings have no glazed window; they are closed with wood infill when the office is not in use. The interior of the office is a narrow rectangular room of concrete with one door on the north side and no significant features. Past the entry gates, the east end of the north court leads directly to the front aisle and ramp between the Stage and amphitheater. A narrow angled planting bed at the bottom of the massive parged concrete west wall of the amphitheater provides an element of green which mediates between the verdant site and the entirely concrete interior theater space; this element of the 1957 project also acts as an interlocking finger between the Howard and Born designs.

At the north end of the north court, steps on the east side of the ticket booth/plant box lead to the north stairs, which the 1957 addition provided to give patrons direct access to the upper promenade, or *diazoma*. A stair on the north side of the ticket office leads to the first landing, which is divided by a steel fence, keeping the north stair outside the paid area. The north stair leads to a newer asphalt paving path to the Foothill Student Housing, similar in size and location but not identical to one shown on the 1956 Born drawings. The plant box on top of the ticket office has a platform of 2 x 6 wood decking on its northeast corner; the rest of its surface is planted in ivy; in the 1957 planting plan ivy was specified as the groundcover but seven leptospermum, now all gone, were also to be planted. From the upper landing, the east stair switches back to the south, and at the next landing it transitions to a series of five flights **Greek Theatre**

concentric with the amphitheater and terminating at the upper promenade level. These unpainted concrete steps have galvanized steel pipe railings in their center, with low concrete walls on the outer side, which is bordered by a planted area that has ivy as the groundcover and various types of trees. On the 1957 planting plan, this area is shown planted with ivy (as the groundcover), 11 pines and three olive trees, along with toyon, acacia, and ceanothus (in the southwest corner;); several of the pine and the toyon, acacia, and ceanothus are no longer present. (This area provides a transition between the more formally landscaped plant boxes and the eucalyptus grove beyond (north) of the fence that surrounds the theatre site.). On the inner side, similar walls form a series of six stepped plant boxes. The first box located at the lowest level is planted with ivy and has two trees (that appear to be a variety of *Prunus; Prunus* "Thundercloud" was specified on the 1957 planting plan). The second box is planted with laurel; the third with juniper; the fourth with laurel; and the fourth and fifth also with juniper. An olive tree is located in the fifth box. This planting scheme is the one shown on the 1957 planting plan.

The first and third landings widen toward the center of the amphitheater to allow access to toilet rooms tucked into the grade under plant boxes above. The women's room is located on the lower level and the men's room is located on the upper level. The floor is concrete, the walls are covered with light yellow glazed ceramic tile, and the ceiling is painted board formed concrete. The stall partitions are made of metal. The women's room has four lavatories and eight water closets; the men's room has four urinals, four water closets, and four lavatories. The plumbing fixtures appear to be original to the 1957 addition. Natural light enters through narrow slit like windows on the west wall. On the landing outside the women's room is an original concrete drinking fountain with an exposed aggregate finish and bowl of turquoise ceramic tile.

The tree and shrubbery in the plant boxes visually mask the grade relationship between the north stairs and the upper promenade. The switchback stairs at the north court and associated plant boxes and site walls block a direct view from the court to the upper promenade. This part of the addition visually conceals its programmatic space (toilet rooms) and circulation function. Howard's original plan showed two concentric paths at the upper promenade, with a stair extending straight west from the two ends of the outer one, providing the same circulation function that the north stair does. Born's design makes the stair more gradual, allows easy access to unobtrusive toilet rooms, and is clearly differentiated from the original design.

The south gate is very similar to the north gate, though it is not a mirror image because of differing site conditions, especially on the west. While the north end of the site and gate area serves as the primary pedestrian entry, the south also accommodates vehicles and service activities. A driveway with asphalt paving from the west end of the Bowles Hall parking lot runs north to the Greek Theatre, bisected by a large concrete plant box which corresponds to the ticket office structure in the north gate. Approximately 10 feet high, this exposed aggregate concrete mass with ivy planted in the earth at its top has a cleanly punched opening on the west side, originally for a telephone booth but now closed off with an iron gate, and projecting walls on the south which frame an area now used for storage of empty containers. Other than this, its only function is to divide the south access opening. The top of the box is filled with dirt and is planted with ivy; the ivy was specified in the 1957 planting plan along with seven leptospermum (which no longer exist). There are iron entry gates from its east wall to the exposed aggregate concrete retaining wall of similar height that supports the higher grade of the site to the east, and from the north wall to the south wall of the south wing of the backstage building. Atop the plant box is a site light fixture which appears to be Fixture V-2 shown on the drawings for the 1957 addition. Designated on the lighting fixture schedule as an Appleton G58 "louvered standlite," this mushroom-like down light of enamel steel is also found on the plant box above the ticket office and the plant boxes adjacent to the north and south courts.

North of this massive plant box is the south court, almost a mirror image of the north court except for the lack of a ticket office. There is a plant box located along the north side of the south court. There are two tree-sized pittosporum in this plant box; its west end has a platform of 2 x 6 wood decking and ivy is planted as a ground cover in the rest of the box; both the pittosporum and ivy were specified in the 1957 planting plan. From this area, with asphalt paving, the south stair, with its concrete stairs and landings of exposed aggregate concrete with ballast stones ascends to the upper promenade. The south stair is essentially a mirror of the north stair.

There are also a series of six stepped plant boxes on the north side (inside) of the stairs (basically a mirror image of the layout of the plant boxes along the inside of the north stairs). The lowest plant box is located on top of the retaining wall along the east side of the south court; the ground level of its planting bed is at the same as the elevation of the first landing. This first plant box is planted with ivy and has two trees (that appear to be a variety of Prunus). As was the case on the north side, the second box is planted with laurel; the third with juniper; the fourth with laurel; and the fourth and fifth with juniper. This was the planting scheme specified in the 1957 planting plan.

The area on the south side of the stairs (between the stairs and the fence next to the Bowles Hall parking lot) is a planted area that has ivy as the groundcover and various types of trees (including an olive, eucalyptus trees, and pines); basically conforming to the 1957 planting plan, although some of the individual trees may have been planted (or grew) after that date. As with its mirror image on the north side, this area provides a transition between the more formally landscaped plant boxes and what was formerly the eucalyptus grove beyond (south) of the fence that surrounds the theatre site; today this area is primarily a paved parking lot.

Upper Landscape Area

The upper landscape area consists of the retaining wall for the upper promenade, the spectator service area, service entrances, lighting booth, and lawn seating and paths. The upper landscape area has a variety of large trees (including eucalyptus, redwood, and pine) grouped along its south edge; some of the trees predate the 1957 addition, some additional eucalyptus were called for in the 1957 planting plan, and some appear (based on their size) to have been planted after 1957. A grass lawn forms the groundcover in this area (as specified in the 1957 planting plan). The location and genus of selected significant trees was noted in a survey prepared as part of this HSR. That information is located in IV Appendix v.

The circumferential upper promenade retaining wall is approximately four feet high and has recessed lights embedded in the wall which are supplemented by four lights on tall steel stanchions. The asphalt upper promenade is serviced by a southern entrance from Bowles Hall Parking Lot; a mirror-image opening leads to a flat area of bare earth at the chain link enclosure fence on the north side. Lawn seating access paths consist of two flights of ancillary stairs going east from these paths. On the north side, a low retaining wall supports a path and concrete stair which skirt the side of Building D of the Foothill Student Housing Complex; a high, solid wood fence separates the path from a grass lawn next to the dormitory. A row of three eucalyptus trees is located to the east of the east end of this fence; they appear to have been planted around the time the fence was built. On the south side, a new wood railroad tie stair extends from the concrete ancillary stairs east to the lawn seating and spectator service area. The sloped grass lawn seating is circumferential and essentially adds another tier of seating above the original amphitheater. Approximately an acre of nearly level ground immediately above (east of) the lawn seating serves as the spectator service area. South and north side service entrances allow vehicles into this area. There are several large eucalyptus trees in this area. (These trees are part of the stand of trees that have historically been located to the east of the theater site; today, the chain link fence along the east side of the site has created an artificial boundary between these trees and those on the east side of the fence.)

At the central crest of the lawn seating is a partly subterranean lighting control booth, which has the appearance of pill box due to its blocky low profile design and flat concrete roof with a metal hatch for access. This booth houses lighting controls and the transformers that provide power to the upper landscape area. The upper landscape area has a lawn irrigation system which is controlled by a panel on the side of the lighting booth. The entire area is enclosed by a chain link fence draped with material to provide a visual baffle, obstructing direct views of the stage from outside the paid area. The spectator service area extends east of the fence to the concrete retaining wall of the Foothill Parking Lot. An asphalt path across this area connects the Bowles Hall parking lot with the Foothill Student Housing complex; it has a concrete stair to the Bowles Hall parking lot.

I. Utilities and Infrastructure

The purpose of this HSR is to chronicle the history of the building and interpret its significance. Unlike some HSRs that segue into a specific proposed project, including structural, mechanical, electrical and plumbing assessments performed by engineers in these disciplines, this HSR does not outline the scope of work for a specific project and does not include engineering evaluations. The following sections are general and are included to provide summary information about the existing conditions of systems, whether physically apparent, or gleaned from Cal Performances staff or historic research.

Structural Systems

The theater, including the stage and amphitheater, are of poured-in-place concrete construction. Historic photographs show the amphitheater was built directly on terraced earth and drawings show the stage floor rests directly on earth, retained by the stage platform wall. (See Image 13.) Historic photographs and a note on one of the addition drawings suggest the stage walls were unreinforced, however there is no information about the use of reinforcing rods in the amphitheater construction.

Severe cracking and displacement was observed in the end walls of the amphitheater, which function as retaining walls for the dirt below the raked seating. (See Image 56.) The 1954-55 repair drawings suggest that vertical cracks in all three of the stage walls extend through the depth of the walls. Further, historic photographs show formwork for the engaged concrete columns (i.e., columns integral to the wall behind) in situ before the formwork for the intervening wall sections was erected. (See Image 12.) This photograph suggests the columns were poured before the wall sections, without rebar between the two parts of the wall that would provide the wall with mechanical continuity between the tall, narrow sections. Alternatively, the photograph could simply illustrate Julia Morgan's efforts to create a platform and backdrop for the commencement ceremony several days later. Cores have been removed from the rear stage wall, suggesting the presence or absence of rebar may have already been determined and the quality of the concrete may have been assessed. The addition was built of reinforced concrete and, except for cracking in the floor slabs at the ends of the short legs of the C-shaped ground floor, there does not appear to be any apparent damage.

Mechanical System

The components of the mechanical system are spread out between several mechanical rooms and many may be original to the backstage building. The heating and ventilating system is a hot air system, with exposed ducts.

There is a service elevator in the south wing of the addition.

Electrical System

The electrical panels are more numerous and widespread than the mechanical equipment, including large lighting panels in the Control Equipment/Cal Performances Office (Room 216/--) and a large panel mounted on the exterior face of the south wall. The panels appear to vary in age. Most of the electrical conduit has been run through conduit in the concrete walls or under the stage floor slab and whatever is exposed is assumed to have been added since 1957. A combination of historic and modern building and site light fixtures illuminate the property; they are described in the respective sections.

Plumbing System

The plumbing system is assumed to be largely original, except for modifications to the fire alarm and fire suppression systems in the north wing, construction of two accessible toilet rooms in east end of first floor of north wing to replace one toilet room and a closet in 1995-96 and the addition of two white enamel, four-person drinking fountains in the amphitheater.

Site Drainage

Because the building was constructed on a site containing a natural spring, site drainage was an obstacle from the outset, resulting in cost overruns during construction of the theater and the installation of perforated drain tiles eight feet from the northwest and southwest corners of the addition during and after the addition was completed. Groundwater backs up through the floor drain in the --/Storage Room (Room 111A/--) in the north wing, suggesting problems with the sump or waste water line into which this floor drain flows.

J. Alterations and Use

Changes Before and After Construction of the 1957 Addition

1903-1910

Historic photographs, dated 1904 show a board fence enclosing the east side of the upper promenade and a simple lumber gate to the south, respectively. (See Image 16.) By 1906, if not somewhat earlier, a tall wood fence was constructed around the perimeter of the theater on the north, east and south, with gates adjacent to the amphitheater on the north and south. (See Image 15.) The two fences co-existed for some time. Early views of the theater show the wood fence backstage in two different locations, suggesting it may have been reconfigured. (See Images 15, 18 and 22.) From at least the late 1920s until the mid-1950s, a metal fence encircled the theater. The general contractor removed this fence as part of his construction contract.

In 1907, President Benjamin Ide Wheeler proposed to The Regents the installation of a large marble plaque above the central stage entrance in honor of William Randolph Hearst.¹²⁸ (See Image 19.) This plaque and the bronze plaque on the face of the stage, which honored John Galen Howard, were paid for by the Hearst family at the direction of Phoebe Apperson Hearst and installed by 1908.¹²⁹ While the location for the Hearst plaque was unpopular from the outset, referred to as a "blemish" on the theater by a visiting scholar and covered with bunting by thespians, the plaque was not moved until 1956.¹³⁰

In about 1909 or possibly earlier a double row of flag poles was installed along the upper promenade of the amphitheater and wood gates were installed at aisle openings in the bottom wall. (See Images 15-17.)

Five years after the completion of the theater, the University built an ancillary wood frame building to the east, in approximately in the location of the awning and cable structure and the

¹²⁸ Wardrip, A Western Portal of Culture, p 280.

¹²⁹ George and Phoebe Apperson Hearst Papers.

¹³⁰ George Herbert Palmer to Phoebe Apperson Hearst, March 20, 1917. George and Phoebe Apperson Hearst Papers, The Bancroft Library, University of California, Berkeley.

central court's west wall, to provide dressing rooms for performers. (See Image 27.) The building, which contained two large locker rooms a large room for stage props and two restrooms, was built by J.P. Sherward, a University carpenter, for \$3,000.¹³¹ The building was demolished by the contractor for the 1957 addition, as part of the scope of work for this project.

1910-1957

By the 1950s, the theater was in poor condition, perhaps largely the result of inadequate original detailing and workmanship and unresolved site conditions. (See Image 20.) Repairs of the 1903 structure and the completion of facilities to make the theater more serviceable were the primary interest of the Hearst Corporation with the expansion of hospitality functions of secondary interest. Walter T. Steilberg's documentation concerning the theater's condition and necessary repairs suggest that in about the 1930s concrete repairs were made to the auditorium seats. Except for this passing reference, there is no information about this early work.

In a letter to Ernest Born dated September 11, 1954, Steilberg described the deleterious conditions, including 19 slides to illustrate the problems. In Steilberg's narrative, he discusses the building's lack of a roof drainage system, resulting in the partial collapse of the roof surface which in turn allowed water to pond and penetrate into the wall construction, and concrete cracking and spalling in the auditorium seating. Of the latter, he cites safety concerns over aesthetic preferences for romantic ruins as a reason to undertake repairs:

As you must have observed anything we do in the nature of cleaning up or repairing the seat ledges will destroy the "patina" which many admire; and I doubt that this half-century accumulation of dirt on the rough surface of the concrete can be duplicated with any cement wash. The surface finish of these seat ledges is of course a matter of taste...¹³²

¹³² Walter T. Steilberg to Ernest Born, September 11, 1954. Ernest and Esther Born Collection, Environmental Design Archives, University of California, Berkeley.

¹³¹ Wardrip, A Western Portal of Culture, p 276.

Greek Theatre

In September 1954, the investigation of the deterioration was underway and Steilberg's letter and his handwritten notations on the accompanying slides provide some clues concerning possible repairs. No specifications or post-treatment report have been found for this work. Settlement damage occurring shortly after construction was observed in the south stage wall. The letter mentions a substantial amount of repair work to the cornice and crack repair work to the walls. (See Image 28.) Various slides illustrate mock-ups to remove a thick coating of oil paint from the ornamental molding on the central stage door surround; in the end, this molding was removed. (See Image 19.) Regarding the roof, Steilberg states the iron rail will be removed from the roof and the depressed area will be filled with concrete block topped with gunite flush with the roof deck. The iron railing was not reinstalled. Other slides taken by Steilberg for Born show the new standing seam copper roof installation, with a notation about improperly prepared seams in the original roofing. Steilberg's notes make reference to the poor grading of concrete aggregate and, generally, the very poor quality of the concrete. (See Image 21.) The poor quality concrete is evident in early photographs of the amphitheater and remains evident today. He refers to the proposed auditorium seat repairs as gunite, followed by sandblasting, and auditorium crack repairs by cutting out cracks before patching.¹³³ (See Images 30-31.)

Ground water problems caused cost over-runs during construction and persisted afterward. Several of these conditions have persisted or reoccurred today; these include leaks and cracks in the northern women's auditorium toilet room; rust stains on the east face of the stage wall, indicating possible insufficient concrete coverage over ferrous metals or from sheet metal used in pour joints; ponding in the storage closet under the north stair of the backstage building and subsidence of pavement at the south entrance. Efforts to divert groundwater from a natural spring on the site included the installation of perforated drainage tiles installed 8' from the west exterior wall of the addition.¹³⁴ Steilberg appears quite concerned about the evidence that the

¹³³ Ibid. The contractor for this work was Mastercraft Co. and, specifically, Mr. Mero, Mr. Tandy, Mr. Clausen, Mr. Priggey (foreman) and Mr. Vance (gunite nozzleman).

¹³⁴ Water T. Steilberg to Ernest Born, July 30, 1957. Ernest Born to Donald C. Bentley, August 6, 1957. Ernest Born Office Memo Copied to Roy Grimes, February 21, 1958. Handwritten notes on Steilberg's slides of existing conditions. Ernest and Esther Born Collection, Environmental Design Archives, University of California, Berkeley.

theater was built on an underground spring and the consequences the movement of ground water could have on the buildings:

If not diverted we can expect this flow, slowed as it is, to carry away the fines in our footing beds, soften them unequally and ultimately cause differential settlement and unsightly cracking of the superstructure.¹³⁵

The original wooden drain covers in the orchestra circle were replaced with iron grates during the 1940s; though it was not until 1956 that the underground stream was diverted so that it would not run directly under the south wall of the Greek Theatre.¹³⁶

Several small sheds were constructed at unknown dates. These structures appear in drawings (see Appendix d) from 1947 (Wilson Tract) and 1953 (Wilson Tract Addition) but do not appear in the 1947 drawing for Stern Hall (Women's Dormitory). The 1954-55 repair conditions drawings¹³⁷ contain directions for their removal and the outline of one of the sheds, removed for construction of the addition, is visible in a 1950s construction photograph. (See Image 40.)

Born continued to monitor the Greek Theatre's condition, use and design integrity into the 1960s. A rare glimpse of the early management and adaptation of a building by users, Born took issue with the proposed construction of wood stairs from the upper promenade to the lawn and the proposed enlargement of the Bowles Hall student parking lot into the lawn of the theater. (See Image 45.) In writing to the Hearst Corporation, Born decried the "disfigurement" of the lawn with wood stairs and the restriction of the adjacent Bowles Hall parking to service with student parking relocated to the east of that building.¹³⁸ He monitored the decisions of the Greek Theatre Assignment Subcommittee, taking issue with their desire to restrict the use of the

¹³⁵ Ibid.

¹³⁶ Wardrip, A Western Portal of Culture, p 284.

¹³⁷ Please see Images 56 and 57.

¹³⁸ Ernest Born to William W. Murray, September 20, 1957. Ernest and Esther Born Collection, Environmental Design Archives, University of California, Berkeley.

reception room in the north wing to special functions and arguing instead for more diverse uses, including meetings, luncheons, and student and faculty dinners.¹³⁹

Campus Setting Changes

Since construction of the theater, and since completion of the addition in 1957, both the site of the theater and the larger campus setting have changed significantly. While the theater retains overall integrity of location, setting, feeling, and association under the National Register Criteria, changes around it have diminished the last three aspects somewhat.

When the original theater was completed, its campus setting exhibited only the most basic of its current characteristics, most of them factors of basic topography and landscape (the grove of trees that surrounded the site on all sides). The Hearst Competition had yet to make its impression on the planning and architecture of the built campus, and the predecessor designs by Olmsted and his antecedents were more apparent. A campus map from 1897 showing the plan by Hall and a map by the city engineer in 1904 show the theater's site was as much part of the hills as the campus and city, lying east of a series of extensions of Audubon Street (College Avenue) which did not serve any marked buildings. The only campus buildings shown in 1897 were the Chemistry Building (Clinton Day, 1891), the Mining and Mechanic Arts Building (Alfred A. Bennett, 1879), Bacon Hall (John A. Reimer, 1881), North and South Halls (David Farquharson, 1873 and 1875, respectively), and the Mechanical and Electrical Engineering Building (William Curlett, 1893).¹⁴⁰ The more detailed 1897 map shows a number of small, unlabeled buildings (possibly including some of the small wooden structures that survived from the earlier use of the campus property as the Simmons ranch) and two "Shop" structures east of Mining and Mechanic Arts, while the 1904 drawing shows the advent of the Hearst Memorial Mining Building. Notations of eucalyptus, pine, and cypress groves on the Greek Theatre site and the surrounding hill zone make clear that this area was already wooded when the 1897 map was created.

¹³⁹ Ernest Born to Garff Wilson, Greek Theatre Assignment Subcommittee October 12, 1957. Ernest and Esther Born Collection, Environmental Design Archives, University of California, Berkeley.

¹⁴⁰ Helfand, The Campus Guide, p 9

The Greek Theatre was therefore sited in a wooded hillside location, overlooking the campus, city of Berkeley, San Francisco Bay, and San Francisco as it does now. The open campus was a collection of buildings and landscape features representing inchoate schemes and not a unified cultural landscape. Although less than 50 years old as a settlement, the city of Berkeley did have an urban fabric, with the steeply rising hills as the east edge. Howard's plan showed the theater as the eastern outpost of the built campus, and the decisive execution of the plan soon made this vision reality. While the hills remained relatively unbuilt in that early era, the campus quickly took form to west, with the construction of Hearst Mining (completed 1907), California Hall (1903), the Old Power Plant (later Art Gallery, now slated to be Department of Music performance space, 1904), Senior Hall (1905), Northgate Hall (1906), Doe Memorial Library (1907-11), Sather Gate (1908-10), Durant Hall (1908-11), Wellman Hall (1910-12), Girton Hall (1912), Sather Tower and Naval Architecture (1913-1914), Wheeler Hall (1915-17), Hilgard Hall (1916-17), Gilman Hall (1917), Dwinelle Annex (1920), California Memorial Stadium (1923, Howard's last major campus design), Stephens Hall and LeConte Hall (1923), Haviland Hall and Hesse Hall (1924), and Bowles Hall (1929).¹⁴¹ George Kelham's Crocker Radiation Laboratory, built in 1937, stood where Pimentel Hall is now located.¹⁴² These buildings, most of which Howard designed, rounded out the Hearst Competition as originally executed. Except for Bowles and California Memorial Stadium, the buildings all took sites in the formal, beaux-arts core with most of them reinforcing the principles Emile Benard and Howard drew on in their campus plans. Bowles Hall represented a departure for campus planning, but its siting in the landscape recognizes the hills as a different context from the main campus to the west. The stadium represented a significant change in the hills – and to the hills, with its massive filling of Strawberry Canyon and piping Strawberry Creek into culverts. But its distance (and the intervening siting of Bowles Hall a few years later) diminished the effect of the stadium on the setting of the theater.

Drawings from 1927 to 1953 (see Appendix d) show the evolution of several site conditions which remain important to the property. The Location and Plot Plan for Bowles Hall by George Kelham notes the fence around the Greek Theatre, and calls out the location of trees south of the

 $^{^{141}\} sunsite.berkeley.edu/uchistory/archives_exhibits/campus_planning/timeline.html$

¹⁴² Helfand, The Campus Guide, p 91

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new building. It also shows existing roads apparently connecting the Stage to Stadium Rimway Approach from the south, then turning east toward the site of Bowles, with a small new parking lot next to the building. A drawing for Stern Hall by Corbett and MacMurray and William Wurster dated June 10, 1941 shows the continuous grove of trees between the Greek Theatre and the new Women's Dormitory, with a road roughly opposite University Drive curving around the north side of the theater site. This route and the fence around the theater are also shown in the Nov. 1947 Topography Area South of Wilson Tract and the 1953 Wilson Tract Addition which shows the completed Gayley Road and (old) Stanley Hall.

The architectural context of the theater changed markedly from 1941 to 1956. Gayley Road replaced College Avenue as the north-south thoroughfare on the east side of the campus. Gayley Road was placed much closer to the theater, effectively moving the boundary between the formal main campus (now known as the Campus Park) and the hills. The area west of the theater, denoted "Eucalyptus and Cypress Grove" on the 1897 plan, became part of the classical campus conceived by Benard and Howard. While a strip of site remained west of the theater, it became a structure on a campus artery, no longer a place reached after a walk through a wooded hillside. Construction of the Women's Dormitory (now Stern Hall) in 1941 set in motion development of the important architectural change to the site of the theater. The original part of the building was near Hearst Avenue, and like Bowles Hall; its siting acknowledged the special character of the hills. Construction of Gayley Road ushered in a number of new buildings just to its west, also changing the setting of the theater. As each of these buildings were added, trees in the existing grove were removed; thereby diminishing the predominance of the grove in this portion of the campus. Lewis Hall, directly across Gayley Road, was constructed in 1948, designed by Geoffrey Bangs, who had worked for Howard.¹⁴³ Architecturally, it looked back to the Hearst Competition, and sited at the bottom of the embankment of Gayley Road it did not have a great impact for a building its size. Stanley Hall, designed by Michael Goodman and completed in 1952, epitomized the transformation of the campus on the west edge of the theater; its design mediated between classical and modern, and its height and bulk exceeded its predecessors but fell well short of later buildings. The replacement (completed in 2006), along with Latimer (1963), is visible from inside the amphitheater, changing significantly the character

¹⁴³ Helfand, The Campus Guide, p 96.

of the setting to the west (buildings are now visible where the view was previously dominated by a mass of trees). Nearby sizable buildings Campbell Hall (1959), and Tan Hall (1996) altered the character of the Campus Park and the western setting of the theater, with lesser influence from lower buildings such as Pimentel Hall (1964) and Hildebrand Hall (1966). Roughly equal in impact to the construction of Latimer and Stanley Hall replacement was the incremental expansion of the Women's Dormitory into Stern Hall and later the Foothill Student Housing complex (to the north and northeast of the theater). A 1959 addition brought Stern Hall closer to the Greek Theatre, followed by another in 1981. In 1991, the Foothill Student Housing complex appeared on the east side of Stern Hall; because its site is uphill from the older structure, and because the south end wraps around it, closer in plan to the center of the amphitheater than Stern, the later building has a much greater impact on the setting of the theater. Again buildings were added into what previously had been a grove of trees and the size of the surrounding grove was correspondingly reduced. This altered views and resulted in the alteration of feeling and setting of the site.

Foothill Housing Building D comes so close to the lawn seating area that the upper site stair was relocated to accommodate it; a solid wood-shingled fence skirts this building, prominently visible from more than half the seats in the amphitheater. On the east side of the theater, construction of Cyclotron Road (which gave access to the former Wilson Tract after the University acquired it for what was to become Lawrence Berkeley National Laboratory) had almost no impact at all on the site because it was well up the wooded slope (the same is true of the laboratory and the buildings on Centennial Drive, even though they did change the hills). But the parking lot for the 1991 addition, just east of the upper service area of the theater, added to the impact of the Foothill Housing project, especially in that it changed the view uphill from the lawn seating area with construction of concrete retaining walls. The retaining walls, the flat engineered topography of the parking lot, and the automobiles along the edge of the parking lot are now visible from the east edge of the theater grounds. The expansion of the parking lot next to south side of the theatre has also resulted in the incremental removal of trees and the diminishment of the prevence of the grove of trees and has altered the buffer, views, setting, and feeling the grove provided.

1957 Planting Plan

For the most part, Halprin's 1957 planting plan for the Greek Theatre is still in place. The plant palette continues to be one predominated by various shades of green and the lack of flowering plants (except for the *Prunus* trees planted on the west sides of both the north and south courts). Large trees and groundcovers with the very limited use of shrubs (or any other middle level of plant materials between the tree canopies and the groundcover) continues to characterize the planting design. The plants that Halprin specified (ivy, juniper, or grass lawn) to create a uniform ground plane within individual planting beds or areas remain in place. For the most part, both the eucalyptus trees that predated the 1956 additions and the new trees that Halprin specified on the 1957 planting plan B remain. However, the numbers of trees located at the edge of the site has diminished over the years due to other projects (as described in the preceding section). Generally, alterations to the 1957 planting plan have been from the loss or disappearance of some of the individual trees (usually within a group of trees) rather than the addition of new plant species to the site. An exception to this is the addition of the hedge along the west side of the asphalt path in the Gayley Road area (this hedge was not a part of the 1957 planting plan). Historic Structure Report

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Construction Chronology

Circa early 1870s	Eucalyptus trees planted on campus.
1894-1902	Ben Weed, a Cal student, discovered a natural amphitheater surrounded by a eucalyptus grove and began using it for student gatherings. (See Image 10.) It was located behind the Chemistry Building and in approximately the same location at the present-day Greek Theatre. It became known as known as Ben Weed's Amphitheatre. Because the site contours lent themselves to amphitheater seating, Ben Weed's Amphitheatre was selected for construction of the Greek Theatre and cleared in 1902.
1902-03	John Galen Howard drawings, dated 1902, show a grander plan than the realized design with: a road located closer to the theater than Gayley Road; monumental stairs rising to the theater at the end of the "University Axis"— Howard's primary east-west campus axis — a two-story structure wrapping around the stage walls with loggias on the north, south and west; monumental wing walls projecting from the stage returns to enclose the amphitheater fully on the west; and an order of caryatids surmounting the stage entablature with oil lamps on tripod bases punctuating the ends of the roof. (See Image 11.) The upper promenade is shown covered with a tile roof supported on columns and perimeter walls. The drawing illustrates stairs rising to a path that hugs the promenade wall and provides access to the promenade. The plan places the Greek Theatre in an urban context with a grand cascade of walkways and stairs to the north, a plaza to the northeast and a street to the east.
1903	Construction of the Greek Theatre. Lindgren-Hicks Co., "cement contractors," was the contractor. (See Images 12, 13 and 17.) The stage floor, ramps to orchestra pit and the interstitial space between the stage

and orchestra circle were paved with a scored, light-colored material—

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probably concrete; it was removed in 1956-57. Image 14 shows the original paths and drives serving the Greek Theatre and Images 15, 16, 22 and 23 show the raw conditions surrounding the Greek Theatre, including the packed dirt entrance courts, during its early years.

1903 – 1954A 1907 view and other historic views show an ornamental molding at
central door surround. (See Image 19.) It was removed when repairs were
made to the structure in 1954-55.

1903 – 1954 Many historic photographs show transom rails in the door openings in the north and south stage walls and the center opening in the west stage wall. (See Images 19, 20 and 22.) It is assumed they were original features, possibly removed during the mid-1950s work.

After c. 1906 –A tall wood fence surrounding theater to the north, east and west, with1919, or possiblygates in the vicinity of the structure was built to enclose thelater; date ofamphitheater and, presumably, separate the paying audience from thedemolitionnon-paying public. (See Images 17 and 18.) Before this fence wasunknownconstructed, there was a board fence at the upper promenade. (See Image16.) Chain link fences are indicated to be removed in the mid-1950sconstruction documents. (See Appendix e.)

The Regents, at the suggestion of Wheeler, voted to install a large marble plaque above the central stage entrance in honor of William Randolph Hearst. (See Image 19.) Howard may have included a similar plaque in the same location, but at the upper loggia, of his 1902 scheme. (See Image 11.) This plaque and a plaque on face of stage wall, identifying Howard as the architect, were purchased by Phoebe Apperson Hearst and installed by 1908. (See Image 19.)

Summer 1909-A wood frame building, 155' long (approximately the length of the stage),1956was built behind and to the west of the 1903 stage. (See Image 27.) The
building contained 13 rooms, including eight "regular" dressing rooms
and, presumably, several dressing rooms for star performers.

1903-	Historic views of the north stage wall return, show openings or blind
1954-57	windows in the west wall of the north return. (See Image 22.) Physical
	evidence suggests these openings or blind openings appeared at the south
	return as well. These elements are no longer extant and were probably
	infilled as part of the work undertaken during the mid-1950s.
1903-1957	Historic view shows a double row of tall poles—flag poles used for
	ceremonies—flanking the upper promenade. (See Image 16.) These flag
	poles were reduced in number to one row and possibly replaced as part of
	the mid-1950s work. (See Image 42.)
After 1903	Many historic views of varying dates show curtains in the stage door
	openings. (See Images 18 and 20.)
1930s	Notes regarding concrete deterioration made by Steilberg in 1954-55
	suggest repairs were made to the amphitheater concrete in about the
	1930s.
1946	Gayley Road was cut through campus to replaced College Avenue. (See
	Images 7 and 25.) Gayley lies closer to the Greek Theatre than College
	did as the north-south route through the east end of campus. (See Images
	9, 26 and 27.) A comparison of Images 26 and 27 shows a 1940s landscape
	project at the Greek Theatre that included rerouting a drive, planting
	shrubbery and installing a street light and bollards.
c. 1910 – at least	Early views show gates, possibly wood gates, at the bottom of the aisles
1948; possibly as	in the upper amphitheater seating. (See Image 17.) A 1958 view shows
late as 1958	only one gate, suggesting most of the gates were removed by this date.
1948	A historic view, dated 1948, shows the concrete paving around the
	orchestra circle is cracked overall and the face of stage platform wall is
	stained and cracked. The Orchestra circle is a dark-colored material and
	was probably still earth in this photograph. Wood trench grates, visible in
	early photographs, were replaced by iron grates; some survive today.

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March 28, 1952 Fall 1953	The Regents Committee on Grounds and Buildings announced the selection of Ernest Born as the official supervising architect for the theater rehabilitation. Born completed a set of drawings. The drawings were approved by the University and the Hearst Foundation and submitted to the contractor for bids. Funds were, however, insufficient to build the addition as designed. (See Images 33-34.)
1954-55	Repairs to the existing structure, designed largely by Walter T. Steilberg, were undertaken. Mastercraft Co. was the contractor for the concrete repair work. (See Images 28-32.)
Spring 1956	Born completed a preliminary set of drawings for a scaled-back design.
Summer 1956	Work was begun on the addition. Construction was completed in eight months — in 1957—even though the scope of the addition was changed during construction. (See Image 39 and Appendix IV e.) Marble plaque honoring Hearst was moved from over the central stage entrance to the south exterior wall of the south wing of the addition. (See Images 19 and 48.) The firm of Engstrom & Nourse appears to have been the contractor for the addition.
1957	The site was landscaped. (See Images 43-44.)
September 29, 1957	Greek Theatre Re-dedication Ceremony.
c. 1957-63	Installation of four white enameled metal drinking fountains, two on the lower level and two on the upper level. (See Image 50.) Fixing in place of the rotating baffles of the awning and cable structure and other modifications to the structure. Redwood plant boxes were installed backstage.
c. 1957-63	Lighting booth for stage installed at the upper lawn. (See Image 59.)

1957-58	Installation of the tapestry and stone bas-reliefs given by the Hearst
	Corporation were installed in one of the south stairwell and the Public
	Ceremonies/First Aid Station (Room 215/) after the building was
	completed. The artwork was intended for the main reception spaces,
	which have not been built. Two of the pieces, the tapestry, which hung
	at the intermediate landing in the south stairwell, and a 16 th century
	French stone bas-relief carved for Francis I were removed at an
	unknown date.
1963, or possibly	Dark paving material, possibly asphalt, applied to orchestra ramps.
earlier	
1995-96	The only modifications to the building requiring construction documents
	appear to be recent modifications to the fire alarm system in ground floor
	corridor and north wing, and construction of two accessible toilet rooms
	in east end of first floor of north wing by. Brocchini Architects of,
	Oakland.

K. Use of the Greek Theatre

The years following the opening ceremonies bring a list of famous actors, actresses, musicians and dancers that rivaled the performance history of any other outdoor theater setting. William Dallam Armes, a Cal alumnus and faculty member who was the first director of the Greek Theatre, brought a number of professional dance and acting troupes onto the stage. Armes is also credited with bringing the Greek Theatre into national recognition.¹⁴⁴ By booking such performers as Sarah Bernhardt, Armes took an early step to solidify the reputation of the Greek Theatre beyond its architecture or the prestige of the University alone. Armes understood that the most important aspect to the Greek Theatre was its unique setting, and the unique performance space it could provide to an audience.

On May 17, 1906, Sarah Bernhardt performed Racine's *Phaedre*. The proceeds from this performance were to benefit the victims of the recent Earthquake that devastated San Francisco. Though the rumor circulated that Bernhardt played at the Greek Theatre only because the theater she was originally scheduled to perform in had burnt to the ground, Armes had booked her appearance at the Greek in addition to her cancelled San Francisco appearances. The proceeds from her performance at the Greek Theatre were all donated to earthquake relief.¹⁴⁵ She often boasted that playing Phaedra at the Greek was the role of a lifetime, and though it was meant to be her American farewell tour, she returned to the Greek Theatre twice more, once in 1911 and again in 1918.¹⁴⁶ "It is Greece!"¹⁴⁷ Bernhardt had exclaimed after seeing the Greek Theatre, and her presence there fostered a tradition of some of the world's finest performers.

Sarah Bernhardt was so taken with her performance at the Greek Theatre that she used the image of the Greek Theatre to promote her tours in Europe. William Dallam Armes tells the story of a faculty member on an automobile tour in France in 1913, discovering a billboard with "a large picture of the Greek Theatre" pasted on it as an advertisement for Racine's *Phaedre* that

¹⁴⁴ Cal Performances Centennial, p 33.

¹⁴⁵ Wardrip, A Western Portal of Culture, p 109.

¹⁴⁶ Cal Performances Centennial, p 59.

¹⁴⁷ Ibid., p 5.

Bernhardt was performing in "the remains of a ruined theatre in a neighboring town."¹⁴⁸ Bernhardt felt that this was the role that she had born to play, in the theatre that was meant for her to play it in.

The listing of famous performances at the Greek Theatre over the years is as diverse as the theater scene was during the early 20th Century. Armes and his successor Samuel J. Hume, also a Cal alumnus, worked to bring national notoriety to the Greek Theatre by inviting "top flight artists who were eager to compete with Bernhardt in making their mark on the extraordinary new Greek Theatre in the Berkeley Hills."¹⁴⁹ Ruth St. Denis and her husband, Ted Shawn, two pioneers of modern dance, performed in *Miriam, Sister of Moses* in 1916. The Greek Theatre continued to serve as an important facility for the arts, both to local theater troupes and to nationally recognized stars. Actors such as Margaret Anglin, Constance Crowley, Maude Adams, and Robert Mantell, and a list of influential directors and producers just as long came to the Greek Theatre.¹⁵⁰

In 1934, the director Max Reinhart presented a series of performances of *A Midsummer Night's Dream*. Reinhart had produced the play at the Hollywood Bowl, the San Francisco Opera House, in Florence, and outside his own castle near Salzburg.¹⁵¹ The first act was performed in the Faculty Glade, and then the cast, holding torches, led audience members to the Greek Theatre, where the rest of the play, illuminated by the torches, was performed. The cast included Olivia De Haviland and Mickey Rooney.¹⁵² The Greek Theatre had been decorated to resemble a French/Athenian court:

This final tableau, created by nearly 400 extravagantly costumed actors, brilliantly lighted and enhanced by a full orchestra and vocal chorus, presented a picture unlike any ever witnessed before or since in the Greek Theatre. Most of the play had been performed in Faculty Glade; however it is this last image in the Greek Theatre which

¹⁴⁸ Wardrip, A Western Portal of Culture, p 113.

¹⁴⁹ Cal Performances Centennial, p 34.

¹⁵⁰ Ibid., p 59.

¹⁵¹ Wardrip, A Western Portal of Culture, p 312.

lives on as the most vivid memory of Max Reinhart's A Midsummer Night's Dream in Berkeley.¹⁵³

In contrast, Kurt Adler's production of Aida relied on the architectural backdrop of the stage and amphitheater and the bucolic setting, refraining from elaborate set decorations. "Aida offered up a spectacular treat of both sight and sound...The magic of the spectacle, however, due in no small part to the atmosphere of the Greek Theatre itself"¹⁵⁴ according to historian Mark Wardrip.

The quality of the Greek Theatre as a common meeting place lent itself to sports, spirit, and political rallies over the years. Traditionally, the theater in Greece was also a gathering place for the populace¹⁵⁵, and this idea was incorporated into Wheeler's original vision of a centralized, unifying space. School spirit was one of the most important aspects of university life. Big Game rallies were held every time the Cal football team played its rival Stanford and, in the early days, an annual sequence of other rallies was also staged there. A tradition dating back to the early days of both Bay area universities, they demonstrated the close knit-spirit of the University and took advantage of the Greek Theatre.

Other traditions centered on the Greek Theatre as well. Traditionally, the entering freshman class was initiated into the University by the upper classmen at the theater. Other spirited events such as the "Pajamarino" during which male students attended en bloc, by class year, dressed in nightclothes or the Senior Extravaganza production, remained popular traditions for the Greek Theatre and the University for years.

The theater's scheduled performances became few and far between from the 1930s through the 1950s as more options for entertainment became available, and World War II intervened. The schedule varied, some years having more performances, years such as 1934 having only a

¹⁵² UC Berkeley News, Greek Theatre Turns 100.

¹⁵³ Wardrip, A Western Portal of Culture, p 314.

¹⁵⁴ Ibid., p 314, 316.

¹⁵⁵ http://lilt.ilstu.edu/DRJCLASSICS/lectures/theater/ancient_greek_theater.shtm

handful.¹⁵⁶ There are no performances listed from the fall of 1941 through the fall of 1946. The theater hosted support rallies for the troops abroad during both World War I and World War II. In 1918 the theater saw a series of rallies for American troops, the French, and general war time fund raising. The celebration of Armistice, on November 11th, 1918 marked the end of World War I, and eventually became a yearly event after 1923. In 1920, the American Legion held a meeting to distribute certificates to the next of kin for those lost in the war effort.¹⁵⁷

The Greek Theatre has also served a consistent community role in Berkeley, attracting and serving town and well as gown. Community members were once a prominent part of the audience at student rallies, flocking to see the live spectacles and performances. "Half hours of music" sponsored by the campus at the Greek were publicized in the local papers for community members to attend. Civic ceremonies periodically took place at the Greek, including elaborate charitable fundraiser "Berkeley Municipal Christmas Tree Pageants" in the 1920s and early 1930s. The Greek Theatre was featured as a Berkeley—not just a University—attraction and asset in promotional efforts by local businesses and realtors attempting to attract new residents to Berkeley. In more recent decades Greek Theatre has become the traditional graduation spot for Berkeley High School, with hundreds of graduates and thousands of family members and friends in attendance. ¹⁵⁸

In the summer of 1974, the Greek Theatre again changed identities and became one of the most important venues in the San Francisco Bay Area for music. The programs began with the performance of Joan Baez, a folk musician. Bill Graham, a legendary San Francisco music promoter, brought much of the popular music to the Greek Theatre, from 1974 until his death in 2001. After that, his company, Bill Graham Presents, continued to promote music concerts at the Greek Theatre. Today the Greek Theatre remains a popular spot for progressive music performances, as well as continuing a long tradition of dance and theater.

¹⁵⁶ Wardrip, A Western Portal of Culture, p 376.

¹⁵⁷Ibid., p 371.

¹⁵⁸ Steven Finacom 2/16/2007

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Function of the Theater

During a typical summer concert the Greek Theatre seats around 8,500 people with approximately 1,000 staff members assisting. The staff assists with ushering, concessions, security, medical emergencies, and stage support.

The number of audience entering through the north and south gates is monitored by Ticketmaster electronic ticket counting software that alerts the ushers and ticket sales staff in real time how many audience members have entered and how many tickets are sold between the two entrance gates. Re-entry is not permitted once a performance has started. A visual baffle is hung in front of Foothill Housing to prevent people from filming the performances.

Food is sold throughout the theater at several stationary locations and by walking concessionaires. The grilling and preparation of hotdogs and hamburgers is done in the Central Court behind the stage. Runners transport the food to various parts of the theater. Finer cuts, such as steaks, are grilled in the upper landscape area.

Beer and wine is sold throughout the theater. There are several specialty concession areas such the margarita stand, on a platform on the south side of the upper promenade. Mexican food is sold adjacent to the north stairs above the north gate area. The kitchen and dining commons on the lower level is used by the performers and the performance support staff. The meals are mostly catered.

The permanent toilets are unable to handle the amount of people during the performances; portable toilets are brought in for additional capacity during performances. Most of the portable toilets are located in the upper landscape area.

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L. Significance and Integrity Evaluation

Significance

The Greek Theatre is significant under National Register Criteria A, B, and C. It is significant at the state level under Criterion A (event) for its association with the development of the University of California (planning and construction of the campus, and important campus ceremonies and events), and at the local level for its association with cultural events and entertainment. The property is significant under Criterion B (persons) at the state level for its association with historically significant persons: Phoebe Apperson Hearst and William Randolph Hearst, because of Phoebe Hearst's role in planning the theater, her son's role in paying for the original construction, and his gift and the role of his heirs' business in the 1957 addition. It is significant at the National level under Criterion C (design/construction) because it represents the work of a master and possesses high artistic value. The theater is one of John Galen Howard's first buildings on the Berkeley campus, and also one of the largest. More than any other one, it exhibits his use of classical precedent without programmatic influences of contemporary academic needs. And the Greek Theatre will be the least-altered of Howard's major buildings on the campus once Phases 2 and 3 of the California Memorial Stadium renovation are completed as part of the Southeast Campus Integrated Projects. The theater is also significant under Criterion C because it fully articulates the ideal concept of a classical amphitheater; this association is strengthened by its construction as a core building of the University when it consciously sought to become the Athens of the West.

The Born additions of 1957 are significant at the local level under Criterion C because they illustrate how Modernist architects adapted contemporary forms, detailing, and use of materials to Beaux-Arts buildings. The landscape designed in consultation with Lawrence Halprin is also significant for the use of Modernist landscape principles in circulation and planting design.

Historic Contexts

As discussed in further detail elsewhere in this report, the following is a summary of historic contexts within which the significance of the Greek Theatre was evaluated.

Outdoor Theater Movement in the United States, 1900 to 1920

Desperate to shed its frontier image and embrace the democratic ideals of the great civilizations of the ancient world, early 20th Century California became home to the most successful and longest-operating outdoor theaters in the United States. The Greek Theatre was one of the earliest and unquestionably the most outstanding outdoor theater built on an American university campus.

Phoebe Apperson Hearst and William Randolph Hearst

The William Randolph Hearst Greek Theatre is strongly associated with the lives of perhaps the greatest woman philanthropist of 20th Century California, Phoebe Apperson Hearst, and her son, William Randolph Hearst.

Classical Revival Campus Architecture of the Early 20th Century

The Greek Theatre, inspired by the theater built in Epidaurus, Greece, in second half of the Fourth Century B.C., was the first building on the Berkeley campus designed in the classical revival style. Classical Greek theater, originating in Athens between c. 550 and c. 220 B.C., was one of the foundation blocks of Western culture and one of the strongest statements the new state university could make about its position as a great seat of learning was to ally itself with the great ancient civilization of Greece by building a Greek theater in the hills of Berkeley. Exempt from the programmatic needs of contemporary academic uses, the Greek Theatre was a pure, ideal expression of a classical structure that established the classical style for the future development of the University. Herbert Croly, a critic for the Architectural Record, observed:

California is more closely allied to Latin civilization than is any other part of the American republic...Under the influence of the open-air life and really temperate climate...Californians should be able to give a more genuine and more idiomatic expression to the Latin or the classic tradition in art and architecture than will their fellow countrymen further east...It should be added also that the Californian landscape...is peculiarly adapted to classic type of building...A landscape of this kind demands a type of building which has been simplified in the classic spirit.¹⁵⁹

The classical revival style represented a departure from the Second Empire, Gothic and Spanish Colonial revival styles that characterized several of the early campus building, many eastern universities and nearby Stanford University.

The University of California as a Center for University-Wide and Regional Cultural and Educational Events

The Greek Theatre has served as the venue for many of the University's important campus ceremonies and events and many important regional cultural events. In the years following the completion of the Greek Theatre the list of famous actors, actresses, musicians and dancers who performed at the theater rivaled the performance history of any other outdoor theater setting in the United States. William Dallam Armes, the first director of the Greek Theatre, is credited with bringing the Greek Theatre national recognition. To the University, the theater was the site of commencement ceremonies, football rallies and yearly student events, such as the "Pajamarino." In the summer of 1974, the Greek Theatre became one of the most important venues in the San Francisco Bay Area for music when Bill Graham, a legendary San Francisco music promoter, stated booking musicians in the theater.

Period of Significance

The period of significance of the Greek Theatre is 1903-1957. Its period of significance under Criteria A and B spans these years because of the ongoing use for important University and cultural events, and the involvement of Phoebe and William Hearst and the Hearst Corporation. Its period of significance at the national level under Criterion C is 1903, when the John Galen Howard design was constructed. Its period of significance under Criterion C at the local extends to 1957, when the Born addition was constructed.

¹⁵⁹ Woodbridge, John Galen Howard and the University of California, p 79.

Integrity

National Register Bulletin No. 15 defines integrity as "the ability of a property to convey its significance. To be listed in the National Register of Historic Places, a property must not only be shown to be significant under the National Register criteria, but it must have integrity."¹⁶⁰ The National Register criteria has codified seven qualities a property must retain, in various combinations, to possess integrity. These qualities or aspects of integrity are:

Location: Location is the place where the historic property was constructed or the place where the historic event occurred. Location is important to an understanding of why the property was created or why a historic event occurred, critical to imparting a sense of a historic property's time and place.

Design: Design is the combination of elements that create a property's form, plan, space, structure, and style of a property.

Setting: Setting refers to the physical environment of a historic property, in contrast to location which refers to the specific place a property was built or an event occurred. Setting refers to the character of the place during the property's period(s) of significance. Setting often takes into account the physical conditions under which a property was built and the functions it was intended to serve.

The relationship of the historic resource to its surroundings, whether natural or manmade, constitute its setting and include such elements as topographic features, vegetation, manmade site features and relationships between buildings, site features and open space.

Materials: Materials are the physical elements used to create a historic resource and reveal the information about design intent and period materials and technologies.

Workmanship: Workmanship refers to evidence of craftsmanship indicative of period technological practices and aesthetic principles.

¹⁶⁰ National Register of Historic Places Bulletin No. 15, *How to Apply the National Register Criteria for Evaluation*, p 44.

Feeling: Feeling is a property's expression of the aesthetic or historic sense of a particular period in time. Feeling is a critical concentration of physical features that collectively convey the property's historic character.

Association: Association is the intellectual link between an important historic event or person and a historic property. A property retains integrity of association if it is the place where a historically significant event or activity occurred and it remains sufficiently intact to convey that relationship.

Integrity Assessment

How to Nominate a Resource to the California Register of Historical Resources, prepared by the Office of Historic Preservation, California Department of Parks and Recreation, defines integrity as:

the authenticity of an historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Historical resources eligible for listing in the California Register must ... retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance.

The National Register defines integrity in terms of the retention of location, design, setting, materials, workmanship, feeling, and association. A property's integrity must be evaluated within the context of the criteria under which a resource is considered eligible for listing in the National Register. While each aspect of integrity is assessed individually in a nuanced approach, the overall integrity of a property which is determined holistically from the synthesis of the seven aspects is ultimately a binary determination: either the property retains integrity or it does not.

Integrity of the Greek Theatre

The Greek Theatre retains all seven aspects of its historical integrity. The property has been little modified since 1957. Aging and deterioration have affected numerous elements of the property, but not enough to impair their integrity. Some alterations and additions since 1957 have been incompatible with the historical character of the Greek Theatre, but they are minor in scale. The most significant impact on integrity has been the construction of the Foothill Student Housing

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complex and its parking lot with conspicuous concrete retaining walls, to the north and east of the theater. Building D, and especially its screen wall, is highly obtrusive, readily visible from most of the amphitheater. Its presence significantly diminishes the crucial site qualities that characterize the 1903 and 1957 designs. While it diminishes the integrity of setting by interrupting the wooded hillside which was vital to the siting and design intent for Howard and Born, the Foothill project does not impair integrity of setting overall because of its limited size. The Foothill project had a similar impact on integrity of feeling. Other changes in the setting over time had a far lesser effect of the same nature; while the original hillside site was nearly wild, Howard and his contemporaries envisioned neighboring sites being built, and projects like California Memorial Stadium bore out their expectations. The Greek Theatre's current setting continues to convey its essential original character: a seemingly bucolic place overlooking but crucially removed from an active campus and surrounding city. The other aspects of integrity: location, materials, workmanship, design, and association have scarcely been affected since construction.

While the Born addition of 1957 is substantial and impossible to overlook, it does not impair the integrity of setting, design, or feeling with respect to the 1903 structure designed by John Galen Howard. The Born project resulted in a relatively small degree of demolition of character-defining features of the original theater; impacts on the historic fabric of the crucial elements of the classical amphitheater and stage were very limited. The Born addition is quite visually unobtrusive from inside the amphitheater. Most of its primary design characteristics specifically reinforce or complete the design intentions of unexecuted features in Howard's drawings: the Memorial Plaza strengthens the sense of arrival from the campus below, the north and south gates reinforce the north-south axis between the stage and amphitheater while controlling visual and physical access, and the north and south stairs tie the upper promenade to the orchestra level. Born's work is compatible with Howard's in materials, scale, and articulation but is readily distinguishable from it visually. The compatibility with the original design is a noteworthy characteristic of the Born addition.

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M. Ratings of Significance

The stage and amphitheater designed by John Galen Howard are Very Significant. This includes the complete amphitheater, the ramps, and the stage. It meets all the definitions for very significant, except that its condition ranges from Good to Poor.

The addition, central court, plant boxes, and other landscape elements of the north and south gates, the Gayley Road landscape area, and the upper lawn seating area and inner circumference of the Upper Landscape Area and site are Significant. This includes the north and south stairs and the outer wall of the upper promenade. This portion of the property is significant for architecture and landscape architecture, was built in the period of significance, and is in good condition, overall. It is of secondary architectural and historical importance when compared to the original Howard structure.

The remainder of the site: the outermost areas north, east, and south of the Significant landscape areas integral Born addition, stretching near to the Foothill Student Housing – Stern Hall complex on the north, to the Foothill parking lot on the east, and near to Bowles Hall on the south are Contributing. This area is largely defined by topography; its site features, plant materials, and especially tree canopies which create the wooded setting are central to the character of the Greek Theatre. This Contributing zone is essential to the significance of the original theater and the addition; changes which substantially hinder its role in creating the setting for the Greek Theatre would have a highly negative impact on the significance of the property.

The most important public spaces inside the backstage building of Born addition are Significant, and the lesser ones are Contributing. They do date from the period of significance.

Elements

The stage surface and the roof of the stage structure are Significant. While they are compatible with the original Howard design, their materials and detailing are visibly from the period of the Born addition, when they replaced deteriorated elements of the original construction.

The other visible materials of the Howard design, including unfinished concrete with exposed aggregate and the concrete of the stage structure with a cement skim coating, are Very

Significant. (The amphitheater has been repaired and exhibits significant deterioration in places, but retains its original form and the character of its original material and detailing so that it continues to convey the significance of its design and historical development.) The white marble William Randolph Hearst donor plaque on the South Wing and the bronze John Galen Howard plaque on the stage front wall are Very Significant, while the black marble William Randolph Hearst Greek Theatre plaque at Memorial Plaza is Significant.

The *prohedria* of marble, granite, and cast stone are Very Significant. All works of art older than the Greek Theatre and archaeological objects incorporated in or fixed to the property are Very Significant. These include the tapestry (location unknown to the author) and the stone relief sculptures in the backstage building. (This report does not provide details on these objects because they are not intrinsic components of the property, but they should not be overlooked in assessing the Greek Theatre as a cultural asset.)

The primary visible materials of the addition are Significant. These include:

- plant materials shown on the Born drawings, including turf, groundcover, shrubs, and trees
- exposed aggregate paving, including basalt stone accent strips (including Memorial Plaza)
- stuccoed concrete walls with recessed fascia and projecting copper-clad eave, stairs, and benches
- canopy and awning structure, adjacent low stucco walls and concrete planter boxes
- marble commemorative plaque
- iron gates and galvanized steel pipe railings
- site lighting fixtures by Appleton, recessed wall lighting fixtures, and surface wall fixtures
- drinking fountains designed by Born with exposed aggregate concrete and turquoise ceramic tile bowls
- ceramic wall tile in men's and women's toilet rooms

The following features are Contributing because they date from the period of significance (1957) and are compatible with the character of the property, although they do not play a primary role in defining it:

- plumbing fixtures in men's and women's toilet rooms
- floor and ceiling finishes in toilet rooms
- toilet room partitions

The following materials are Non-Contributing; some may be from the addition, but they are generic materials or are so utilitarian they do not contribute to the character of the property:

- asphalt paving
- wood platforms on the site and plant box surfaces
- chain link fences
- barbed wire fences
- electrical items (including lighting), signage, and other hardware and devices added since 1957, whether working or abandoned

The following are Non-Contributing because they date from after the period of significance, are

incompatible with the character of the property, or both:

- lighting booth
- railroad tie stairs
- four lighting fixtures on high stanchions at the upper promenade
- white cast-iron enamel gang-style drinking fountains

N. Architectural and Site Conditions and Recommendations

Architectural

The purpose of this Historic Structure Report is to document of the history of the Greek Theatre and establish its period of significance and significant character-defining features, rather than to develop an exhaustive repair and rehabilitation program, including engineering analyses, and a cost estimate for the proposed work.

If the Greek Theatre is rehabilitated, engineering analyses and materials testing are recommended to inform the development of a detailed materials treatment program.

There are no available construction details for the 1903 stage and amphitheater and notes on the 1950s drawings and historic photographs appear to be contradictory about reinforcing bars in the concrete stage walls. (See Image 29.) Construction drawings show voids in the base of the stage walls. (See Appendix IV e.) These voids were created by wood formwork, which has probably been encapsulated in the construction. The stage floor was built over earth, with the stage platform wall functioning as a retaining wall. In 1957, the stage floor was replaced by a 3" terrazzo top coat over a 4" reinforced concrete slab in turn poured over a 4" gravel bed. The concrete used for the amphitheater seating was either poured directly on earth or over form work as suggested in Howard's original building sections.

Portions of the 1957 addition are semi-subterranean, built into the west-facing slope of the hill to reduce the overall bulk of the addition. (See Appendix IV e.) The thickness of the walls and roofs of the addition varies depending on their location, but they are reinforced with steel rebar. The flat slab roofs are covered with terraces or built-up roofing. The exterior walls are coated with integrally colored stucco and the interior floors, walls and ceilings are either bare, painted, or in rare instances finished with vinyl tile, gypsum plaster, plywood, adhered acoustical tile or another material.

The stage structure developed severe moisture problems at a very early date from improper roof detailing and the apparent lack of roof drainage, exacerbated by a natural spring in the vicinity of the south stage wall. (See Image 20.) The water damage was not only apparent in the cornice, but also appeared to be the cause of the long vertical crack and displacement that occurred in the engaged column south of the north door in the west stage wall. The mid-1950s conditions survey

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(see IV Appendix d) makes note of very early settlement cracking at the middle of the south stage wall, at the location of a vertical crack 1/8" to $\frac{1}{2}$ " wide. There was corresponding cracking at the north stage wall. All of these cracks telegraphed to the opposite face of the walls, indicating they were cracks that extended the depth of the walls. (See Images 29 and 39.) Additional deterioration noted on the mid-1950s drawings included, at the audience face of the stage walls, a network of horizontal and vertical cracks in the face of the base, vertical cracks through the entablature above almost every column and through the full height of the north and south walls, periodic horizontal cracks through the panels between columns possibly at cold joints, and spalling of the entablature. At the exterior face of the stage walls, the survey shows vertical cracks through the entablature corresponding to almost every column location on the opposite face of the wall and through the full height of the north and south walls, horizontal cracks through the panels between columns possibly at cold joints, paired vertical cracks corresponding to the engaged columns on the opposite face of the wall, and spalling of the entablature and in the wall surfaces, sometimes associated with cracks and sometimes not. Because the 1950s construction drawings indicate there is no rebar in the stage walls, because of the construction of the stage walls in tall, narrow segments, and because of the extent of vertical cracking shown on the 1950s repair drawings, the stage is potentially in poor condition structurally. While the new stage floor installed during the 1950s provided for recessed electrical receptacles and pipe sleeves embedded in the floor construction to support stanchions, the original stage floor may have been so severely cracked it warranted replacement. The surface of the terrazzo stage floor undulates like a washboard and is stained from water run-off over the oxidizing copper roof. Low areas around the perimeter of the floor allow water to pond and possibly penetrate the terrazzo joints to the earth below the stage floor. There is a medium-sized crack and related spalling, that is poorly patched, running east-west at the center of the stage and smaller cracks near the stage doors. The stage floor is in fair condition.

Because it is unlikely the face of the stage platform wall was adequately waterproofed during construction, water has leached through the concrete, carrying dirt and salts from the soil to the surface. In addition to soiling and salt stains, the stage platform wall is cracked in several locations along its length. It is in fair condition. The exterior concrete surfaces of the amphitheater show signs of structural damage, including a crack that runs along the aisle immediately south of the center of the amphitheater and related displacement and the severe cracking and displacement of the end wall of the raked amphitheater seating, adjacent to the south court. (See Image 56.) The corresponding north end wall exhibits similar cracking, but it is narrower and there is no displacement associated with this cracking. Photographs taken during the mid-1950s show a crack that extends through a wedge of seating located toward the center of the amphitheater and the upper promenade wall; this crack was at least partially concealed by the resurfacing of the seats in the 1950s. The surfaces of the amphitheater are in fair condition overall, although potentially it is in poor condition structurally.

It should be mentioned that if the concrete does contain rebar, the rebar would continue to mechanically tie discrete broken pieces of concrete together. That said, it should also be mentioned that water penetrating through cracks or draining from the earth retained below the amphitheater would corrode the rebar and, over time, it would lose its effectiveness.

Water problems in the ground floor and basement utility rooms, present after completion of the 1957 addition, were either never completely corrected or they reoccur today. The concrete decks, under the legs of the C-shaped central court, have cracked and, in the past, water has leaked has into the rooms below. Water leaks into the storage room below the intermediate landing of the north stair. The standing water in this room reaches a height of three inches, although the water staining on the walls indicates that in the past a substantially greater amount of ground water backed up through the floor drain than at present. While the condition of the addition is good overall, this building system is in poor condition.

Life Safety Issues

A variety of life safety deficiencies — conditions that do not meet current code requirements — are apparent. Because of the emphasis of this HSR on the history and significant features of the building, a code analysis was not included in the scope for this report. It should be mentioned these life safety deficiencies are not reflected into the condition rating system interpreted above.

Accessibility Issues

The Greek Theatre does not fully comply with the Americans with Disabilities Act (ADA), a federal civil rights law that governs accessibility for the disabled. (See Accessibility Recommendations below regarding site and building deficiencies.)

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Structural Observations

Structural observations are noted above. The scope of work for the HSR did not include a structural assessment. This report is not based on previous structural studies. The 1997 SAFER study covered the Stage and rated it "very poor."¹⁶¹

MEP Systems Observations

A mechanical, electrical, and plumbing (MEP) evaluation was not included in the scope of work for the HSR. As outlined above, the hot air mechanical system appears to be original to the addition. The mechanical equipment is located in several ground floor mechanical rooms and the ducts are exposed in all ground floor locations. Similarly, much of the electrical system appears to be original, although there have been modifications made to this system over the years. There are panels scattered throughout the building governing building and site lighting, including a large panel or the main service at the south side of the stage. Most of the electrical conduit in the addition is contained within the walls and, where conduit is exposed, it is assumed to have been installed after 1957. A combination of historic and modern building and siting light fixtures illuminate the property; they are described in preceding sections. The plumbing system appears to be original to the addition and, as described in sections above, at least one floor drain is deficient.

¹⁶¹ http://www.berkeley.edu/administration/facilities/safer/rating.html

Overall Building Recommendations

Architectural

Life Safety Issues

If the building is rehabilitated in the future, a code analysis should be prepared and the existing deficiencies addressed as part of this work.

Accessibility Issues

A study by David Finn Architects entitled, *Barrier Removal Evaluation and Recommendations for the Greek Theater (sic)*, was prepared in 2006. The recommendations for barrier removal contained in this report should be revisited within the context of the recommendations made in this HSR.

Structural Evaluation

A structural engineer experienced with historic concrete construction and the State Historic Building Code should be retained to prepare a structural evaluation of the building and provide retrofit recommendations. The engineer should be one of several engineering consultants, including mechanical, electrical and plumbing engineers, working as a member of a project team led by a historical architect. Because of the long history of ground water problems associated with the site, a soils analysis and report is recommended and this work should coincide with the above-recommended building investigation.

MEP Systems Evaluation

The MEP systems should be evaluated as part of an architectural and engineering assessment of the building.

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Overall Site Conditions

Views

Views play a central role in the character and significance of any amphitheater. Because the site is at the juncture of the formal campus and the hills, in the cypress and eucalyptus grove planted soon after the establishment of the University, it plays a special role at the Greek Theatre. The approach to the theatre has always been from the designed spaces and large buildings of the campus toward the hills, with their contrasting naturalistic landscape, large trees, and open spaces. Within the theatre, views overlook the campus, Berkeley, and the bay to the west. The nearby site forms part of the view from any seat in the amphitheater, and external views both near and far are much larger than the stage for those sitting in the upper rows.

When the theater was built, both the campus and the city were markedly less developed than today, but both the Benard and Howard plans clearly foresaw the theatre looking down on a very different precinct from the grove it initially occupied. Construction of large buildings after World War II, especially Latimer and Stanley Hall Replacement, has intruded somewhat visually and through noise from mechanical equipment, but even this change has not altered the fundamental siting character of the theater. Large eucalyptus trees between the Greek Theatre and Latimer Hall shroud that building considerably. The trees around the north, east, and south edges of the site are integral to it and to the important views spectators see as they enter the amphitheater and ascend to their seats. Early photos show that the hills above and to the east remained open, probably offering a view of distant grass beyond the trees; today the Foothill parking lot replaces that view. The trees around the amphitheater have changed over the years, with the upper lawn expanding after the 1957 addition, but the basic character of the views has changed very little. The trees have two important components: the open base punctuated by large trunks and the canopy. The canopy largely obscures perception of Bowles Hall, even though it is in the line of sight of many seats on the north side of the amphitheater. The tree canopy plays a similar role with respect to Stern Hall, but the newer portion of the Foothill Student Housing complex is the single, stark exception to the continuity of views. Two buildings from the last phase of this project, and especially the solid wood screen wall almost due north of the amphitheater, intrude visually, persistently obvious from almost all seats and the stage.

Acoustics

This study did not include an acoustics study. Amphitheaters evolved partly because of their inherent acoustic properties and have remained in use for acoustic performance into modern times. The Greek Theatre has not hosted acoustic performances recently, and noise from nearby campus buildings is very noticeable from upper seats.

Hydrology

The heaving and subsidence of paving materials at the stair landings to the north and south of the amphitheater and at the south court, immediately adjacent to the east wall of the south wing, suggest unstable soil conditions related to ground water. The cause of the water that backs up into the basement room in the north wing and the adequacy of water drainage from retained soils should be investigated.

Unlike the ground water problems discussed above, surface run-off appears to be provided for adequately.

1957 Planting Plan

For the most part, Halprin's 1957 planting plan for the Greek Theatre is still in place. The plant palette continues to be one predominated by various shades of green and the lack of flowering plants (except for the *Prunus* trees planted on the west sides of both the north and south courts). Large trees and groundcovers with the very limited use of shrubs (or any other middle level of plant materials between the tree canopies and the groundcover) continue to characterize the planting design. The plants that Halprin specified (ivy, juniper, or grass lawn) to create a uniform ground plane within individual planting beds or areas remain in place; however, the condition of the individual plants within a bed is often not uniform and this detracts from the intended effect of a uniform ground plane. For the most part, the trees B both the eucalyptus trees that predated the 1956 additions and the new trees that Halprin specified on the 1957 planting plan B remain. However, the numbers of trees located at the edge of the site has diminished over the years due to other projects (as described in the preceding section). Generally, alterations to the 1957 planting plan have been from the loss or disappearance of some of the individual trees (usually within a group of trees) rather than the addition of new plant species to the site. An exception to this is the addition of the hedge along the west side of the asphalt path in the Gayley Road area (this hedge was not a part of the 1957 planting plan); additionally the condition of the hedge is not uniform along its length and so the hedge does not hide the chain link fence, as intended.

Eucalyptus Grove

When the Greek Theatre was built, the eucalyptus grove surrounded the Greek Theatre on all sides. With the addition of Gayley Road in 1946, the connection with the grove on the west side was reduced to a thin strip of trees between the theater and the new road. At the time the Born addition was built in 1957, the grove still enclosed the theater on the other three sides. However, in his report on observations of the campus made in 1954, Lawrence Halprin, then serving as Campus Landscape Architect, noted that many of the trees in the various groves on campus had "already passed their prime" and he recommended then that "an enormous and immediate program of reforestation should be started." The same observation holds today fifty years later; many of the trees are reaching the latter part of their life cycle.

Construction projects both before and after the Born addition (1956) to the theater have removed individual trees in order to add buildings, parking lots, or other features. Due to the incremental removal of trees, the grove is no longer experienced as a contiguous plant feature; rather small groups of trees or individual trees have been isolated within a parking lot island or planting bed. The addition of paved or built space has lessened the amount of open space surrounding the trees; so lessening the area available for root growth, water absorption, and other processes.

Lighting

The Greek Theatre has a mixture of outdoor light fixtures from the 1957 addition and newer luminaires. It does not appear the 1957 project was intended to light the entire site for intensive night use, nor to provide theatrical lighting. The latter is provided by temporary equipment installed for each concert, including a large truss over the stage supported on two towers, all brought in by truck and broken down after performances. There are three noteworthy permanent outdoor fixture types from the 1957 addition: the upright Appleton fixture (similar to the Spero Island light still manufactured), the recessed wall downlight referred to as "Lite Box" on Sheet E-5 of the drawings for the 1957 addition, and the surface wall downlight on the west walls of the amphitheater, Simes Catalog No. 44412, designated P-2 on the Fixture Schedule. In addition, there are a variety of more recent fixtures, including four large stanchions just beyond the upper promenade.

Fencing & Privacy Control

Limiting access to outdoor sites poses a challenge to classical designers, and the Greek Theatre presents an interesting parallel to California Memorial Stadium: Howard rendered both as idealized venues tucked seamlessly into the hillside above the campus, but practical considerations soon saw them fenced in. The 1957 drawings and subsequent designs show that the need to control access has long been tailored to the Greek Theatre by using simple fences but keeping them far from the structure itself. The backstage buildings and planters of the Born and Halprin design ingeniously provided barriers and visual control on the west side of the site, with simple iron gates at the pedestrian and service openings. Chain link fences complete the enclosure on the north, east, and south, with the exception of the shingled solid wood fence due north of the Greek Theatre where the Foothill Student Housing complex intrudes on the theater site. Along the rear portion of the site, the chain link fence has solid fabric netting to block views into the theatre during performances.

Accessibility

As discussed above under the existing condition of the building, the site improvements at the Greek Theatre do not fully comply with the Americans with Disabilities Act (ADA).

Overall Site Recommendations

Views

Views that contribute to the historical integrity of the Greek Theatre should be maintained; aspects that diminish its integrity should be altered so they are more compatible with the historic character of the property. Policies, practices, and initiatives which would do this include:

- Maintain and enhance the trees which contribute to the historic setting. This includes the base characterized by massive trunks of mature trees and the canopy. The base is particularly significant on the north, east, and south sides of the property, while the canopy should be maintained 360 degrees around the theater, except for openings to the west (strategic screening of large campus buildings to the west is desirable).
- Avoid construction of new buildings adjacent to the theater to the west unless they will be well screened by the tree canopy and will not result in the additional removal of trees from the grove area. The upper rows of the amphitheater have always had special views to the city and region west of the stage. It should not be assumed that a new building can be adequately screened by the stage alone.
- Avoid any construction of new buildings visible from inside the amphitheater to the north, east, and south.
- Screen the two intrusive Foothill Student Housing complex buildings with new trees. Refer to the 1957 planting plan for the selection of tree species that would be compatible with the historic landscape of the theater and to avoid adding a new layer or palette of plants to the viewshed of the theater. Because siting of these buildings is inherently incompatible with the historical character of the theater, there is no way to remedy their effect through new and creative architectural or landscape design initiatives, even if these are valued in their own right. If the integrity of the Greek Theatre is to be increased (assuming the buildings cannot be removed), planting trees with an opaque canopy as close as possible to the buildings is the only promising option.
- Remove the highly intrusive solid wood screen wall which is almost due north (compass north) of the theater next to the Foothill building. No aspect of this wall is compatible

with the theater. If the wall is needed as a visual screen between the building and the theater, temporary screening should be installed during performances when needed.

• Plant groundcover or low, unobtrusive shrubbery compatible with the historic landscape of the Greek Theatre to mask the Foothill parking lot retaining walls.

Acoustics

An acoustic study would be helpful before major changes to the Greek Theatre. Construction or alteration of buildings nearby which could have acoustic effects on the theater should follow an acoustic study. Construction which would further impede the acoustic performances for which the property was designed should be avoided.

Hydrology

Repairs or replacement of site features affected by ground water should be informed by the soils report, recommended above. If the theater rehabilitation is not planned for the near future, a project of limited scope, designed to address the ground water that backs up through the floor drain in the basement room in the north wing is recommended. Until the larger building rehabilitation occurs, it may be possible to implement a temporary measure, such as daylighting the drain pipe.

Little is known about plans for the new building that will be located immediately adjacent to the Greek Theatre to the north. Although it appears the new building will be located at a lower elevation than the Greek Theatre, the building and related parking should be sited in such a way that they do not exacerbate surface run-off or subsurface hydrology of the Greek Theatre, thereby adversely affecting the historic building.

1957 Planting Plan

Any additions of vegetation within the areas of the 1957 planting plan should follow the guidelines (i.e. location and species) specified in the 1957 planting plan.

A plan for replacing missing plants or ones that are at the end of their life cycle should be developed, again based on the guidelines from the 1957 planting plan.

The hedge that is located along the west side of the asphalt path in the Gayley Road area was not a part of the 1957 planting plan. Additionally, the hedge is in poor condition and no longer serves its intended function (to hide the fence). The hedge should be removed.

Eucalyptus Grove

Because there has been an incremental loss of trees within the area that historically constituted the grove, the remaining trees in the grove area should be located and documented so that there is a baseline survey of what constitutes the grove. This information should be used to plan for restoration of the grove. This documentation would also allow for a better evaluation of the impacts from any future proposed removal of trees from the area. A preliminary survey effort was prepared as part of this HSR and is located in Appendix IV a. v. The survey recorded the location of trees that appeared, based on their size and location, to be a part of the historic grove. The genus of the trees (i.e. eucalyptus, pine, redwood, etc.) each tree was recorded. The scope of this survey was limited to locating trees in the immediate vicinity of the Greek Theatre; trees located in the parking lot to the south of the theater, although part of the historic grove, were not surveyed.

The remaining trees of the grove and their growing area should be protected. Additional trees should not be removed. A plan should be developed to plant new trees to ensure the continuation of this plant feature into the future (since a sizable proportion of the trees are at the end of their life cycle).

Lighting

There does not appear to be any site lighting from before 1957; the fixtures shown on the Born drawings contribute to the historical integrity of the property. It is advisable to maintain these significant lights from 1957 and augment them where appropriate with additional fixtures. In maintaining the property and increasing light levels, lighting designers should study adding other types of compatible fixtures, with consideration of unobtrusive or concealed fixtures where appropriate. The four tall light standards at the Upper Promenade should be replaced with fixtures more compatible with the 1903 and 1957 designs if a lighting project occurs.

University of California

Fencing and Privacy Control

Controlling site access and privacy of performances and improving the appearance of the property should complement the character and historical integrity of the Greek Theatre. The iron gates on the west side of the site should be maintained. It is acceptable to maintain the chain link fence on the north, east, and south sides of the site. If a sturdier or more ornamental fence is desired, it should be compatible with the iron gates on the west, and should be slightly simpler than them. It would be very desirable to replace the fabric screening on the rear fence with a less obtrusive material (or to remove it if possible). The replacement could be a small-scale metal grating more in keeping with the 1957 design, or a very simple system of wood slats. See above (views) the recommendation to remove the solid wood fence around the Foothill Housing building north of the theater.

Accessibility

The recommendations for removing site barriers to universal access that are contained in the 2006 study entitled *Barrier Removal Evaluation and Recommendations for the Greek Theater*, should be revisited within the context of the recommendations made in this HSR.

O. Materials Conditions and Recommendations

Architectural Materials Conditions

Concrete

As mentioned above, several conditions telegraph through the stage's cementitious parging, including early crack repairs, existing cracks in the same locations and patterns shown on the repair drawings dated July 10, 1954 (see IV Appendix d), and rust staining and oxide jacking in a few locations. Portions of the mutules are missing from the stage entablature and water staining is evident below the copper roof fascia; it is unknown when this damage occurred and, more precisely, if the water infiltration that caused this damaged was corrected by the mid-1950s repair program or if it is an ongoing problem. In addition, the condition of the stage platform wall, discussed above, is poor, exhibiting stains and spalling; there are four prominent vertical cracks through the center of the wall and two prominent horizontal cracks at the ends of this wall.

The most severe damage evident in the amphitheater is the severe cracking in the south end wall of the upper amphitheater seating and south curved wall of the amphitheater and the related out-of-plane movement of the cracked sections of the concrete wall. (See Image 56.) An aisle, located against this wall to the east, raises serous life-safety concerns in an earthquake. The end wall at the north side of the upper amphitheater is also cracked, but there is no noticeable out-ofplane movement of the concrete planes. Here, the widest crack begins at row 26 and continues north down the curved rear wall of the upper amphitheater. Patches and surface parging is evident in this area, suggesting these conditions have been extant for some time.

Considerable differential movement is evident between sections five and the stairs between sections five and six of the upper amphitheater, the obvious displacement almost an inch and a half in some locations. Near the top of this aisle, one of the stairs has cracked horizontally across its face, probably a result of this east-west offset. Less severe, there is torsional movement in the stairs between rows seven and eight. In general, the other stairways show normal wear or a limited cracking. A historic photograph taken during the mid-1950s shows a large crack that extends through one section of the upper amphitheater seating and the upper promenade wall behind. This crack is not readily visible today as a result of the mid-century repairs. The concrete used in the upper amphitheater seating is of very poor quality. (See Images 21 and 55.) The aggregate is not well graded, some of the aggregate is too large to be used in a concrete mix and the concrete was not vibrated to flow into the bottom of pours. Losses in the cementitious matrix are evident overall. The 1950s repairs apparently included the application of a new cementitious surface material containing well-graded, smaller aggregate. This finish is evident in what appears to be a thin application north and south of the aisle between sections one and two and north of the aisles between sections two and three, and five and six and in a thicker application on the tops of the lower promenade walls. (See Image 32.)

The lower amphitheater was apparently completely resurfaced with a light concrete that contains well-graded aggregate that is smaller than the aggregate used in the original mix. (Image 30.) This finish is about one inch thick, as measured at a large loss near the center of the memorial chairs. It is not clear if the original concrete construction was cut back for the repairs, although this would be a logical approach in order to retain consistent riser heights in the upper amphitheater. Portions of the lower promenade near the north and south courts have been removed and replaced with concrete repairs that do not closely match the mid-1950s material; this work probably occurred as part of a project to repair the drainage channel.

The promenades, walkways, seats, aisles and stairs appear to drain well overall, except for the walkway at the bottom row of seats in the upper amphitheater.

There is more minor and localized damage throughout, including, cracking, spalling, discoloration, patches using concrete that does not match the historic concrete, wear, abrasion, graffiti and paint used to conceal graffiti. Biological growth, including lichens and moss, are apparent. The existing white seat numbers in the upper amphitheater compete inappropriately with geometric visual properties of the concentric rows of stepped seating.

In general, the concrete of the addition is in very good condition. There are cracks in the concrete planters at the central court and in the west wall at the ground floor. Perhaps the most severe concrete damage observed is in the pre-cast concrete grilles located in the west wall of the addition at the ground floor where concrete losses in the vertical grille bars have been caused by the expansive effects of corroding rebar.

Coating: 1903 Stage Structure

In general, the coating is in good to fair condition, exhibiting the amount of crazing, dirt, abrasion and other types of damage related to use that is expected for a 50 year old coating on a public building. The base of the inside faces of the stage walls has been stained by water run-off from the copper roof and portions of the coating have been painted, presumably to cover graffiti.

Stucco: Addition

Except where differential movement has occurred between the wings and the central court plant boxes and at the base of the west addition wall in this general location, the coating is in good condition overall, with only minor cracking and crazing.

Copper Roofing

The roof could not be reached and therefore roofing conditions were not observed. From the ground, defects in portions of the edge details are evident in at least two locations north of the central stage entrance, causing recent staining of the stuccoed wall surfaces.

Terrazzo

The terrazzo stage floor is stained from water run-off from the copper roof and the striped pattern of stains corresponded to the slightly undulating surface of the floor. In addition to the uneven in surface of the terrazzo, there are low areas around the perimeter of the floor. There is a sizeable crack in stage floor, extending from the central door to the edge of the stage, and smaller cracks at the stage doors, near the stage walls and in the concrete apron. Efforts have been made to patch the center crack, with little success. Large sections of the sealant joint around the perimeter of the floor have failed.

Marble Chairs

Because the row of chairs is continuous except for two spaces and because one of these spaces contains a mortar bed, it appears that at least one if not two chairs have been removed. The remaining chairs, especially the white Vermont marble chairs, show signs of deterioration from atmospheric pollutants, most noticeably sugaring. The backs of many of these chairs and some of the other chairs, made of granite, other types of marble and cast stone, are cracked and some have been patched with materials that are weathering well and do not match the surrounding stone. Chips, larger losses, adhesive residue and dried gum stuck to the stone were observed. Several chair seats were not cut at an slight angle to drain rainwater. Biological growth, largely lichen, is visible on the chairs. There are removable plywood covers for the front of the chairs, but the sides and rear are unprotected.

Doors

Except for the Public Ceremonies/First Aid Station (Room 215/--) exterior doors and the --/Storage Room (Room 111A/--) door the bottoms of which are dry rotted, the doors are in fair to good condition with normal wear and tear expected of 50 year old materials. The south hall doors are swollen from moisture and do not swing freely. The types of wear observed affect the finish coating and in some elements the material itself and include abrasion, dirt and veneer losses.

Hardware

The original hardware shows signs of wear, but the hardware that was randomly tested in the field for this HSR appears to operate well. Much of the original door hardware has been replaced during the past 50 years, with hardware that, to a greater or lesser extent, is not compatible with the original hardware.

Site Materials Conditions

Concrete Site Paving with Large Exposed Aggregate

The condition of the paving varies considerably from poor to good, seemingly depending on its exposure. The landing below the concrete stair which rises from the longitudinal path at the south end of the site is perhaps in the worst condition, exhibiting serious cracking and evidence of subsidence. Most of the landings at the public toilet rooms are not level. As the north ramps ascend from Memorial Plaza to the ticket booth, they are in fair, fair-to-good, and fair-to-poor condition. The paving in the vicinity of the ticket booth is in fair condition transitioning to good condition to the south, beyond the ticket office. At the south side of the amphitheater, the paving at the landings outside the women's and men's toilet rooms is in fair condition.

Concrete with Peddled Aggregate Poured Between Wood Strips

At the central court as elsewhere on the site, many of the wood paving strips have rotted or are altogether missing and dirt and weeds fill the crevices between concrete pours. There are no apparent drains in the paved fields and the paving is not obviously sloped to drain. In fact, the low spots are largely concentrated adjacent to the west stage wall and the adjacent gutter, recently coated with an epoxy material, does not drain. Heavy accumulations of surface dirt indicate other low points in the paving where water ponds.

Concrete Stairs

Overall, the concrete site stairs are in good condition, with few spalls and little settlement. Most of the treads appear to have been poured with an adequate pitched surface, permitting them to drain surface water.

Concrete Plant Boxes

The concrete boxes at the ticket office, north wall of the north wing and the base of the west wall of amphitheater (north and south), large box at south entry (with phone booth) good, on south wall of the south wing, and the terraced sequence at the north stair are in good condition.

Asphalt paving

The asphalt site paving, including the paving on the longitudinal path that parallels the Gayley Road sidewalk, is in fair condition, exhibiting little surface disturbance. The asphalt paving poured over the south court and on the south leg of the central court and over the orchestra ramps is in good condition, except for cracks along the joints between the asphalt and the basalt paving stones. Cal Performances maintenance staff mentioned that asphalt had recently been used to patch subsiding earth at the east wall of the north wing. In both of the latter locations, a dark, non-historic paving material was poured over a light-colored historic paving material, changing the character of the light-colored neo-classical palette of materials. Historic photographs show hard packed dirt at the north and south courts before the construction of the addition and a dirt path to the east of the addition during the period, 1954-58. (See Image 23.)

Concrete Site and Retaining Walls

The concrete site and retaining walls at the west end of the south court and the lowest landing in the north stair sequence are in good condition. Those at the west side of the south entry where the concrete stair leads to the longitudinal path are in fair condition. Fences

The chain link fence that is located down slope from the longitudinal path paralleling the Gayley Road sidewalk is in poor condition overall. The steel gates are in good condition, except for an occasional bent member.

Materials Recommendations

Architectural Materials

A soils investigation is recommended to determine the type and condition of the soil, especially the effects of the natural spring on the bearing capacity of the soil. In addition, a structural engineering assessment is advised to assess existing conditions and provide recommendations about the structure in general and the stage walls and the end walls of the upper amphitheater seating in particular.

Concrete

A program of materials testing and repairs should be developed in consultation with a structural engineer. However, if this program is not developed in the near future, a structural assessment of the end walls of the upper amphitheater seating should be undertaken immediately and, if necessary, a plan developed to correct or shore the outward movement of the walls. The painted seat numbers in the upper amphitheater should be changed to a less obtrusive color scheme.

Perhaps in combination with the structural project discussed above, the pre-cast concrete grilles should be repaired by removing the corrosion from the rebar, applying a protective coating to the rebar and patching the grille bars to match the historic material. (See window recommendations above.)

Coating: 1903 Stage Structure

The University should undertake limited coating repairs or replacement in-kind where damage to the substrate has in turn damaged the coating. As part of a larger project, remove paint coatings and clean the wall surfaces.

Doors

As part of a larger rehabilitation project, the doors should be repaired and refinished to match their original condition and finish. The door and transom at the north stairwell should be rehabilitated to match their original appearance.

The maintenance staff or a University engineer should be consulted to determine the hazard posed by rainwater on the equipment in the Utility Room/-- (Room 108/141). If the condition

presents a hazard, the missing sash should be replaced to match the existing or a reasonable alternative developed, such as a compatible louvered sash installed in the opening.

Hardware

If the existing hardware cannot be repaired by the maintenance staff and needs to be replaced, replacement hardware that is compatible with the historic hardware should be used. Salvage the removed historic hardware, storing it in a container that is not airtight and labeled with the hardware's original location in the building. When a large rehabilitation project is undertaken, this hardware should be refurbished for reinstallation.

Stucco: Addition

Install an expansion joint between the wings and the central court planter boxes and repair the adjacent stucco.

Copper Roofing

Undertake a roofing survey to assess the existing condition of the roof.

Terrazzo

In order to eliminate a potential tripping hazard, repair the center crack to match the existing terrazzo and replace the perimeter caulking.

Marble Chairs

A conservation study specifically focused on the memorial chairs is recommended to outline treatments, taking into account security (including vandalism), protection, stabilization and conservation. Until such time as the study is undertaken, changes in temperature in the stone should be recorded during rally bonfires to determine if the bonfires are causing the stone undergo sudden thermal changes and crack. If additional chairs are desired, they should be added only in the remaining unused spaces defined by the pattern of the existing chairs. While the variation in material and design among the existing chairs means that future ones need not be replicas of the existing chairs, they should be closely compatible in size, form, material, and detailing. The commemoration date on future chairs would convey their place in the chronology of the property.

Site Materials

Paving

Paving appears to be deteriorating mostly from site conditions such as drainage or settlement, and less from material defects or wear, except for the wood strips which have decayed. Correcting drainage and geotechnical problems can be expected to extend the life of the paving. When specific causes of pavement failure have been corrected, the pavement should be repaired to restore its original appearance. Eventually, all paving materials will need repair and maintenance, however. A maintenance plan including recommendations for the characterdefining pavement materials should be prepared and used.

Concrete Stairs, Plant Boxes, and Walls

While concrete is discussed separately in site and architectural sections of this report, it should be understood as the single most prominent building material in this property and treated appropriately as part of a unified maintenance program. The retaining walls on the west ends of the amphitheater need structural attention (see above), and when this occurs, care should be taken to restore their historic visual relationship to site concrete. Concrete is not a pressing repair issue elsewhere, but it should be included in a maintenance plan.

Fences

The gates and perimeter fences have undergone a number of changes since construction of the Greek Theater. While the gates at the North and South Courts are of some significance and are in good condition, the fences which are of lesser significance are in poorer condition in some cases. Fences should be repaired, and even chain link fences should be maintained so they do not become visually obtrusive.

Recommendations for Future Studies and Work

The following is a list of studies recommended in this report:

- Life safety and building code study
- Geotechnical study, including site hydrology
- Structural evaluation, including determination of concrete composition and reinforcement
- Building systems study, including mechanical, electrical, and plumbing systems
- Acoustics (theater and proposed construction or changes nearby)
- A maintenance plan appropriate for a property of this size, complexity, and historical significance.

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Murray, William W., The Hearst Corporation, to Robert Gordon Sproul, President, University of California, July 11, 1956. Ernest and Esther Born Collection, Environmental Design Archives, University of California, Berkeley.

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III. Images

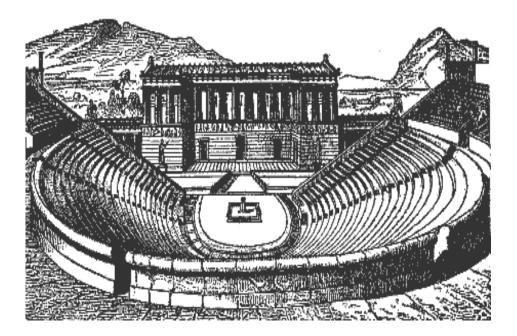


Image 1. Drawing of Theater at Epidaurus. Influenced by the Theater of Dionysios at Athens. Image courtesy of Classics Department, CUNY Brooklyn.

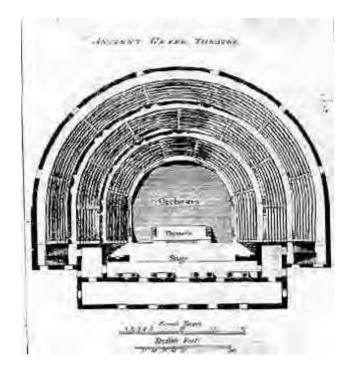
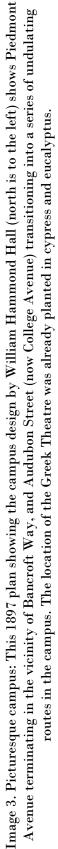


Image 2. Illustration of Ancient Greek Theatre. Image courtesy of Classics Department, CUNY Brooklyn.



Greek Theatre

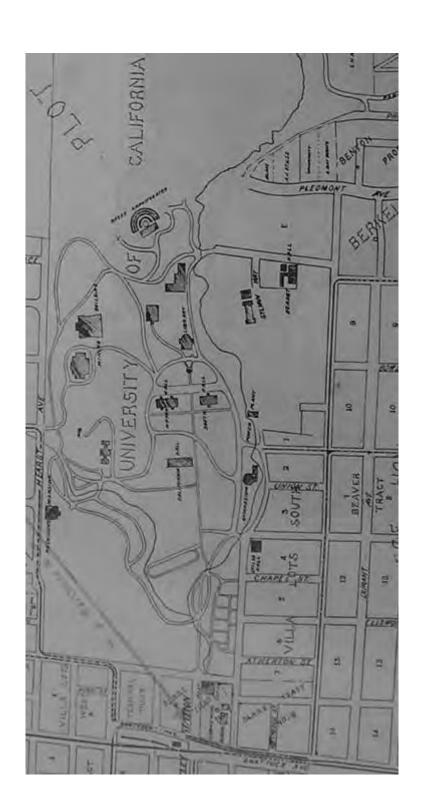


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Image 4. Emile Benard's winning plan for The University of California, 1900. University Archives, The Bancroft Library, University of California, Berkeley.



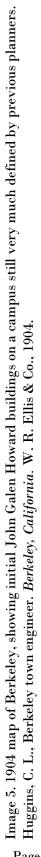
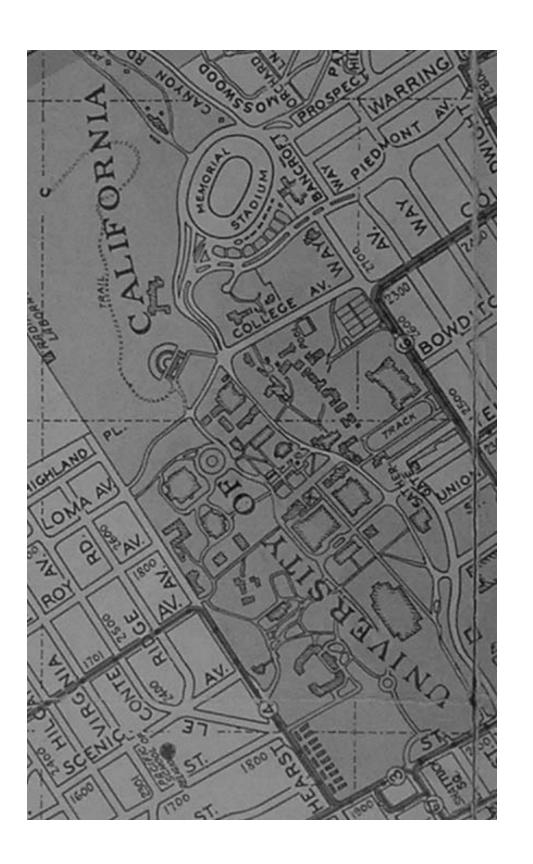




Image 6. John Galen Howard's plan for the University of California. Image courtesy of The Bancroft Library, University of California, Berkeley.



Mining, the Mining Circle, Le Conte and Gilman Halls, and the Sather Tower. U.S. Army Air Corps, 15th Photo Section. Aerial Photographic Mosaic Map of University of California. San Francisco. 1928. Image 7. The campus changed quickly as the Hearst Competition design took shape. This 1928 aerial photograph shows Hearst Memorial



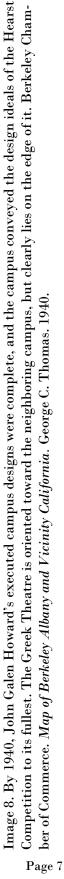




Image 9. This 1957 view shows the Greek Theatre with Gayley Road complete, just after the Born addition. The Foothill Student Housing complex and parking lot are not yet present, leaving much more of the original site character than exists today. Aerial Survey of University of California, Berkeley, 1957. Image courtesy of Pacific Aerial Surveys.



Image 10. View of Ben Weed's Amphitheatre c. 1900. Image courtesy of The Bancroft Library, University of California, Berkeley.



Image 11. John Galen Howard drawings, dated 1902, show a grander plan than the realized design with: a road located closer to the structure than Gayley Road; monumental stairs rising to the theater at the end of the "University Axis"— Howard's primary east-west campus axis — a two-story structure wrapping around the stage walls with loggias on the north, south and west; monumental wing walls projecting from the stage returns to enclose the amphitheater fully on the west; and an order of caryatids surmounting the stage entablature with metal oil lamps punctuating the ends of the roof. The upper promenade is covered with a tile roof supported on columns and perimeter walls. Stairs rise to a path that hugs the promenade wall and provides access to the promenade. The plan places the Greek Theatre in an urban context with a grand cascade of walkways and stairs to the north, a plaza to the northeast and a street to the east. Image courtesy of The Bancroft Library, University of California, Berkeley.



Image 12. May 8, 1903 view of the stage construction, illustrating some tasks in the construction sequence of the stage: the lower stage walls were built first, the column formwork was erected (shown) separate from the stage walls behind, and a temporary wood floor was built in the location of the current stage floor to serve as a working platform for the stage wall construction. Subsequent to the stage construction, the orchestra circle in front of the stage was excavated to its current level. Image courtesy of The Bancroft Library, University of California, Berkeley.



Image 13. View, dating to 1903, of the amphitheater seating under construction, showing the substantial amount of fill used in creating the raked seating and terracing of the earth under the seats. Image courtesy of The Bancroft Library, University of California, Berkeley.

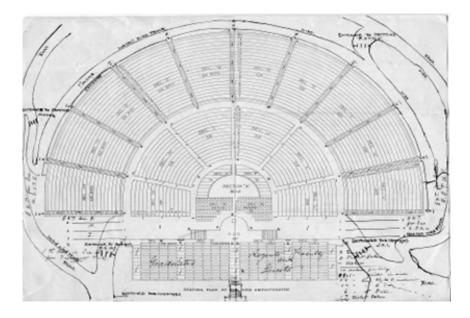


Image 14. Seating plan of the Greek Theatre, c. 1903, in the John Galen Howard Collection of the Environmental Design Archives of the University of California, Berkeley. The original paths and roads leading to the theater, the location of barbed wire fencing, some of which is not shown in period photographs, and the carriage entrance to the theater were sketched in ink on the seating diagram. Image Courtesy of The Bancroft Library, University of California, Berkeley.



Image 15. View of the dirt north court taken c. 1904-08, showing the backstage fence (right) projecting eastward from the stage wall return (center) and the board fence and double row of poles at the upper promenade (upper center). This view also shows one of the transom rail in the stage doors at the far right. Image courtesy of The Bancroft Library, University of California, Berkeley.



Image 16. This photograph, dated 1904, was taken from the hill to the north, looking down on the Greek Theatre; it shows the first board fence installed around the upper promenade and a double row of poles above the amphitheater (left), the unpaved north court and a wire fence adjacent to the north stage wall (right), the raw conditions of the landscape behind the north wall of the amphitheater (foreground) and the dense forested quality of the site to the south (background). Image courtesy of The Bancroft Library, University of California, Berkeley.



Image 17. View showing original scored concrete stage floor and flag poles at the upper promenade. Image courtesy of The Bancroft Library, University of California, Berkeley.



Image 18. The tinted postcard shows the location of the wood fence backstage. This fence is in a different location than the fence shown in backstage views, dating to c. 1907-08. Image courtesy of The Bancroft Library, University of California, Berkeley.



Image 19. View of the stage, dated 1907, showing the plaque on the face of the platform wall commemorating Howard as the architect and the plaque commemorating Hearst as the donor in its original location over the central stage door; the ornamental trim on the central door surround that was removed as part of the 1954-55 repair program. Image courtesy of The Bancroft Library, University of California, Berkeley.



Image 20. This view of the east stage wall, dated July 18, 1914, clearly shows the severe moisture problems in the cornice and wall just 11 years after the building was built (to the right and left of center). This image also shows one of the original or early transom rails in the central stage entrance. Image courtesy of The Bancroft Library, University of California, Berkeley.



Image 21. View of thelower promenade walltaken April 24, 1915, showing the poor quality and condition of the concrete 12 years after itwas poured. Image courtesy of The Bancroft Library, University of California, Berkeley.



Image 22. View of the north side of the north stage wall taken on October 7, 1915 during a Pajamarino Rally, showing a rise in the foreground that was leveled in 1957 for the construction of the north wing, a wood fence separating the backstage from the public areas, blind openings in the rear wall of the north return (these were infilled in 1954-57) and cold joints in the concrete surface of the exterior stage walls. The cornice visible above the wood fence at the right is probably the cornice of the 1909 support building. Image courtesy of The Bancroft Library, University of California, Berkeley.



Image 23. View, taken April 28, 1917, of actors seated on a gate, showing the south end wall of the amphitheater and the dirt path in the background. The gate probably separated the backstage area from the public areas. Image courtesy of The Bancroft Library, University of California, Berkeley.



Image 24. Aerial View of Campus c.1920. Image courtesy of The Bancroft Library, University of California, Berkeley.



Image 25. This is a view of College Avenue in 1942, showing the Greek Theatre barely visible behind a dense stand of trees. This view shows the set back from College Avenue was greater than the existing set back from Gayley Road. Image courtesy of The Bancroft Library, University of California, Berkeley.



Image 26. View, c. 1946, looking south on Gayley Road. The photograph shows the north vehicular entrance to the theater, as it existed from 1946-1956, the 1909 support building behind the stage and the wire fence surrounding the north side of the backstage area. Image courtesy of The Bancroft Library, University of California, Berkeley.



Image 27. The photograph, dated c. 1946-1954, shows Gayley Road to the right, the dense stand of trees screening the theater from the road, the 1909 support building and chain link fence (to the left). Note the changed configuration of the drive leading to the Greek Theatre and the addition of shrubbery and bollards near the road. Image courtesy of The Bancroft Library, University of California, Berkeley.

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Image 28. This photograph, dated 1954-55, was taken of cornice damage to the stage. It was one of a series of images taken by Water Steilberg of repair work to the theater. Image courtesy of the Environmental Design Archives, University of California, Berkeley.



Image 29. This photograph, dated 1954-55, shows concrete preparation (the removal of deteriorated concrete) for patching. Image courtesy of Environmental Design Archives, University of California, Berkeley.

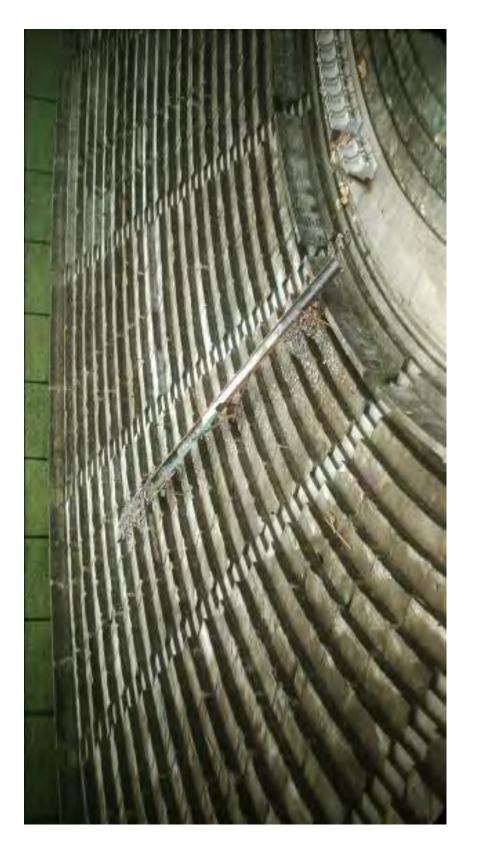


Image 30. This photograph, dated 1954-55, shows the extent of concrete preparation in the amphitheater. Image courtesy of Environ-mental Design Archives, University of California, Berkeley.



Image 31. This photograph, dated 1954-55, is a close-up view of concrete preparation (the removal of deteriorated concrete) to the amphitheater seating. Image courtesy of the Environmental Design Archives, University of California, Berkeley.



Image 32. The photograph, dated c. 1946-1954, shows concrete repairs to the amphitheater seating. Image courtesy of the Environmental Design Archives, University of California, Berkeley.

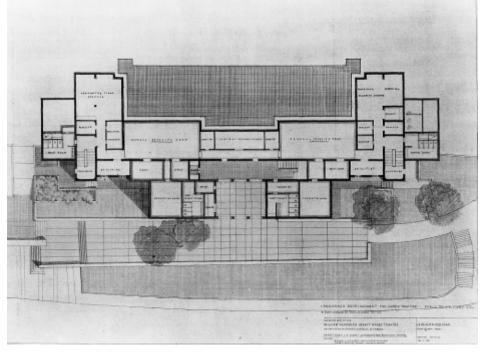


Image 33. Ground floor plan of the scheme approved by The Regents in November 19, 1954. Drawing dated February 3, 1956. This plan contains the central pavilion and terraces at the ground floor. Image courtesy of the Environmental Design Archives, University of California, Berkeley.

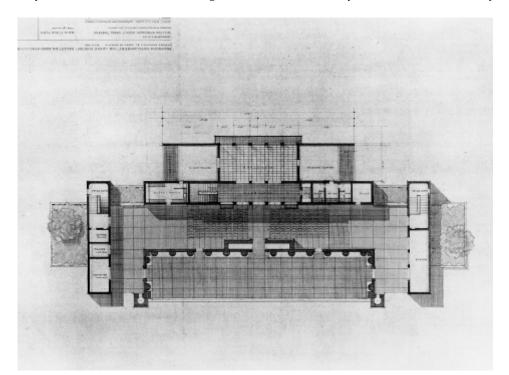


Image 34. Main floor plan of the addition scheme approved by The Regents in November 19, 1954. Drawing dated February 3, 1956. This plan contains the central pavilion, three reception rooms which open into each other and a balcony overlooking the entrance. Image courtesy of the Environmental Design Archives, University of California, Berkeley.

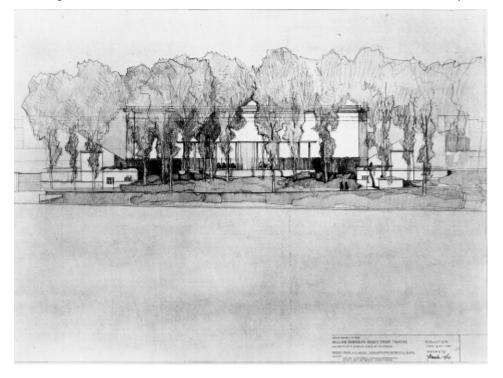


Image 35. This is the west elevation drawing for Scheme G, dated March 7, 1956. Image courtesy of the Environmental Design Archives, University of California, Berkeley.

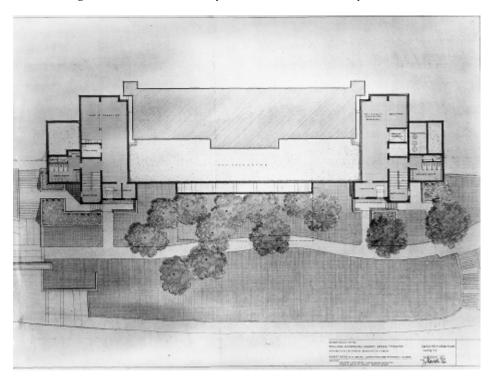


Image 36. Ground floor plan for Scheme G, dated March 7, 1956. The area between the wings as unexcavated. This plan was approved for construction and only modified to include the ground floor of the central wing after construction was underway. Image courtesy of the Environmental Design Archives, University of California, Berkeley.

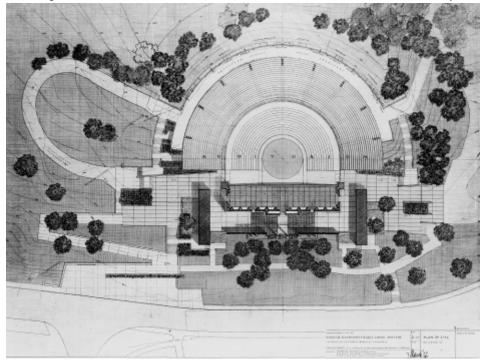


Image 37. Main floor plan of Scheme G, dated March 7, 1956. This was the scheme selected for construction, but later modified. Note the lack of public toilet rooms and planter boxes at the south side of the auditorium. Image courtesy of the Environmental Design Archives, University of California, Berkeley.



Image 38. Perspective drawing, dated June 13, 1956, shows Scheme G, looking southeast from Memorial Plaza. Image courtesy of the Environmental Design Archives, University of California, Berkeley.



Image

39.

This view, taken on July 27, 1956, shows site grading after the demolition of the 1909 support building and the filling of the upper lawn. This view establishes the wood transom rails in the stage openings were removed c. 1954-56. Image courtesy of The Bancroft Library, University



Image 40. This photograph, dated 1957, appears to have been taken before the connecting ground floor section between the north and south wings of the addition was added to the project. The surface of the exterior face of the south theater walls shows the outline of one of the small sheds that was removed for the construction of the addition. Image courtesy of the Environmental Design Archives, University of California, Berkeley.

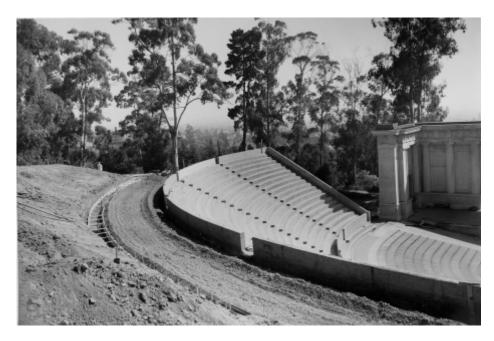


Image 41. This photograph, dated 1957, shows the upper lawn fill at the left, before the upper promenade and its flag poles were installed. The grove of trees to the south of the theater was thinned considerably during the previous five decades. Image courtesy of the Environmental Design Archives, University of California, Berkeley.



Image 42. Upper promenade in 1957, after the flag poles were installed. Note dense stand of trees to the northeast of the theater. Image courtesy of the Environmental Design Archives, University of California, Berkeley.



Image 43. View taken in 1957, showing the site during construction. Memorial Plaza is in the foreground, the ticket office is in the middle ground and the ramps and the public toilet room addition to the amphitheater are shown above the ticket office in the background. The scaffolding against the north end wall of the amphitheater suggests the end wall was repaired or coated at this time. The image illustrates the location of repairs to the exterior stage walls, before the application of the cementitious coating, and the infilling of the two blind openings in the return. Image courtesy of The Bancroft Library, University of California, Berkeley.



Image 44. This photograph shows the completed addition, after the site improvements were begun, in 1957. Image courtesy of the Environmental Design Archives, University of California, Berkeley.



Image 45. This 1958 view shows the hill directly south of the Greek Theatre, before the Bowles Hall parking lot was constructed. This is the site of the proposed new building. The Bancroft Library, University of California, Berkeley.



Image 46. This image, probably taken about 1958, shows the backstage awning and canopy structure with the baffles opened and canvas covering the central court. Image courtesy of the Environmental Design Archives, University of California, Berkeley.



Image 47. Dated c. 1958, this photograph and other contemporary views show the metal fence at the west side of the south court, painted a dark color, originally extended to the south wall of the wing. This view also shows daffodils which, with purple plums, were planted in the vicinity of the theater entrances in the fall of 1957. Image courtesy of the Environmental Design Archives, University of California, Berkeley.



Image 48. South court, 2007. Relocated commemorative plaque to William Randolph Hearst visible at left. Frederic Knapp photograph.



Image 49. South court from Bowles Hall parking lot, 2007 Frederic Knapp photograph.



Image 50. South end of upper promenade, 2007. Note post-1957 drinking fountains. Melissa Bleier photograph.

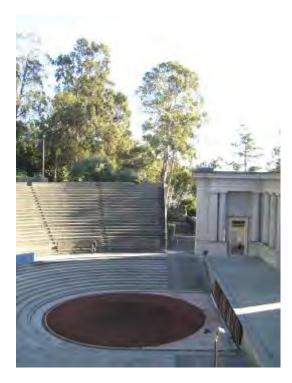


Image 51. Amphitheater from north, 2007. Melissa Bleier photograph.



Image 52. South section of seating, 2007. Note painted numbers on benches. Melissa Bleier photograph



Image 53. Upper promenade with landscape and Foothill Housing visible, 2007. Frederic Knapp photograph.



Image 54. Hearst Greek Theatre from Southeast, 2007. Image courtesy of the University of California.



Image 55. Detail of rough aggregate, North wall, 2007. Melissa Bleier photograph.



Image 56. South Wall of amphitheater, 2007. Note deterioration in cement coating. Will Dickinson photograph.



Image 57. View of orchestra and stage from upper promenade, 2007. Frederic Knapp photograph.



Image 58. Outer edge of lawn seating area in upper landscape area, 2007. Tree canopy and understory visible. Will Dickinson photograph.



Image 59. Lighting box, 2007. Buildings and solid wood fence of Foothill Student Housing complex are visible, unshielded by tree canopy or understory. Will Dickinson photograph.



Image 60. Upper landscape area, 2007. Looking west, showing some of the remaining original eucalyptus trees. Will Dickinson photograph.



Image 61. Solid wood fence with shingle siding at Foothill Housing, 2007; note tree canopy does not screen fence. Will Dickinson photograph.



Image 62. Memorial Plaza and Gayley Road, looking south, 2007. Frederic Knapp photograph.



Image 63. Orchestra circle, prohedria, amphitheater, and upper lawn seating area landscape from stage, 2007. Frederic Knapp photograph.



Image 64. West wall of Born addition with South Wing visible, 2007. Frederic Knapp photograph.

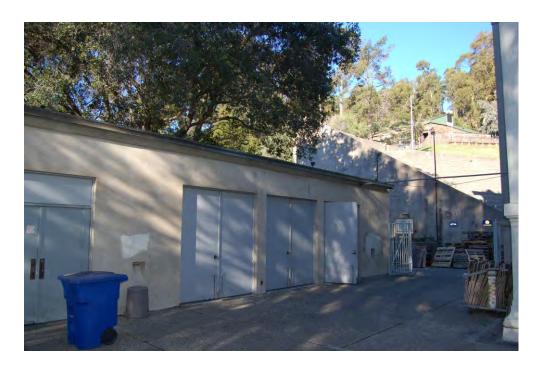


Image 65. North Wing of Born Addition, 2007. Frederic Knapp photograph.



Image 66. Detail of two *prohedria*, showing typical claw feet and scrolled arms, 2007. Frederic Knapp photograph.



Image 67. *Diazoma* at Epidaurus, with remnants of *prohedria*. Photo courtesy of Tom Hines, 2002.

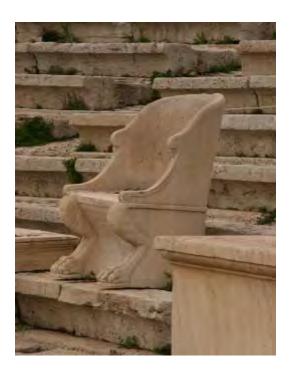


Image 68. Prohedria at Theater of Dionysios, Athens. Photo courtesy of Tom Hines, 2002.



Image 69. View of the ground floor landing of the North Stair (Room 111-211/--), 2007. Will Dickinson photograph.



Image 70. View of "Shop Dressing"/Kitchen (Room 115/--) on the ground floor, 2007. Will Dickinson photograph.



Image 71. View of the ground floor --/Dining Commons (Room 121/--), 2007. Will Dickinson photograph.



Image 72. View of one of the dressing rooms, labeled, --/Dressing Rooms (Room 122/--), 2007. One of the partial-height partition walls separating the dressing rooms is at the right. Will Dickinson photograph.



Image 73. View of the --/South Lobby (Room 118/--), 2007. Will Dickinson photograph.



Image 74. View of the South Stair (Room 110-210/--) with the Steam Pump Room/-- (Room 110A/--) at the left, 2007. Will Dickinson photograph.



Image 75. Greek Theatre and surrounding campus. Image courtesy of Google Earth, 2007.

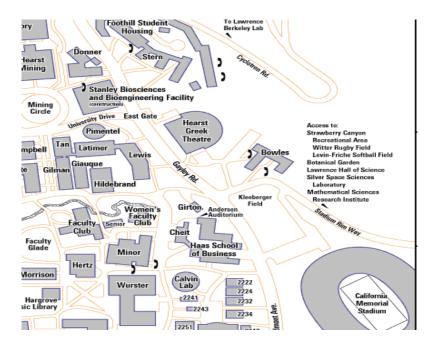
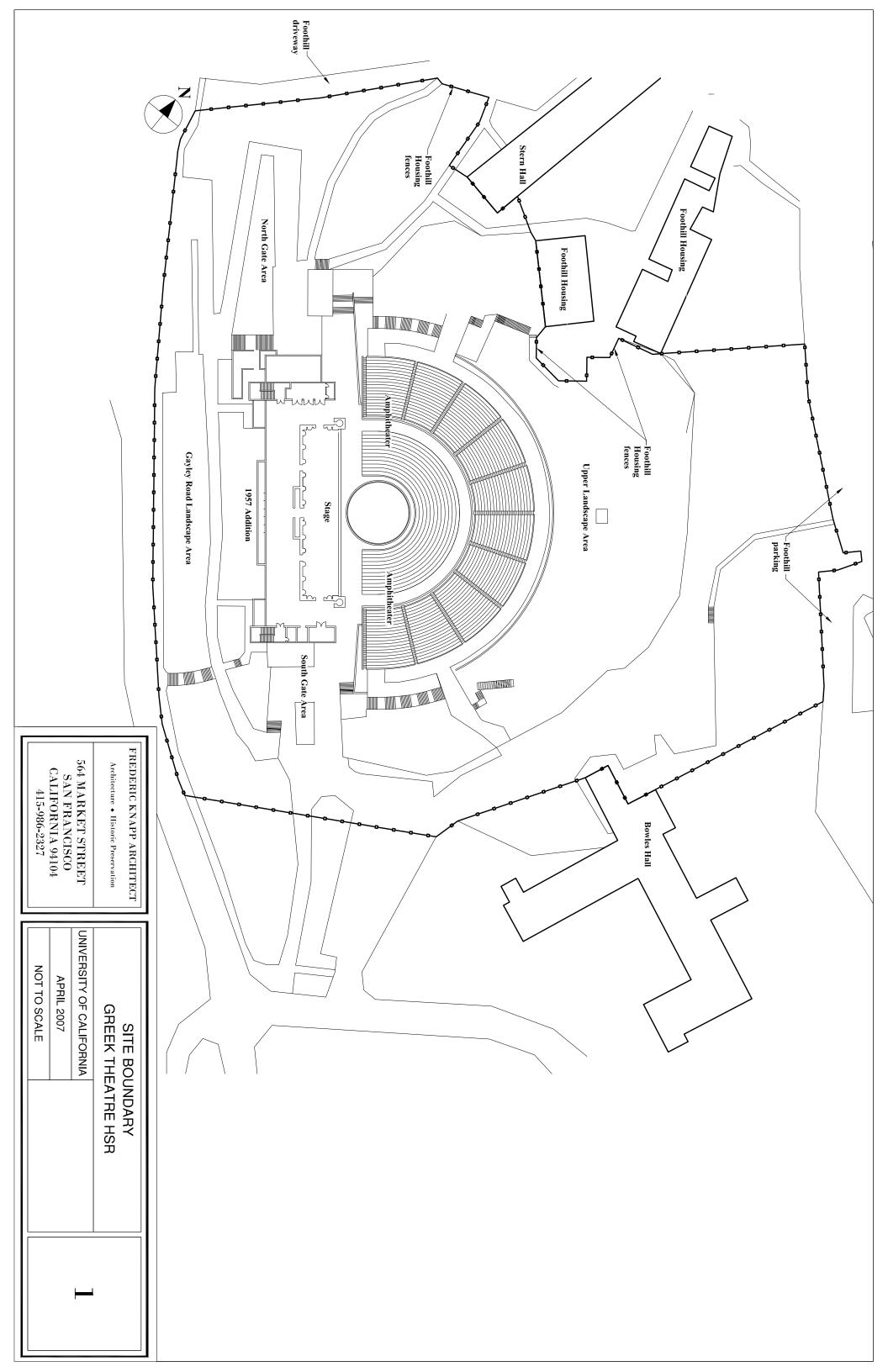
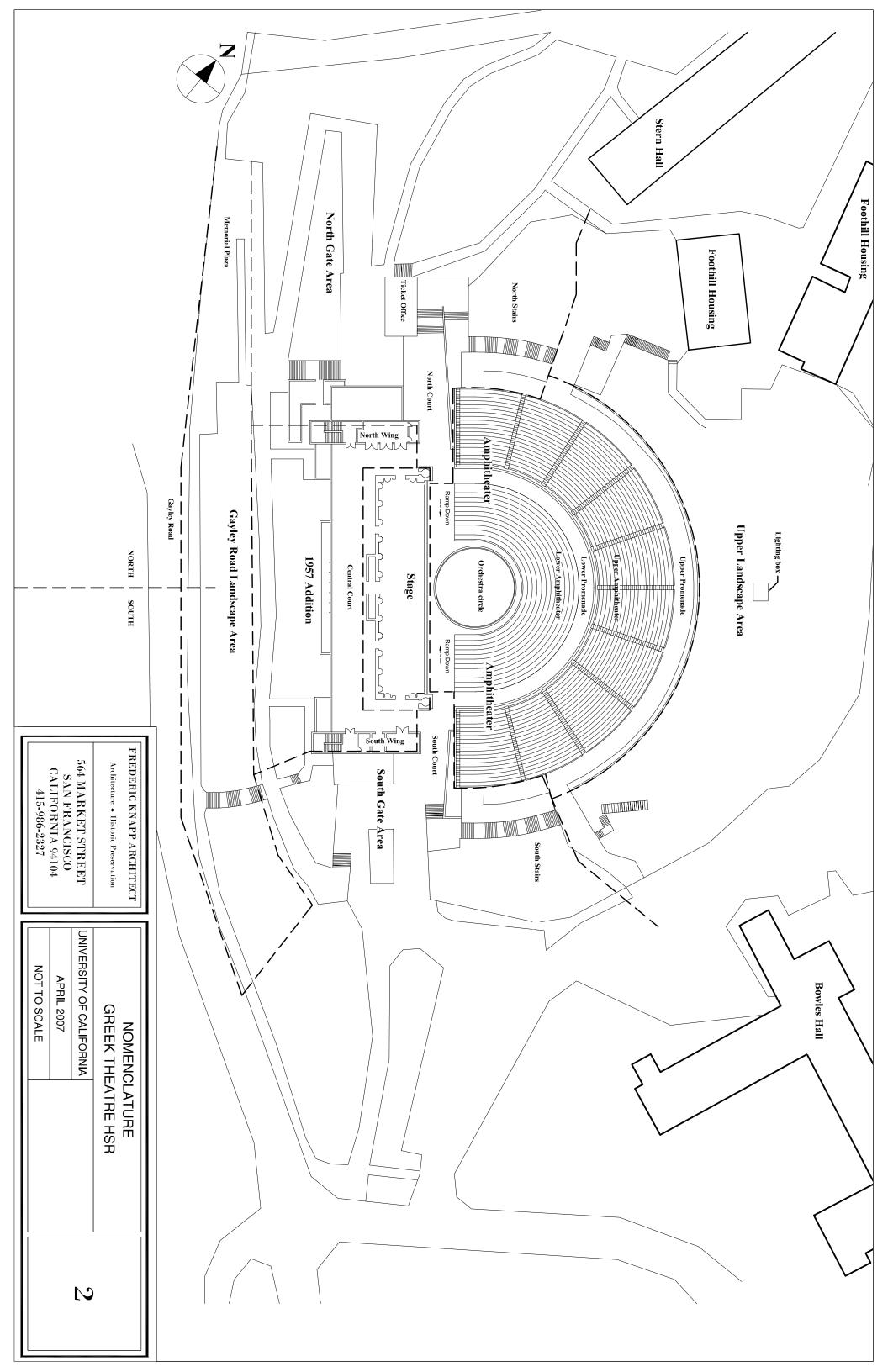


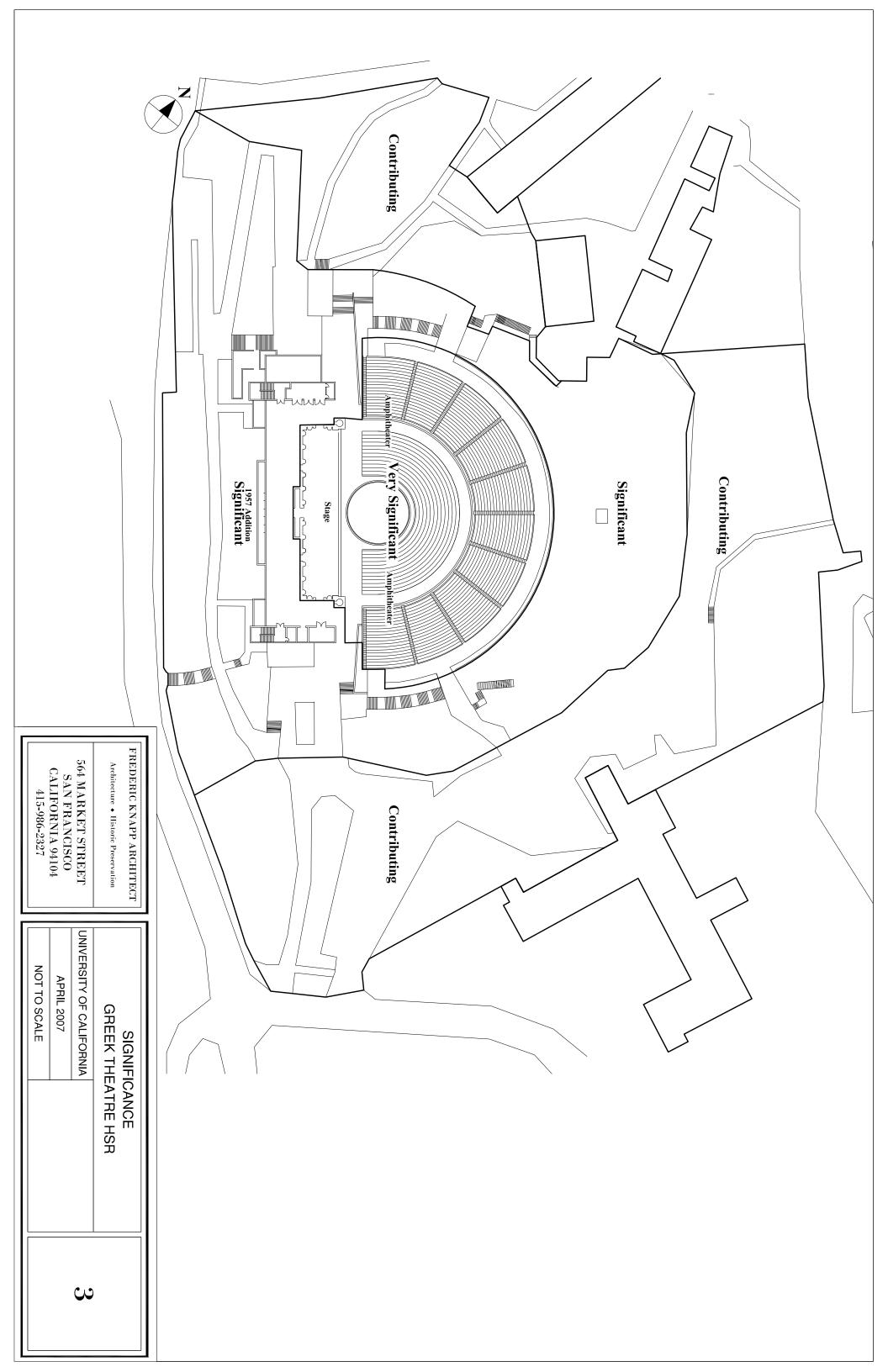
Image 76. Detail of campus map, 2007. Courtesy of University of California, Berkeley.April 2007Frederic Knapp ArchitectP

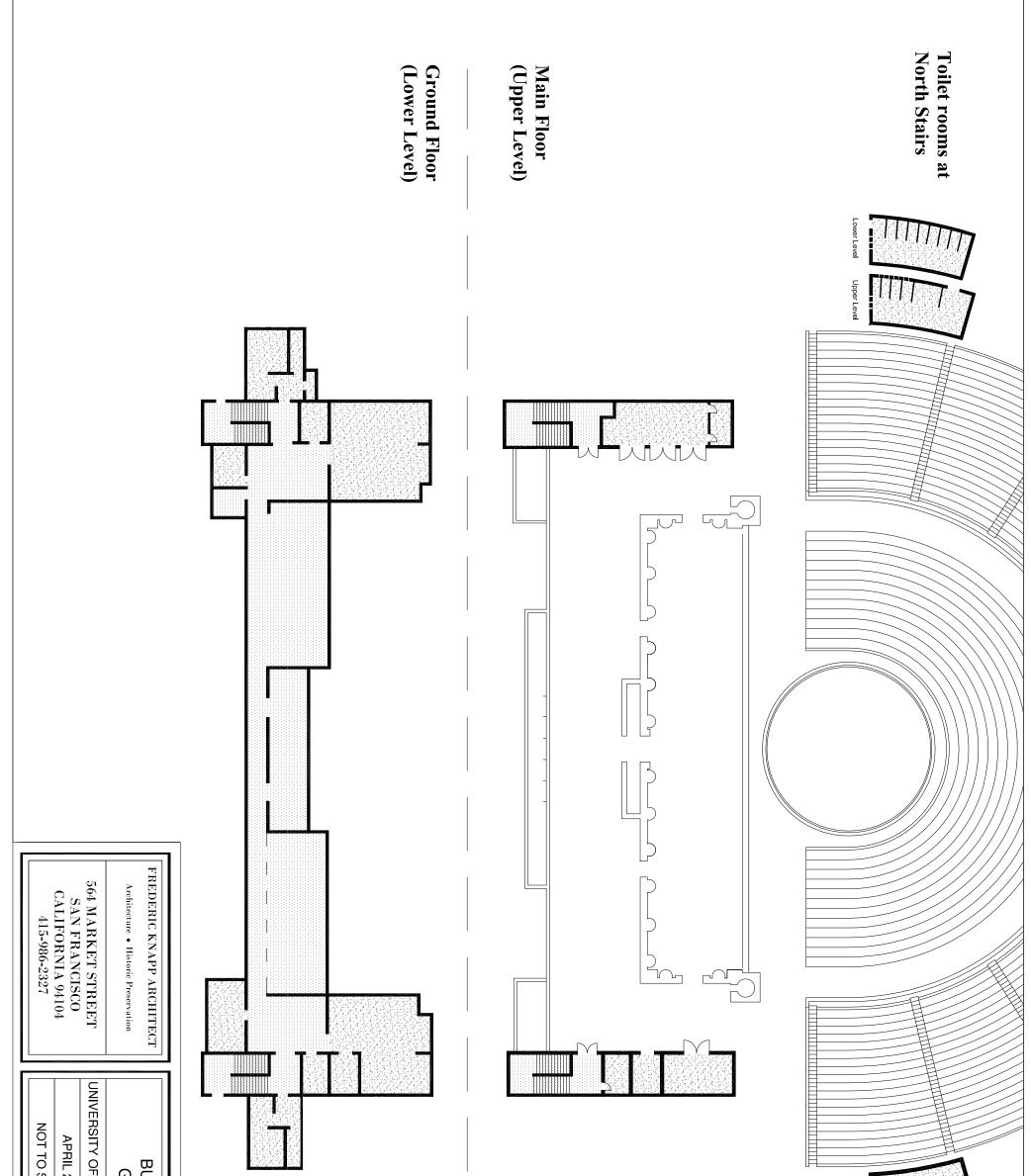
IV. Appendices

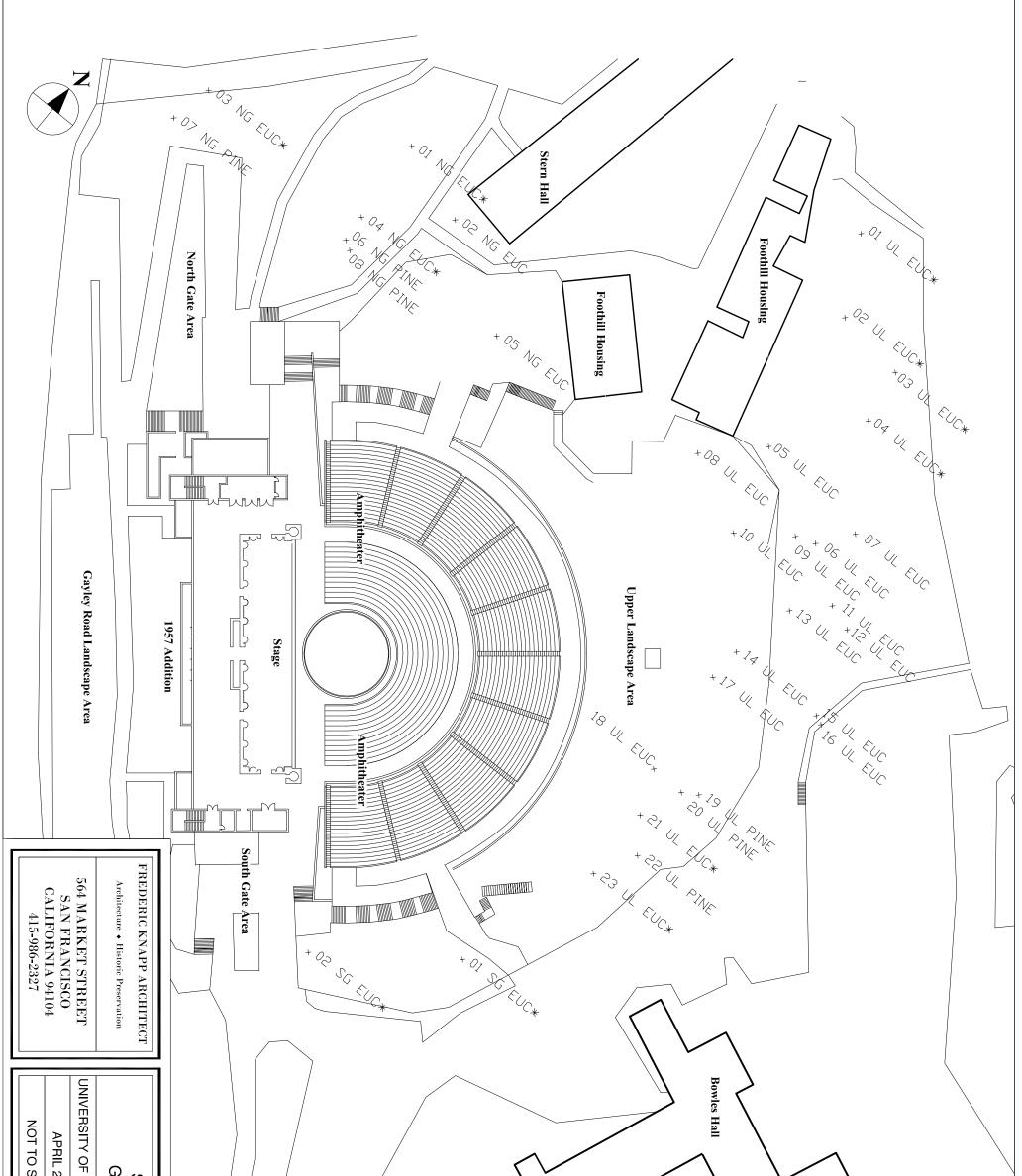
a. HSR Diagrams











SCALE	SIGNIFICANT TREES GREEK THEATRE HSR	
		Legend for Trees+GPS PointEUCEucalyptusREDRedwoodPINEPine FamilyULUpper Landscape Area.SGSouth Gate Area.NGNorth Gate Area.* Pre 1957 Trees

b. Elements of the Theater

Elements of the Theater:

Chorus- preformed in the orchestra, with around 50 people usually with music, supported the actors.

Diazoma (belt shaped aisle) wrapping around the theater, sometimes there are several

Eisodos (pl. Eisodoi) - doors through which the actors entered and exited

Kerkis -wedge shaped seating area in the amphitheater

Klimakes - stairs accessing the seating in the amphitheater

Logeion or Proskenion - is the narrow but raised platform or stage Along the back wall of the scene. It was a place designed just for the actors, by which they got separated from the chorus. It is certain that this happened sometime in the Hellenistic period, because in the classical theater there were no logeion and the performance was taking place strictly on the orchestra.

Paraskenion – a short wing that frames the building

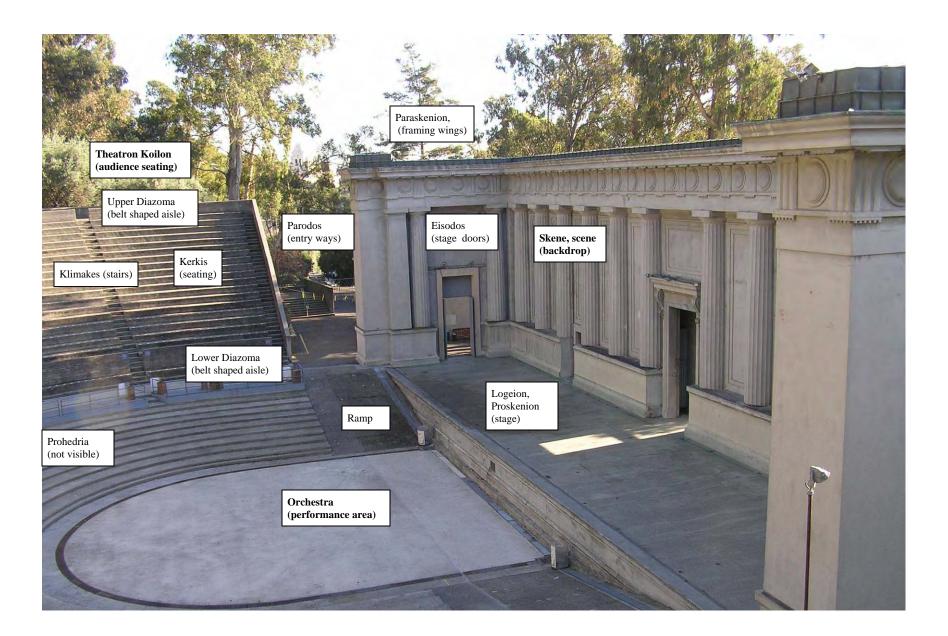
Parodoi (pl. Parodos) - Between the scene and the seats, there are two entrances

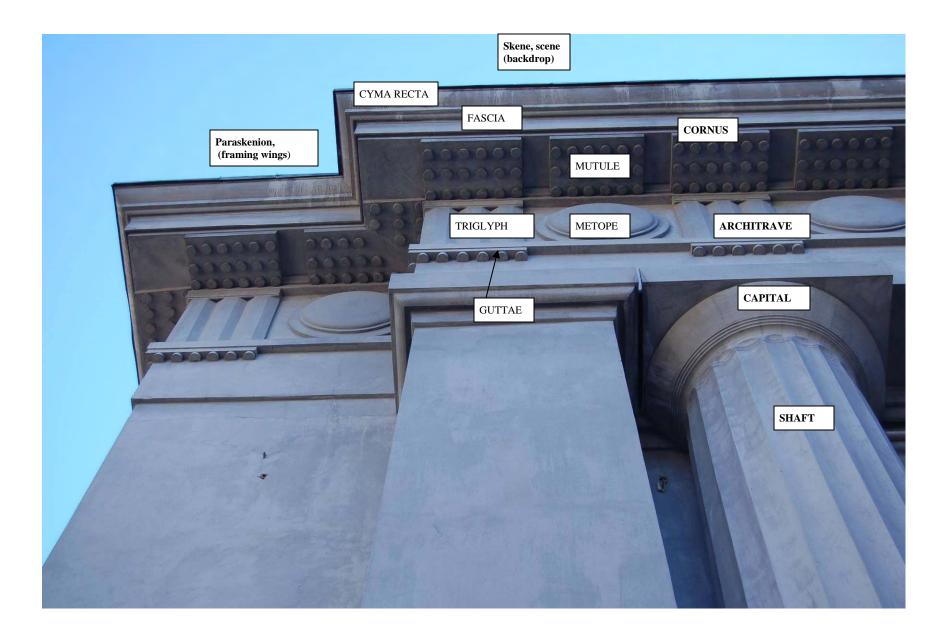
Proedria- seating reserved for priests and important people.

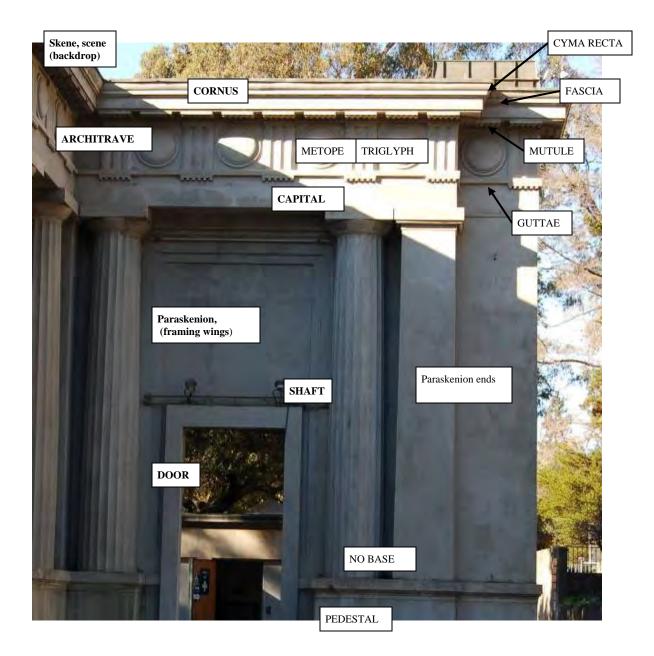
Orchestra – tradition place for the chorus and the original performance place for theater.

Skene or scene – "stage" backdrop or wall.

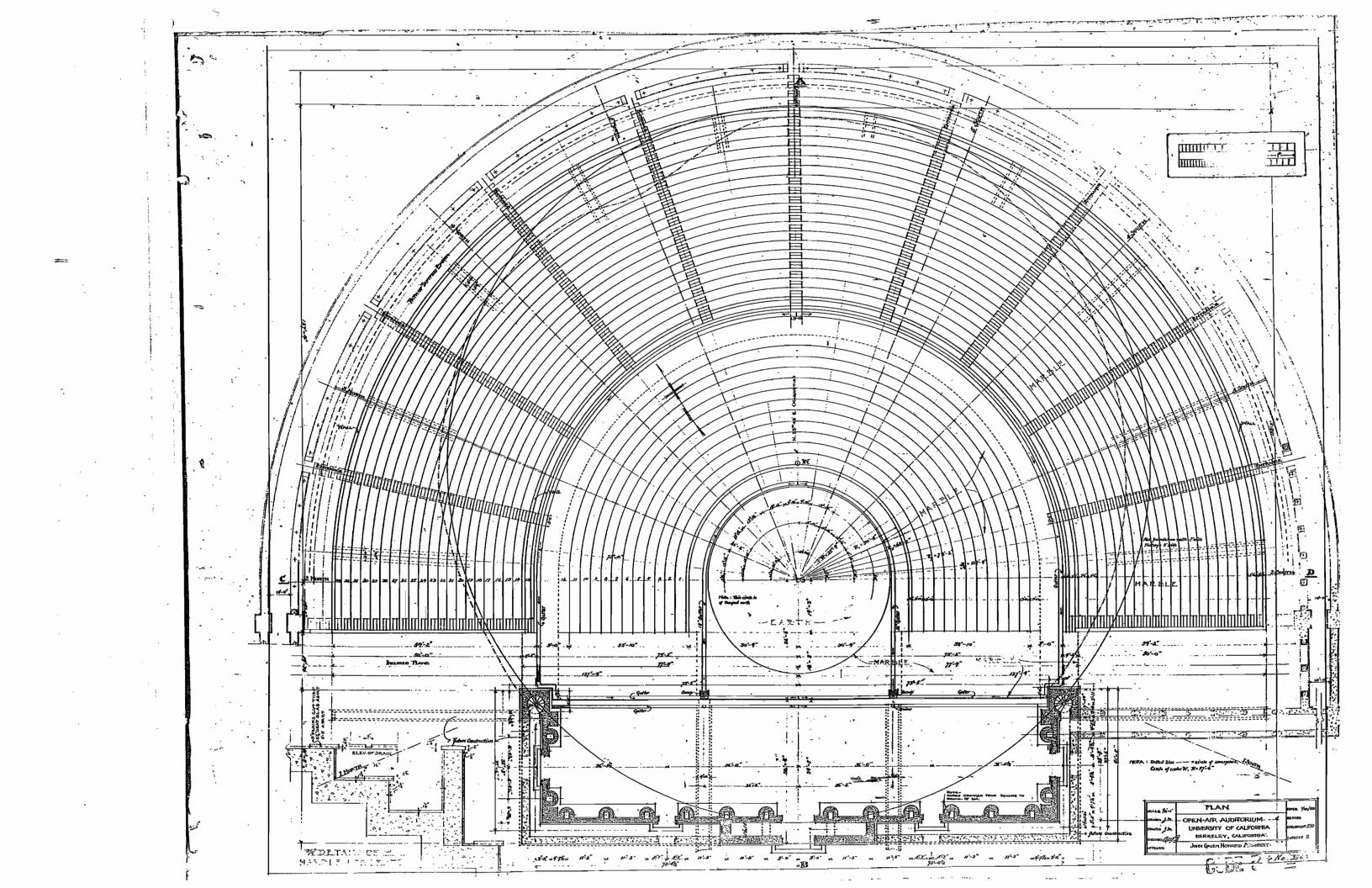
Theatron or Koilon- "watching place" for audience



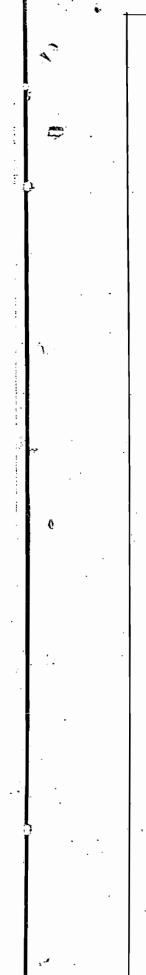


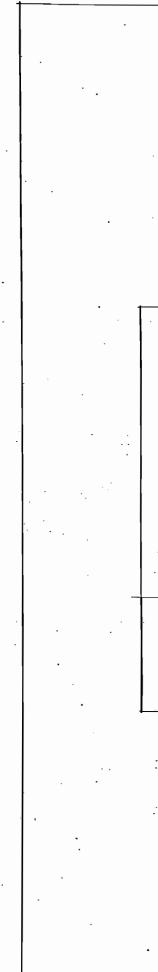


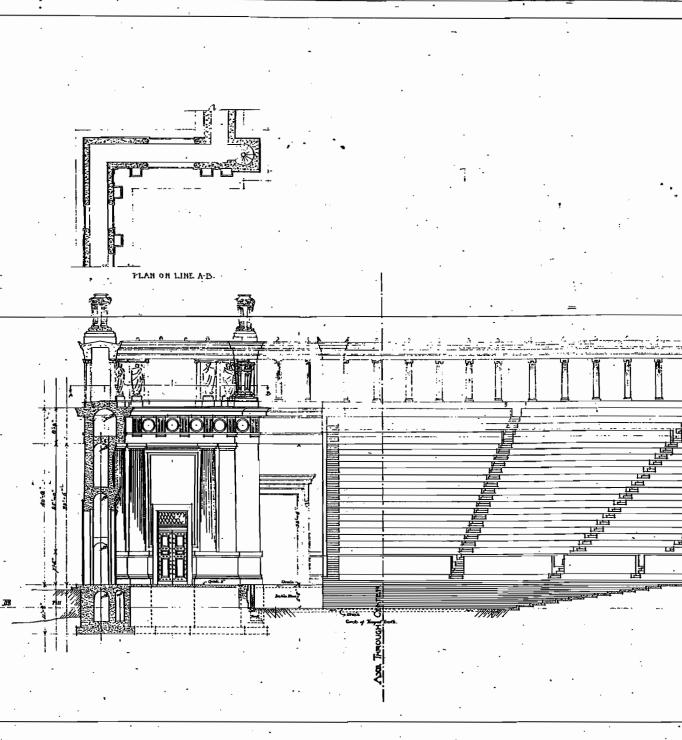
c. 1903 Drawings

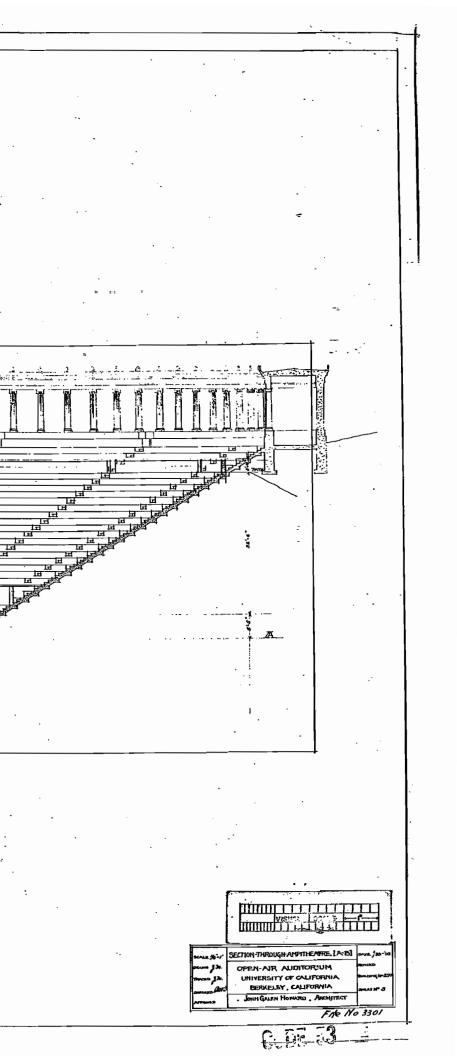


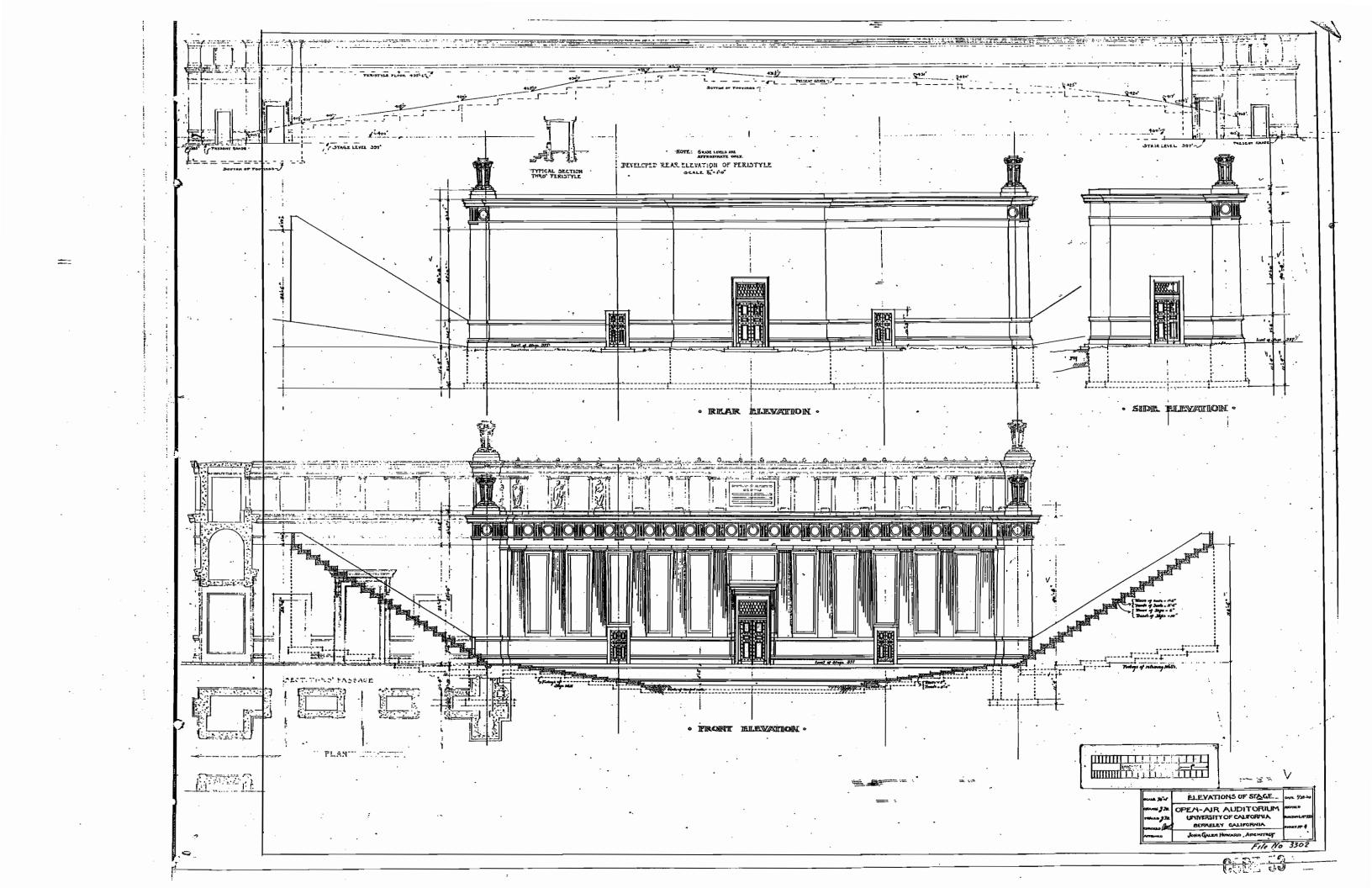
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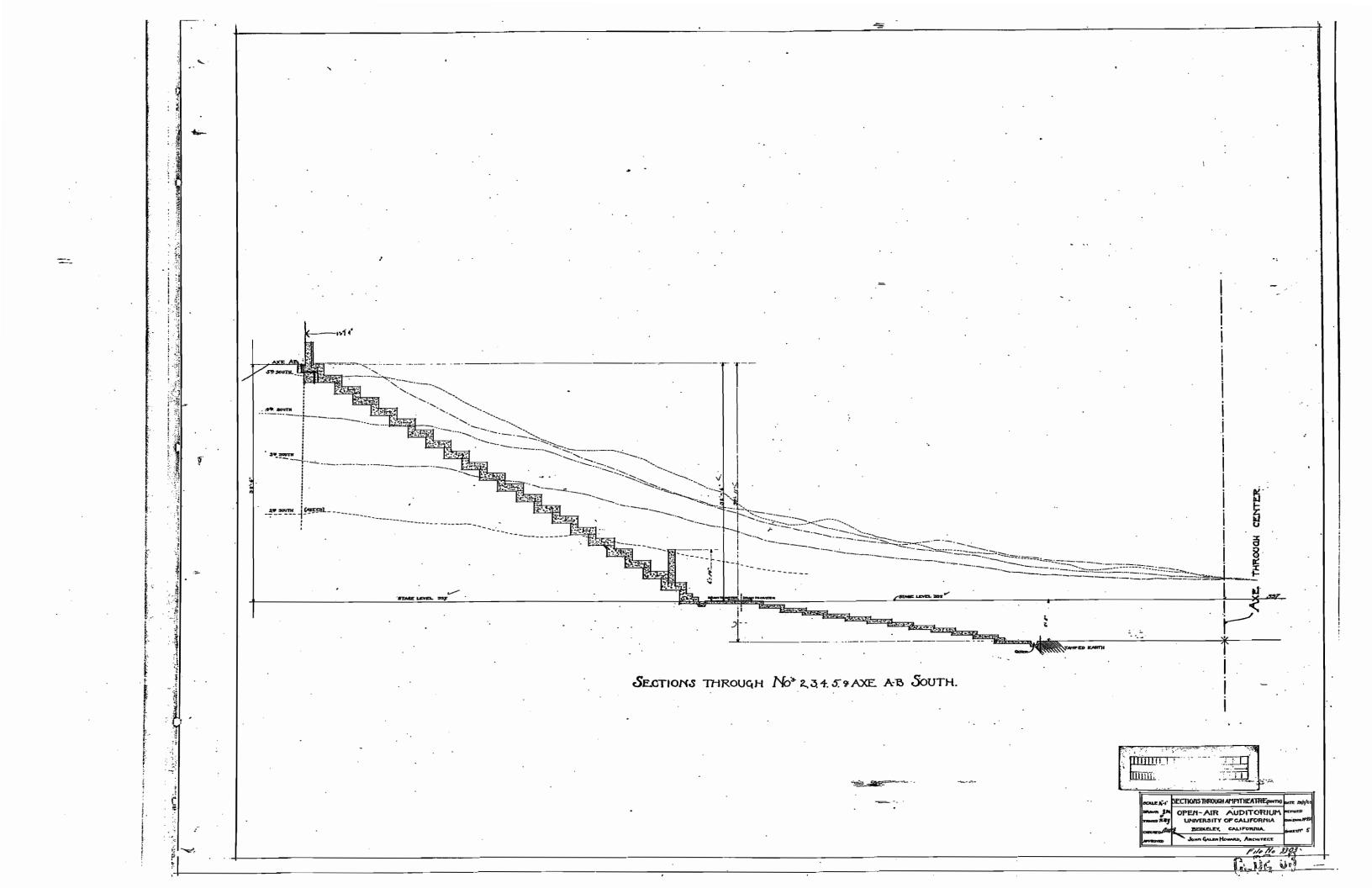


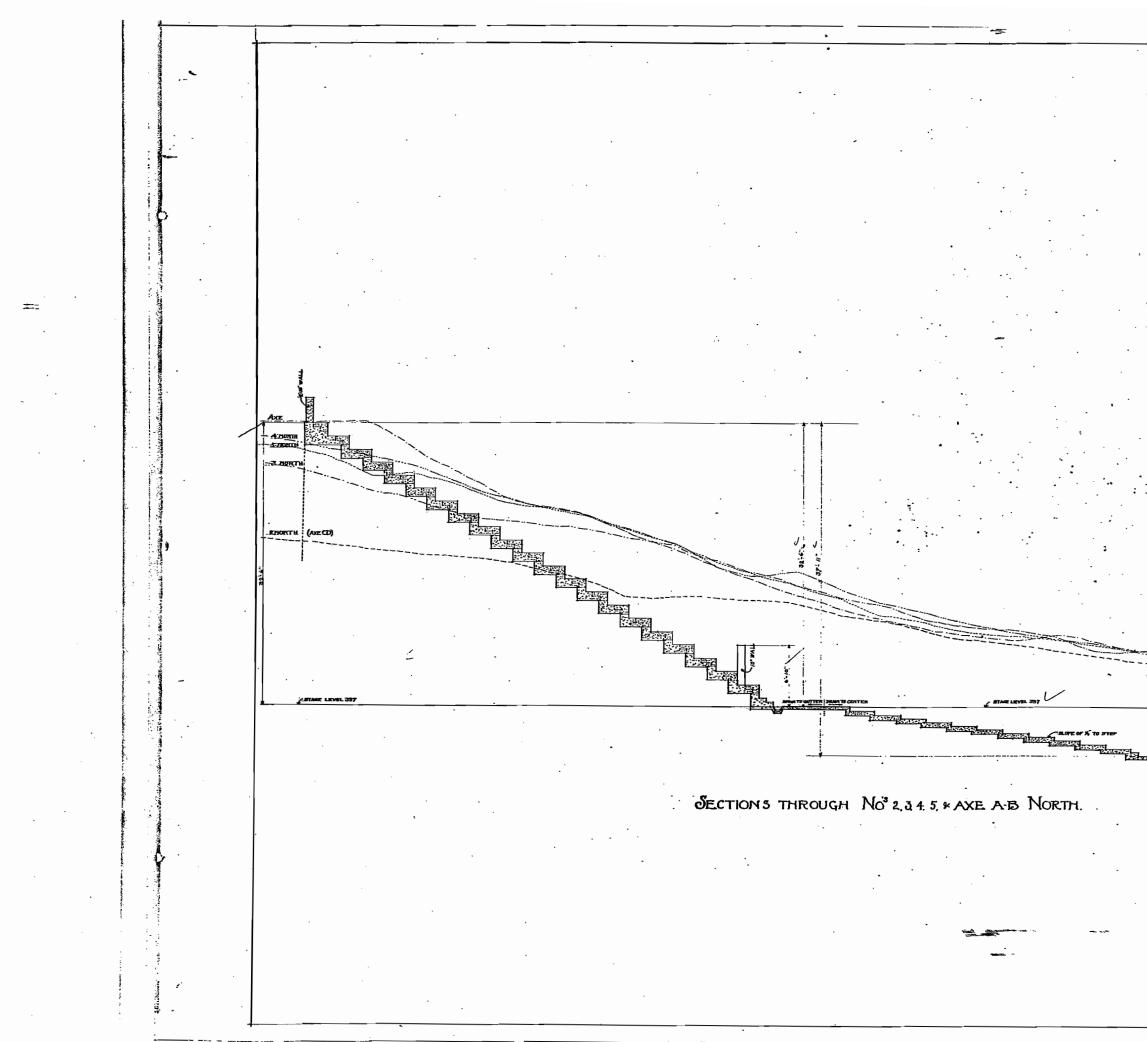


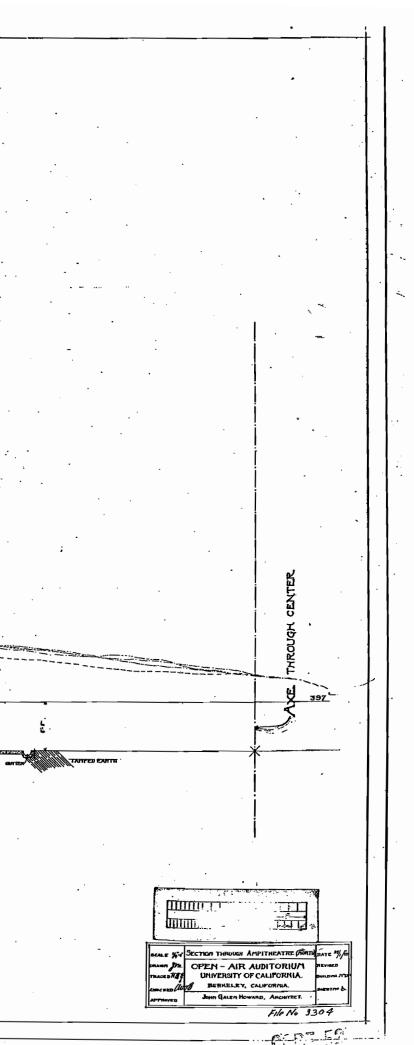




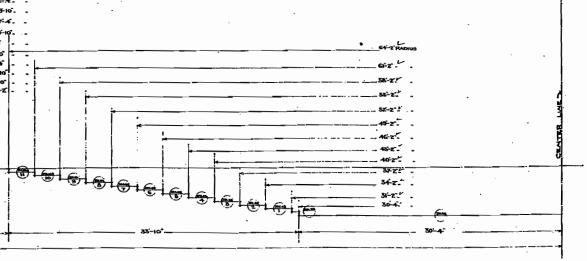






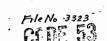


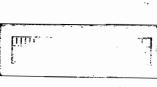
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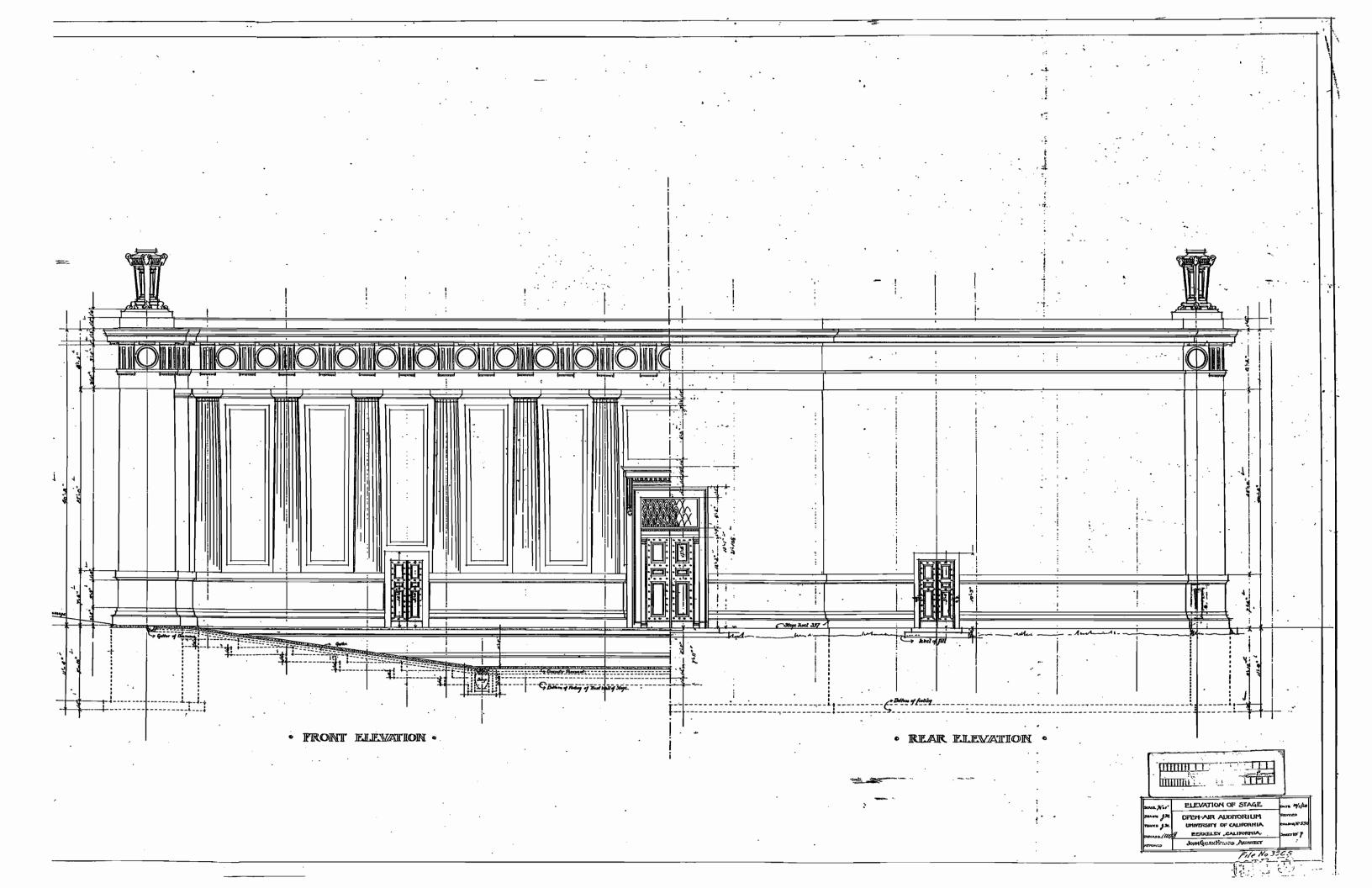
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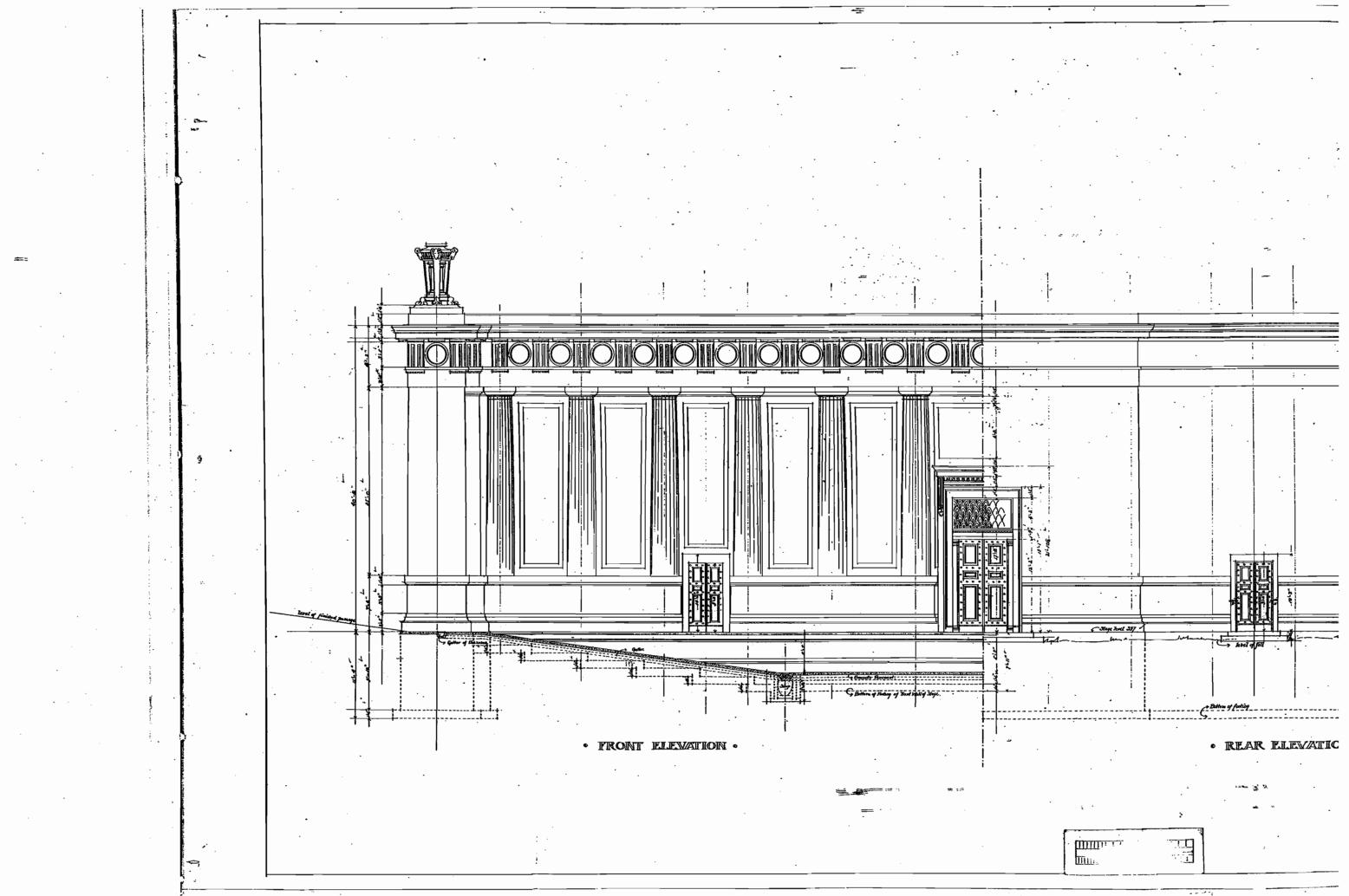
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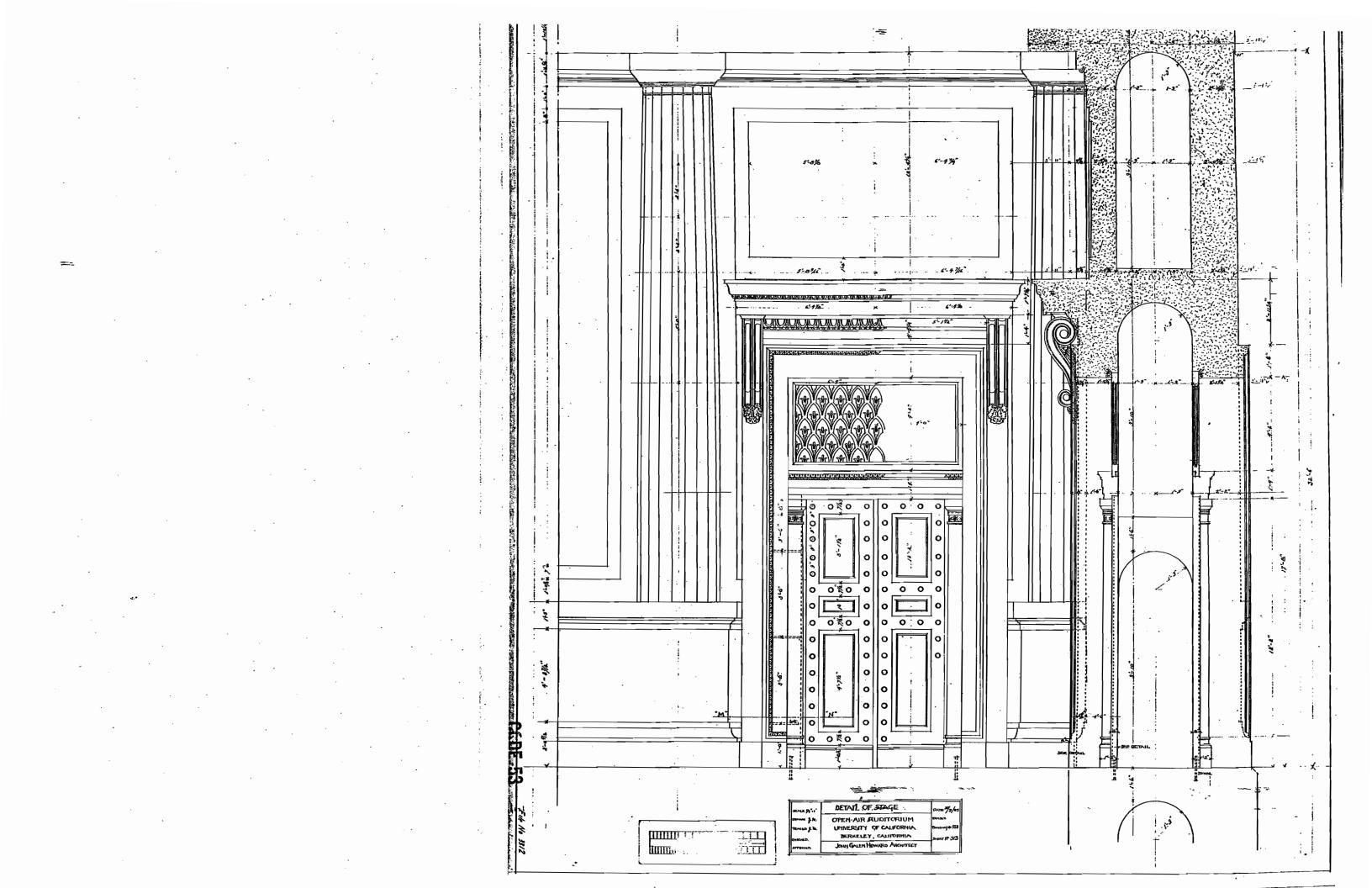


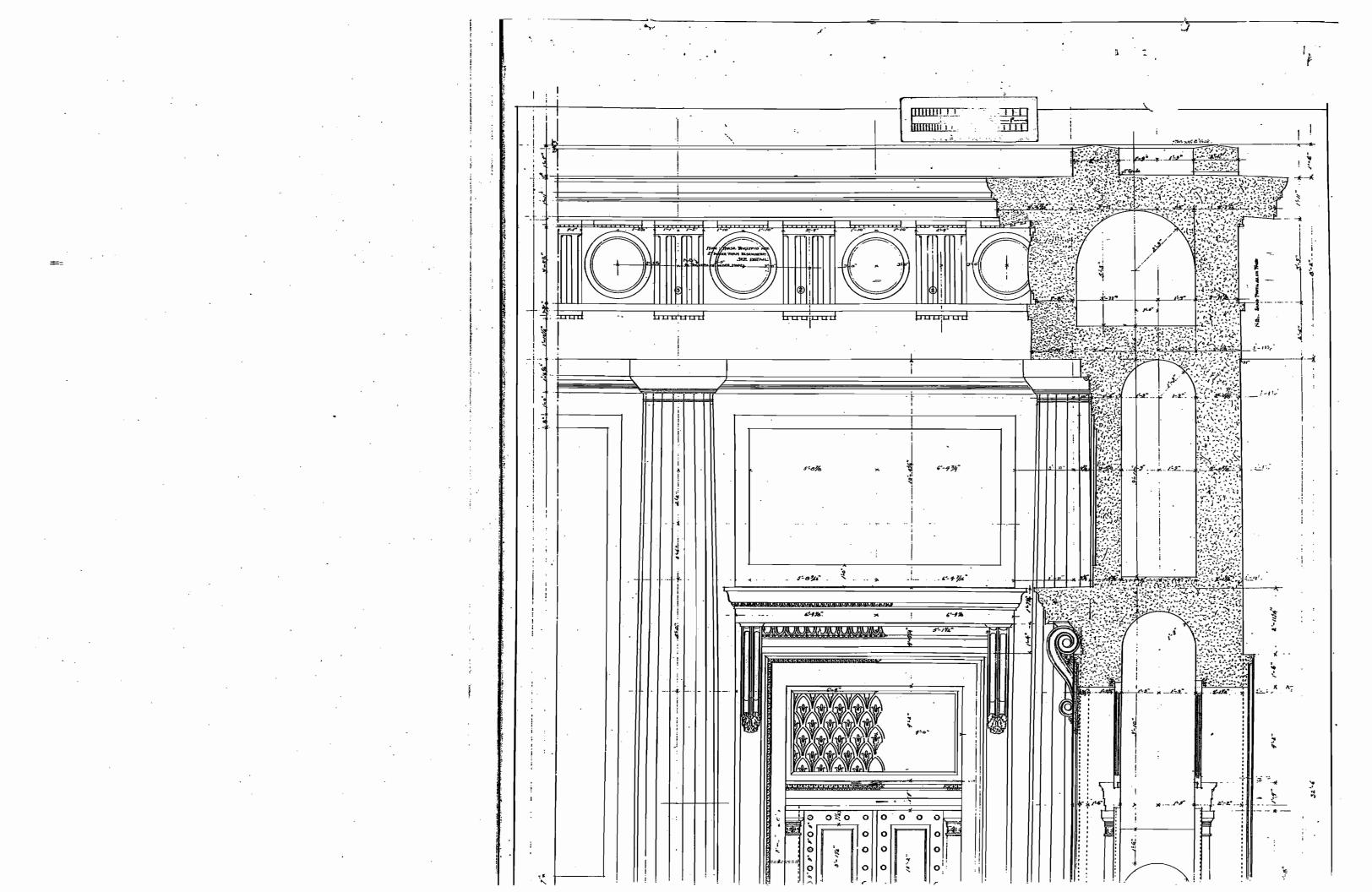


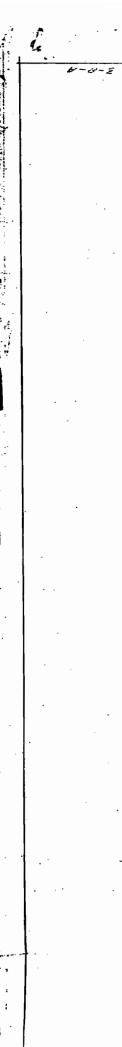
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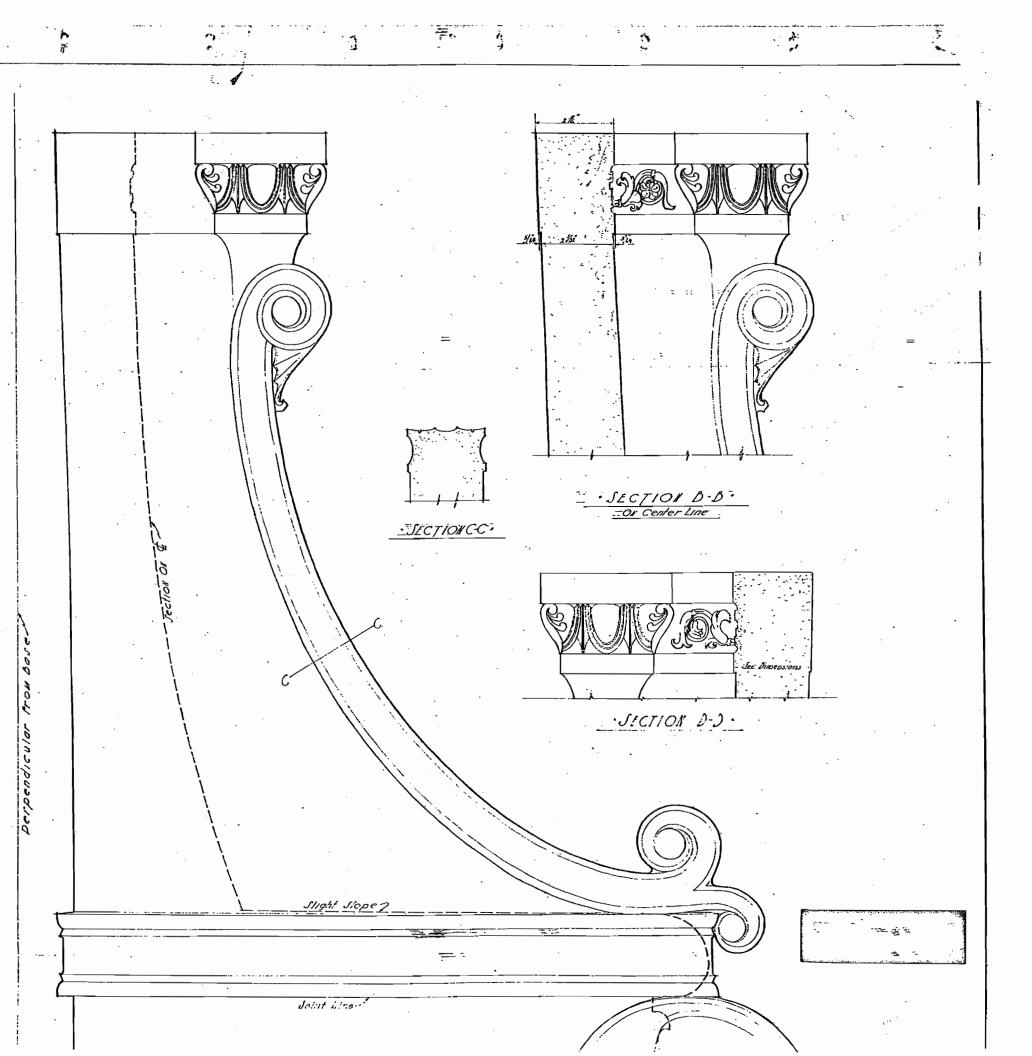




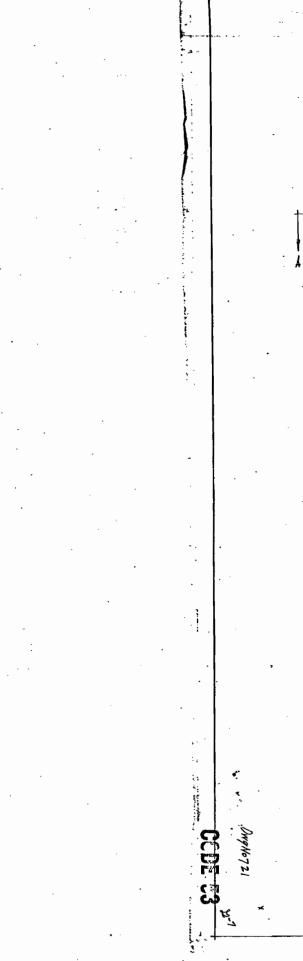


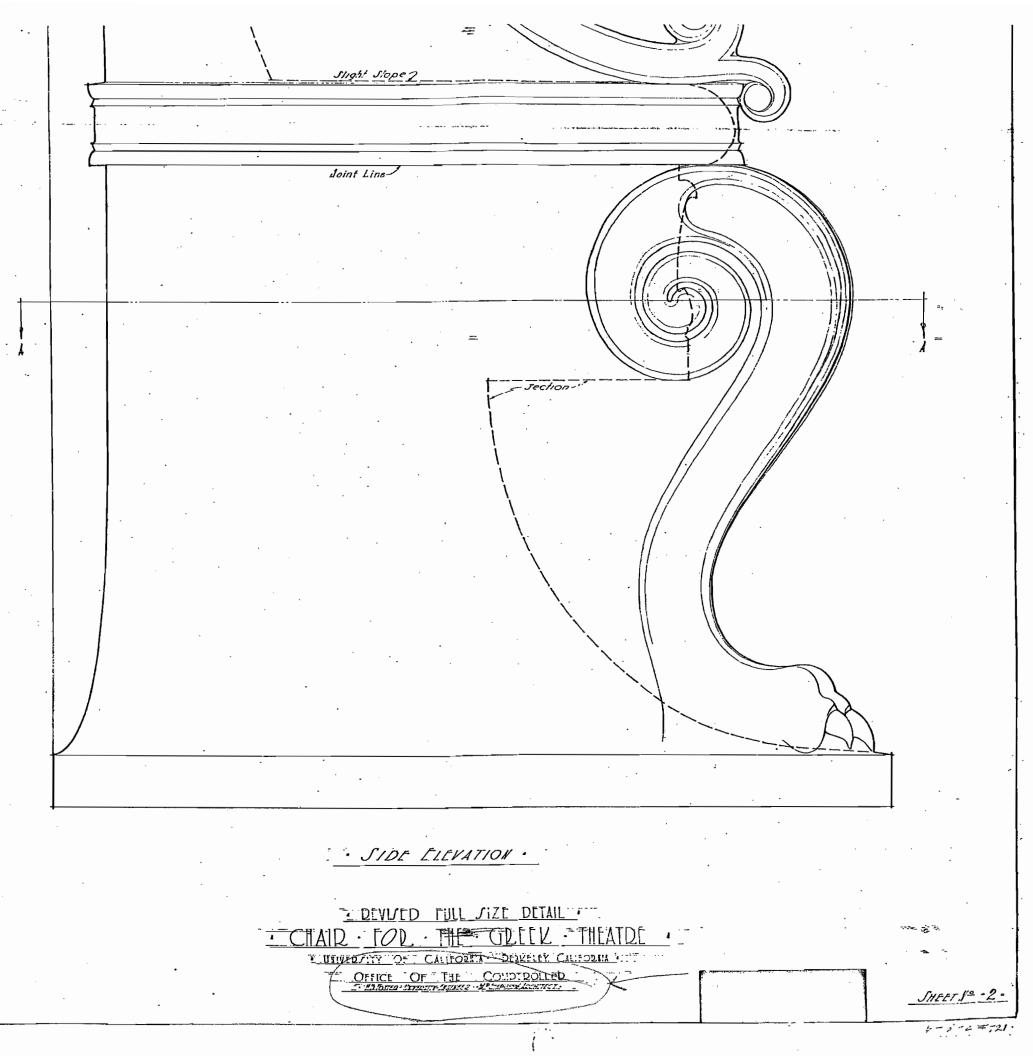


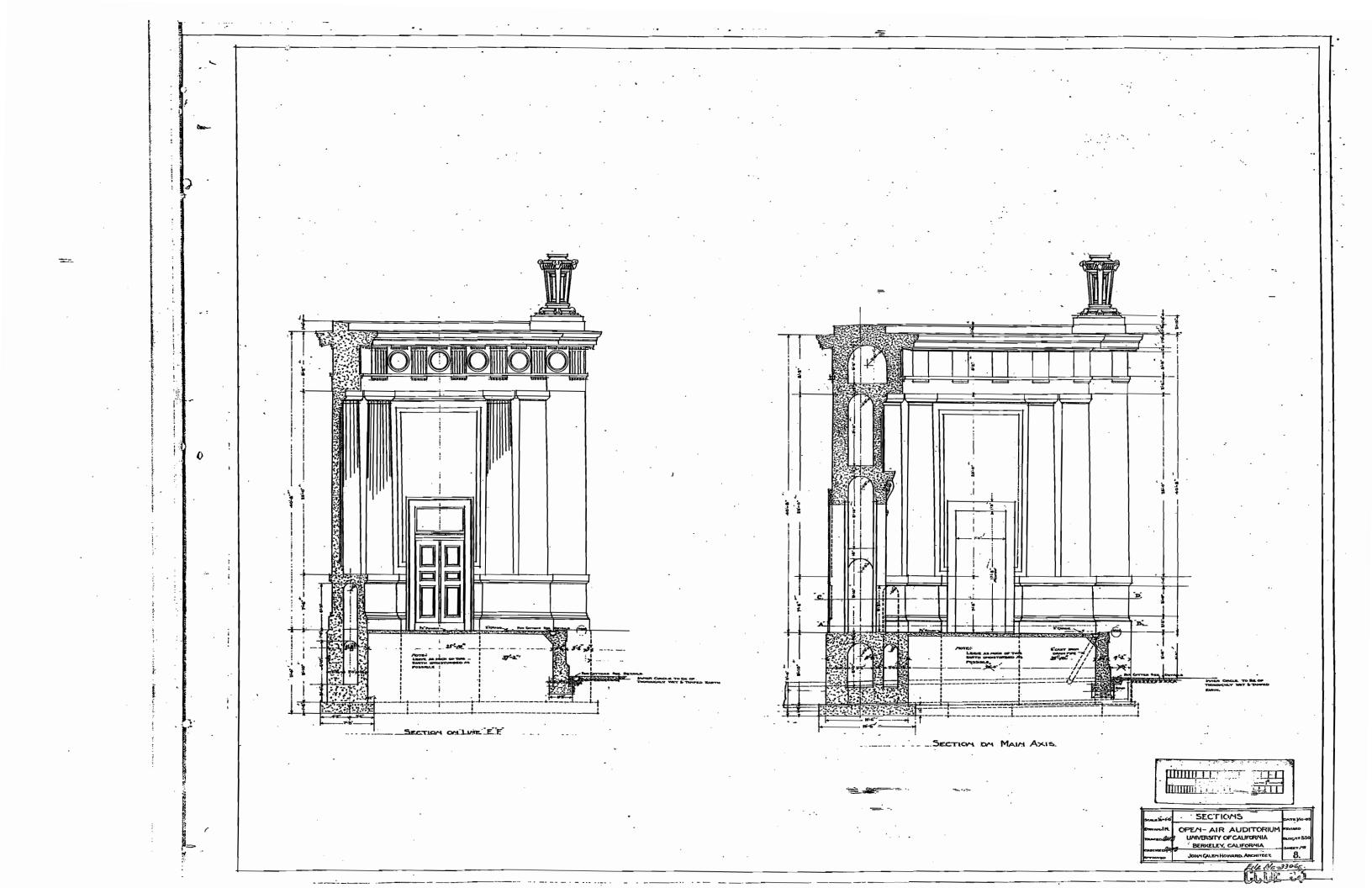


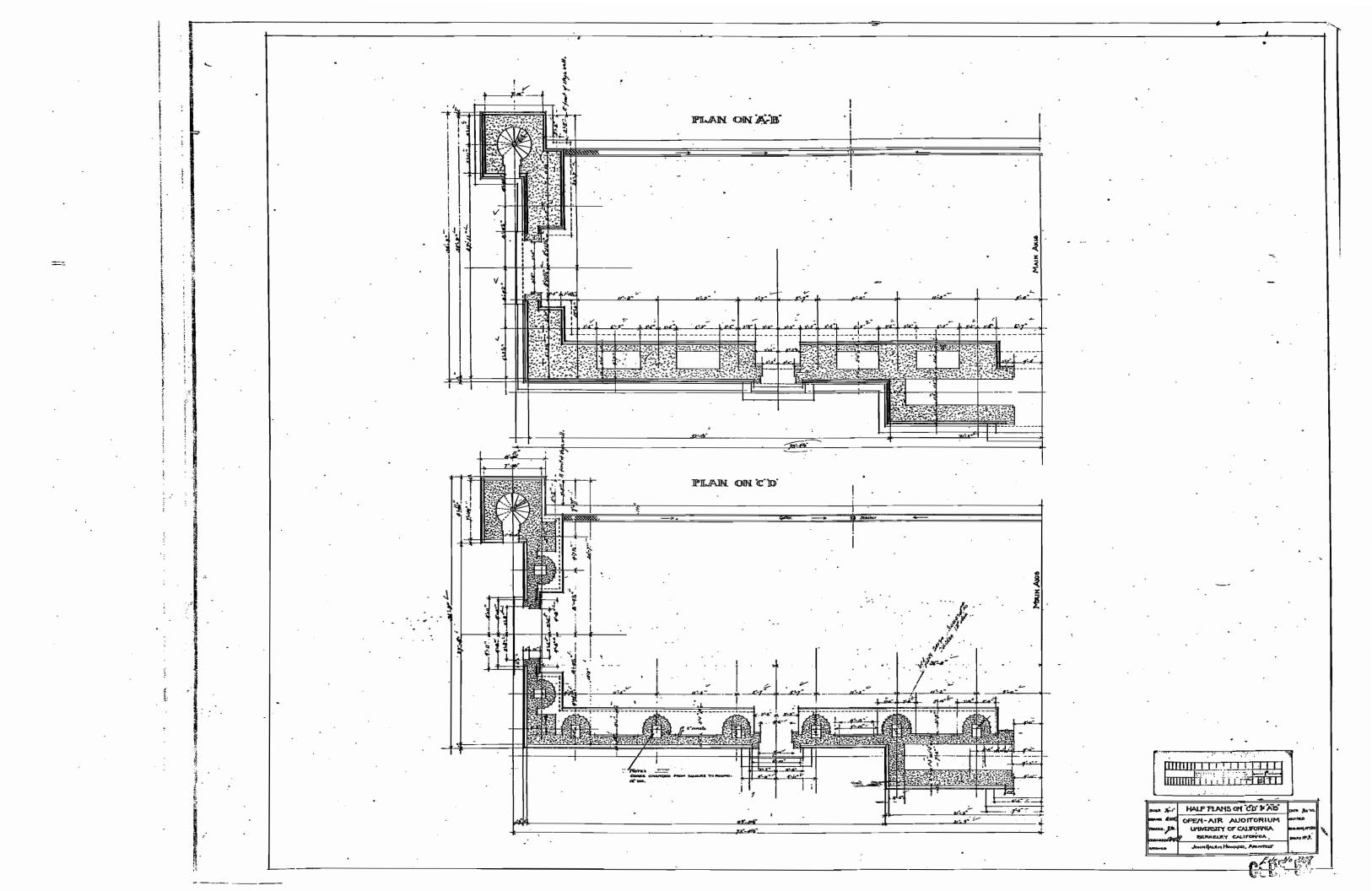


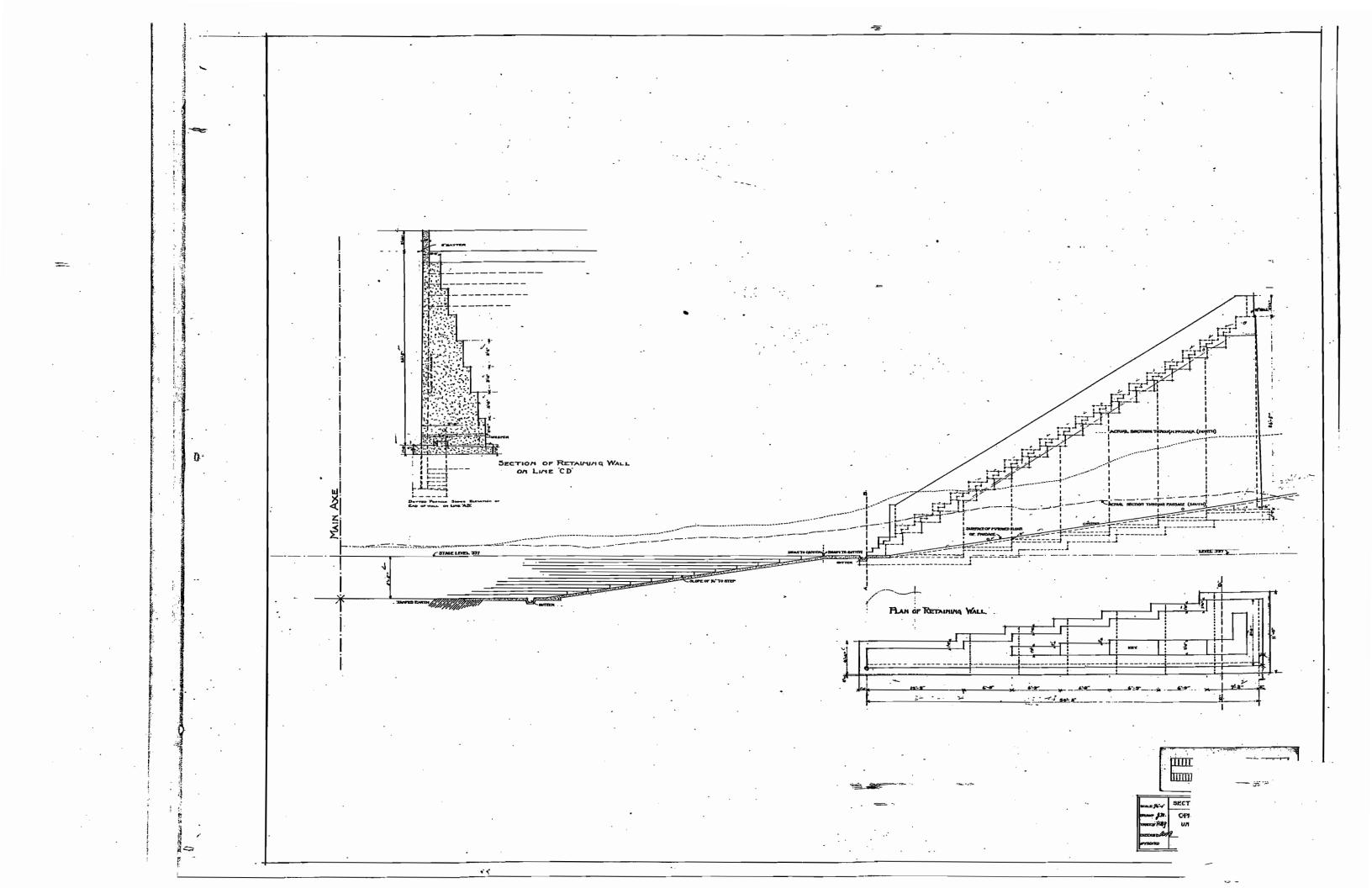
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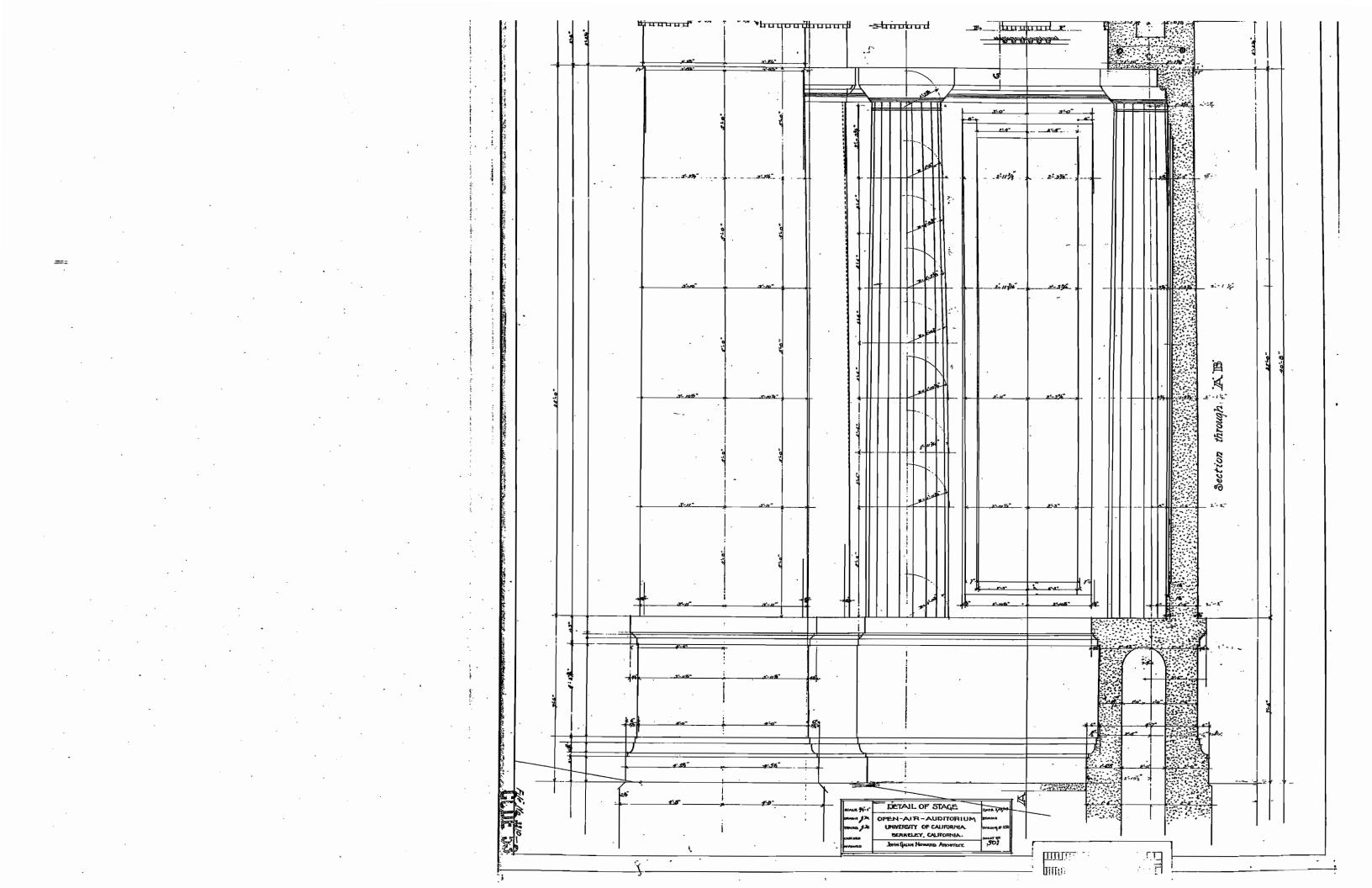


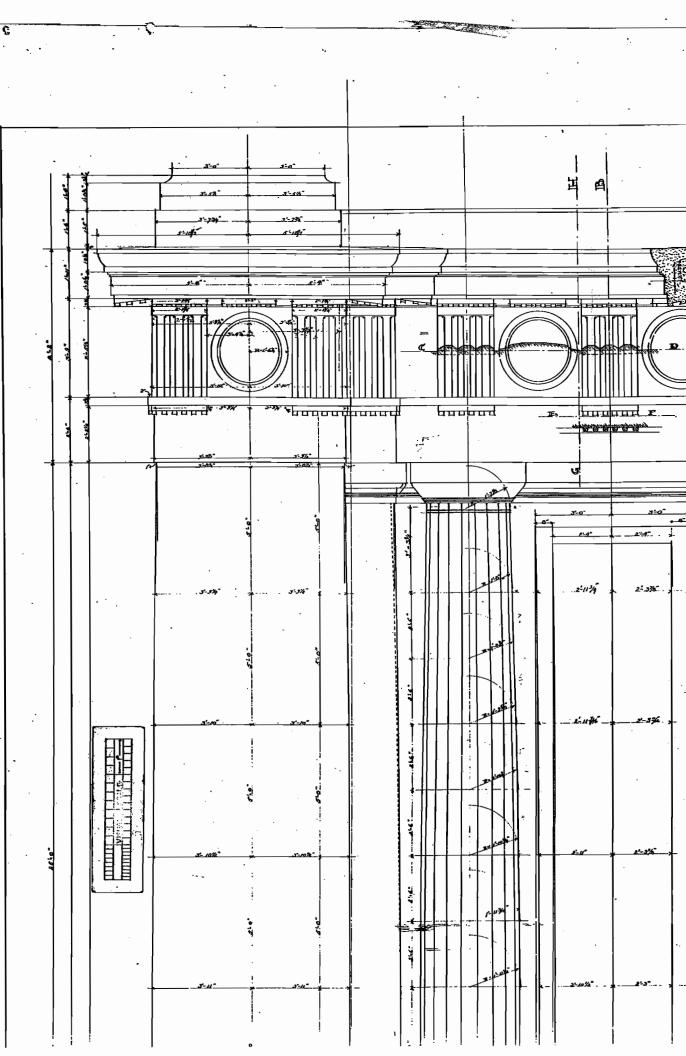


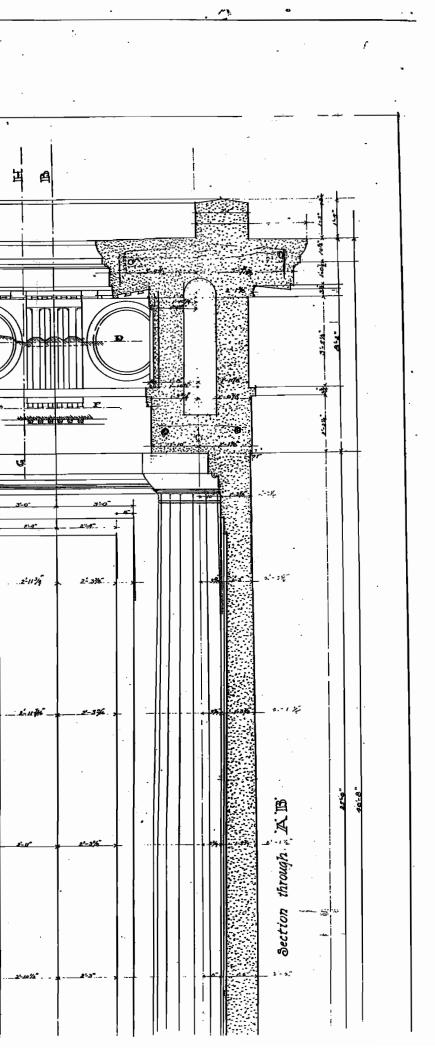


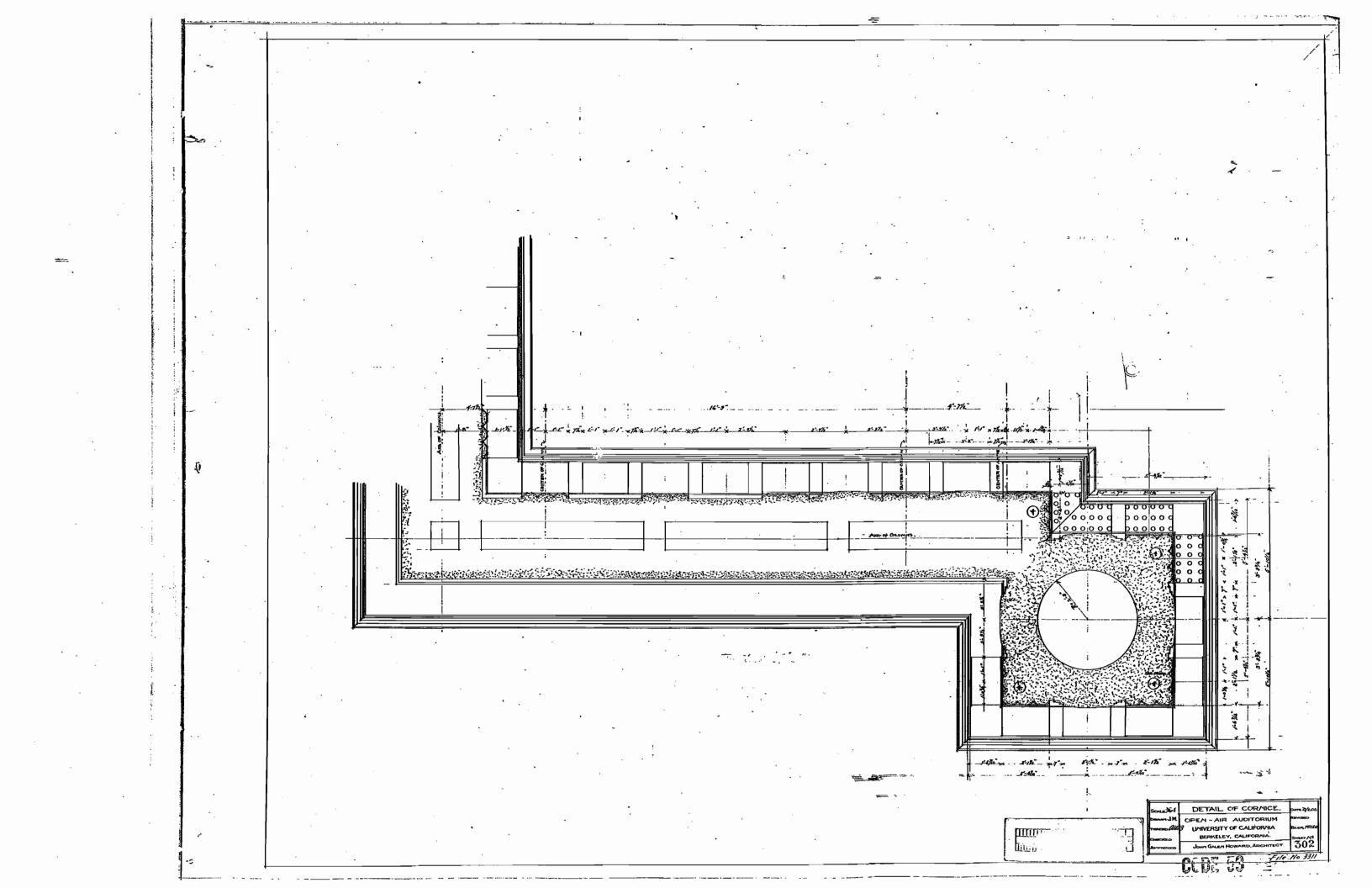










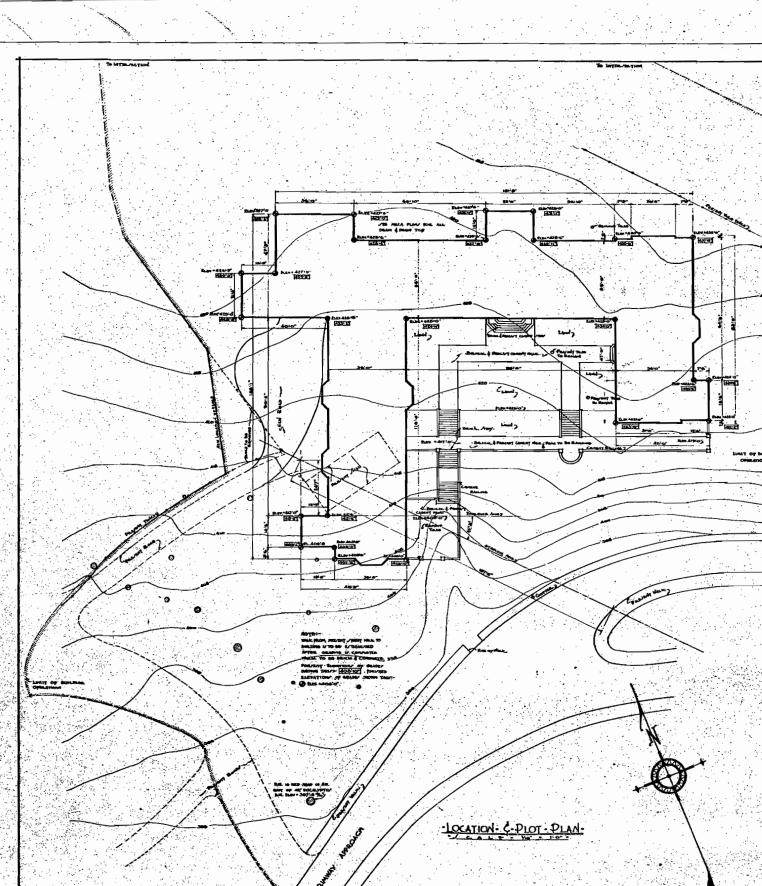


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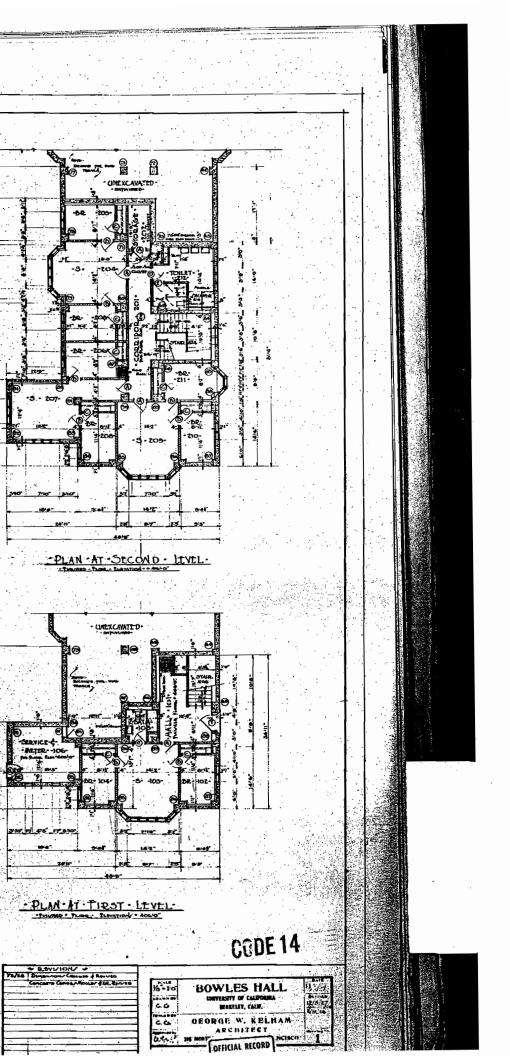


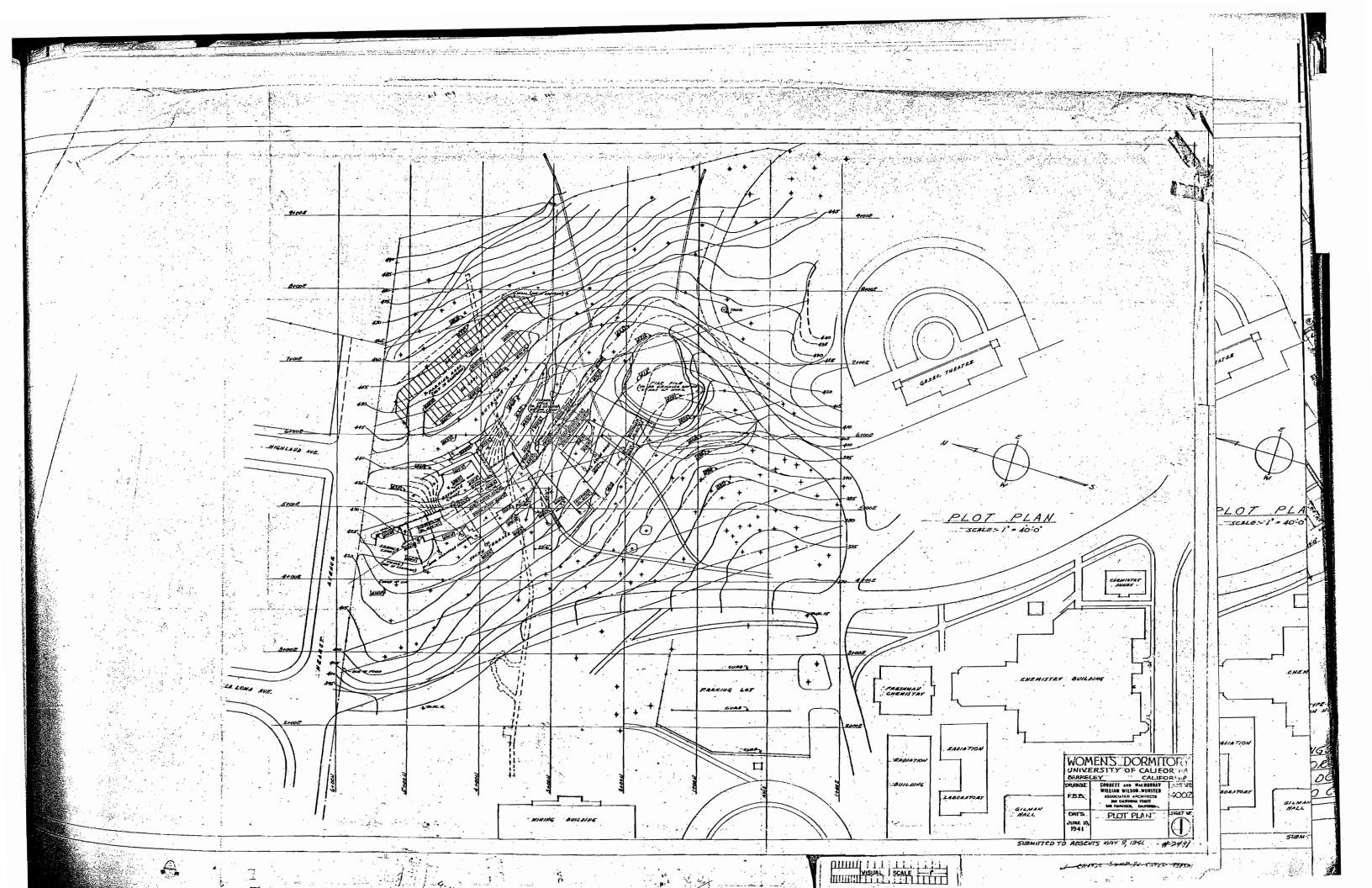


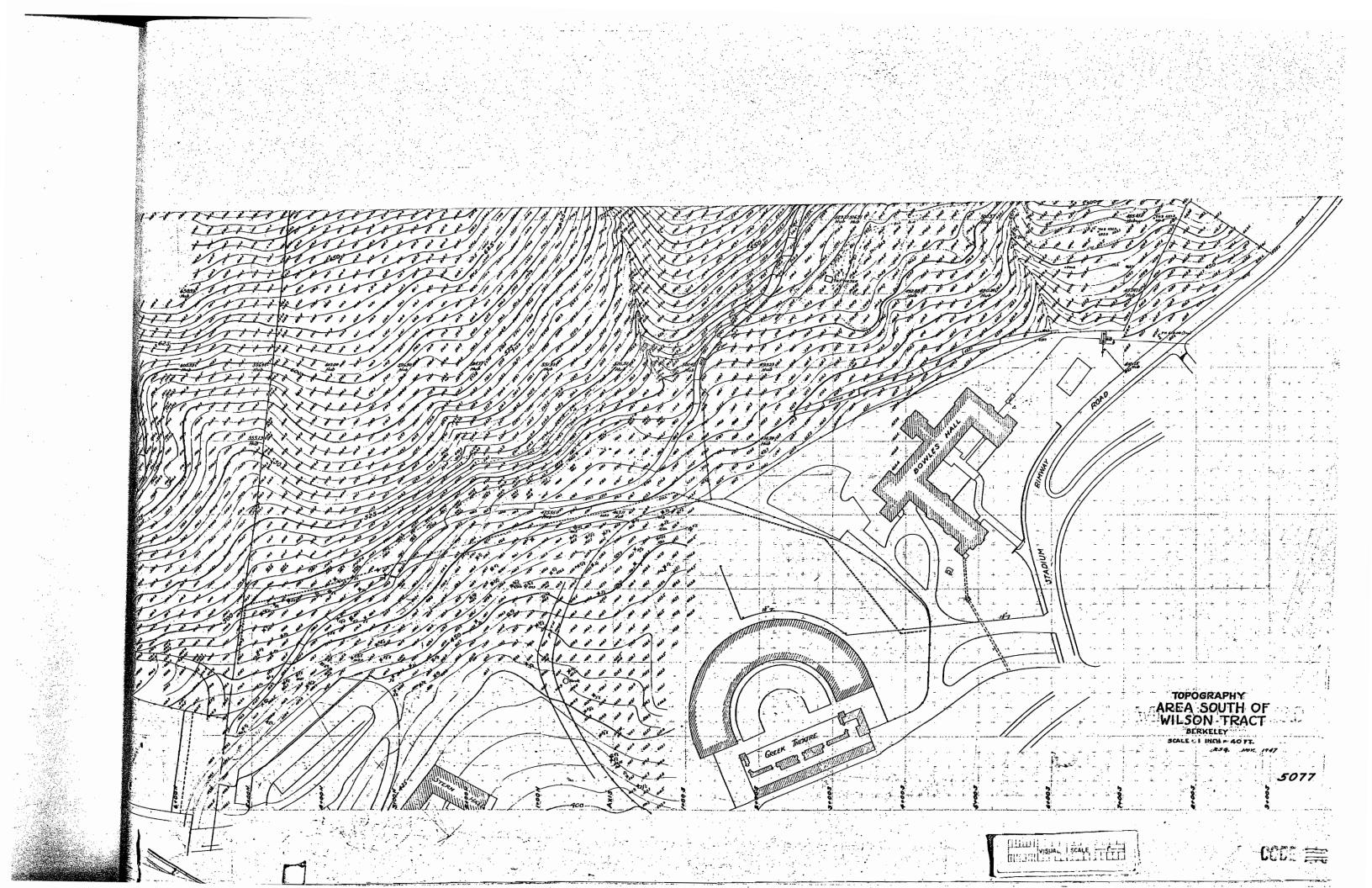
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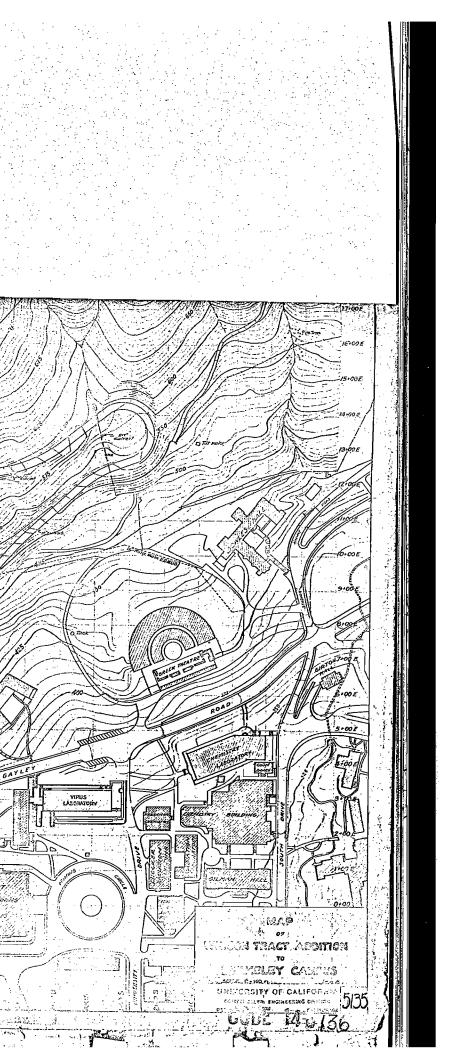
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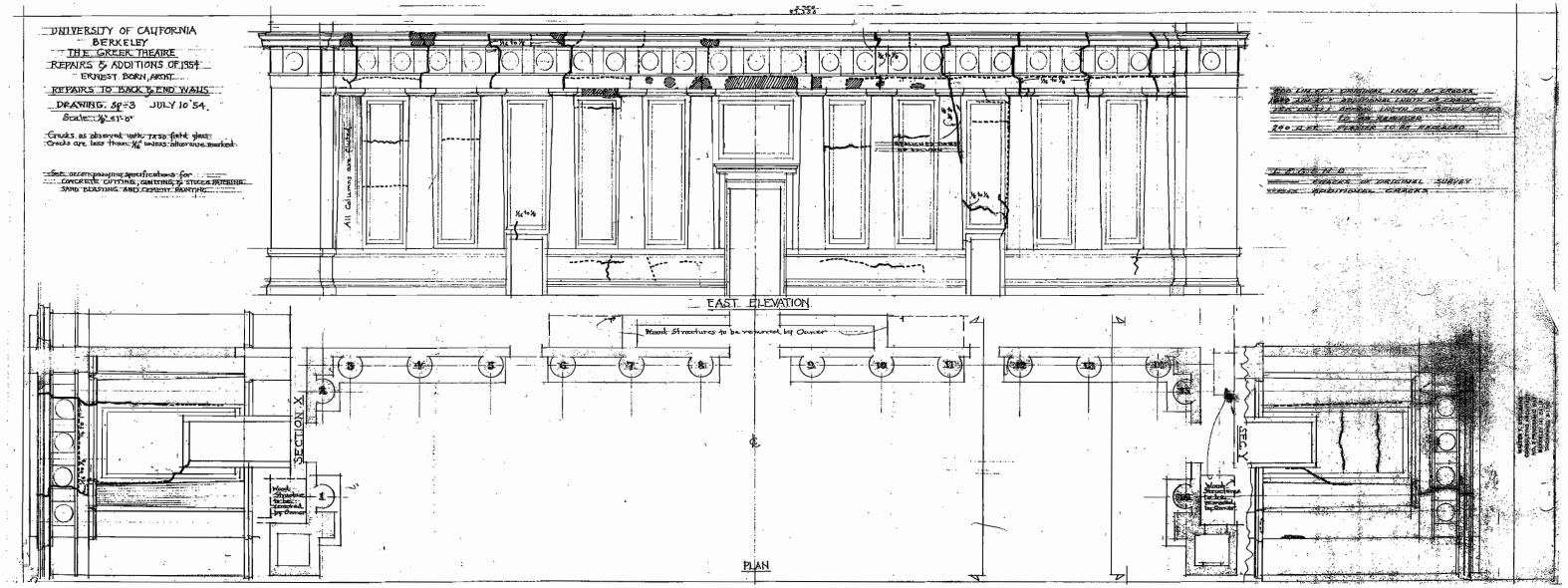
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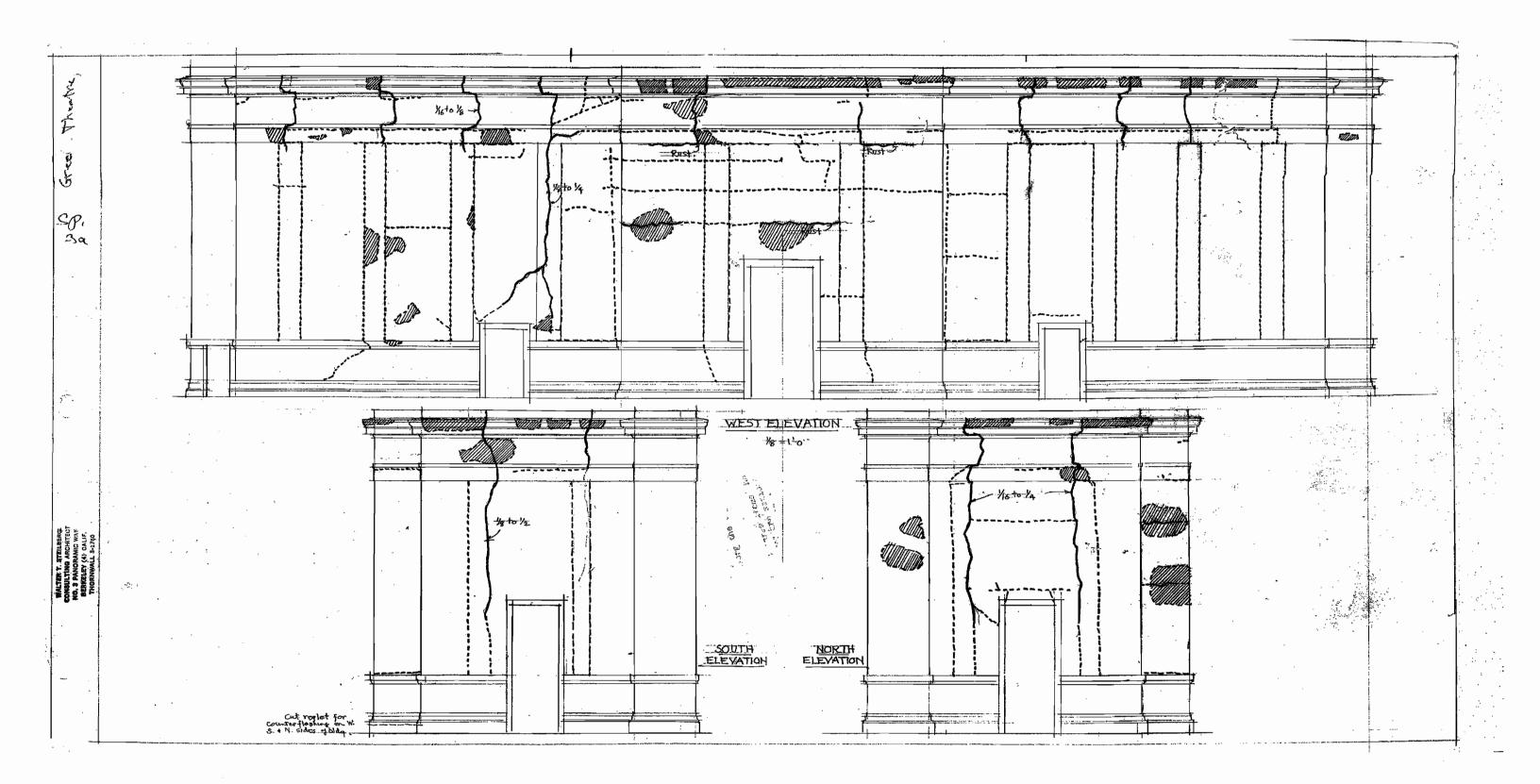
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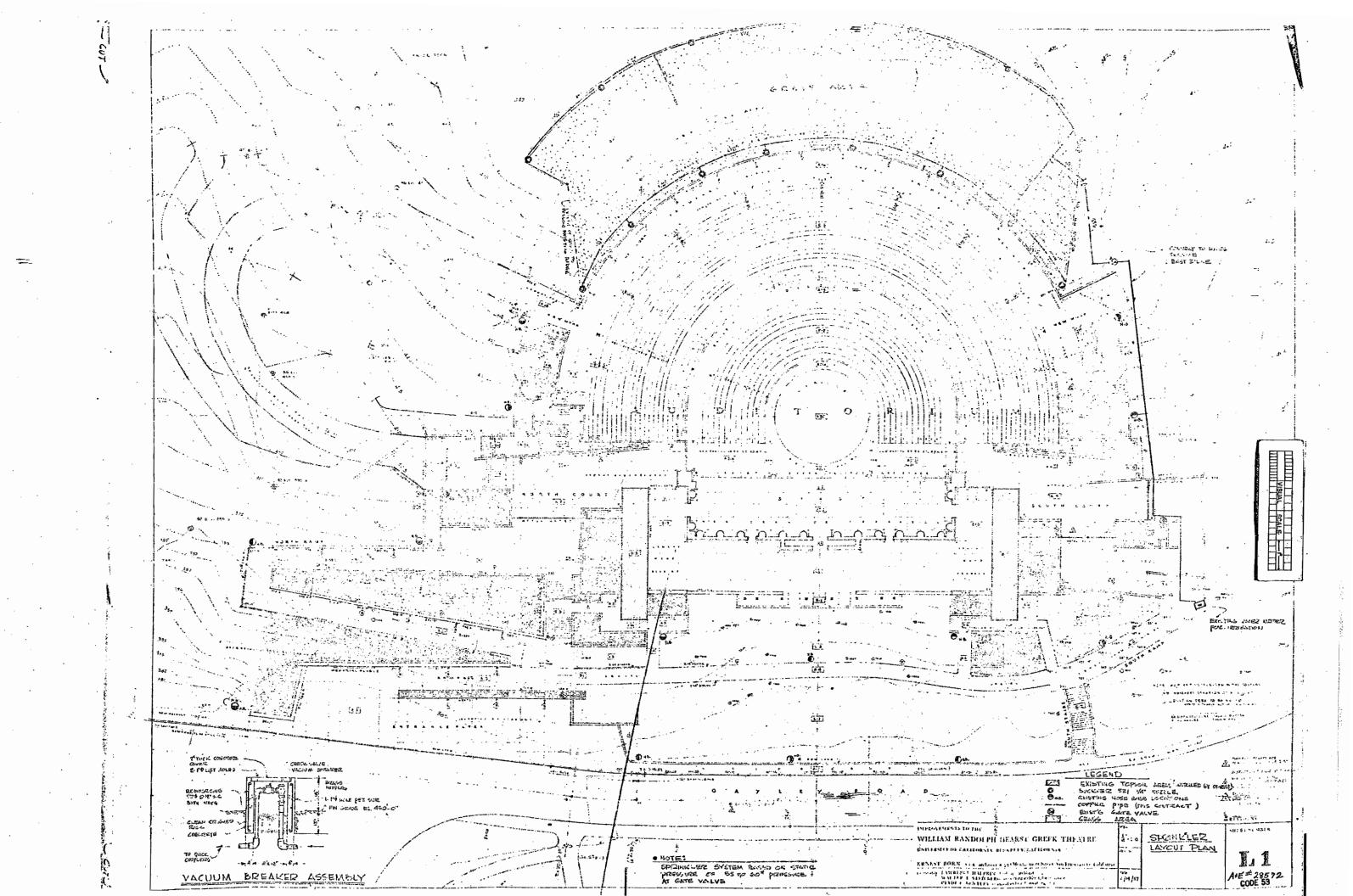
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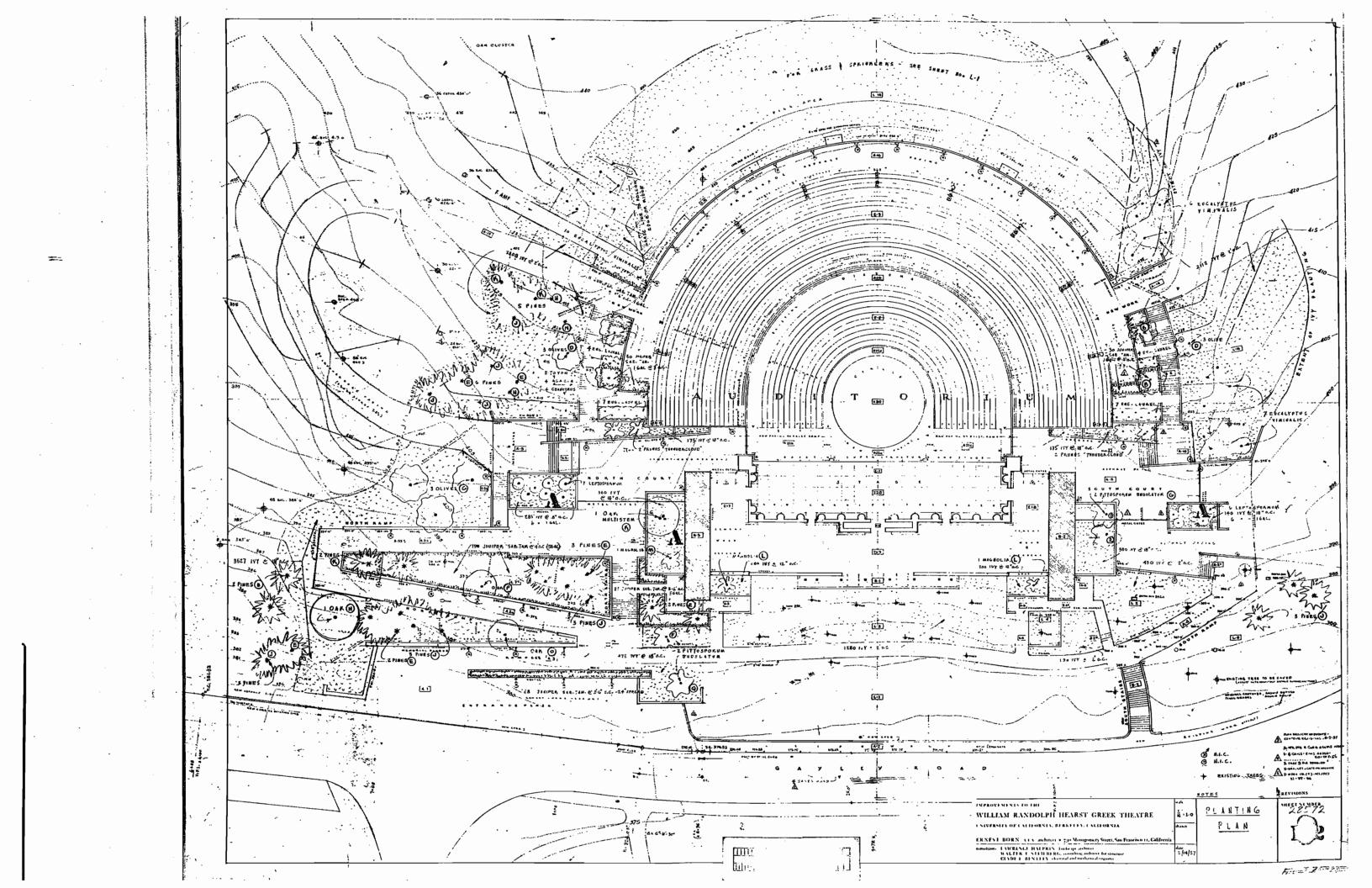


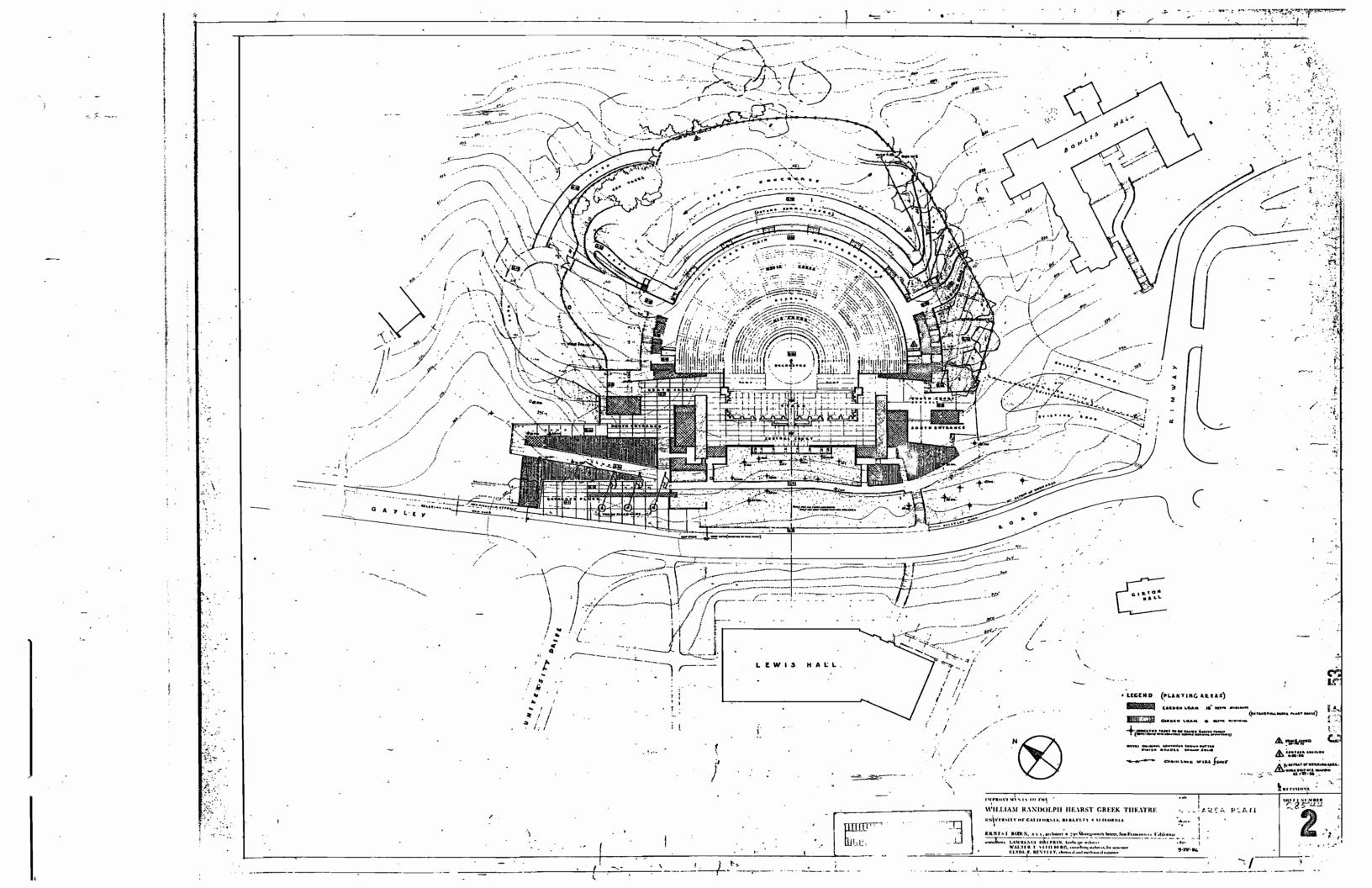


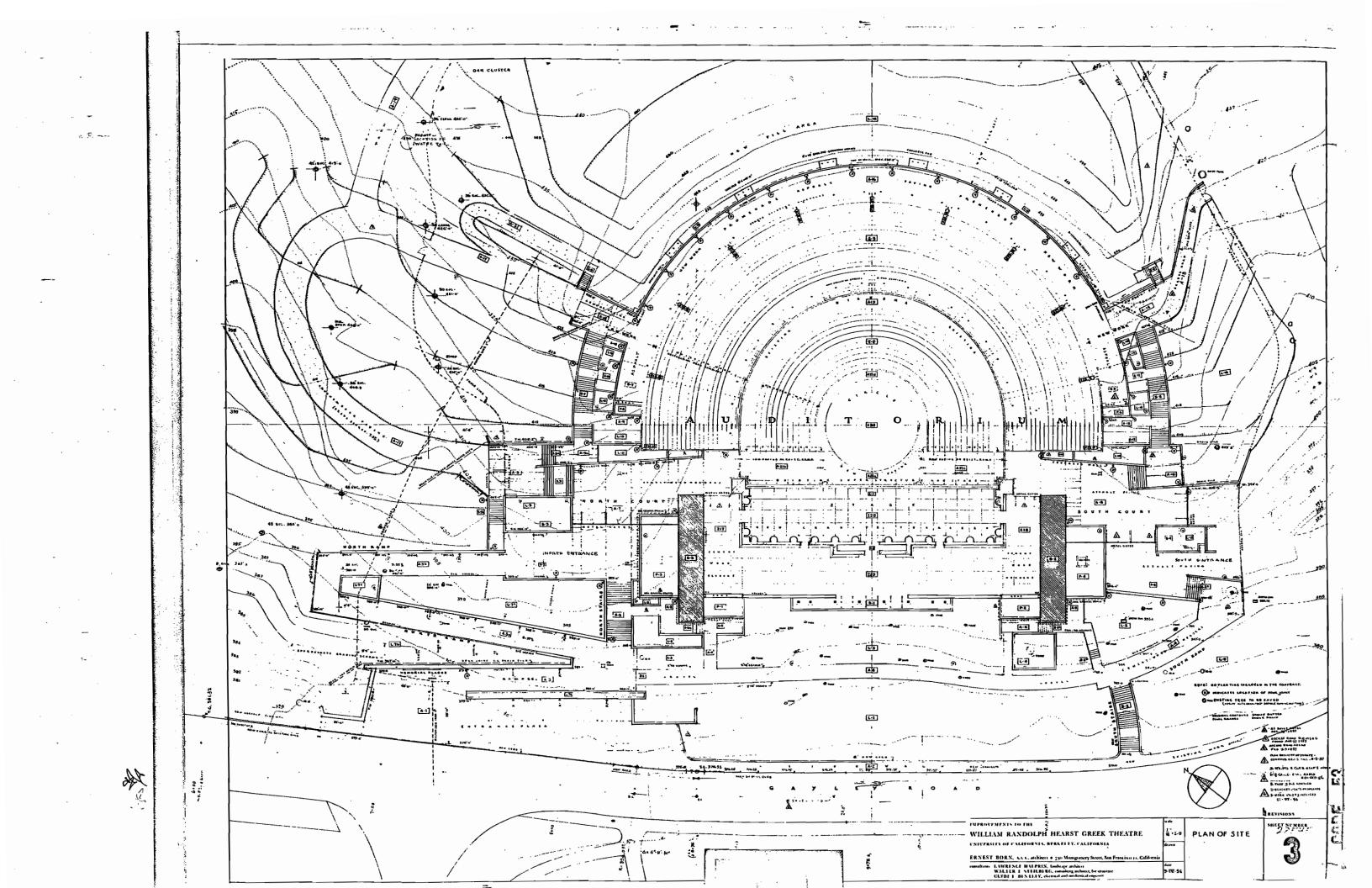


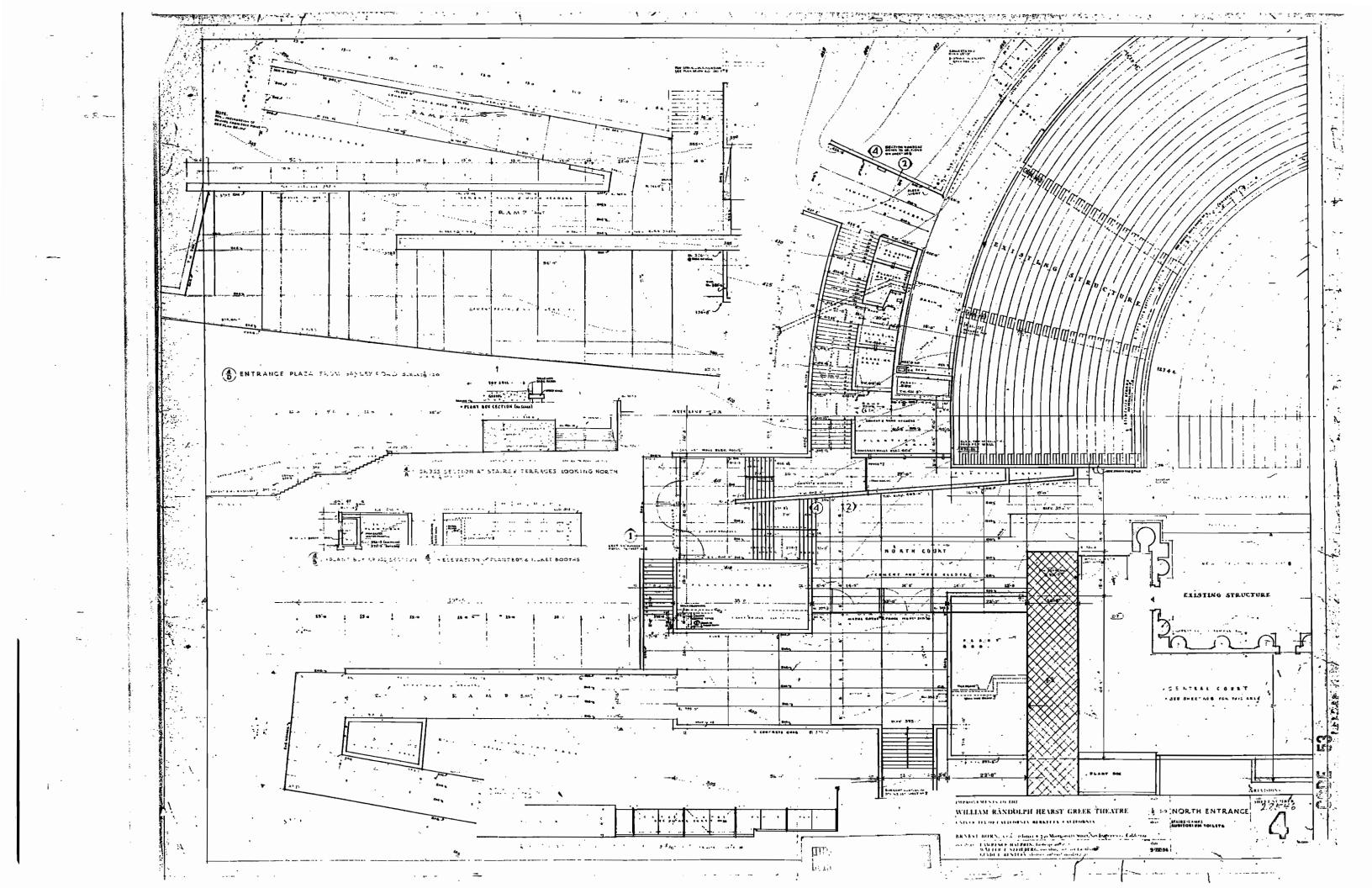
e. 1956 Drawings

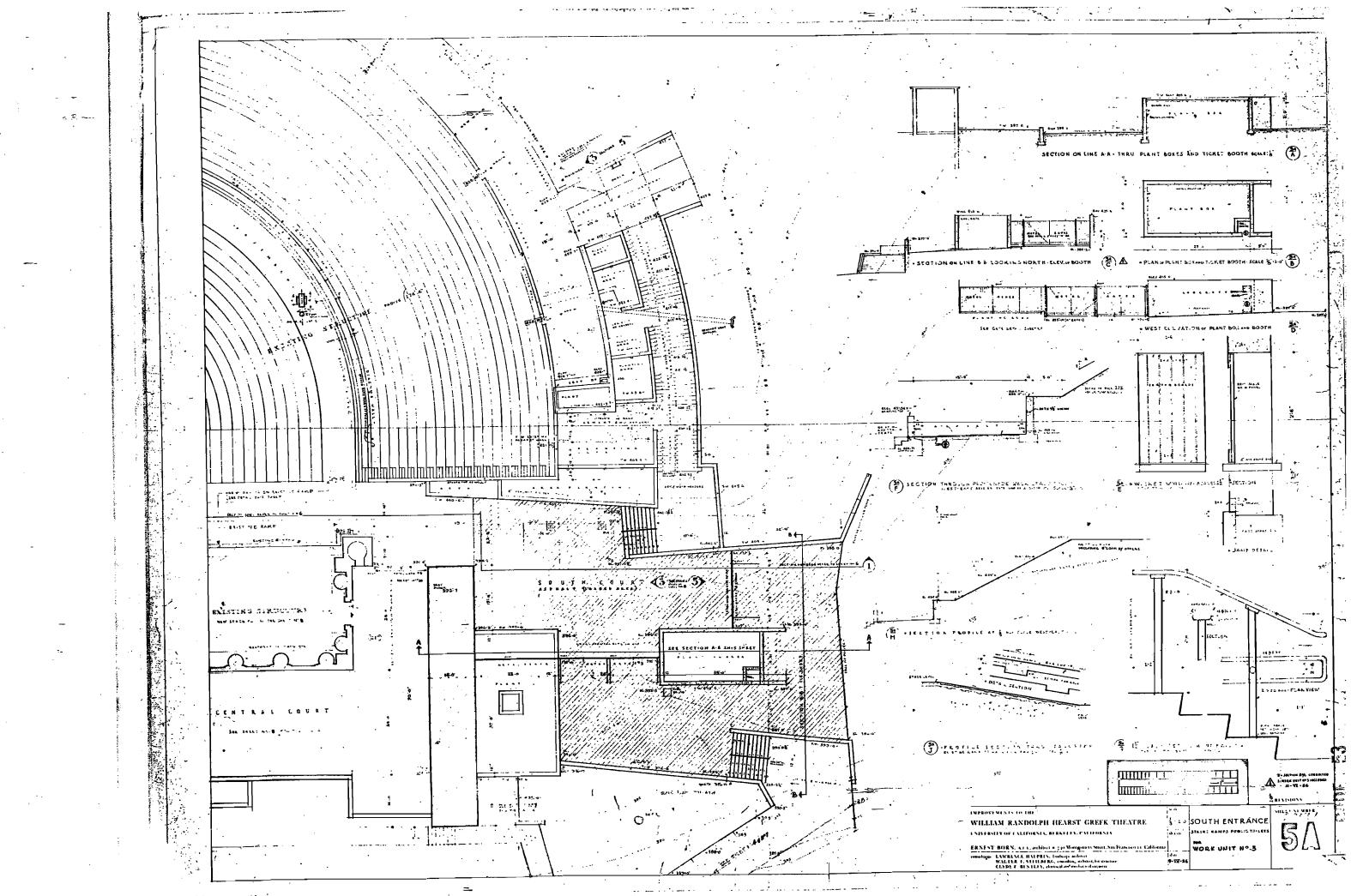


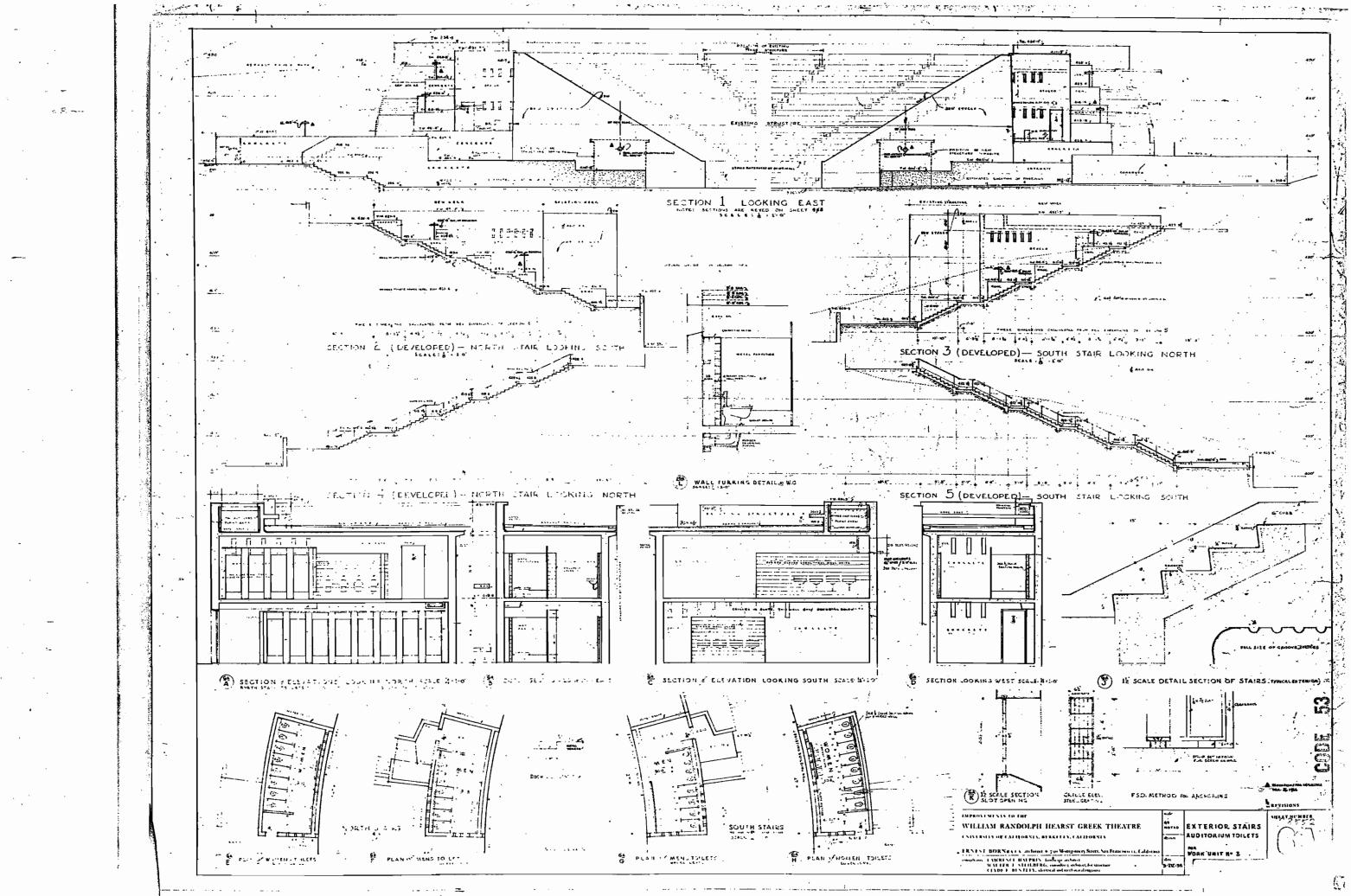


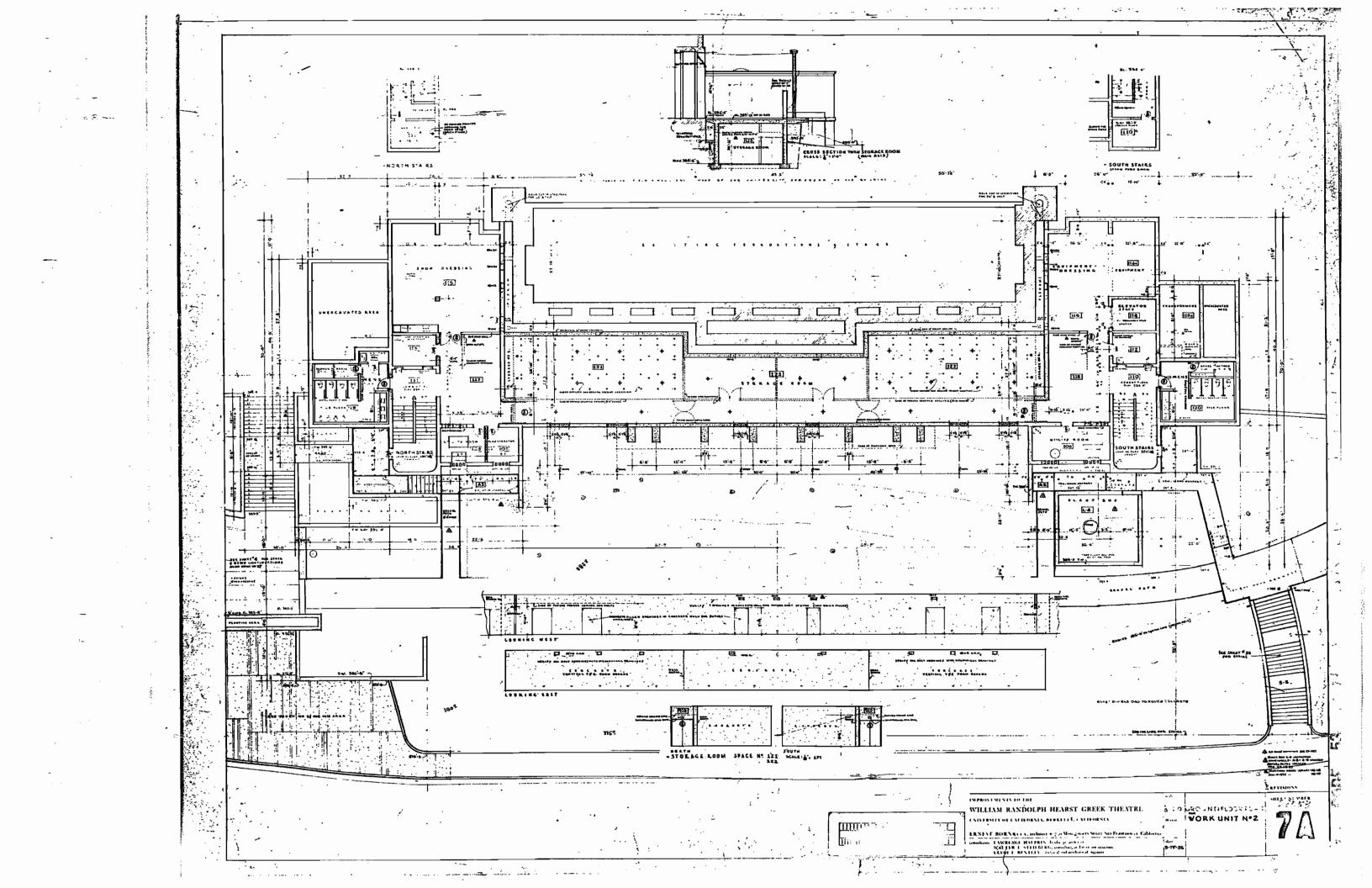


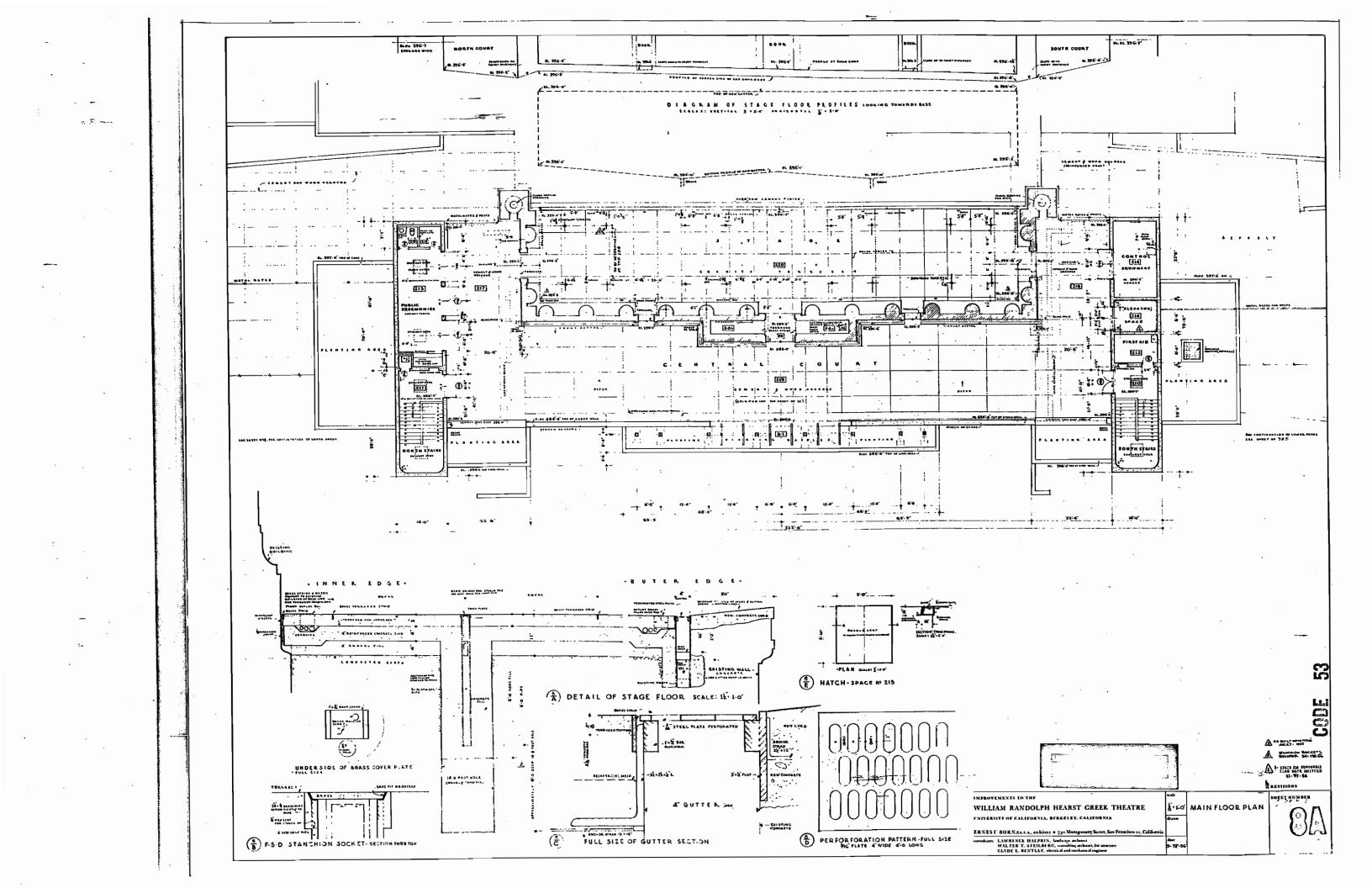


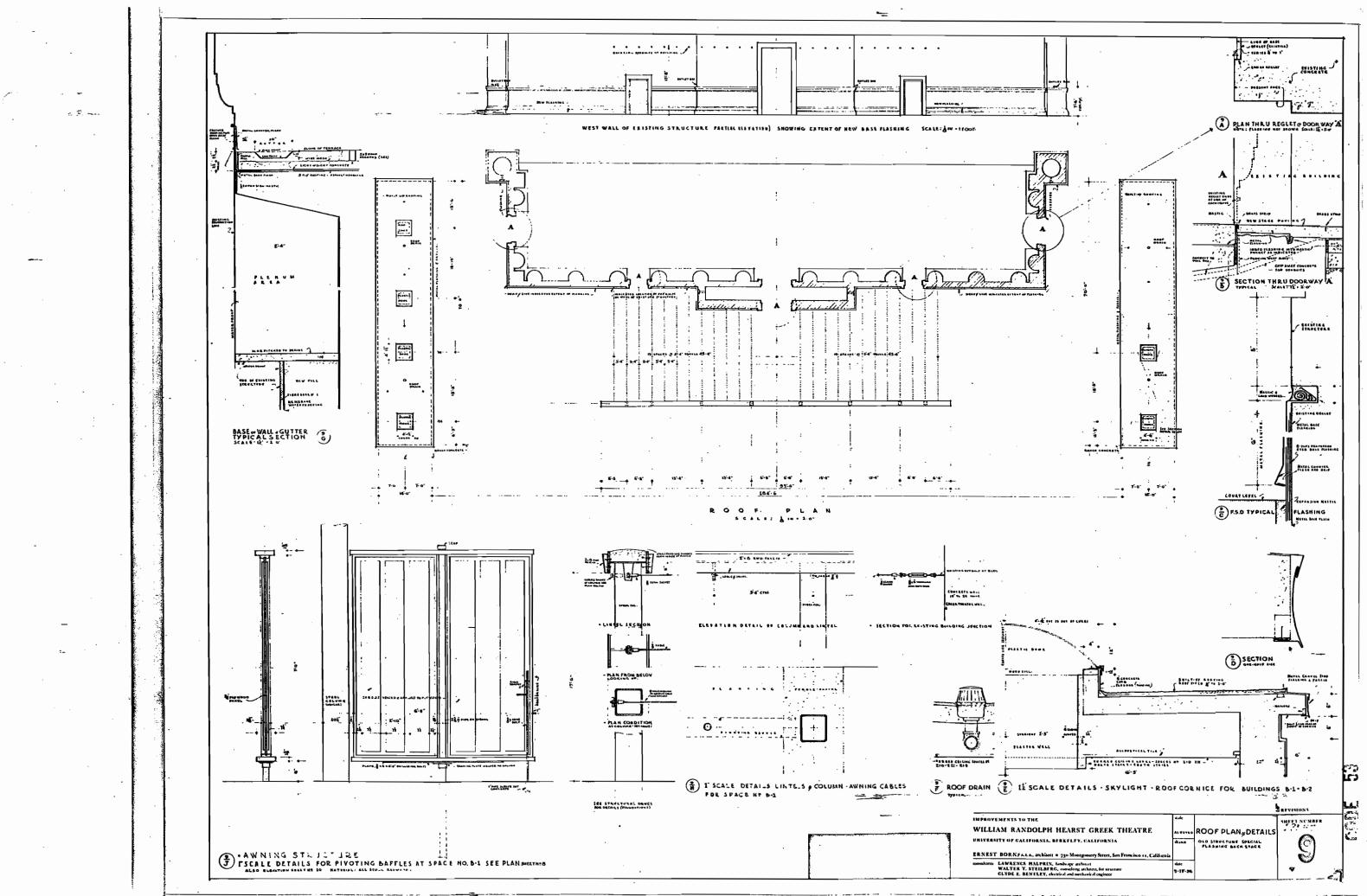


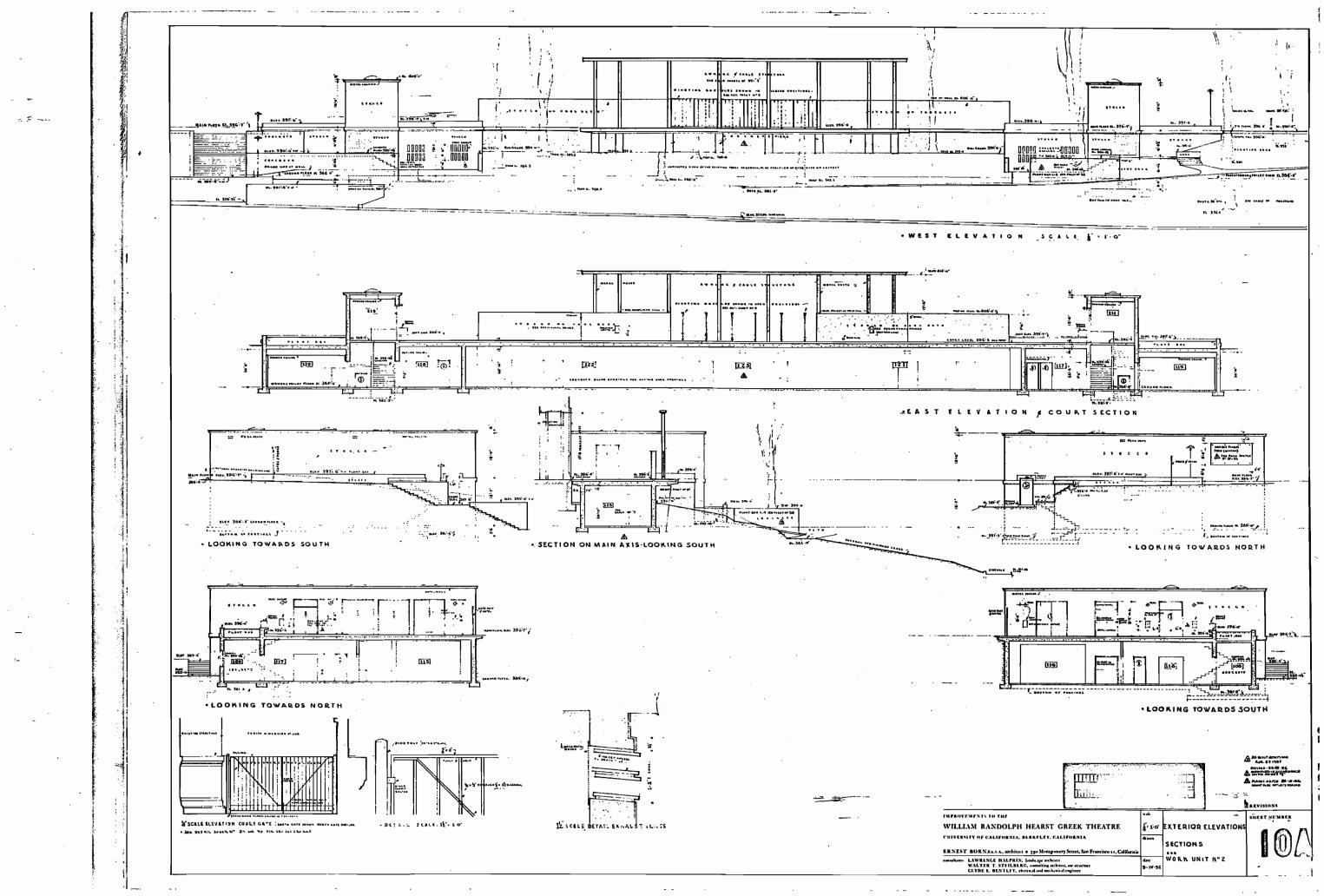


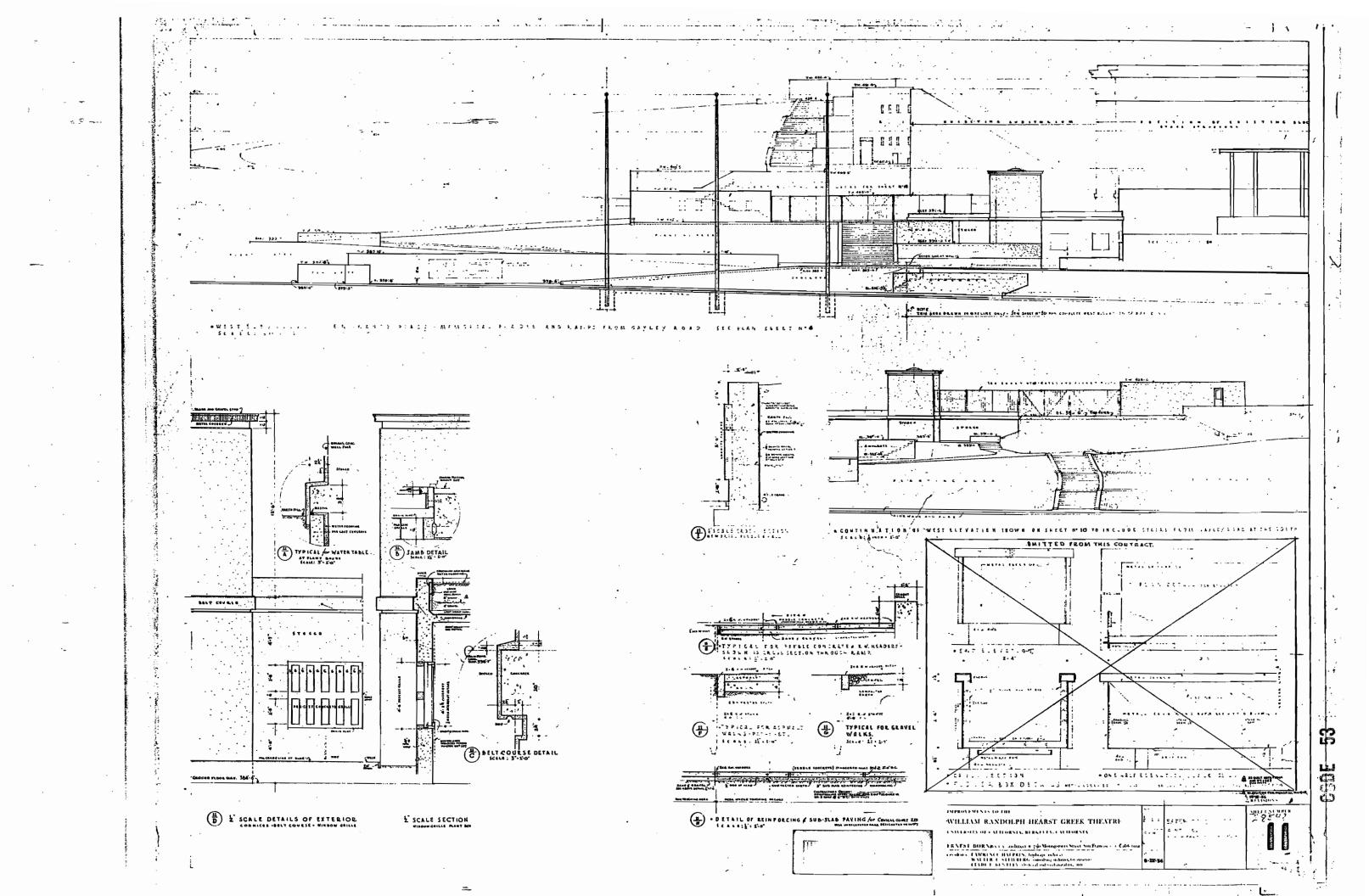


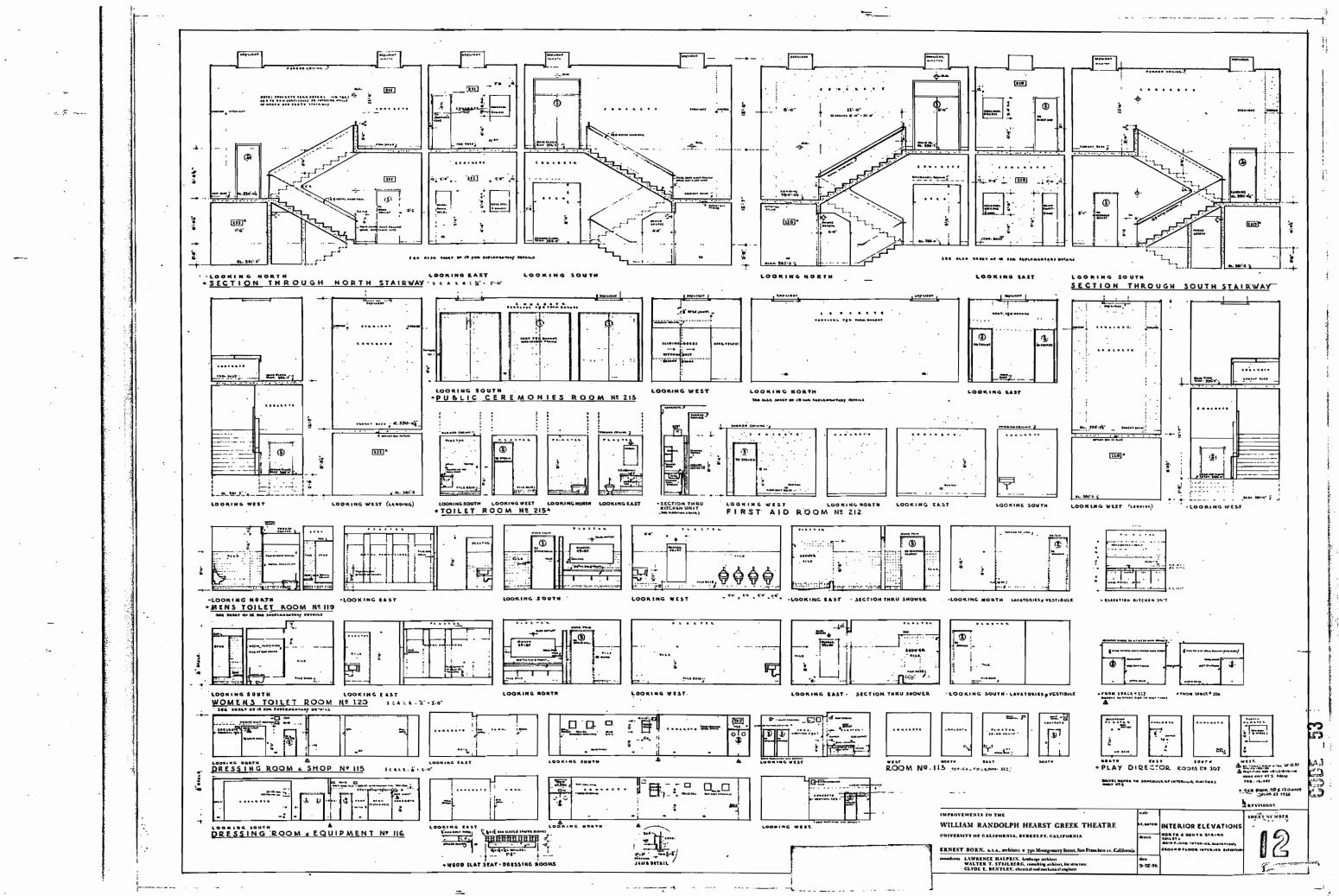


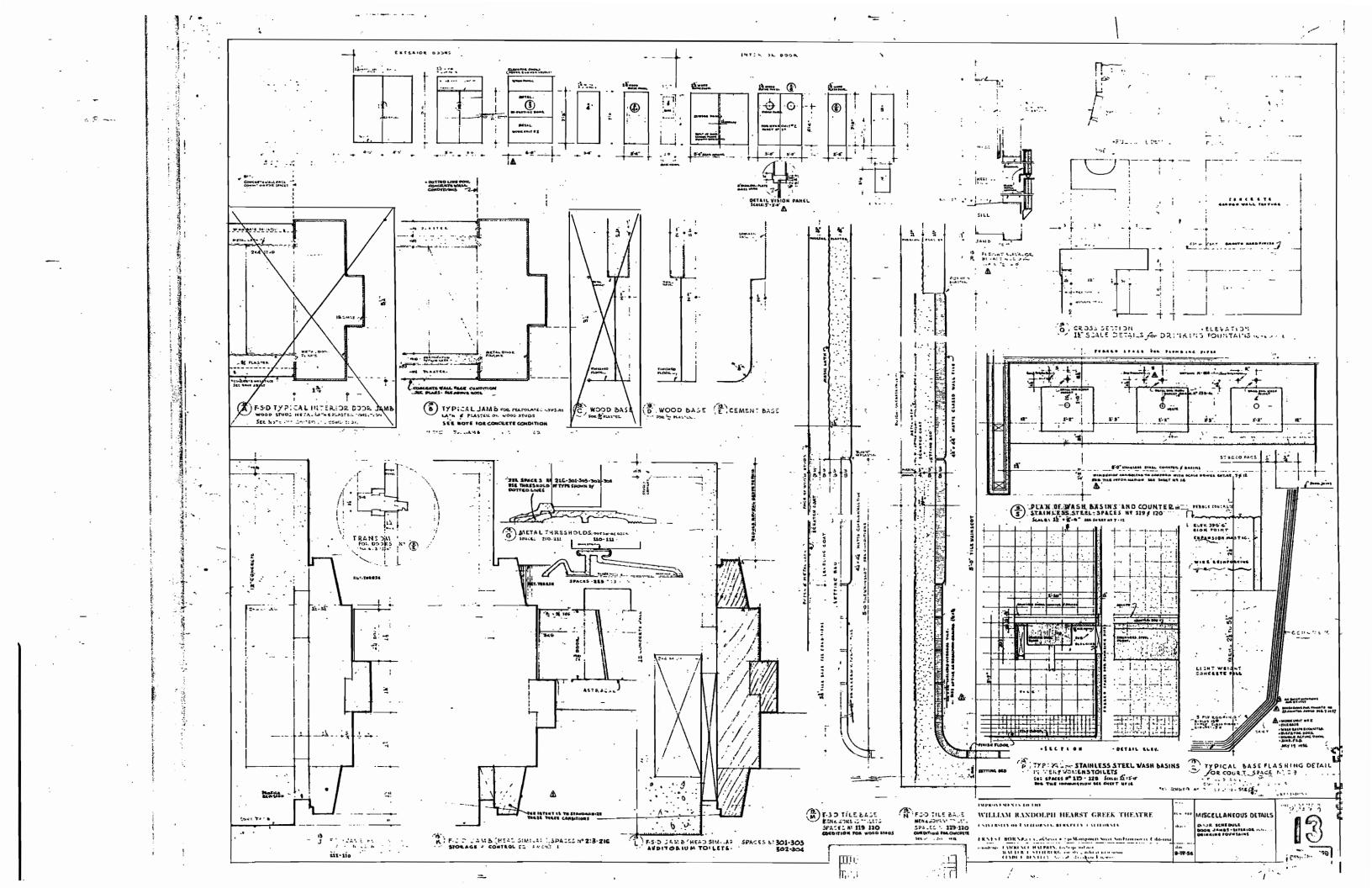


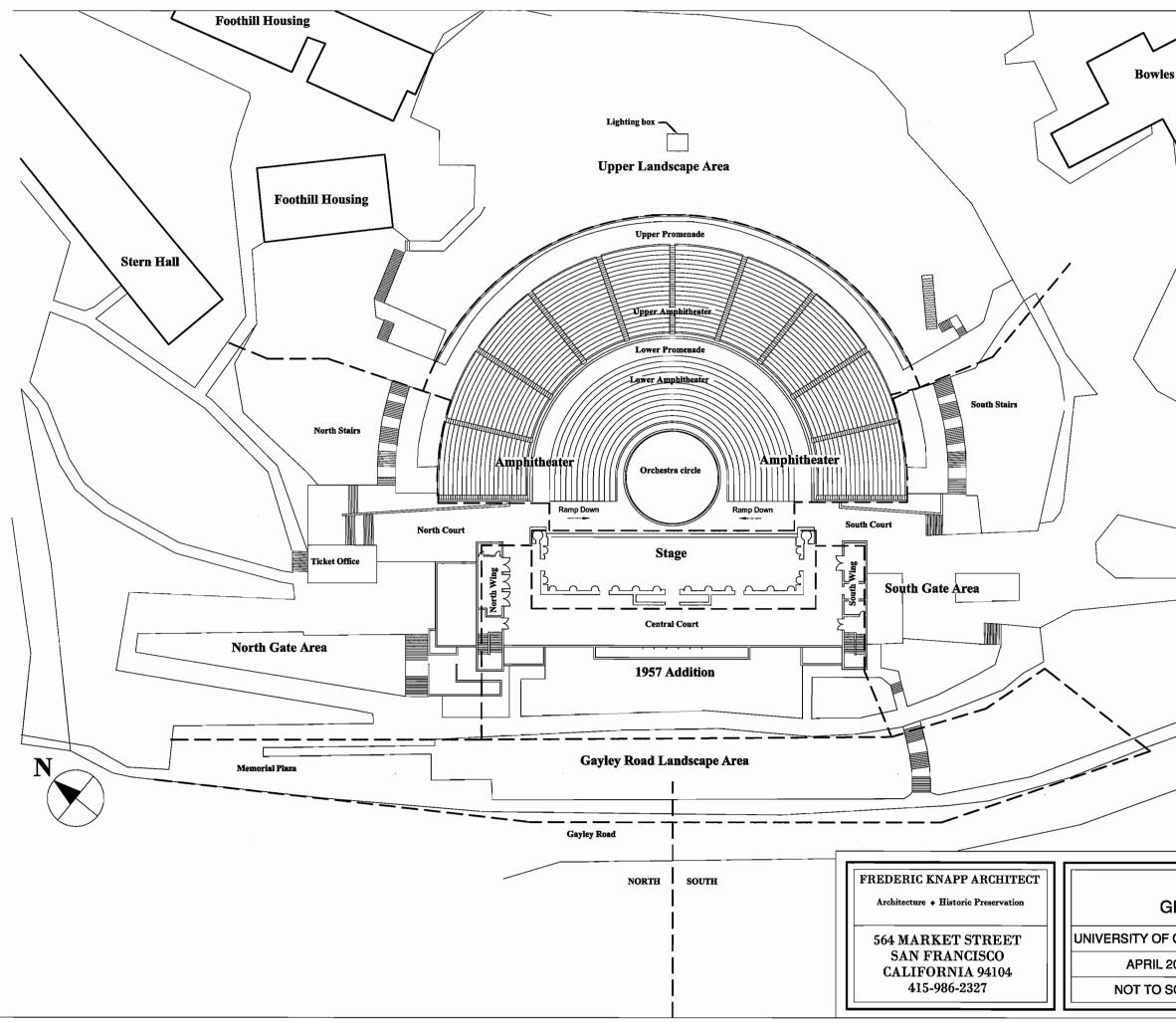




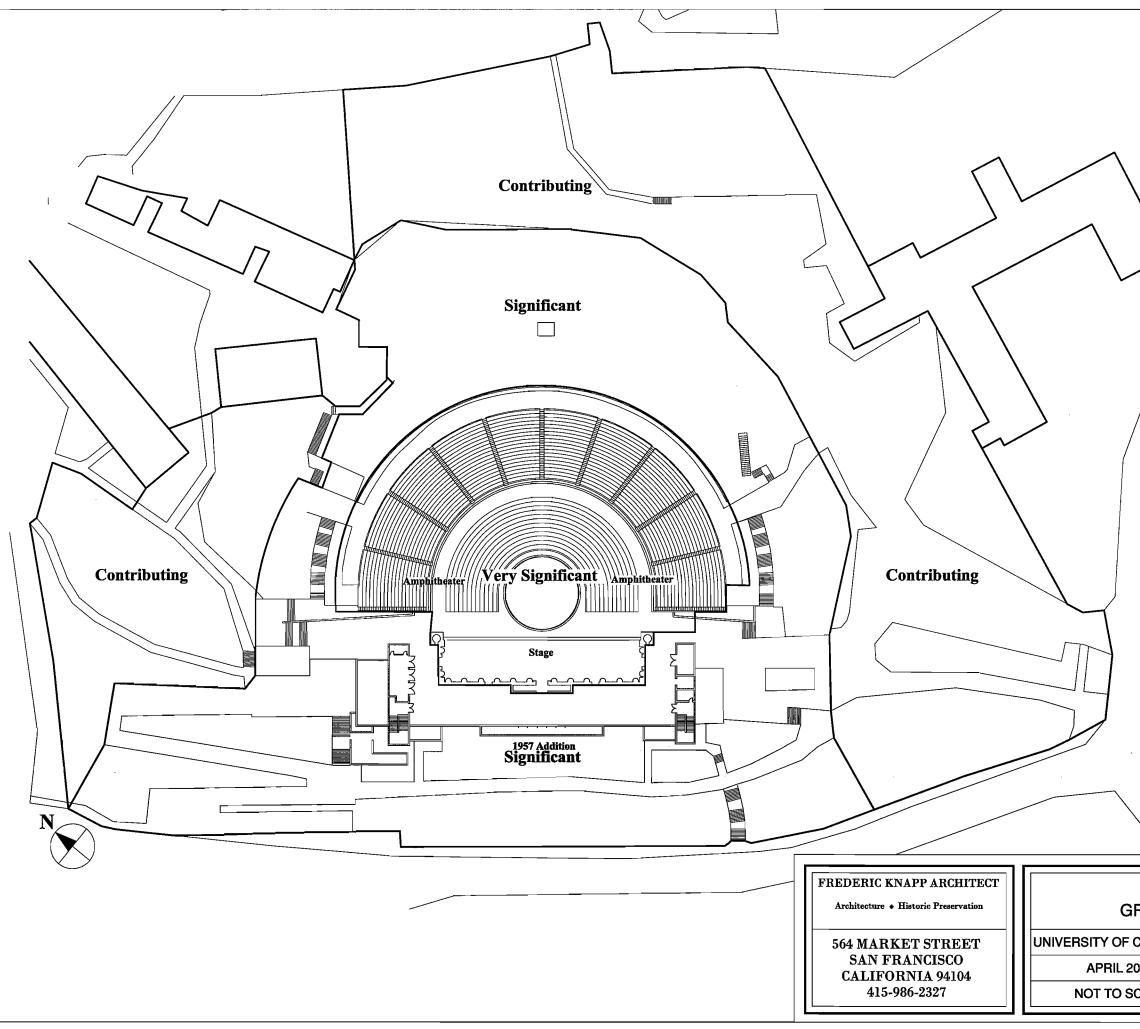




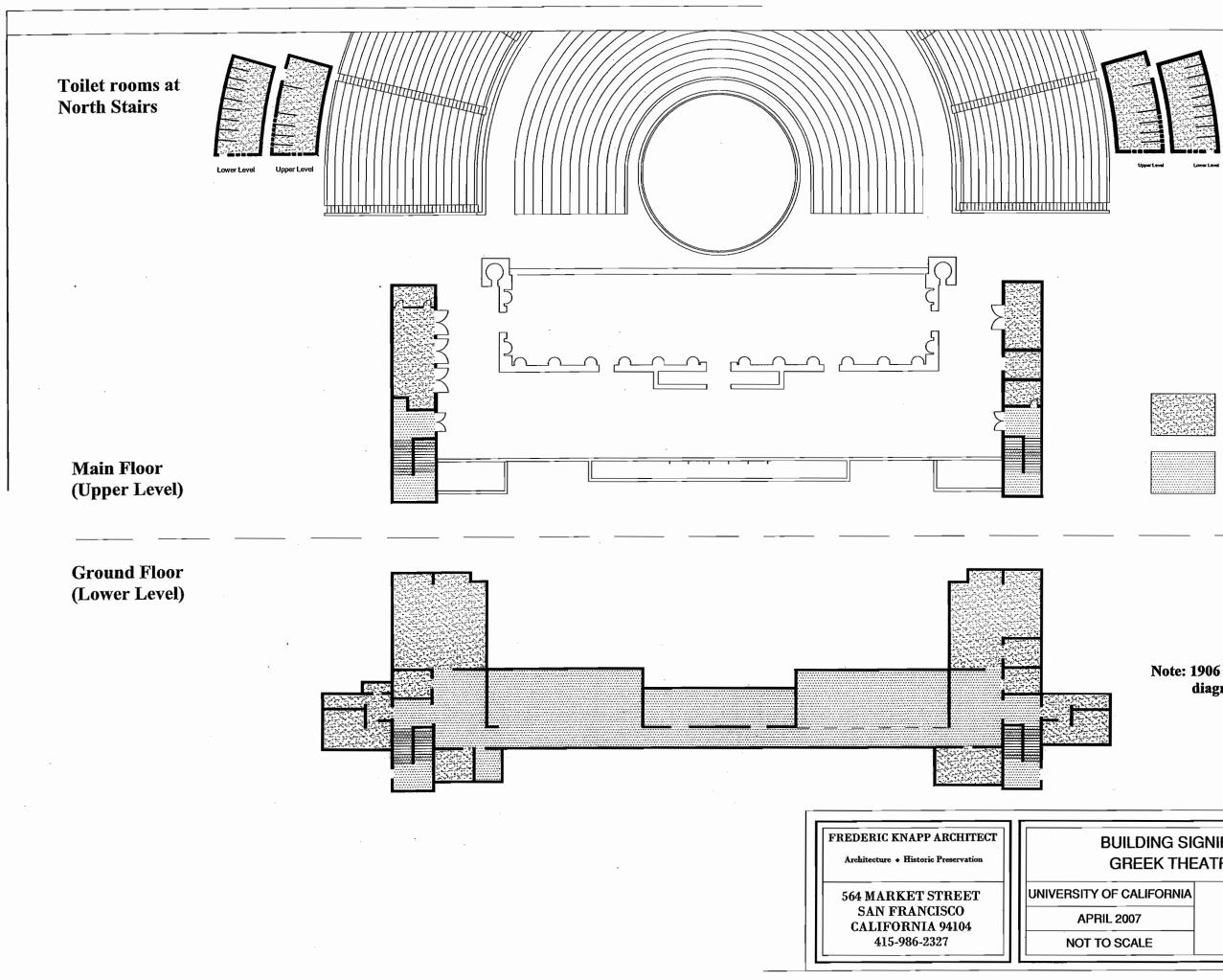




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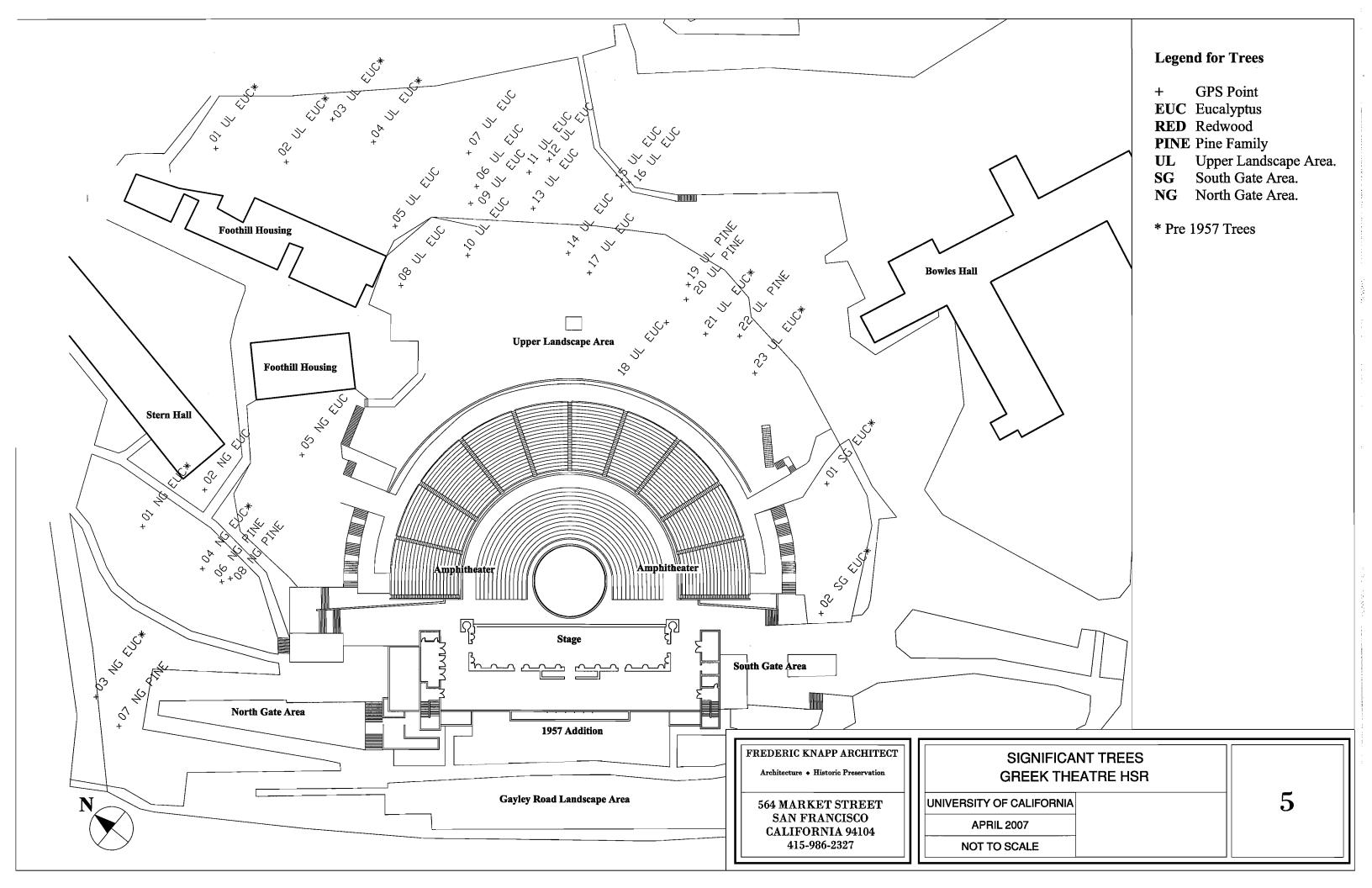
Toilet rooms at South Stairs

Contributing

Significant

Note: 1906 Theater is very significant. This diagram rates 1957 spaces.

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f. List of *Prohedria* or Chairs of Honor

Permanent Prohedria, Marble Seats in the Greek Theatre

(from south to north)

*Spaces between Chairs 2 & 3, between 3 & 4, and 16 & 17.

- 1. Guy Chaffee Erl- Regent 1902-1934
- 2. Joel Henry Hildebrand- by the Class of 1939
- 3. In Memory of the Class of 1943. "In Memory to the Members of the Class of 1943 who died in the service of their Country."
- 4. John George Conrad (1860-1924)
- 5. Edward Roland Sill (1841-1887)
- 6. Saxton T. Pope, MD '99
- 7. Herbert Charles Moffitt, dedicated 1927
- 8. Anne Bremer (1870-1923)
- 9. William Corey Jones-by the class of 1892 (first dean of the Law school)
- 10. President David Prescott Barrows- from his first Freshman class 1923
- 11. David Lesser Lezinsky
- 12. Eugene Woldemar Hilgard
- 13. Victor Paget
- 14. Joseph Le Conte
- 15. President Wheeler- from the class of 1903
- 16. Henry Morse Stevens- from the class of 1905, placed 1910
- 17. Phoebe Apperson Hearst 1909. Phoebe Hearst's marble chair was the first one installed.
- 18. Joseph Le Conte- by W.R. Davis 74. 1912
- 19. William Martin Searby 1835-1909
- 20. Frank Norris
- 21. Martin Kellogg
- 22. Jacob Bert Reinstein
- 23. William Dallam Armes
- 24. George Frederick Reinhardt
- 25. Alexis E Lange
- 26. Charles Mills Gayley
- 27. George Woodbury Bunnell (by his children)
- 28. Samuel Benedict Christy
- 29. Henry Durant- by Dr. Benjamin Pitman Wall, class of 1876
- 30. Willard Bradley Rising
- 31. Robert Gordon Sproul- by the class of 1936

g. Lawrence Halprin Biography

LAWRENCE HALPRIN

Over the course of his more than sixty-year career, Lawrence Halprin has practiced outside of the confines of that of a typical landscape architect; he has been a designer, an author, a filmmaker, and a workshop facilitator and has had a profound influence on landscape architecture through his environmental design projects and his explorations on the nature of creativity. By 1956, when he worked as a consultant to Ernest Born on Greek Theatre renovations, Halprin was rapidly building a reputation as one of the leading, post-war practitioners in California's modern style of landscape architecture. During the 1960s and 1970s, his writings and projects influenced both landscape architecture and urban planning, and he is acknowledged as one of the twentieth century's most influential landscape architects. Halprin has been recognized for his work in landscape architecture, urban planning, and environmental design through numerous awards including: Fellow of the American Society of Landscape Architects (1969); ALSA Medal, the highest honor that the American Society of Landscape Architects (ASLA) bestows on an individual (1978); Fellow of the American Academy of Arts and Sciences (1978); National Medal of Arts, the highest award given to an artist by the United States government (2002); and he was the first recipient of the ASLA Design Medal, that recognizes an exceptional body of work at a sustained level for a period of at least ten years (2003). He continues to maintain an office and practice in San Francisco.

Halprin's Background, Education, and Early Influences

Lawrence Halprin was born in Brooklyn, New York in 1916. After graduating from Brooklyn Polytechnic Preparatory Country Day School for Boys in 1933, Halprin traveled to Palestine and spent two years there where he helped with the founding of Kibbutz En Hashofeth and worked at a chemical factory and as a ranch hand on the kibbutz. Around 1935, he turned to New York and enrolled in Cornell University. After graduating from Cornell in 1939 with a B.S. in plant science, Halprin attended graduate school at the University of Wisconsin, Madison where he received a M.S. in horticulture in 1941 (Halprin 1986, p. 114).

While attending graduate school in Madison, Halprin came upon a book in the library that became the impetus for his career in landscape architecture. Reading Christopher Tunnard's, *Gardens in the Modern Landscape*, he was stuck by the significance of design in the environment (Freid 1986, p. 10). Tunnard was instrumental in introducing modernism into landscape architecture through this book, which he completed in 1938, and through his teaching at Harvard (in 1939, he emigrated from England to the United States to teach at Harvard). Tunnard became the principal spokesman during his tenure at Harvard for the necessity of conceiving a modern landscape commensurate in its conceptual and aesthetic authority to the best of modern architecture (Howlett 1993, p. 32). He believed that the right style for the twentieth century is no style at all, but a new conception of planning the human environment (Tunnard 1942, p. 162). Through his book and teaching positions, Tunnard influenced the designers including Halprin who took up the modernist mantel and shaped the post World War II American landscape. Modernism in the landscape, as practiced by Tunnard and others, was

generally characterized by a straightforward spatial organization, an empathy for the site (its views, topography, surroundings, plant materials), and a concern with functionalism (Beatty et al. 2005, pp. 15-16).

After reading Tunnard's book, Halprin decided on the spot to study design in architecture, with emphasis on landscape design (Halprin 1986, p. 115), and in 1942, he entered the Harvard University Graduate School of Design on a scholarship. (Harvard at this time was the focus of modern design theory in architecture and had architects Walter Gropius and Marcel Breuer, along with Tunnard, on faculty.) Halprin's studies at Harvard were cut short by World War II, and in December 1943, he left the university to enlist in the United States Navy. (He received a B.L.A. from Harvard in January 1944). He served aboard the *USS Morris* in the Pacific theater, and A[w]hile on offshore picket duty during the invasion of Okinawa, Halprin's ship [was] cut in half by a kamikaze plane (Halprin 1986, p. 115). Sent to San Francisco on survivor's leave, Halprin left the Navy in April 1945. He and his wife, Anna, settled in San Francisco, and he began work in the office of Thomas Church in 1945 (Halprin 1986, p. 116 and Forgey 1997, p. D-1).

Halprin worked for Thomas Church from 1945 until he opened his own office in 1949. Church is commonly credited with originating the new approach to garden design that developed after World War II in California and that became known as the California school of landscape design (Laurie 1993, p. 166). Some of the key characteristics of landscapes designed in this "California style" are a small size or compact form, direct indoor-outdoor connections, a predominant use of hard surfaces next to the house (creating an extension into the garden of the living space of the house), and a consideration of the California climate (i.e. provision of shade). "It was an artistic, functional, and social composition, every part of it carefully considered within the context of climate, landscape, and lifestyle. As such, it was a reflection of time, place, and people" (Laurie 1993, p. 168).

In addition to his impact on design through his projects and writings, Church's office served as the initial professional experience and a training ground for Aa younger set of landscape architects (Laurie 1993, p. 178) including Robert Royston, Douglas Baylis, Theordore Osmundson, and Lawrence Halprin. In discussing the importance of his time in Church's office, Halprin has noted that Church "encouraged him to experiment with plants and color and to think of gardens not simply as private spaces but as settings for human activity. Halprin would subsequently apply that insight to the design of everything from public parks to plazas to his own back yard (Dillion 1998, p. 32). Halprin also noted that Church's practice of sending him into the field "to learn construction" contributed to his understanding of the integration of architecture with the landscape (Dillion 1998, p. 32).

Halprin's Early Practice and Projects in the Bay Area (1940s-50s)

In September 1949, Halprin opened his own landscape architecture firm in San Francisco (Halprin 1985, p.116). His location in the Bay Area put Halprin in the middle of the Arevived

postwar profession of landscape architecture (Walker 1993, p. 251). Ambitious young designers from all over the United States flocked to the Bay Area, in particular, to see the gardens publicized in *Sunset* and *House Beautiful* magazines, to work with Church or his followers . . (Walker 1993, p. 251). As with other landscape architects working in postwar California, Halprin's work during this early part of his career focused on residential commissions and the design of gardens. The garden was the medium through which new concepts were expressed; it reflected aesthetic developments in art and architecture and a new social order (Laurie 1993, p. 166), or, in other words, the garden in California was one of the first and most visible expressions of what modernism could mean in terms of landscape design.

In his early garden designs, Halprin worked with leading modernist architects on projects that exemplified the blending of modernist ideas for house and garden with the climate and lifestyle of northern California. In these early garden design projects, he began to develop a vocabulary that reflected his concern for the "relationship and integration between elements (Halprin 1986, p. 116) – the integration of the natural and man-made landscape elements and the integration of the landscape and architecture. This concern would be reflected in his collaboration with Ernest Born in the design of the circulation system and selection of the plant palette for the Greek Theatre.

It was also during this period that Halprin visited several places in California Phoenix Lake, Big Sur, and the Sierra mountains that would have a lifelong influence on his work. He first visited Phoenix Lake, in Marin County, in 1949, and throughout his career, Halprin would spend [m]any hours hiking, sketching, and observing nature though its varying moods and seasonal changes (Halprin 1986, p. 116) as reflected through the landscape of this particular place. It was during his 1950 visit to Big Sur, located on the California coast about 150 miles south of San Francisco, that he became Afascinated with the rugged, mountainous landscape and its interface with the ocean (Halprin 1986, p. 117); his use of water, founded on his observations of this interface, would become a central theme in his design for public spaces. In 1956, he began spending summers hiking, sketching, and studying in the mountains of the High Sierra, and these experiences had a profound impact on Halprin's understanding and interpretation of the ecological processes and how form arises in nature (Halprin 1986, p. 120). The influence of the California Sierras and coastline are readily evident in what became a reoccurring theme of his public designs his challenging abstractions of processes of nature (Rainey 1993, p. 204).

Garden projects undertaken before his work on the Greek Theatre in 1957 included the following:

- The Schuman Garden in Woodside, California done in collaboration with architects Wurster, Bernardi & Emmons (completed in 1950);
- The Caygill Garden in Orinda (completed in 1951);

- The Esherick Garden (completed in 1952), the first of his collaborations with architect Joseph Esherick, in which the two designers explored the integrations of houses and gardens as works of environmental design."
- The Simon Roof Garden in San Francisco (completed in 1952), the first of his garden designs to be published internationally).
- The Woerner Garden project in Kentfield, with architect John Fink (completed in 1952). The house and garden were sited to provide a view of the 2,571-foot-high Mount Tamalpais and Halprin strived to provide a design where the designed and natural landscapes overlapped so that the edges of the designed landscape were Ainterwoven with the surrounding native chaparral."
- The Kaufman Garden, in San Rafael (completed in 1954). This site was steeply sloped, and Halprin integrated the garden and swimming pool into the natural contours of the hillside; the house was sited to take advantage of borrowed scenery of the mountains.
- The Greenwood Common in Berkeley as well as individual designs for the Ackerman, Baer, Maenchen, Schaff, and Wurster gardens (begun in 1953, completed in 1958). Architect William Wurster had purchased this two and a half acre site and subdivided it into twelve lots around a shared open space or common. The plan allowed all residents to enjoy a view of San Francisco and the Golden Gate Bridge and would later influence Halprin's approach to The Sea Ranch by clustering houses around a shared common space.
- The Bissinger Garden in Kentfield with architect William Wurster (completed in 1955; received the AIA Award of Merit in 1957) (Halprin 1986, pp.116-19 and Woodbridge 1988, pp. 171-174).

Halprin's interests and ambitions were not limited to the dimensions of a residential garden, and he "hoped to apply their lessons to the larger world of cities and regions (Halprin 1986, p. 7). During the early 1950s, he accepted a number of commissions related to institutional landscapes, including the Marin General Hospital, his first commission to design a public garden space (Halprin 1986, p. 117) and the design of the grounds for five United Mine Worker's Hospitals (located in Kentucky Virginia) in a project cosponsored by the United Miner Worker's union and a federal planning grant (begun in 1952 and completed in 1954).

In 1953, Halprin began work with architects Vernon DeMars and Donald Hardison on the site design for the multi-unit residential complex Easter Hill Village in Richmond. The design team worked with the steep existing topography of the site to develop a series of terraces where the housing units, circulation system, and public and private outdoor spaces were built. One of the more striking features of the design was the use of approximately 2,400 boulders on the site (left

Francisco with architects Wurster, Bernardi & Emmons (begun in 1962, completed in 1968);2 St. Francis Square, a multi-family housing project sponsored by the International Longshoreman's Union and the San Francisco Redevelopment Agency (1963); the Gould Garden in Berkeley (1966); Embarcadero Plaza and Fountain, now called Justin Herman Plaza (1972); work on the redesign of Market Street (completed in 1970); work on the master plan for the Bay Area Regional Transit (BART) system; the Panhandle Freeway Plan and Report (1963); the San Francisco Freeway Report, an examination of the nature of urban freeways (1964); Woodlake Apartments in San Mateo (1964); Northpoint Apartments in San Francisco (1967); the Bank of America Headquarters in San Francisco (1972); the Jewish Home for the Aged in San Francisco (1970); Lake Merritt Channel Park in Oakland (1972); Levi's Plaza in San Francisco (1982); and the Raymer Garden and Guest House in Atherton, this was the first private garden commission Halprin had done since 1964 (1984). Recent projects have included: the redesign of a new approach to Yosemite Falls in Yosemite National Park in the California Sierra Mountains (2005); the master plan for the new Lucas Film Campus a the Presidio of San Francisco (2006); and the renovations of the Rhoda Goldman Concert Meadow at Stern Grove Park in San Francisco (2005).

A sample of projects he has undertaken outside of the Bay Area include: the Hebrew University, Givat Ram Campus (1960); a panelist for the first AWhite House Conference on Natural Beauty (1965); the Nicollet Avenue Mall in Minneapolis, one of the first conversions of a downtown street into a pedestrian and transit mall, a key urban renewal concept during the 1960s and 1970s (1967); the Portland Open-Space Sequence that resulted in a series of three one-acre plazas linked by walkways (Pettygrove Park (1966), Lovejoy Plaza (1966), and Auditorium Forecourt (Ira Keller Fountain) (1970); the Portland Transit Mall (1978); the Master Plan for Hadassah-Hebrew University Medical Center in Kein Karem, Israel (started in 1966); the California State Fairgrounds Master Plan in Sacramento (1968); the Ida Crown Plaza at the Israel National Museum in Jerusalem (1967); the Nasher Garden in Dallas, a series of outdoor rooms including one for displaying the renowned Nasher art collection (1967); the Fort Worth Central Business District Master Plan (1980); the Everett (Washington) Community Plan and Report (1973); a member of the Jerusalem Committee, Aan international, interfaith group engaged in ongoing dialog with the mayor on religious, sociological, cultural, planning, and architectural issues facing the city (1969-1986); the Seattle Freeway Park (1976); and the Walter and Elise Haas Promenade, a one and a half mile stone walk overlooking the Old City of Jerusalem. In 1974, Halprin was selected by the FDR Memorial Commission to design the FDR Memorial in Washington, D.C. Halprin oversaw the project through rounds of design approvals and a decadelong hold on the project. The memorial, a progression through a series of outdoor rooms dedicated to each FDR's four terms, was dedicated in 1997. Halprin considers this project to be

Twenty-Five Year Award for buildings that Adistinguish themselves by their ability to stand to the test of time (1991).

² The project received the AIA Award of Merit (1966) and the Governor's Design Award of Exceptional Distinction, State of California, Rehabilitation (1966) (Halprin 1986, p. 126).

"the apotheosis of all that I have done" (Forgey 1997, p. D-1).

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over from World War II quarrying) as key elements in the landscape design; Halprin was able to see the aesthetic possibilities of these features and developed a plan that used the boulders as focal features and denote spatial organization of the site. (Over the years, most people came to assume that the locations of the boulders was natural rather than the result of a carefully thought out and executed plan.) Work on Easter Hill was completed in the fall of 1955, and the project immediately attracted attention within the design community. It received *House and Home's* ASpecial Award for Land Planning in 1956 (Halprin 1986, p. 119) and was listed among the Aoutstanding buildings which reveal important characteristics and trends of U.S. architecture during the past 10 years for an exhibition organized by the American Institute of Architects to celebrate its 100th anniversary (*Life Magazine* 1957, p. 59, p. 68).

Halprin began work at both the University of California's Berkeley and Davis campuses during this period. During the early 1950s, Halprin working with the campus architect, Robert Evans, developed a master plan and report for the Davis campus (Halprin 1986, p. 118). In 1953, Halprin began work on the Landscape Master Plan for the University of California, Berkeley and submitted a preliminary report in 1954 (Beatty et al. 2004, p. 28). In his plan, Halprin was concerned with "maintaining open space amidst a huge building program" (Halprin 1986, p. 119). He emphasized a pedestrian campus and recommended returning much of the campus to native planting (and advocated excluding lawns) (Beatty et al., p. 28;) (Halprin's plan was "officially recorded" but never adopted.) In 1956-57, Halprin worked as a consultant to architect Ernest Born in developing the new circulation system and planting design for renovations to the Hearst Greek Theatre. Halprin had developed an awareness of the Greek Theatre site as part of his work on the landscape master plan. In his master plan, Halprin sunk Gayley Road near the theater in an effort to re-connect all campus land from west to east" (Beatty et al. 2004, p. 28; Note: will read Halprin's 1954 report at UCB Envirn. Design Library and use this as citation). Other projects on campus included his work with architects Vernon Demars and Donald Reay where he designed the grounds for the Student Union and Sproul Plaza, Athe monumental entranceway to the university (Halprin 1986, p. 119) and the design for the Alumni House with architect Clarence Mayhew. Halprin's official association with the university continued through 1960 (Halprin 1986, p. 119).

Halprin's Bay Area Practice After the 1950s (Don't know if this is needed)

Halprin's practice continued to expand through the 1950s as he took on a greater variety and scale of projects that were widely chronicled and that established his international reputation. Halprin's office remains in San Francisco, and he continues to practice in 2007. Throughout his career, he continued to undertake a wide range of projects in the Bay Area, including: the Redwood Building, Stanford University (1958); the Stanford Medical Complex in Palo Alto (1958); the McIntyre Garden in Hillsborough (1961); the Lehman Garden in Kentfield (1961); the Sea Ranch Master Plan (begun in 1962, completed in 1967);1 Ghiradelli Square in San

¹ The project received the Governor's Award, Design of Exceptional Distinction, State of California, Planed Communities (1966); the AIA Award of Honor for the Sea Ranch Swim and Tennis Club (1968); and the AIA's

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h. Phoebe Hearst Biography



Phoebe Apperson Hearst (1842-1919) Phoebe Apperson Hearst was born 1842 in Franklin County, Missouri. Before marrying 41 year old George Hearst at the age of 19, Miss Apperson worked as a teacher in area schools.

Soon after their marriage the couple moved to San Francisco where Phoebe gave birth to their only child, William Randolph in 1863. In 1873 Phoebe took young William on a grand tour of Europe where the two spent more than a year visiting castles, museums and various cultural centers. This trip would prove to be a pivotal inspiration for William's later endeavor constructing Hearst Castle.

When George Hearst was elected to the United States senate in 1887, the couple relocated to Washington D.C. where Phoebe entertained many guests and statesman. Four years later, Phoebe became the sole heir to her husband's valuable estate upon his death in 1891.

After George's death, Phoebe again returned to California and renewed construction on a palatial residence in Pleasanton, California that had been started by her son a few years earlier. For the project, Mrs. Hearst commissioned Julia Morgan as architect. She would later become the architect behind Hearst Castle.

Throughout her life Phoebe was dedicated to education and, when her financial status allowed her to, she became a generous philanthropist of various educational endeavors. As early as 1891, she made a large gift to the University of California, Berkeley in order to endow several scholarships for women students. She also funded an international architectural competition for a master plan for the University of California, Berkeley, endowed a scholarship program for students at the University and presented the campus with the gift of the Hearst Memorial Mining Building and Hearst Hall.

Later she financed a school for the training of kindergarten teachers and in 1887 she founded the first free kindergarten in the United States. She eventually opened up six

more of these free schools supported by her time and money. In 1897, she founded the National Congress of Mothers, a forerunner of the National Council of Parents and Teachers, better known today as the PTA.

In 1897 she became the first woman Regent of the University of California, serving actively on the board from 1897 to 1919.

Phoebe Apperson Hearst died in 1919, a victim of the worldwide influenza epidemic of 1918-1919.

Biography Courtesy of Hearst Castle®/California State Parks

i. William Randolph Hearst Biography



William Randolph Hearst (1863-1951) William Randolph Hearst, the man behind Hearst Castle, is an important figure from the twentieth century whose influence extended to publishing, politics, Hollywood, the art world and everyday American life. His power and vision allowed him to pursue one of the most ambitious architectural endeavors in American history, the result of which can be seen in magnificent grounds and structures of Hearst Castle.

Mr. Hearst was born on April 29, 1863, in San Francisco, California, as the only child of George and Phoebe Hearst. His father being a wealthy man as a result of various mining interests, young William had the opportunity to see and experience the world as few do.

At the age of ten Hearst and his mother toured Europe, gathering ideas and inspiration from the grandeur and scale of castles, art and history. This experience fueled Hearst's life long aspiration to recreate this majesty for his own enjoyment.

Back in the United States, Hearst was enrolled in St. Paul's Preparatory School in Concord, New Hampshire at the age of 16. Mr. Hearst continued his education at Harvard where he showed the first signs of becoming a future publishing tycoon. At Harvard, he excelled in journalism and acted as the business manager of the *Harvard Lampoon*. His election to the "Hasty Pudding" theatrical group revealed his talent and interest in drama.

During his time at Harvard, his father George acquired the *San Francisco Examiner* as payment for a gambling debt. Soon after, the young Hearst pleaded with his father to turn over the paper to his authority. In 1887 the older Hearst relented and relinquished control to his ambitious son. Shortly after, William Randolph Hearst purchased another newspaper, the *New York Journal* which would become the second in a long list of newspaper holdings that Hearst acquired in the next decade of his life. At his peak he owned over two dozen newspapers nationwide; in fact, nearly one in four Americans got their news from a Hearst paper.

In 1903, Mr. Hearst married Millicent Willson in New York City. The couple had five

sons together during their marriage: George, William Randolph Jr., John and twins Randolph and David.

Their honeymoon drive across the European continent inspired Mr. Hearst to launch his first magazine, *Motor*. *Motor* became the foundation for another publishing endeavor that is currently known as *Hearst Magazines*.

Hearst's interest in politics led him to election to the United States House of Representatives as a Congressman from New York in 1902. After reelection in 1904, he unsuccessfully pursued the New York Governorship in 1906.

Following his short political career, Hearst continued his endeavors in publishing and communications. In the 1920's he started one of the first print-media companies to enter radio broadcasting and in the 1940's he was an early pioneer of television. Mr. Hearst was a major producer of movie newsreels with his company Hearst Metrotone News, and is widely credited with creating the comic strip syndication business. His King Features Syndicate today is the largest distributor of comics and text features in the world. In his career, William Hearst produced over 100 films including, *The Perils of Pauline, The Exploits of Elaine* and *The Mysteries of Myra*.

In addition to his successful business endeavors, Mr. Hearst amassed a vast and impressive art collection that included classical paintings, tapestries, religious textiles, oriental rugs, antiquities, sculptures, silver, furniture and antique ceilings. Much of this collection found its home at Hearst Castle and Hearst's various other properties, while the remainder filled warehouses on both the East and West Coasts. Like many of his contemporaries, Hearst voraciously collected art and compiled a museum quality collection.

Throughout his life, Hearst dreamed of building a dwelling similar to those he had seen on his European tour as a boy. Hearst Castle was to become the realization of this dream as he and architect Julia Morgan collaborated for 28 years to construct a castle worthy of those he saw in Europe. During construction Hearst used the Castle as his primary residence and it was here that he continually entertained the elite of Hollywood, politics and sports. Hearst left his San Simeon estate in 1947 to seek medical care unavailable in the remote location. While the Castle was never completely finished, it stands as the remarkable achievement of one man's dream.

William Randolph Hearst died on August 14, 1951, at the age of 88. He was interred in the Hearst family mausoleum at the Cypress Lawn Cemetery in Colma, California. All of his sons followed their father into the media business and his namesake, William Randolph, Jr., became a Pulitzer Prize-winning Hearst newspaper reporter. Today Mr. Hearst's grandson, George R. Hearst, Jr., is chairman of the board of The Hearst Corporation.

Biography Courtesy of Hearst Castle®/California State Parks

j. University Timeline

Timeline of the Hearst Architectural Competition

In 1898 and 1899, an ambitious international competition was held to determine a master plan for the buildings and setting of the University of California, Berkeley. Formerly an undistinguished land grant college, its campus had grown in a piecemeal and haphazard fashion over the previous thirty years. The competition was the idea of a recently hired instructor of mechanical drawing, the architect Bernard Maybeck. The generous patron who made the whole project possible was the mining and real estate heiress Phoebe Apperson Hearst, who would become the University's greatest early benefactor. The campaign proved to be one of the milestones of the turn-of-the-century City Beautiful movement.

April 16, 1860. College of California dedicates Berkeley campus site at Founder's Rock.

1865. Frederick Law Olmsted completes his plan for the College's proposed Berkeley campus, emphasizing an open space axis oriented towards the Golden Gate.

1873. The University of California moves from its temporary Oakland home (inherited from the College of California) to the Berkeley site. William Hammond Hall prepares a plan for the Berkeley campus. First permanent building (South Hall) completed.

1870s, 80s, 90s. A series of permanent and temporary buildings are constructed at Berkeley, designed by a number of architects in various styles and somewhat haphazardly sited around the campus grounds.

1894-95. Newly appointed UC Regent Jacob Reinstein and drawing instructor Bernard Maybeck begin to discuss ideas for improving the Berkeley campus.

1895. Phoebe Hearst offers to construct for the University a mining building as a memorial to her deceased husband, Senator George Hearst. Maybeck produces a sketch of a possible building, but suggests a plan is needed first to decide where it should be built on the campus.

1896. April, Regent Reinstein formally proposes a competition to produce a new plan to guide the physical development of the campus. October, Phoebe Hearst offers to fund the proposed competition, which becomes known as the Hearst International Architectural Competition.

1896-97. Reinstein and Maybeck promote the Competition across the country and around the world, distributing hundreds of copies of the prospectus.

July 1, 1898. The deadline for entries for the Competition. More than 100 submissions are received and judged at Antwerp, Belgium, by a jury of distinguished architects. Eleven finalists are selected and commissioned to produce more detailed studies of their plans.

August-September, 1899. Revised entries are received and displayed in San Francisco's recently completed Ferry Building. Phoebe Hearst presides over receptions and events, and thousands of local residents view the plans. The second round of judging takes place. A plan submitted by French architect Emile Bérnard is selected as the winner. Like most of the entries, Bernard's plan reflects then-popular Ecole de Beaux Arts views towards site planning and architecture. John Galen Howard's entry receives fourth place.

October, 1899. Benjamin Ide Wheeler arrives to become the University of California's new President. He will become the guiding administrative force behind the funding and implementation of the Hearst Plan and growth of the University.

1900. May 12. Phoebe Hearst turns the symbolic first shovelful of earth to break ground for the President's Mansion (designed by San Francisco architect Albert Pissis), now University House, the first campus building to be constructed according to the Hearst Plan. December 14. The Regents adopt Bernard's revised plan, but difficulties and differences between Benard, Hearst, and University officials have already made his separation from the project inevitable. An architect to implement the Plan is being sought; attention focuses on John Galen Howard.

1901. Phoebe Hearst selects Howard to design the Hearst Memorial Mining Building. December 21. Howard is formally appointed Supervising Architect for the University, a post he will hold until 1924.

1902. Construction begins on the Hearst Memorial Mining Building (completed in 1907).

Construction begins on the Hearst Greek Theater (completed in 1903)

1903. Construction begins on California Hall (completion in 1905). By this point Howard has reshaped the Benard design into a revised plan of his own, returning the orientation of the central axis towards the Golden Gate, as Olmsted envisioned it. The Department of Architecture is founded under Howard's leadership. It will become a School of Architecture in 1913. He will remain its head until 1927.

1904. Construction begins on the University Power House, to provide centralized power and heat for the growing campus.

1905. Construction begins on Golden Bear Lodge (now Senior Hall).

1906. Construction begins on Northgate Hall for Department of Architecture (to be expanded several times over the years). April. San Francisco Earthquake shakes Berkeley, delays construction, but does not cause major physical damage on the campus.

1907-11. First stages of Doe Memorial Library constructed. Expanded in 1914-18.

1908. Howard prepares a revision of the Hearst Plan.

1908-10. Sather Gate constructed.

1908-11. Boalt Hall (now Durant Hall) constructed.

1910-12. Agriculture Hall (now Wellman Hall) constructed.

1913-14. Sather Tower constructed.

1913-14. Drawing Building constructed.

1914. Howard produces another revision of the Hearst Plan.

1915-17. Wheeler Hall constructed.

1916-17. Hilgard Hall constructed. This is Howard's first permanent campus building in which less expensive concrete is planned and used for the exterior instead of granite.

1917. Gilman Hall constructed.

1919. Phoebe Hearst dies and Benjamin Ide Wheeler retires as UC President, bringing to an end their two decades of collaboration with Howard, in shaping the physical character of the University.

1920. Military Science Building (now Dwinelle Annex) constructed.

1922. The wooden Hearst Hall, used as the women's gymnasium, burns. This will be the first permanent building on campus designed by an architect other than Howard since Howard became Supervising Architect, undermining Howard's control.

1922-23. California Memorial Stadium constructed. Howard does the design, although he has advised against the location.

1923. Stephens Memorial Hall constructed, Berkeley's first complete student union building

LeConte Hall constructed. Berkeley Fire destroys much of North Berkeley but spares the campus.

1924. Haviland Hall completed. Hesse Hall (first unit) completed. November 22. The Regents cancel John Galen Howard's contract as Supervising Architect.

1931. John Galen Howard dies.

Courtesy of University of California, Campus Architecture and Planning Department http://sunsite.berkeley.edu/~ucalhist/archives_exhibits/campus_planning/timeline.html

k. Article: Berkeley Daily Planet. April 18th, 1906

Despite Quake's Toll, Berkeley's Daily Life Continued

By Richard Schwartz Special to the Planet (04-18-06)

The following is an excerpt from Richard Schwartz's Earthquake Exodus, 1906: Berkeley Responds to the San Francisco Refugees. This is the last in a series of four installments from the book.

In spite of all normal life in Berkeley being suspended by the damage and the flood of earthquake refugees that had covered the town, it was odd how "normal life" kept poking through like blades of grass that had been covered but still found their way to the light in spite of it all.

Students, though living lives as cadets, guards, food servers, cooks, nurses assistants, etc., still needed to finish their school somehow, someway, sometime.

Regular life kept reasserting itself, mixed in with this most extraordinary time.

Graduation Day, 1906

On April 28, UC Berkeley President Benjamin Ide Wheeler announced that because students and faculty had been helping with the relief effort, exams would be canceled, and students' final grades would be based on their work during the spring term.

The seniors may have not mourned the cancellation of exams, but they missed some of the pleasures routinely enjoyed by graduating classes. One of them was a yearbook. The 1906 Blue and Gold was about to be printed at Sunset Press in San Francisco when the earthquake struck. The yearbook burned along with the press's other publications in the fire.

Graduation ceremonies for more than four hundred seniors took place at the Greek Theatre on May 16.

President Wheeler delivered a stirring address that acknowledged recent events: "Class of 1906, I give you my blessing and send you forth. You will never forget these days of vehemence through which you issue into life. It may be you have learned more in them concerning the things that are real than in all your college courses. You have learned the exceeding blessedness of helping others, you women who toiled devotedly in relief and care, and men who faithfully through hours of horror guarded the doors of the unprotected. You saw the things that men counted the real stay and foundation of life vanish to the winds; even the crust of mother earth was no longer firm beneath her feet; but out of the ruin and dismay you saw emerge a surer foundation shapen in the mind of the Eternal Real, and there composed is not land or gold or steel, but the blessed loyalties of human brotherhood and the tender mercies of human love."

Sarah Bernhardt Performs Benefit

People needed a break—an escape from survival and the urgent tasks they were performing on a daily basis, many for very long hours. They needed to forget all that had happened for a bit.

A month after the earthquake, many Berkeley residents and San Francisco refugees came to the Greek Theatre to be entertained in the grandest style by the grandest lady of the stage.

On April 26 Sarah Bernhardt performed a concert in a huge tent in Chicago to benefit the San Francisco relief effort. It was a huge success. The next month she came to Oakland and appeared at Ye Liberty Playhouse in Oakland.

Then, on May 17, she starred in the play Phedre at UC Berkeley's Greek Theater. Admission was \$1 or \$2 for reserved seats, and 10 percent of the proceeds went to benefit the refugees. By the time the curtain rose at 3 p.m., an audience of 5,000 had packed the theater. They were ready for a respite from the events of the previous month.

Bernhardt had expressed an interest in performing at the Greek Theater after reading about it.

"It has always been a dream of mine to play Phedre sometime in the open air," she told the Oakland Enquirer.

According to one review, "Her Phedre, though a tragic figure in a tragedy-haunted community, supplied the first big breathing spell that the fire-sufferers had enjoyed." Bernhardt's voice "cooed and soothed and sobbed through the lines ... and as she left the amphitheater in an open carriage without a veil, she was cheered enthusiastically by thousands of people who had lingered on the heights among the trees, or along the campus to wave and shout her an enthusiastic farewell."

Bernhardt later said, "There in the Greek Theatre of the University of California at Berkeley I played Phedre, as it has never been played before, under blue skies and in a classic theatre of the Greek type. There sat before me 8,000 folk, of whom more than half had been made homeless by the terrible fire of San Francisco, and they forgot—yes, I believe they forgot all."

http://www.berkeleydailyplanet.com/article.cfm?archiveDate=04-18-06&storyID=23932

l. Methodology for Global Positioning Satellite

Methodology for Using Global Positioning Satellite to Locate Trees

The HSR preparers conducted a tree survey using a Global Positioning Satellite (GPS) device to gather geographical information on contributing trees in the area around the Greek Theatre. William Dickinson operated the GPS equipment and later converted the data into CAD format; landscape historian Denise Bradley selected the trees and noted important data on them. The scope of this survey was limited to locating significant trees.

The surrounding landscape information on the CAD drawing is based on information obtained from campus building plans for the Foothill Housing project. The campus provided full-size prints of drawings A&E 47760, 47761, 47823, and 47824. Will Dickinson inserted .jpg files from electronic scans of these drawings into AutoCAD, stitching the four files together at match lines. The combined site plan was then scaled and rotated based on known lengths and locations on the stage, and inserted into a plan file of the Greek Theatre based on online files obtained from Cal Performances. The structures and boundaries were briefly checked for accuracy based on geographically calibrated aerial and satellite maps and positioned to the best fit possible without deforming the maps. The result shows the Greek Theatre, Foothill Housing, the Foothill parking lot, Bowles Hall, and the Bowles Hall parking lot. The alignment, scaling, and rotation are purely suppositional and only intended for use as a general reference to the location of these landscape elements.

Based on a recommendation from the UC Berkeley Seismological Center, the HSR team rented a Trimble Geo XT unit from California Survey and Drafting. The survey used the internal antenna in the GPS unit. Its sub-meter (margin of error of less than 1 m) accuracy was appropriate for the scope of this project. Dickinson and Bradley performed the field data gathering in the late afternoon on 9 February; rainy weather occurred on the scheduled date, reducing the GPS unit's reception of satellite signals.

The survey team tested the GPS outside of the office to confirm its ability to acquire satellite signals on the day of the survey. The GPS unit was set to capture a geographic location every five seconds. To take one point measurement, the unit must acquire four or five satellites and the operator needs to remain at a particular site for around one minute. After five to ten locations are recorded by the unit, it calculates a point based on the averages of the locations collected.

The Trimble Pathfinder and Microsoft Active Sync were installed on the desktop and laptop computers. The GPS unit was tested by connecting it to the computer via its docking cradle and a USB cable. The GPS unit and a laptop were taken to the Greek Theatre.

The survey team established a test point at the center of the stage. Then, starting in a counterclockwise direction from the South Gate, Denise Bradley identified the important trees and assisted Will Dickinson in obtaining GPS data for each. The name information was connected to the data for each tree and was based on a code for the general area and the type of tree: eucalyptus "EUC", redwood "RED", or pine "PINE." Landscape historian Bradley noted whether the trees had pre-1956 significance or other additional information.

After moving counterclockwise within the fenced area to the north gate, the field team continued outside the fence perimeter, surveying the trees below Foothill Housing in a clockwise direction, then continuing past Foothill Housing clockwise toward Bowles Hall.

Approaching Bowles Hall, the satellite reception became very poor due to rainy weather and overcast skies. Additionally, most of the readings were done under tree cover and on a steep west-facing slope between buildings, trees, and an undulating landscape. Because of these impediments, no more point readings could be taken in this area, despite its importance to the study.

The raw data was transferred from the GPS unit to the Trimble software via a USB cable. The accuracy of the GPS point measurements was poor due to these conditional difficulties. Raw data had a margin of error of up to 6 m. The Trimble Pathfinder software rated the data 68% accurate.

The Trimble Pathfinder software is able to correct this data set by using information from a base station. A base station is a known geographic point near by the site which provides a static location to triangulate and recalibrate the data set. This recalibrated file is known as a corrected data file.

Information was reviewed and renamed so that the raw data set is clear and understandable for later review. The file was then exported as an AutoCAD DFX file on a Universal Trans Mercator (UTM) coordinate system. The UTM grid is optimal for measurements on a 2D plan as drawn in AutoCAD.

The data was added as an additional layer on the Greek Theatre site drawing compiled as described above. This survey was not intended to recalibrate any existing maps of the campus or locations of buildings, roads, paths or parking lots. While the locations of the trees are the only information of geographical accuracy, the general relationship between the trees and the Greek Theatre and its architectural context appears useful as a tool for understanding the role of the trees in this historic property.

Programs and devices used: Adobe Photoshop for creating a single file from four tiled maps of the Bowles and Foothill housing Trimble: Geo XT unit with a 416 MHz processor running the Microsoft® Windows Mobile® version 5.0 software Trimble Pathfinder Office

AutoCAD 2006

Accurately issues encountered compiling survey and drawing information in creating a diagrammatical schemes for the Greek theater.

The schematics that accompany the HSR for the Hearst Greek Theater are wholly incomplete. Much of the line and map elements are based on estimates and best fit conjecture. Creating new as built drawings or surveys for the landscape area addressed in the report is entirely out of the scope. The drawings most closely followed in the process of schematic creation were from the University of California. The methodology is described below.

1. A partial CAD file from the Cal performances was obtained through their website. http://facilities.calperfs.berkeley.edu/greek/info.php. The providence of this file is unclear. It is likely the information is based on a simple survey information or interpolation of past drawings. The basic elements of the Howard design are shown, the amphitheater seating, the orchestra, and the stage.

2. The CAD file was refined and only the elements germane to the HSR were incorporated.

3. Other images and scans were overlaid such as the 1989 drawing by Daniel Cho, Department of Dramatic Art 1/4" plan jpegs of the skene and Born building. These images however lacked important information such as the lower level of the Born addition and information about the surrounding landscape area.

4. The full size Born plans were obtained from facility services. They were scanned and the resulting digital files were scaled and fit over the existing file. This information provided the basis of the for room layout for the upper and lower levels of the 1956 Born addition.

5. The Born site plans have no information about current conditions due to the drawings being over fifty years old. More current drawings were need to establish the general location of Stern Hall, Foothill Housing, walking paths, access roads, parking lots, and grade changes. The landscape plans for Foothill housing and the parking lots were requested.

6. The foothill and parking lot plans, A&E 47760, 47761, 47823, and 47824, were scanned and stitched together in Photoshop and inserted into the schematic. On these drawing the location of the Greek theater was only blocked in. The detailed information on these draws was restricted to the areas of new construction and modification, the condition of the entire landscape area was no addressed. In the process of simplification and establishing a best fit, the scanned images were scaled and rotated. The incomplete look of the final schematic is meant to emphasis the fact that the relational aspects of the site could be adequately investigated or soundly surveyed.