National Aeronautics and Space Administration

Lyndon B. Johnson Space Center 2101 NASA Parkway Houston, Texas 77058-3696



Reply to Attn of: JE-25-027 04-24-2025

Mr. Brad Patterson State Historic Preservation Office Texas Historical Commission P.O. Box 12276 Austin, TX 78711-2276

Subject: Initiation of Section 106 Consultation, Project Review

Construction of New B13-15 Outdoor Space, at NASA Johnson Space Center (JSC)

Dear Mr. Patterson:

The National Aeronautics and Space Administration (NASA), Lyndon B. Johnson Space Center (JSC) is proposing to construct a new Outdoor Space (Project) located between the north wings of Building 13 and Building 15 (Enclosure 1). The Project is located on Federal Property administered by NASA JSC and, as such, has been determined to be a Federal undertaking subject to consultation under Section 106.

The Project involves construction in two phases, only the first of which is currently funded. These phases include:

- 1. Installation of supporting infrastructure, such as concrete pads, power and stub up for future outlets and lighting, a new electrical panel, and new aggregate concrete walkways, as well as assessment of drainage systems for possible adjustments; and
- 2. Construction of a covered meeting space, utility space, and four smaller huddle spaces on the concrete pads (Enclosure 2).

Phase 1 involves clearing and grading of the area, installation of five exterior concrete slabs (one centrally-located slab, approximately 3,300 square feet (SF); one in the southeast corner, approximately 175 SF; and one in each of the southwest, northwest, and northeast corners, approximately 145 SF each) designed to support future structures, approximately 220 SF of aggregate pavement connecting the five slabs, electrical conduits connecting to an existing panel within one of the nearby buildings, and any necessary changes in drainage systems to accommodate the new concrete additions. The design drawings are provided in Enclosure 2. Designs of the meeting, utility, and huddle spaces are conceptual and will be finalized during Phase 2.

The design for Phase 1 will utilize pavement that is similar to the historic sidewalks around the Engineering Quad in color, texture, and materials. The design of the structures planned for Phase 2, though not finalized, also incorporates elements that honor the surrounding historic buildings and the history and accomplishments of JSC. The meeting, utility, and huddle spaces were intentionally designed as open structures to allow visitors to see the historic buildings through the space relatively unobstructed. The equal-sized repetitive pattern of widely spaced vertical beams in the central meeting space reflects the rhythm of solid and void established by the historic architecture, emulating the dark joints between Precast Exposed Aggregate Facing (PEAF) panels found throughout the site. In addition, the color of the roof panels will be muted from the bright white shown in the provided renderings to a muted, powder-coated gray to further minimize visual impact and reduce glare to second story occupants in nearby buildings. The angled roof evokes the upward momentum of flight, reflecting the aerospace engineering achievements of the teams working in the engineering buildings around the space and the purpose and history of JSC as the center of human spaceflight. The color of the backdrop in the meeting space, where presenters would stand, was selected to closely match the color of the PEAF panels on surrounding buildings while allowing for the projection of visual displays during presentations.

The four peripheral huddle spaces are intended to strengthen teams that work within the surrounding buildings. Teams will personally construct these gathering space pergolas from prefabricated kits that, instead of raw wood as depicted in the renderings, will consist of composite materials in a muted gray color that will closely match the central meeting space. Similar to the meeting space, these structures will use an open design to minimize visual obstruction to the historic buildings.

The proposed Project would lie within the National Register of Historic Places (NRHP)-eligible JSC Historic District and within the viewshed of eligible buildings B13, B15, B16, and B17, and, as such, NASA JSC has taken efforts to analyze the potential adverse effects to historic properties in the identified Area of Potential Effect (APE) (Enclosure 3).

B13, the Structures and Mechanics Laboratory, is located on Avenue D due east of B15 and was constructed in 1964. B13 is eligible for listing on the NRHP under Criterion A, Criterion B, and Criterion C. The proposed Project would be visible from the west façade of B13's north wing and the north façade of B13's south wing. The current view is that of the east side of B15, the south side of B16, and scattered mature trees on the otherwise open landscape of the Engineering Quad. The proposed Project would mostly retain that view and feel, allowing visibility of the same features through unobstructive structures with muted colors that blend in with the existing setting.

B15, the Experiments and Systems Laboratory, is located on Avenue D and was constructed in 1964. B15 is eligible for listing on the NRHP under Criterion A and Criterion C. The proposed Project would be visible from the east façade of B15's north wing. The current view is that of the west side of B13's north wing, the north side of B13's south wing, and scattered mature trees on the otherwise open landscape of the Engineering Quad. The proposed Project would mostly retain that view and feel, allowing visibility of the same features through unobstructive structures with muted colors that blend in with the existing setting.

B16, the Avionics Systems Laboratory, is located at the terminus of Delta Link Road and was constructed in 1964. B16 is eligible for listing on the NRHP under Criterion A, Criterion B, and Criterion C. The proposed Project would be visible from the south façade of B16 but

partially obscured by mature trees. The current view is that of the north side of B13 and B15 and scattered mature trees on the otherwise open landscape of the Engineering Quad. The proposed Project would retain that view and feel, having trees and landscaping, but would include unobstructive structures with muted colors that blend in with the existing setting.

B17, the Engineering and Applications Development Laboratory, is located on Second Street west of B16 and was constructed in 1972. B17 is eligible for listing on the NRHP under Criterion A and Criterion C. The proposed Project would be visible from the south façade of B17 but mostly obscured by the north wing of B15 and mature trees. The current view is that of scattered mature trees with minimal visibility of the north side of B13 and B15 on the otherwise open landscape of the Engineering Quad. The proposed Project would retain that view and feel, having trees and landscaping, but would include unobstructive structures with muted colors that blend in with the existing setting.

Photos and renderings were taken from buildings located in the identified visual APE to better demonstrate potential impacts to the current viewshed in the JSC Historic District (Enclosure 3: APE Viewshed Analysis – Photos and Renderings). These buildings include B13, B15, B16, and B17. The Outdoor Space would be minimally visible from B16 and B17 and would not pose an adverse effect due to the mature trees that adequately suppress views in the direction of the newly proposed Project. The Outdoor Space would be fully visible at ground level from only B13 and B15, and the minimal, muted nature of the proposed structures would reduce any visual impacts so that it would not pose an adverse effect. Based on a visual analysis of the renderings and photos included in Enclosure 3, the new Outdoor Space will have No Adverse Effect to historic properties or the JSC Historic District in the indirect (visual) APE.

Regarding potential adverse effects in the direct APE, the Project will be constructed in the cultural landscape known as the Engineering Quad. In 2013, NASA JSC conducted a 100 percent pedestrian and reconnaissance archaeological survey of the approximately 1,670-acre campus. This study identified no archaeological sites or resources within the direct APE. Additionally, in 2017, NASA JSC completed the Historic and Architectural Survey and Evaluation of Facilities, identifying and making recommendations of significance on all 459 of JSC's assets. The survey identified that the Engineering Quad "offer[s] employees and visitors valuable outdoor gathering spaces." The proposed Outdoor Space would retain and enhance this original purpose, providing a collaborative space for meetings, events, and recreation. The meeting spaces planned for construction in Phase 2 would also be relatively impermanent, allowing the area to be returned to its historic appearance easily. In an effort to reduce impacts to the Historic District, the network of historic sidewalks will remain unchanged. Based on the findings of these studies, the proposed Project will have No Adverse Effect on the cultural landscape of the Engineering Quad in the direct APE.

Consistent with the obligations under Section 106 of the National Historic Preservation Act (NHPA), NASA JSC will seek input from interested parties and the public on this project. These notices are in progress concurrently with this consultation with your office. Should the outreach result in an opinion that conflicts or provides useful information as it pertains to the determination of No Adverse Effect, we will supplement the file with your office. With this determination and concurrent activities, NASA JSC requests your concurrence to proceed.

Thank you for your attention to this consultation. If you have any questions or need additional information, please contact me at 346-686-5332 or by email at jennifer.l.morrison@nasa.gov.

Sincerely,
Jennifer
Morrison
Jeni Morrison
Jeni Morrison
Jeni Morrison
Jeni Morrison

JSC Cultural Resources Manager

Enclosures (3):

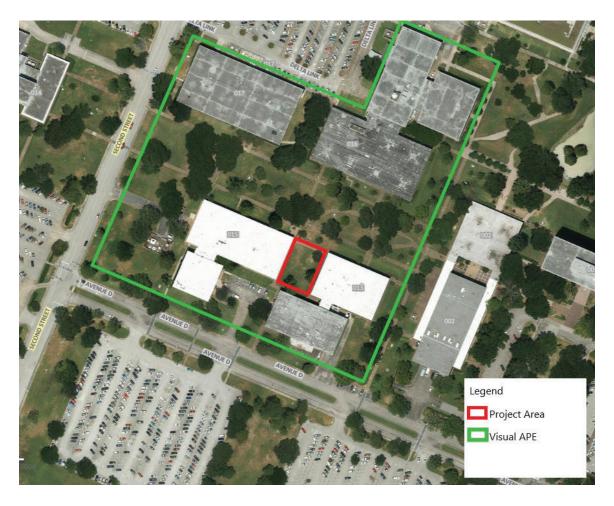
- 1. Site Map Showing Proposed Project Area
- 2. Floor Plan and Phase 1 Design Drawing
- 3. APE Viewshed Analysis Photos and Renderings

cc:

Ms. Miranda Grieder
Historic Preservation Project Reviewer
Federal and State Review Program
Division of Architecture
Texas Historical Commission
P.O. Box 12276
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Ms. Emily Dylla Program Coordinator Archeology Review and Compliance Texas Historical Commission P.O. Box 12276 Austin, Texas 78711-2276

ENCLOSURE 1Site Map Showing Proposed Project Area

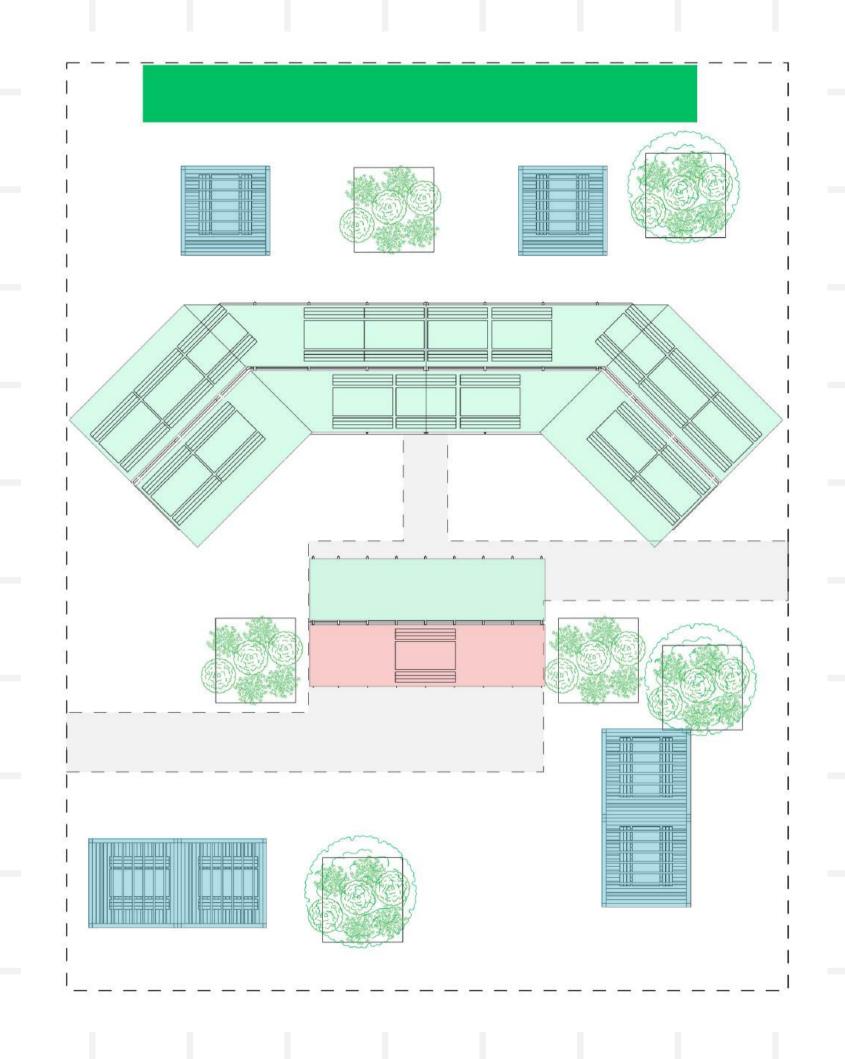


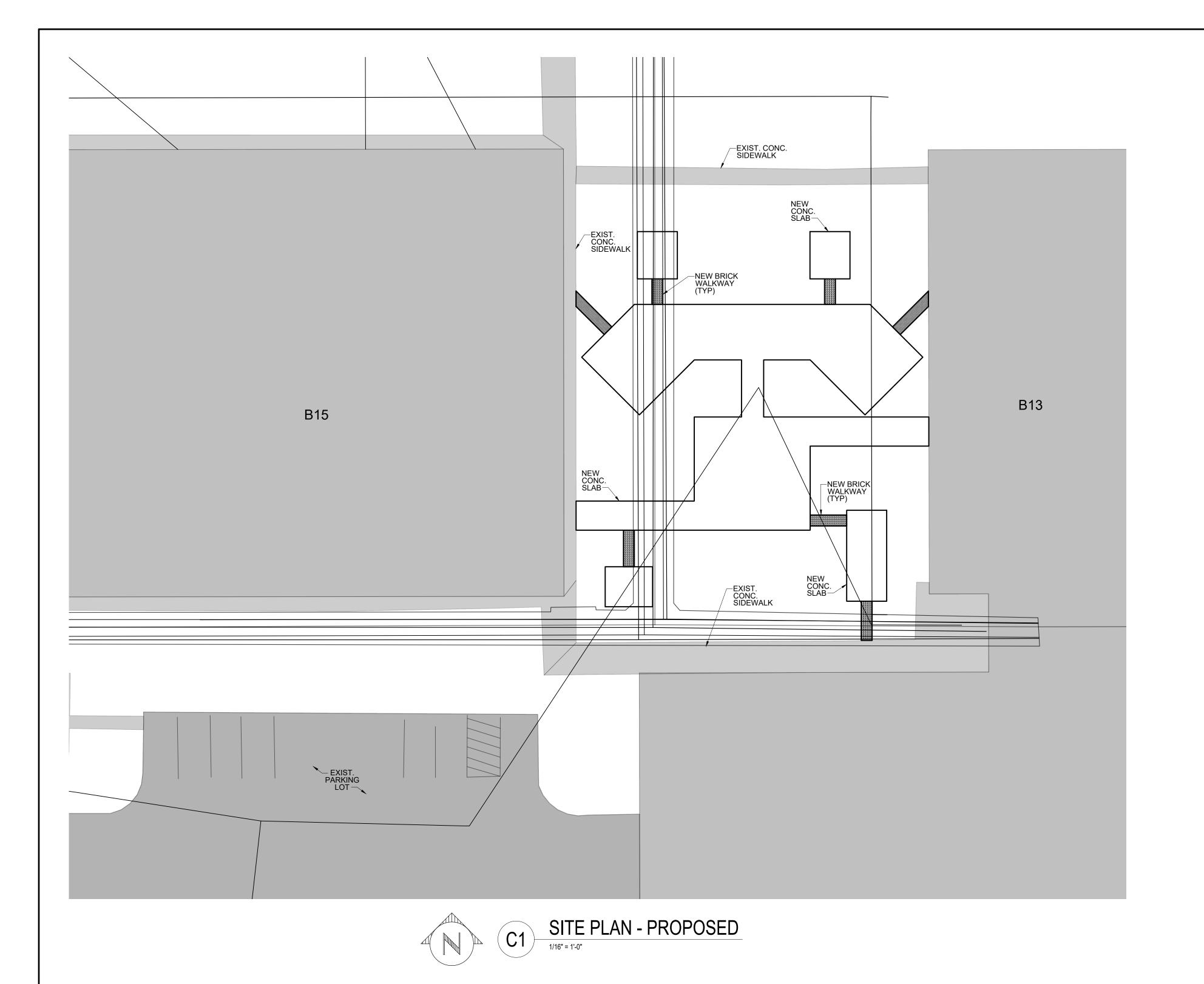
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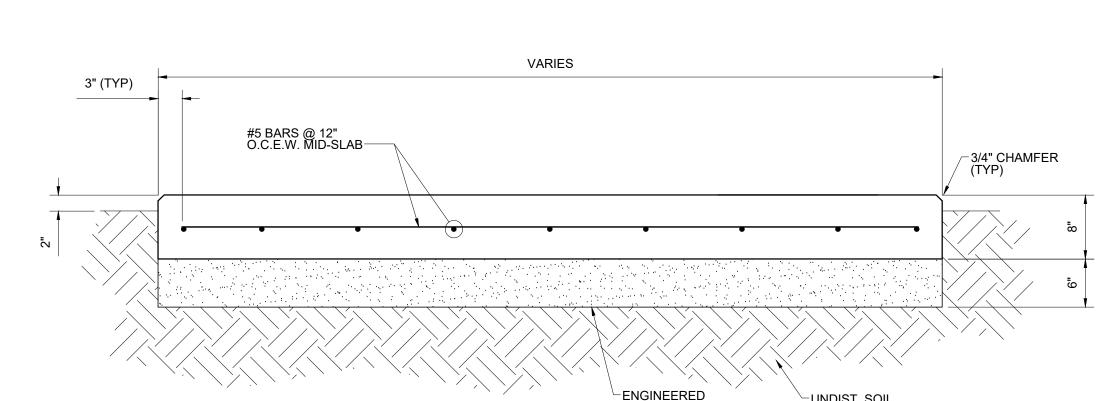
ENCLOSURE 2 Floor Plan and Phase 1 Design Drawing

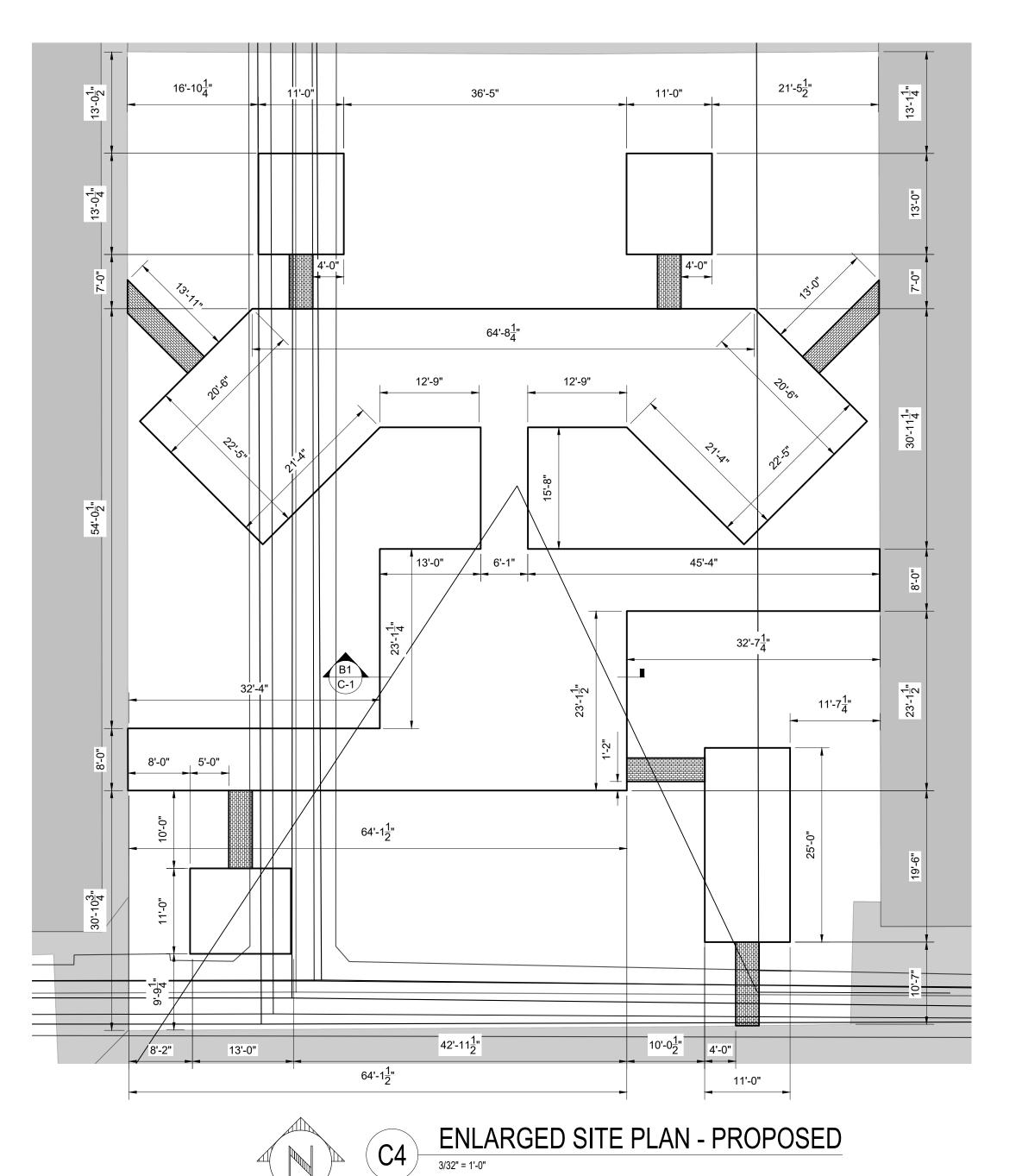
FLOOR PLAN B15 B13 B13HB UTILITY SPACE **HUDDLE SPACE** COVERED MEETING SPACE

NASA JSC | Summer Internship







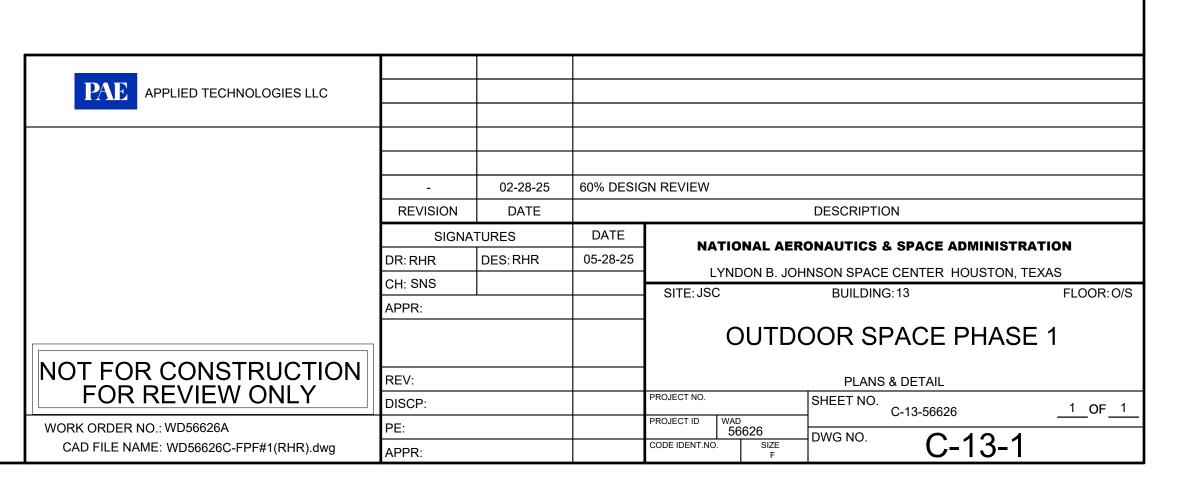


NOTE:

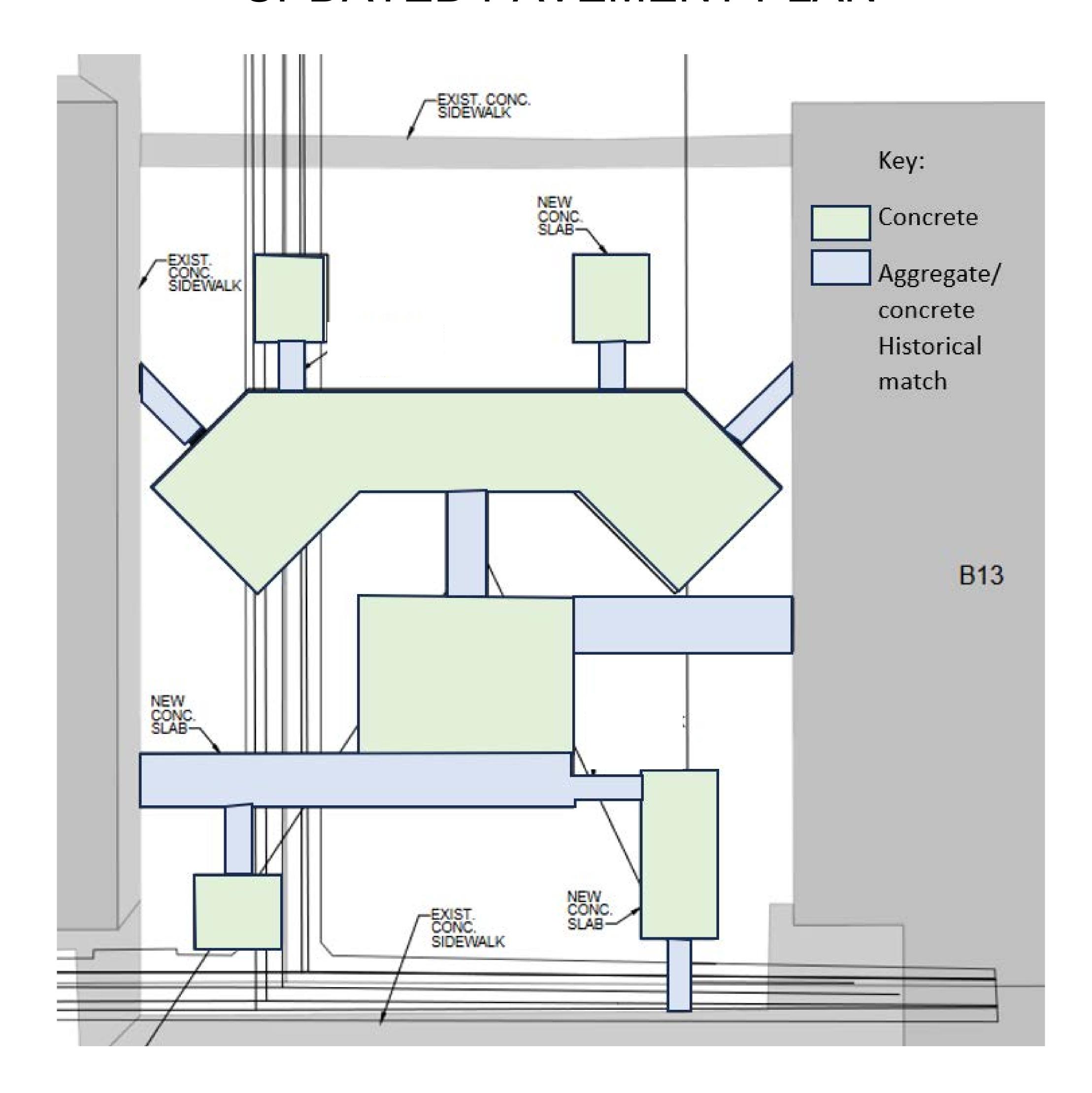
- 1. THIS IS A NEW DRAWING. ALL WORK IS NEW UNLESS STATED OTHERWISE.
- 2. DESCRIPTION OF WORK: THIS TASK CONSISTS OF PROVIDING AND CONSTRUCTING (5) EXTERIOR NEW CONCRETE PADS IN BETWEEN BLDG. 13 & 15 FOR FUTURE STRUCTURES TO BE INSTALLED BY OTHERS.
- 3. ALL PERSONS REQUESTING CONSTRUCTION CHANGES AND DEVIATIONS TO THE DRAWINGS OR SPECIFICATIONS SHALL BE DIRECTED TO THE NASA PROJECT MANAGER AND/OR THE TECHNICAL REPRESENTATIVE LISTED BELOW. FINAL DIRECTION TO THE CONTRACTOR AND/OR VENDOR TO MAKE FIELD CHANGES SHALL BE BY THE CONTRACTING OFFICER ONLY.

NASA PROJECT MANAGER IS: CREIG RHODES @ 281-483-0583 CUSTOMER: HEATH FORD @ 281-483-1405

- 4. FIELD VERIFY ALL DIMENSIONS PRIOR TO ANY CONSTRUCTION. OBTAIN CUSTOMER APPROVAL PRIOR TO INSTALLATION.
- 5. ALL PERSONNEL SHALL CONFORM TO CURRENT SITE SAFETY PROCEDURES.
- 6. PROJECT AREA SHALL BE KEPT CLEAN AND FREE OF DEBRIS AT ANY TIME.
- 7. RESTORE AREA TO MATCH PREVIOUS CONDITION AFTER COMPLETION OF CONSTRUCTION.
 8. PROVIDE COMPRESSIVE STRENGTH CONCRETE OF f'c=3,000 psi @ 28 DAYS.
- 9. CONCRETE SIDEWALK SHALL HAVE BROOM FINISH.
- 10. REBAR SHALL BE ASTM A615, GRADE 60.
- 11. DIGGING PERMIT IS REQUIRED. CONTACT GIS DEPT. @ 3-2830 FOR PERMIT. FIELD VERIFY LOCATION OF ALL EXISTING BURIED LINES.
- 12. WARNING: UTILITIES ARE SHOWN ON EXISTING MUP DRAWING. HOWEVER, FIELD VERIFICATION OF THE EXACT LOCATION OF ALL EXISTING BURIED LINES OR UTILITIES NEARBY THE PERIMETER OF THE NEW CONSTRUCTION WORK IS REQUIRED. IF REQUIRED, HAND-DIGGING SHALL BE PERFORMED IN ORDER TO ENSURE NO DAMAGE TO THE EXISTING UTILITIES.



UPDATED PAVEMENT PLAN



ENCLOSURE 3

APE Viewshed Analysis – Photos and Renderings

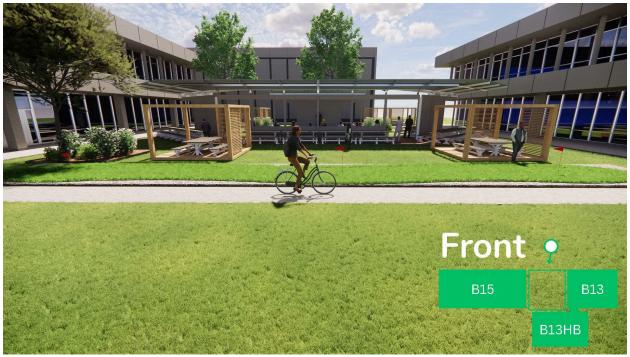
APE Renderings:



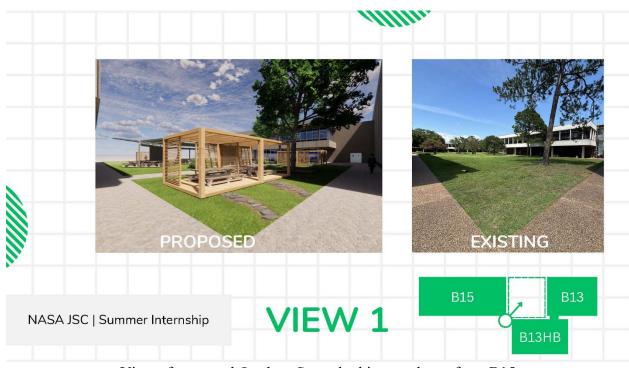
Overall bird's eye view of proposed Outdoor Space with future design changes noted



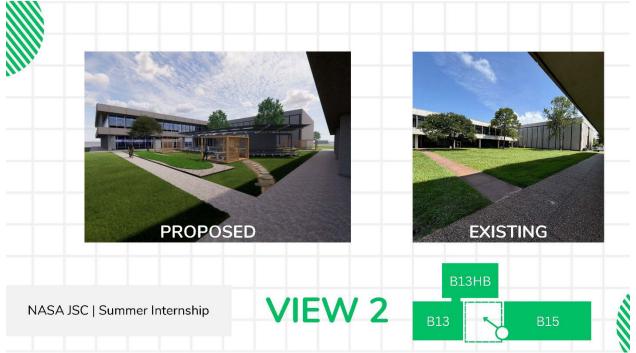
Overall bird's eye view of proposed Outdoor Space showing phase progression



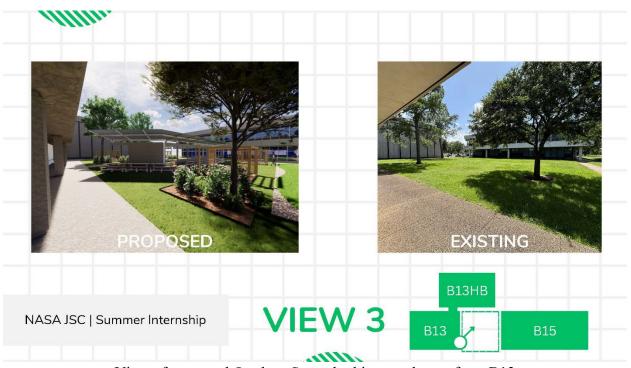
View of proposed Outdoor Space looking south from Engineering Quad



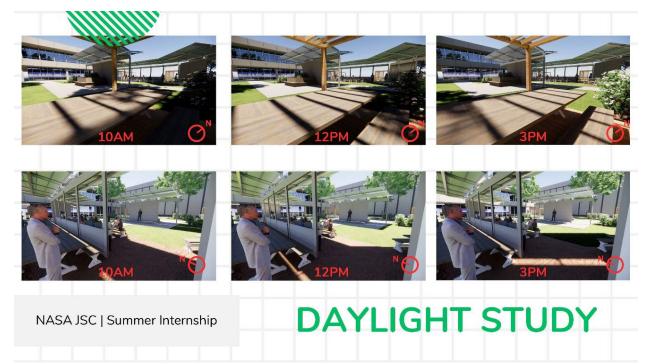
View of proposed Outdoor Space looking northeast from B15



View of proposed Outdoor Space looking southeast from B15



View of proposed Outdoor Space looking southwest from B13



Close-up views of proposed Outdoor Space features showing historic buildings in the backdrop APE Photos:



Looking north from proposed Outdoor Space toward B16 (visible; partially obscured by mature trees)



Looking northwest from proposed Outdoor Space toward B17 (visible; mostly obscured by mature trees)



Looking south from B16 toward proposed Outdoor Space (visible; partially obscured by mature trees)



Looking southeast from B17 toward proposed Outdoor Space (visible; mostly obscured by mature trees)