Compton Community College District
1111 E. Artesia Blvd.
Compton, CA 90221

DATE: **March 7, 2025**

TO: **All Bidders**

PROJECT: **RFQ CCC-088**
VAPA

SUBJECT: **ADDENDUM #1**

The following changes, omissions, and/or additions to the Project Documents shall apply to bids made for and to the execution of the various parts of the work affected thereby, and all other conditions shall remain the same.

Careful note of the Addendum shall be taken by all parties of interest so that the proper allowances may be made in strict accordance with the Addendum.

Respondent shall acknowledge receipt of this Addendum in the bid documents. Failure to do so may subject Respondent to disqualification.

1. **RFC questions and answers:**
   1.1 RFC Question and answer spreadsheet is attached.

2. **Changes to Specifications and Plans (DSA #03-122535):**
   2.1 See attached Addendum 1 Consolidated Changes Narrative provided by the architect summarizing all changes to Specifications and Plans..

3. **Changes to Specifications (DSA #03-123908):**
   3.1 See attached Addendum 1 Consolidated Changes Narrative provided by the architect summarizing all changes to Specifications and Plans..

Attachments:
RFC Question and Answer spreadsheet
Compton College VAPA – FFE Group 2 color plans & specs
RFP CCC-088 VAPA Geotechnical Investigation
Axis Communications Specification Cut Sheet
Board Resolution No. 06-27-2022J Johnson Controls
Board Resolution No. 06-27-2022F Stanley Security

END OF ADDENDUM #1

COMPTON COMMUNITY COLLEGE DISTRICT
RFQ CCC-088 Visual and Performing Arts (VAPA)
RFC Questions Answers
Addendum #1

RFC	Question	Drawing Sheet No. & Detail No. Refernce	Specification Section & Paragraph Reference	Answer
1	Owner-Furnished, Owner-Supplied - When will this scope of work be released	TP101, TP202, TP200, TP300	116123	Provided by Owner
2	Confirm location and scope per spec 05 52 00 - Stainless Steel Railings		05 52 00	Not in project, section 05 52 00 to be removed. (Struere)
3	Confirm fluid applied weather resisant barrier over exterior plaster 2A/A322. Building Y.	A322		Confirmed (Struere)
4	Within Division 28 you state to match, or provide product form (from) a single manufacture which would imply the client is requesting specifics on the products being provided. To expedite the preparation of the values for the project can we be provided the following information: Spec Says: Camera types listed below describing various resolutions, form-factor and features shall be supplied by a single manufacturer per site, and meet or exceed the following requirements: Please provide the desired manufacture of the cameras. Many camera manufacturers meet or exceed these requirements.		Div 28	Axis (per the attached, received and approved by the district)
5	Confirm location and scope per spec 10 26 13-Corner Guards		10 26 13	Not in project, section 10 26 13 to be removed. (Struere)
6	Please clarify, STC rating on door. Door's 108A, 108B, 116A, 127A, 127B, 128A, 128B, 129A, 129B, 130, 132, list STC 40. GL1, GL2, 1" IG has a STC of 35, please clarify if the door rating is wrong or provide new glass type.		Div 08	Aluminum door systems and IGU's are revised to come as close as possible to specified STC 40 rating and are issued as part of the addendum. For additional clarifcation, all glass with "translucent" description in the specifications will be corrected to say "transparent". (Struere)
7	Within Division 28 you state to match, or provide product form (from) a single manufacture which would imply the client is requesting specifics on the products being provided. To expedite the preparation of the values for the project can we be provided the following iformation; Spec Says: NVR general requirements where required, Project cameras shall be conected to existing Security system, otherwise provide per below as required: Please provide the Manufacturers name of the existing security system as well as the version such as Professional, Enterprise Etc.		Div 28	Johnson Controls (per attached board approved resolution)
8	Doors with adjacent side lights, will the entire opening need to match the doors STC rating?		Div 08	Yes, revised drawings will be issued by addendum. (Struere)

COMPTON COMMUNITY COLLEGE DISTRICT
RFQ CCC-088 Visual and Performing Arts (VAPA)
RFC Questions Answers
Addendum #1

RFC	Question	Drawing Sheet No. & Detail No. Refernce	Specification Section & Paragraph Reference	Answer
9	For the 3% DVBE participation goal for this project, the information required on the DVBE Participation Worksheet Attachment D & F will not be available until the close of bid. We will not know our complete utilization and non-utilization of DVBE subs until the last minute of the bid period. We respectfully request the completed Attachedments D & F to be submitted 48 hours after the bid closes. This will ensure the completeness and accuracy of the caluculated numbers.			Contractor has to demonstrate that they made a resonable effort for the DVBE requirements.
10	Per specs 329000/3, 3D, it shows ratios for backfilling trees. However, tree planting notes #7 on L700 show "do not add amendments to the backfill soil". Please clarify.	L700	329000/3.3D	Follow Specification, drawing updated in Addendum 1. (RIOS)
11	Per specs 329000/3, 3D, it shows ratios for backfiling shrubs. However, shrub planbting notes #6 on L700 shows "don not add amendments to the backfill soil, backfill the planting hole with excavated native soil". Please clarify.	L700	329000/3.3D	Follow Specification, drawing updated in Addendum 1. (RIOS)
12	Per specs 329000/3, 3D7 it shows planting pits shall be backfilled with amended soil mix in 12" layer. However, tree planting notes #7 and shrub planting notes #6 on L700 show 'do not add amendments to the backfill soil, backfill the planting hole with excavated native soil or existing soil'. Please clarify.	L700	329000/3.3D	Follow Specification, drawing updated in Addendum 1. (RIOS)
13	Per spec 329000/2.1M it shows metal header is 'Permaloc Aluminum Edging 3/16" x 16'-0" Blackl or Bronze Anodized electrically absorbed dyes. However, detail 4 on L750 shows 1/4" x 5" steel header with 15" long stake. Please clarify.	L750	329000/2.1M	Follow Specification, drawing updated in Addendum 1. (RIOS)
14	Per specs 329000/3.3D5, it shows new trees and palms would be provided with 2 auger boles. However, detail 5 on L750 shows 1 drainage sump. Please clarify.	l750	329000/3.3D5	Follow Specification, drawing updated in Addendum 1. (RIOS)
15	Per specs 329000/3.2, it shows soil preparation with 3 cy of organic amendment per 1,000 square feet. However, general note #25 on L700 shows compost for soil preparation is 4 cy per 1,000 square feet. Please clarify.	L700	329000/3.2	Follow Specification, drawing updated in Addendum 1. (RIOS)
16	Per specs 328400/3.3, it shows sand backfill a minimum 4" pver and under all piping under paved areas. However, detail T on sheed KL621 shows sand backfill according to full depth of sleeve under paved areas, under sleeves are clean soil pipe bedding. Please clarify.	L621	328400/3.3	Follow Specification, drawing updated in Addendum 1. (RIOS)

COMPTON COMMUNITY COLLEGE DISTRICT
RFQ CCC-088 Visual and Performing Arts (VAPA)
RFC Questions Answers
Addendum #1

RFC	Question	Drawing Sheet No. & Detail No. Refernce	Specification Section & Paragraph Reference	Answer
17	Confirm location and scope per spec 05 41 00 - Cold-formed Steel Framing		05 41 00	All interior locations where 18 gauge steel studs or thicker are used. All exterior metal stud locations. (Struere)
18	Will there be free parking available for workers?			Contractor to utilize parking within the construction fence line, or coordinate free parking passes with campus police.
19	Per drawing A602 glass legend, GL-4 is ¼" clear glass, but glazing spec. (088000.3.7E) indicates GL-4 is two-ply laminated clear glass for glass rails. Please advise.	A602		Sheet A602 is correct, specifications updated. Exterior glass rails not in scope. (Struere)
20	Per drawing A602 glass legend, GL-5 is ¼" laminated glass, but glazing spec. (088000.3.7F) indicates GL-5 is ¼" low-iron glass. Please advise.			Sheet A602 is correct, specifications updated. (Struere)
21	Please clarify that MS-1 is intended to use manual operation while MS-3 requires motorized operation. As it stands, both are specified exactly the same.			Per specifications and drawings, all Mechoshades to be motorized. (Struere)
22	Does Spec Class Lab 130 require drapery PF-1 & roller shade MS-1? Or just drapery PF-1? Interior elevations on drawing A404 indicate only drapery PF-1 is required.			Per A131 - Finish Plan, Lab 130 requires both PF-1 and MS-1. (Struere)
23	Please confirm that "Owner-Furnished and Owner-Supplied: mean the contractor to install.			No, Owner furnished and supplied by Owner Refer to A141 color coded FFE Group 2 Layout Exhibit and Specification for clarification (Struere)
24	Plans call out for ribbon bikes, however they do not specify which type of ribbon bike. Please advise.	32 33 13		Per Specification section 32 33 13 use "Original Ribbon Rack" by "AAA Ribbon Bike Rack Co" (Basis of Design). Specification to be updated: 9 Capacity. Finish to be Galvanized. Inground Mount. See updated specification section. (Struere)
25	Please provide fire proofing specifications. Not included in drawings and specs.			No fire proofing required. (Struere)
26	Please clarify if dirt spoils need to be exported offsite?			Clean dirt to remain onsite at district designated area. Contaminated soil is to be removed from the site and included within this base bid.
27	Selective site demolition plan indicates keynotes C, D, and E under the "Salvage Key Notes" list, however, these keynotes are not shown in the plan. Please clarify if these notes are applicable.	C2.01		Yes, that is correct

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT
ADDENDUM 1 CONSOLIDATED CHANGES NARRATIVES

SHEET N0.	DESCRIPTION
SPECIFICATIONS	
00 01 10 Table of Contents	Deleted Sections 05 52 00 STAINLESS STEEL RAILINGS and 10 26 13 CORNER GUARDS from the project
07 42 19 Composite Metal Panels	2.4 FABRICATION A., added a Basis of Design manufacturer and described the potential impact of using a different fabricator.
08 80 00 Glazing	Added code requirements, removed structural sealants and revised glass types.
08 34 73 sound-control door & window assemblies	Door type B removed from this section.
08 35 13 aluminum-framed stacking glass doors	Stacking door basis of design updated
08 43 13 aluminum-framed storefronts and entrances	Storefront basis of design information updated. Acceptable manufacturers section moved to 2.1.E
11 61 33 - Rigging Systems and Draperies	Section 1.2, added references to finish key; Section 2.4, revised drapery length, per user request, added lining for increased light control.
26 09 61 - Performance Lighting Systems	Section 2.1, revised manufacturer to current name; Added parts 2.14, 2.15, 2.16, 2.17 which were unintentionally omitted.
27 41 17 - Sound Video and Communications Systems	Every reference to Consultant in Specification section 27 41 17 refers to the Architect or the Architect's Designated Representative. Section 1.3 "Prequalified Contractors" changed to "Acceptable Contractors". Avidex added to section 1.3.A.7. Section 2.4, revised "One button studio" to current equivalent equipment manufacturer and model.
32 33 13 Site Bicycle Racks and Lockers	Updated 2.2 EXTERIOR BICYCLE RACKS A. The Original Ribbon Rack. Added "9 Capacity website: https://ribbonrack.com/products/ Inground Mount
GENERAL	
SK006 - RENDERINGS	Rendering titled: "VIEW OF ASSEMBLY (DRAMA ART) LOOKING WEST" updated to show full-length curtains in the SW corner.
LANDSCAPE	
L700 - PLANTING NOTES AND SCHEDULE	Change of annotation-Tree Planting Notes #7 to follow the specification section 32 90 00 3.3 D Change of annotation-Shrub Planting Notes #6 to follow the specification section 32 90 00 3.3 D Change of annotationShrub Planting Notes #6 and Tree Planting Notes #7 to follow the specification section 32 90 00 3.3 D7 Change of annotation-General Notes #25 to follow the specification section 32 90 00/3.2
L750 - PLANTING DETAILS	Change of detail #4 Metal Edging to follow the specification section 32 90 00/2.1 M Change of detail #5 Tree Planting to follow the specification section 32 90 00/3.3 D5
ARCHITECTURAL	
A101 - FLOOR PLAN	Door 116D flipped at VEST 119 // Interior Elevation tag 15/A404 added in OFFICE 101 // FEC on west wall near Door 116D moved to east wall next to Door 116C // Curtain graphics next to door 116D now visible // Curtain symbol added to legend
A131 - FINISH PLAN	Door 116D flipped at VEST 119 // Curtain graphics next to door 116D now visible
A141 - FURNITURE PLAN	Door 116D flipped at VEST 119 // Smartboard added at OFFICE 101 // Keynote 3 added to Furniture Plan Keynotes // Keynote 3 tag added to CLASS LAB (129) MUSIC // "Equipment Legend (Group 2)" added // "Classroom 108 Alternative Layout" plan added // Chair and side table FF&E added to LACTN 110
A151 - SIGNAGE PLAN	Door 116D flipped at VEST 119 // Door 116D sign flipped to other side // Exit sign above Door 116D centered on new location
A201 - REFLECTED CEILING PLAN	Door 116D exit sign moved to align with center of new location // "MS" tags for existing mechoshades added with arrows to show extent for clarity // "MS" tag added to ceiling legend
A301A - ELEVATIONS - MATERIAL	GL-1 and GL-2 replaced with GL-1A, GL-1B, GL-2A, GL-2B, and GL-2C // All GL material tags updated // One horizontal mullion added to all full height glass doors // Two vertical mullions added at bi-fold door and the window above it
A301B - ELEVATIONS	One horizontal mullion added to all full height glass doors // Two vertical mullions added at bi-fold door and the window above it
A302A - ELEVATIONS - MATERIAL	GL-1 and GL-2 replaced with GL-1A, GL-1B, GL-2A, GL-2B, and GL-2C // All GL material tags updated // One horizontal mullion added to all full height glass doors //
A302B - ELEVATIONS	One horizontal mullion added to all full height glass doors //
A311 - BUILDING SECTIONS	Curtain length increased on west wall of ASSEMBLY (DRAMA ART) 116 shown in section 2
A323 - WALL SECTIONS	Curtain length increased on west wall of ASSEMBLY (DRAMA ART) 116 shown in wall section 2
A401 - INTERIOR ELEVATIONS & PLAN	Door 116D flipped at elevation 3 // Door 116D sign flipped to other side // Exit sign above Door 116D centered on new location // FEC on elevation 4 moved to elevation 1 // Curtain length increased on west wall of ASSEMBLY (DRAMA ART) 116 shown in elevations 2, 3, and 4
A404 - INTERIOR ELEVATIONS	Interior Elevation 15 titled: "OFFICE 101 NORTH ELEVATION" added

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT
ADDENDUM 1 CONSOLIDATED CHANGES NARRATIVES

A411 - ENLARGED RESTROOM PLANS	Shower Curtains and Hooks product info added to legend, "NIC" removed.
A412 - RESTROOM ELEVATIONS	Shower Curtains and Hooks product info added to legend, "NIC" removed.
A601 - DOOR SCHEDULE & DETAILS	Glass types updated in door schedule // One horizontal mullion added to all full height glass doors // Two vertical mullions added at bi-fold door
A602 - OPENING SCHEDULE & DETAILS	Glass types updated // Two vertical mullions added at bi-fold door and the window above it
A610 - INTERIOR FINISH MATERIALS	DRP-1 and DRP-2 added // Minor finish information updates to MS-1, MS-2, MS-3, and IPT-5
A701 - PARTITION TYPES	Detail 3 graphics adjusted to show wall framing continuing beyond ceiling to clarify that the wall does not stop at the ceiling // Tag for already existing 8/S011 added to detail 3 for added clarity
A904 - INTERIOR DETAILS - CEILING	Mecho shade identification tags "(MS-#)" added to the titles of details 6, 10, 21, and 22 for clarity

CURTAIN WALL	
CW0.01 COVER PAGE	DOOR SYSTEM 300 STC SERIES ADDED TO THE SYSTEMS USED ON THE PROJECT
CW0.02 GENERAL NOTES	GLASS SCHEDULE UPDATED
CW2.00A EXTERIOR ELEVATIONS	ELEVATION 129 AT NORTH ELEVATIONS UPDATED AND HORIZONTALS ADDED AT DOORS
CW2.00B EXTERIOR ELEVATIONS	HORIZONTALS ADDED AT DOORS.
CW2.01 ELEVATIONS	GLASS THICKNESS REVISED TO 1 1/8" AND DOOR SYSTEM REVISED TO 3000 STC SERIES
CW2.02 ELEVATIONS	GLASS THICKNESS REVISED TO 1 1/8" AND DOOR SYSTEM REVISED TO 3000 STC SERIES
CW2.03 ELEVATIONS	HORIZONTAL ADDED AT DOOR 101
CW2.04 ELEVATIONS	GLASS THICKNESS REVISED TO 1 1/8", DOOR SYSTEM REVISED TO 3000 STC SERIES AND MULLIONS SPACING REVISED AT ELEVATION 129.
CW2.05 ELEVATIONS	DOOR SYSTEM REVISED TO 3000 STC SERIES
CW5.01 SECTION DETAILS	GLASS THICKNESS REVISED TO 1 1/8", AND DETAIL 1 ADDED TO THE PAGE.
CW5.02 SECTION DETAILS	GLASS THICKNESS REVISED TO 1 1/8".
CW5.03 SECTION DETAILS	GLASS THICKNESS REVISED TO 1 1/8".
CW5.04 SECTION DETAILS	DOOR SYSTEM REVISED TO 3000 STC SERIES
CW5.05 SECTION DETAILS	GLASS THIKNESS REVISED TO 1 1/8".
CW5.06 SECTION DETAILS	GLASS THIKNESS REVISED TO 1 1/8" AND DOOR SYSTEM REVISED TO 3000 STC SERIES.
CW5.07 SECTION DETAILS	DOOR SYSTEM REVISED TO 3000 STC SERIES
CW5.09 SECTION DETAILS	GLASS THICKNESS REVISED TO 1 1/8" AND DOOR SYSTEM REVISED TO 3000 STC SERIES.
CW5.10 SECTION DETAILS	GLASS THICKNESS REVISED TO 1 1/8" AND DOOR SYSTEM REVISED TO 3000 STC SERIES.
CW6.01 PLAN DETAILS	GLASS THICKNESS REVISED TO 1 1/8" AND DOOR SYSTEM REVISED TO 3000 STC SERIES.
CW6.02 PLAN DETAILS	GLASS THICKNESS REVISED TO 1 1/8" AND DOOR SYSTEM REVISED TO 3000 STC SERIES.
CW6.03 PLAN DETAILS	GLASS THICKNESS REVISED TO 1 1/8".
CW6.04 PLAN DETAILS	DOOR SYSTEM REVISED TO 3000 STC SERIES
CW6.05 PLAN DETAILS	GLASS THICKNESS REVISED TO 1 1/8" AND DOOR SYSTEM REVISED TO 3000 STC SERIES.
CW6.06 PLAN DETAILS	GLASS THICKNESS REVISED TO 1 1/8" AND DOOR SYSTEM REVISED TO 3000 STC SERIES.
CW6.07 PLAN DETAILS	GLASS THICKNESS REVISED TO 1 1/8" AND DOOR SYSTEM REVISED TO 3000 STC SERIES.
CW6.09 PLAN DETAILS	GLASS THICKNESS REVISED TO 1 1/8".
CW6.10 PLAN DETAILS	GLASS THICKNESS REVISED TO 1 1/8" AND DOOR SYSTEM REVISED TO 3000 STC SERIES.
CW6.12 PLAN DETAILS	GLASS THICKNESS REVISED TO 1 1/8".

THEATER	
SVC101 - SVC SYSTEMS SCHEDULES	In assembly room, added two connection panels at wall at pipe grid elevation, per review with user group.
SVC103 - SVC SYSTEMS RCP	In assembly room, added two connection panels.
SVC104 - SVC SYSTEMS CUSTOM PANELS	In assembly room, added two connection panels.
TR201 - ASSEMBLY: RIGGING SECTION AND DETAILS	In assembly room, revised curtains to extend to floor, per user group request.

ELECTRICAL	
E001 - ELECTRICAL FRONT SHEET	Wall mounted WAP added to symbols legend.
E302 - ELECTRICAL POWER FLOOR PLAN	Added power to new SmartBoard added on the north wall of OFFICE 101
E303 - ELECTRICAL SIGNAL FLOOR PLAN	5 wall mounted WAP's added.

SECTION NO. TITLE

SECTION NO. TITLE

SECTION NO. TITLE

SECTION NO. TITLE

SECTION NO. TITLE

END OF TABLE OF CONTENTS

SECTION 07 42 19 - COMPOSITE METAL PANELS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes panel system and the following components:

1. Aluminum-faced composite panels rain screen system (ACM) with mounting system at trellis and cornice elements.
2. Panel mounting system including anchors, shims, furring, fasteners, gaskets and sealants, related flashing adapters, and masking (as required) for a complete watertight-installation.

B. Related requirements: Division 07 for other sheet metalwork.

1.2 DEFINITIONS

A. Panel:

1. Two sheets of aluminum sandwiching a solid core of extruded thermoplastic material formed in a continuous process with no glues or adhesives between dissimilar materials.
2. The core material shall be free of voids and shall not contain foamed insulation material.
3. Products laminated sheet by sheet in a batch process using glues or adhesives between materials are not acceptable.

1.3 ADMINISTRATIVE REQUIREMENTS

A. Preinstallation Conference:

1. Meet with Owner, Architect, ACM panel fabricator/Installer/manufacturer's representative, structural-support Installer, and installers whose work interfaces with or affects ACM panels, including installers of doors, windows, and louvers.
2. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
3. Review methods and procedures related to ACM panel installation, including manufacturer's written instructions.
4. Examine support conditions for compliance with requirements, including alignment between and attachment to structural members.
5. Review flashings, special siding details, wall penetrations, openings, and condition of other construction that affect ACM panels.
6. Review governing regulations and requirements for insurance, certificates, and tests and inspections if applicable.
7. Review temporary protection requirements for ACM panel assembly during and after installation.
8. Review procedures for repair of panels damaged after installation.
9. Document proceedings, including corrective measures and actions required, and furnish copy of record to each participant.

B. Coordination: Coordinate ACM panel installation with rain drainage work, flashing, trim, construction of soffits, and other adjoining work to provide a leakproof, secure, and noncorrosive installation. This Section is responsible for incidental moisture intusion via venting and weeping.

1.4 SUBMITTALS

A. Shop Drawings: Dimensioned Shop Drawings showing materials, gages, methods of fabrication and assembly, joints, finishes and all other pertinent data.

1. Show panel layout, details edge conditions, joints, corners, panel profiles, supports, anchorages, trim, flashings, closures, and special details.
2. Distinguish between factory and field assembled work.

B. Samples: 12-inch long by actual panel width Samples in profile, style, color, and texture indicated. Include panel accessories.
C. Data: Manufacturer including product specifications, standard details, certified product test results, installation instructions, and general recommendations, as applicable to materials and finishes for each component and for total panel system.
D. Code Compliance: Documents showing product compliance with the national and local building code shall be submitted prior to the bid. These documents shall include, but not be limited to, appropriate Evaluation Reports and/or test reports supporting the use of the product.

1.5 QUALITY ASSURANCE

A. Installer qualifications: Firm with a minimum of 5 years' experience in installation of exterior metal panels of scope and complexity similar to those of the Project.
B. Composite Panel Manufacturer shall have a minimum of 20 years' experience in the manufacturing of this product.
C. Composite Panel Manufacturer shall be solely responsible for panel manufacture and application of the finish.
D. Fabricator/installer shall be acceptable to the composite panel manufacturer.
E. Field measurements should be taken prior to the completion of shop fabrication whenever possible. However, coordinate fabrication schedule with construction progress as directed by the Contractor to avoid delay of work. Field fabrication may be allowed to ensure proper fit. However, field fabrication shall be kept to an absolute minimum with the majority of the fabrication being done under controlled shop conditions.
F. Shop drawings shall show the preferred joint details providing a structurally sound wall panel system that allows no uncontrolled water penetration on the inside face of the panel system as determined by ASTM E 331. Systems not utilizing a construction sealant at the panel joints (i.e. Rout and Return Dry and Rear Ventilated System) shall provide a means of concealed drainage with baffles and weeps for water which may accumulate in members of the system.
G. Maximum deviation from vertical and horizontal alignment of erected panels: 1/4-inch in 20-feet non-accumulative.
H. Panel fabricator/installer shall assume undivided responsibility for all components of the exterior panel system including, but not limited to attachment to sub-construction, panel to panel joinery, panel to dissimilar material joinery, and joint seal associated with the panel system.
I. Mockups: Build mockups to verify selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for ACM fabrication and installation.

1. Build mockup of typical MCM panel assembly in situ as directed by the Architect including corner, supports, attachments, and accessories.
2. Once reviewed by the Architect, acceptable mockup can form a permanent part of the Work, and will form the basis for acceptance for the remainder of the Project.
3. Remove and replace materials found not acceptable at no cost to the College.

1.6 HANDLING

A. Protection: Cardboard covers, strippable film or other form of protection standard with the fabricator.

B. Delivery:

1. Deliver panels and other components so they will not be damaged or deformed.
2. Exercise care in unloading, storing, and erecting panels to prevent bending, warping, twisting, and surface damage.

C. Storage:

1. Stack materials on platforms or pallets, covered with tarpaulins or other suitable weathertight ventilated covering.
2. Store metal wall and roof panels so that they will not accumulate water.
3. Do not store panels in contact with other materials that might cause staining, denting, or other surface damage.

1.7 WARRANTY

A. Furnish panel manufacturer's written warranty covering failure of the factory-applied exterior finish on metal panels within the warranty period. This warranty shall be in addition to and not a limitation of other rights the Owner may have against the Contractor under the Contract Documents.

1. Warranty period for factory-applied finish is 20 years after Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Design wind pressure: Wind loads prescribed by Code or ANSI A50.1, whichever is more restrictive, but in no case less than 20 psf.
B. Thermal movements:

1. Provide assemblies, including anchorage, that accommodate thermal movements of systems and supporting elements resulting from the following maximum change (range) in ambient and surface temperatures without buckling, damaging stresses on glazing, failure of joint sealants, damaging loads on fasteners, failure of doors or other operating units to function properly, and other detrimental effects.
2. Temperature change (range): 120-degree F. ambient, 180-degree F. material surfaces.

C. Performance requirements:

1. Engineering responsibility: Engineer, fabricate and install the assemblies to limit air and water infiltration, as specified below, and to safely support, without failure and a maximum deflection of L/240, the wind load specified above, both positive and negative with support spacing not less than the maximum spacing for the Project.

a. Fasteners and connections are shown schematically. Final types and sizes shall be determined by a California-licensed civil or structural engineer employed by the Contractor.
b. In no case shall the fasteners or connections conflict with or require revision of the finish profiles of the panels or the supporting work.
c. Connections to the structural frame shall not impose any eccentric loading, or induce twisting or warping.
d. Connections of panels to supports shall be able to accommodate misalignment of the structure within limits allowed by the AISI, and AISC tolerances.

e. The panels shall have enough rigidity to keep oil-canning to a minimum within a temperature range of 150-degree F. With shop drawings submit anticipated distortion measured in a diagonal line drawn from each corner.

2. System performance requirements: Provide certified test results by a recognized testing laboratory or agency in compliance with specified test methods for each system.

a. Composite panels shall be capable of withstanding building movements and weather exposures based on the following test standards required by the Architect and/or the local building code.
b. Panels shall be designed to withstand the design wind load, but in no case less than 20 psf and 30 psf on parapet and corner panels. Wind load testing shall be conducted in accordance with ASTM E 330 with the following results:

1) Normal to the plane of the wall between supports, deflection of the secured perimeter-framing members shall not exceed L/175 or 3/4-inch, whichever is less.
2) Normal to the plane of the wall, the maximum panel deflection shall not exceed L/60 of the full span.
3) Maximum anchor deflection shall not exceed 1/16-inch.
4) At 1-1/2 times design pressure, permanent deflections of framing members shall not exceed L/100 of span length and components shall not experience failure or gross permanent distortion. At connection points of framing members to anchors, permanent set shall not exceed 1/16-inch.

c. Air infiltration: When tested in accordance with ASTM E 283, air infiltration at 1.57 psf must not exceed 0.06 cfm/ft² of wall area.
d. Water infiltration - Water infiltration is defined as uncontrolled water leakage through the exterior face of the assembly. Systems not using a construction sealant at the panel joints (i.e. Rout and Return Dry and Rear Ventilated Systems) shall be designed to drain water leakage occurring at the joints. No water infiltration shall occur in system under a differential static pressure of 6.24 psf after 15 minutes of exposure in accordance with ASTM E 331.
e. Pressure equalized rain screen systems: Comply with AAMA 508 “Voluntary Test Method and Specification for Pressure Equalized Rain Screen Wall Cladding Systems.”
f. Provide assemblies that operates quietly at all times and without:

1) Vibration harmonics.
2) Wind whistles.
3) Noises caused by thermal movement (including “popping” and “ticking”).
4) Thermal movement transmitted to other building elements
5) Loosening, weakening or fracturing of attachments or components or system.

2.2 PANEL PERFORMANCE

A. Panel bond-integrity: When tested for bond integrity, in accordance with ASTM D1781 (simulating resistance to panel delamination), there shall be no adhesive failure of the bond a) between the core and the skin nor b) cohesive failure of the core itself below the following values:
B. Peel strength: 22.5-inch lb/in as manufactured; 22.5-inch lb/in after 21 days soaking in water at 70-degree F

C. Fire performance:

1. ASTM E 84: Flame Spread Index must be less than 25, Smoke Developed Index must be less than 450.
2. ASTM D 1929: A self ignition temperature of 650-degree F or greater.
3. ASTM D 635: Requires a CC1 classification.

D. Adhesion:

1. Test Method: ASTM D 3359.

E. Coating shall not pick off when subjected to an 11-inch x 11-inch x 1/16-inch grid and taped with #600 Scotch Tape.

F. Humidity resistance

a. Test method: ASTM D 2247.
b. No formation of blisters when subject to condensing water fog at 100 percent relative humidity and 100°F for 4000 hours.

G. Salt spray resistance:

1. Test Method: ASTM B-117; Expose coating system to 4000 hours, using 5 percent NaCl solution.
2. Corrosion creepage from scribe line: 1/16-inch max.
3. Minimum blister rating of 8 within the test specimen field.

H. Weather exposure outdoor:

1. Ten-year exposure at 45-dehree angle facing south Florida exposure.
2. Maximum color change of 5 Delta E units as calculated in accordance with ASTM D 2244.
3. Maximum chalk rating of 8-inch accordance with ASTM D-4214.
4. No checking, crazing, adhesion loss.

I. Chemical resistance:

1. ASTM D 1308 utilizing 10 percent Muriatic Acid for an exposure time of 15 minutes. No loss of film adhesion or visual change when viewed by the unaided eye.
2. ASTM D 1308 utilizing 20 percent Sulfuric Acid for an exposure time of 18 hours. No loss of film adhesion or visual change when viewed by the unaided eye.
3. AAMA 2605 utilizing 70 percent reagent grade Nitric Acid vapor for an exposure time of 30 minutes. Maximum color change of 5 Delta E units as calculated in accordance with ASTM D 2244.

2.3 MATERIALS

A. General: Provide materials selected for their surface flatness, smoothness and freedom from surface blemishes where exposed in the finished Work.

B. Metal panels:

a. Basis-of-Design Product: Subject to compliance with requirements, provide ALUCOBOND®; 3A Composites USA Inc.; ALUCOBOND® PLUS or comparable product by one of the following:
b. Alcan Composites USA, Inc.

c. Mitsubishi Chemical America, Inc.
d. Or equal.

C. Aluminum face sheets: Thickness: 0.0157-inch (nominal), AA3000 Series alloy.
D. Extrusions, formed members, sheet, and plate: ASTM B 209 as recommended of the manufacturer.
E. Panel stiffeners, if required: Structurally fastened or restrained at the ends and secured to the rear face of the composite panel with silicone of sufficient size and strength to maintain panel flatness. Stiffener material and/or finish shall be compatible with the silicone.
F. Flashing materials: 0.030-inch minimum thickness aluminum sheet painted to match the adjacent curtain wall / panel system where exposed. Provide a lap strap under the flashing at abutted conditions and seal lapped surfaces with a full bed of non-hardening sealant.

1. Form exposed sheet metal accessories that are without excessive oil canning, buckling, and tool marks and that are true to line and levels indicated, with exposed edges folded back to form hems.
2. Seams for Aluminum: Fabricate nonmoving seams with flat-lock seams. Form seams and seal with epoxy seam sealer. Rivet joints for additional strength.
3. Seams for Other Than Aluminum: Fabricate nonmoving seams in accessories with flat-lock seams. Tin edges to be seamed, form seams, and solder.
4. Sealed Joints: Form non-expansion, but movable, joints in metal to accommodate sealant and to comply with SMACNA standards.
5. Conceal fasteners and expansion provisions where possible. Exposed fasteners are not allowed on faces of accessories exposed to view.
6. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, noncorrosive metal recommended in writing by metal panel manufacturer.

a. Size: As recommended by SMACNA's "Architectural Sheet Metal Manual" or metal wall panel manufacturer for application but not less than thickness of metal being secured.

G. Sealant and backup: As specified in Section 07 92 00.

2.4 FABRICATION

A. Acceptable manufacturer: Keith Panel Systems, Basis of Design, whose system has been approved by DSA. Other manufacturers may be acceptable based on Architect's review and approval.

1. If another manufacturer is used, then the Contractor shall be required to submit to DSA for approval and shall be responsible for any cost impact of time delays in the project due to this review, as well as the cost of the DSA review. Architect approval is required prior to DSA submittal and DSA approval is required prior to fabrication.

~~A.~~B. Fabricate and finish panels and accessories at the factory to greatest extent possible, by manufacturer's standard procedures and processes, as required to fulfill indicated performance requirements demonstrated by laboratory testing. Comply with indicated profiles and dimensional requirements and with structural requirements.
~~B.~~C. Fabricate panel joints with captive gaskets or separator strips, which provide a tight seal and prevent metal-to-metal contact to minimize noise from movements within panel system.
~~C.~~D. Back-cut panels and form corners to the smallest radius possible (1/16-inch maximum) without causing grain separation or otherwise damaging the work.
~~D.~~E. Design panels to be job-assembled without exposed fasteners.

~~E.~~F. Form panels with tolerances to accommodate expansion and contractions between panels and support.
~~F.~~G. Tolerances of completed assemblies shall not exceed the following:

1. Panel bow: 0.2 percent of panel dimensions in width and length but 0.1875-inch maximum.
2. Width or length: 0.064-inch.
3. Thickness: 0.008-inch.
4. Squareness: Less than 0.1875-inch difference between diagonal measurements.
5. Camber: Less than 0.032-inch.

2.5 FINISHING PANELS

A. Finish paint system: Coil coated Kynar® 500 or Hylar® 5000 based Polyvinylidene Fluoride (PVDF) – 2, gloss level 20, in conformance with the following general requirements of AAMA 2605.

1. Color: See Drawings for color.
2. Coating thickness: 1.0 mil (±0.2 mil).

B. Exposed surfaces:

1. Preparation: Remove oxidization, fabrication burrs, oil, grease and other deleterious materials before priming.
2. Prime coat: Spray primer over the prepared metal surfaces in compliance with the paint manufacturer's instructions to provide a uniform dry film not less than 4 mils thick.
3. Finish coat: Apply finish coat smooth and even, free of runs, sags, orange peel, holidays or other imperfections, as approved by the Architect.

C. Concealed steel surfaces, including reinforcement and attachments (concealed aluminum surfaces may be primed only):

1. Preparation: Prepare the metal for painting in compliance with SSPC SP-l, Solvent Cleaning.
2. Shop primer: Spray zinc-rich primer over the prepared surfaces in compliance with the paint manufacturer's printed instructions to produce a uniform dry film not less than 1-1/2 mils thick.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine conditions and measurements affecting the work of this Section at site.
B. Examine wall sheathing to verify that sheathing joints are supported by framing or blocking and that installation is within flatness tolerances required by MCM wall panel manufacturer.

1. Verify that air- or water-resistive barriers have been installed over sheathing or backing substrate to prevent air infiltration or water penetration.

C. Correct detrimental conditions before proceeding with installation.

3.2 PREPARATION

A. Clean debris, dust and other foreign materials behind the work, as it is erected.
B. Provide temporary closures if necessary to prevent the accumulation of such materials behind this work.

3.3 INSTALLATION

A. Install metal panels in accordance with the approved shop drawings and their manufacturer's instructions.
B. Keep cutting, drilling and fitting required for installation of the panels at the job site to a minimum.
C. Set panels accurately in their proper location, alignment and elevation, plumb, level, true and free of rack as measured from established lines and levels, within the following tolerances:

    1. Limit panel to panel offset to a maximum of 1/32-inch.
    2. Limit tolerance, as measured with a 10-foot straightedge to 1/16-inch in any direction.
    3. Tolerances are non-cumulative.

D. Assemble metal panels with flush, hairline joints and concealed fasteners. Comply with manufacturers' instructions and recommendations for installation, as applicable to project conditions and supporting substrates.
E. Provide for thermal and building movement without over-stressing the material, breaking connections or producing wrinkles and distortion in finished surfaces.
F. Make installations weathertight at all locations.
G. Anchor panels and other components of the work securely in place with concealed clips, to permit movement without damage where subject to thermal expansion and contraction. Exposed fasteners are not permitted from surfaces normally visible by the public and the building occupants.
H. Joint sealers:

    1. Install gaskets, joint fillers, and sealants where indicated and where required for weatherproof performance of assemblies.
    2. Provide types of gaskets, sealants, and fillers indicated or, if not otherwise indicated, types recommended by panel manufacturer.
    3. Refer to Section 07 92 00 for sealants and installation requirements.
    4. Do not obstruct weep holes and drainage channels; clean free of dirt and sealants.

3.4 TOUCHUP

A. Remove protective covering as soon as no longer needed.
B. If touchup is required, use the same primer and paint as for shop finished materials. The touchup work must be invisible under normal lighting conditions from a distance of 2 feet.
C. Replace damaged panels which, in the Architect's opinion, cannot be successfully touched-up in the field, with undamaged materials.

END OF SECTION

SECTION 08 34 73 - SOUND-CONTROL DOOR AND WINDOW ASSEMBLIES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes:

1. Sound control metal doors and door frames.
2. Sound Retardant Metal Fixed Window Systems.
3. Seals, inserts, clips, brackets and other miscellaneous items required for a complete installation.

B. Work installed but furnished in other Sections: Finish hardware (other than specified herein) specified to be furnished in Section 08 71 00.

C. Related requirements:

1. Division 04 for grouting metal frames installed in CMU openings.
2. Division 08 for non-acoustical hollow metal doors and frames and glazing.
3. Division 09 for finish painting this work.

1.2 SUBMITTALS

A. Data: Manufacturer Product Data, specifications and recommended installation procedures.

B. Shop Drawings: Show fabrication, installation, anchorage, and interface of the work of this Section with the work of adjacent trades.

C. Certification:

1. That the assemblies utilized have been tested in compliance with ASTM E 90 that they meet the STC losses scheduled below determined in compliance with ASTM E 413 is not less than 49.
2. Show laboratory name, test report number, and date of test.
3. Substitution of test reports not in compliance with ASTM E 90 and E 413 will not be acceptable.
4. For fire-resistive doors, certify that construction has been tested in compliance with UL procedures for labeled fire doors and frames, and meets the requirements of NFPA 80.

1.3 QUALITY ASSURANCE

A. Fire resistance: Provide fire-resistive assemblies bearing the label of a testing agency acceptable to the Building Department for the fire resistance indicated.

B. Uniformity: Provide all acoustical doors and frames made by one manufacturer.

C. The acoustical door assemblies shall meet or exceed the scheduled STC value, and in addition shall meet or exceed the following sound transmission loss values.

1.4 HANDLING

A. Delivery:

1. Inspect doors, frames, and accessories delivered to the site for damage. Unload and store, as specified, with a minimum of handling.

2. During delivery, strap doorframes together in pairs with the head of one frame inverted for bracing, or provide temporary steel spreaders securely fastened to the bottom of each frame.
3. Replace doors and frames damaged before installation. Do not install damaged doors and frames.

B. Storage:

1. Store doors and frames carefully on platforms under cover. Provide a 1/4-inch space between stacked doors.
2. The storage spaces shall be dry and accessible, adequately ventilated and free from dust or water, and shall permit easy access for inspection and handling.
3. Do not use non-vented plastic or canvas shelters that create a humidity chamber.
4. If the fiberboard wrapper on the door becomes wet, remove it immediately.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Design requirements: Acoustical door assemblies to include doors, frames, and door hardware to include gasketing systems, retainers and retainer covers, automatic or fixed door bottoms, cam-lift hinges, thresholds, and sills, required to achieve specified performance requirements.
B. Sound Retardant Metal Swinging Door System STC ratings shall be the results of testing in accordance as an operable system in accordance with ASTM E90 and ASTM E413.
C. Components: Assemblies to be complete with metal frame, doors, sealing system (based on model specified), and Cam-Lift hinges (when required for model specified). Vision lights shall have metal loose stops (type based on model specified), glass and glazing shipped loose to be field installed.

2.2 MANUFACTURERS

~~A. Door Type B (from Door Types): Model 460460 Single Swinging Metal Door with Dual Glazed Vision Lite by Overly Manufacturing Co., basis of design.~~

~~1. STC Rating: 40 minimum.~~

~~B.~~A. Door Type D (from Door Types): Model 439572 Acoustical Metal Door by Overly Manufacturing Co., basis of design.

1. STC Rating: 40 minimum

~~C.~~B. Door Type F (from Door Types): Model 5192288 Single Swinging Metal Door with 15-inches by 20-inches Dual Glazed Vision Lite by Overly Manufacturing Co., basis of design.

1. STC Rating: 50 minimum.

~~D.~~C. Fixed acoustical rated windows 120, 129 and 131 (from window schedule): Model 549226 Dual Glazed Fixed Windows by Overly Manufacturing Co., basis of design.

1. STC Rating: 50 minimum.

~~E.~~D. Other acceptable manufacturers, meeting the requirements of these Specifications, include the following:

1. Krieger Steel Products Co.

2. Industrial Acoustics Co.
3. Or equal.

2.3 MATERIALS

A. Steel sheets and strip: As recommended by SDI 100.
B. Inserts, bolts and fasteners: Manufacturer standard units.
C. Door core: Manufacturer standard.
D. Shop primer: Manufacturer standard rust-inhibitive shop paint, compatible with finish paint specified in Section 09 90 00.
E. Hardware:

1. Seals: H seals at jambs and head. Adjustable H seal in door bottom.
2. Hinges: Model MCL-500, pair for non-labeled assemblies; pair and one-half for fire-rated assemblies.
3. Door closer: Norton 7500, or equal approved by the Architect.

2.4 FABRICATION

A. Fabricate this work to the profiles and dimensions indicated by roll-forming, brake-forming and welding to produce metal doors and frames with straight and square edges.

1. Doors: As based on test results to achieve STC ratings, minimum 16-gage sheet steel face sheets.
2. Frames: Minimum 14-gage sheet steel.

B. Fit and fabricate this work with surfaces free from warp, wave, buckle, oil canning or other defects.
C. Welding shall conform to AWS standards. Grind exposed welds flush and smooth with parent metal.
D. Preparation for finish hardware:

1. Reinforce the doors and frames for finish hardware in compliance with SDI 100, Table IV, and locate finish hardware in compliance with Table V of this publication.
2. Cut, drill and tap the doors and frames to receive finish hardware in compliance with the hardware manufacturer instructions and templates. Drill and tap doors in the field to receive surface-applied hardware. Provide reinforcement for closers on all doors and frames.

E. Cam Lift Hinges: When required to achieve STC, manufacturer to furnish laboratory test data certifying hinges have been cycled a minimum of 1,000,000 while supporting a minimum door weight of 350 pounds.
F. Hardware Reinforcements: Factory mortise, reinforce, drill and tap and doors and frames for all mortise hardware as required by hardware manufacturer’s template. Provide necessary reinforcement plates as required for surface mounted hardware; all drilling and tapping to be done in field by installer. Provide dust cover boxes on all frame mortises.
G. Anchors: Provide suitable anchors to properly install frames in partition types shown on Drawings.

2.5 FINISHING:

A. After assembly, clean, treat, and paint exposed surfaces of steel door and frames.
B. Clean steel surfaces of mill scale, rust, oil, grease, dirt, and other foreign materials before application of paint.
C. Apply shop coat of prime paint of even consistency to provide a uniformly finished surface ready to receive finish paint.

D. Finish painting is specified in Section 09 96 00.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Level subfloor and thresholds so that they contact a straightedge for the length of the threshold.
B. Walk the site with the manufacturer's technical representative and review installation procedures and proper installation and adjustment of the assemblies or secure services of manufacturer's factory trained and authorized installer to perform installation of assemblies.
C. Examine adjacent construction and supports.
D. Verify that openings are within allowable tolerances, plumb, level, clean, will provide a solid anchoring surface.
E. Correct other conditions detrimental to the proper or timely completion of this work before proceeding with installation.

3.2 INSTALLING FRAMES

A. Install frames plumb, square and straight, in compliance with the Drawings, these Specifications, the approved Shop Drawings and UL tested procedures for fire-rated openings.

1. Provide a minimum of 2 anchors for head of double door frames.
2. Provide a minimum of 3 anchors per jamb for frame with doors under 81 inches high; provide one additional anchor for doors in frame over 81 inches.
3. Attach jamb anchors securely to studs.

B. Brace the frames to prevent their displacement during erection of adjacent walls, and coordinate the installation of built-in anchors with related trades.
C. Provide UL approved adjustable floor clips for all frames and anchor them securely to concrete slabs with powder-driven pins or bolts in expansion shields.

3.3 INSTALLING FINISH HARDWARE/HANGING DOORS

A. Install finish hardware in compliance with the hardware manufacturer templates and printed instructions.
B. Adjust operable parts for correct function so the doors operate freely, without sticking or binding, but so that seals are in contact with frame and floors for their entire length when the door is closed.
C. Install doors in their frames and adjust them to meet the STC specified when closed. Do not install doors that are warped, bowed, dented or otherwise damaged.

3.4 FIELD QUALITY CONTROL

A. Secure the services of a qualified Independent Testing agency to test door and frame installations selected by Owner/Architect in accordance with ASTM E336. Installed product shall perform no less than five Field Sound Transmission Class (FSTC) rating points below the specified laboratory STC rating. Any installations which fail to meet these criteria shall be examined, re-worked and re-tested until compliance is obtained.
B. Clean damaged primer, sand smooth, re-clean and spot prime with a paint compatible with the primer and the scheduled finish coats.

END OF SECTION

SECTION 08 35 13 - ALUMINUM-FRAMED STACKING GLASS DOORS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes:

1. Thermally broken stacking glass doors complete with hardware.
2. Glass and glazing for the work of this Section.

B. Related requirements:

1. Section 08 32 13 for aluminum-framed sliding glass doors.
2. Section 08 43 13 for aluminum storefronts and doors.
3. Section 08 71 00 for door hardware.
4. Section 08 80 00 for glazing.

1.2 SUBMITTALS

A. Data: Manufacturer Product Data for doors, including the following.

1. Construction details and fabrication methods.
2. Profiles and dimensions of individual components.
3. Data on hardware, accessories, and finishes.

B. Shop Drawings: Large scale dimensioned Drawings: Include information not fully detailed in manufacturer's standard Product Data and the following.

1. Layout and installation details, including anchors.
2. Elevations of units at 3/4-inch scale.
3. Full-size section details of typical composite members, including reinforcement.
4. Hardware, including operators.
5. Glazing details.
6. Accessories.

C. Samples: 12-inch long sections of door frame with specified finish. Where finish involves normal color variations, include sample sets showing the full range of variations expected.

D. Certification:

1. Certification by a recognized independent testing laboratory or agency showing that each type, grade, and size of unit complies with performance requirements indicated in Part 2.
2. Where reports are not available, engage a recognized independent testing laboratory or agency to perform tests specified. Provide certified test results showing that unit complies with performance requirements indicated.

E. Closeout: Recommendations for maintenance and cleaning of surfaces.

1.3 QUALITY ASSURANCE

A. Single Source Responsibility: Obtain entrances, storefronts, sliding glass doors, window systems, and finish through one source from a single manufacturer.

B. Installer qualifications: Firm who has completed installation of sliding glass doors similar in design and extent to those required for the Project and whose work has resulted in construction with a record of successful in-service performance.

C. Standards: Requirements for doors, terminology and standards of performance, and fabrication workmanship are those specified and recommended in AAMA 101 and applicable general recommendations published by AAMA.
D. Single source responsibility: Provide all sliding aluminum doors from one source and produced by a single manufacturer.

1.4 HANDLING

A. Transport, store and handle assemblies to prevent damage. Store off the floor in a protected location.

1.5 WARRANTY

A. System, folding system hardware, and weatherstripping shall be warranted against failure and/or deterioration of metals due to manufacturing process for a period of 10 years.
B. Locking Hardware shall be warranted for a period of 5 years.

PART 2 - PRODUCTS

2.1 MANUFACTURER/TYPE

A. Basis of design: 1000 Oasis Series (thermal) Bi-Folding aluminum Door, 2-1/4-inch-thick panel section, by Arcadia Architectural Products, Inc., 5190 S. Santa Fe Ave, Vernon, CA 9058. 323-908-5467, fax 323-908- 5547.

1. Vertical stile: 3-1/2 inches.
2. Top rail: 3-1/2 inches.
3. Bottom rail: 3-1/2 inches.
4. Glazing Insert: Snap-in type for 1-inch infill.

B. Basis of Design and Permit Approval: See below under description of products.

1. Arcadia, Inc.; 10,000 Oasis Series.: www.arcadiainc.com.

C. Other Acceptable Manufacturers (Substitutions):

1. Substitutions: See Section 01 63 00-Product Substitution Procedures.

a. Substitution may or may not be accepted after Architect and Owner review with complete evaluation for content and schedule impact.
b. Substitutions shall include all costs for redesign with consequential changes by other Contractor trades along with the Architect and related approvals by governing agencies.

1) Revisions to shop drawings illustrating the proposed changes is not considered adequate for DSA review and approval.

c. Substitutions may be acceptable, based on Architect's review and approval, for submittal to DSA. If substituted, manufacturer cannot obtain DSA approval in a timely manner, then the contractor shall be responsible for any cost impact for time delays in the project schedule. Architect approval is required prior to DSA submittal and DSA approval is required prior to installation.

~~B.~~1) Euro-ST3 Stacking Framed Doors by Euro-Wall www.euro-wall.com. Email: engineering@euro-wall.com.

~~C.~~2) Or equal.

2.2 PERFORMANCE REQUIREMENTS

A. System performance of 39-inches x 120-inches panel. Each assembly shall be tested by a recognized testing laboratory or agency in accordance with specified test methods.

1. Air Infiltration: 1.6 PSF (25 MPH) ASTM E 283.
2. (Weather Resistant Sill Only/Non-ADA).
3. Water Infiltration: 5.4 PSF ASTM E 547 (Weather Resistant Sill Only/Non-ADA with Outswing Application).
4. Uniform Load Deflection: + -30.0 PSF ASTM E 330.
5. Uniform Load Overload: + -45.0 PSF ASTM E 330.
6. Forced Entry Top & Bottom of Stile 3" above lock AAMA 1304-02.
7. Overall DP Rating: DP 30.

B. Design requirements:

1. Comply with structural performance, air infiltration, and water penetration requirements indicated in AAMA 101 SGD-R15.
2. Comply with Code for design wind velocity at the Project site as indicated.

2.3 MATERIALS

A. Door members: Extruded 6063-T6 aluminum alloy (ASTM B221 - Alloy G.S. 10aT5).
B. Screws, fastening devices, and internal components: Aluminum, stainless steel, or zinc plated steel in accordance with ASTM A-164 shall be aluminum or steel, providing the steel is properly isolated from aluminum.
C. Glazing Gasket (compression-type design).

2.4 HARDWARE

A. Hardware for 10000 Series Bi-Folding Aluminum Door shall be furnished and installed by the manufacturer and shall include the following standard hardware
B. Hardware system carrying capacity to be 220 lbs. per panel.
C. Weatherstripping: Q-Lon seals at the top inner and outer edge of door panels or on frame for sealing between panels and between panel/frame. Exterior bottom door panel blade sweep.
D. Sill track: Aluminum (Clear or Bronze Anodize) standard weathered engineered weeping thermally broken threshold, or non-weathered ADA Ramp Sill, and ADA Flush Guide Sill options
E. Stainless Steel Roller Guide Spindle
F. Guide Channel: aluminum
G. Top Guide Carrier/Hanger
H. Two Point Locking Hardware on folding panels, pull handle(s)
I. Four Point Locking Hardware with Lever Lock on Main Entry Panel
J. Magnetic Door Stop for entry swing panel and for stacking of folding panels.

2.5 FABRICATION

A. Stiles and rails shall be tubular sections accurately joined, flush and hairline at corners with heavy concealed reinforcement brackets secured with machine bolts. Exposed screws not permitted.
B. Swing/stacking direction: Outswing (or inswing) opening unit.
C. Define as window systems for net frame heights 72" or less.
D. Each frame corner joint shall be secured with two stainless steel screws.
E. Sealants and back-up rods:

1. Within assemblies: Manufacturer's standard non-drying, non-skinning sealant complying with AAMA 809.2.
2. Between assemblies and adjacent materials: As specified in Section 07 92 00.
3. Glazing sealants: Refer to Section 08 80 00.

2.6 FINISH:

A. Sight-exposed aluminum surfaces: Finish as specified for storefronts in Section 08 43 13.
B. Steel brackets: Prime with rust-inhibitive primer.

2.7 GLAZING:

A. Factory-glaze doors. Comply with glass manufacturer's recommendations and requirements of Section 08 80 00.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine adjacent construction and supports.
B. Verify that openings are within allowable tolerances, plumb, level, clean, will provide a solid anchoring surface.
C. Correct detrimental conditions before proceeding with installation.
D. The maximum deflection of the header with the live load shall not exceed the lesser of L/720 of the span and 1/4-inch. Structural support for lateral loads (both windload and when the panels are stacked open) must be provided.

3.2 INSTALLATION

A. Do not install components that are bowed, dented, abraded, broken or otherwise defective.
B. Install in accordance with approved shop drawings and manufacturers installation instructions.
C. Install doors level, plumb, square and with tight fitting joints. Attach to supporting construction with non-staining and non-corrosive shims, anchors, fasteners and spacers.
D. Installer to provide adequate anchorage devices and to securely fit frame in place, absolutely level, straight, plumb and square. Install frame in proper elevation, plane and location, and in proper alignment with other work. Head section of frame must be installed with a 1/8-inch upward crown at the center of the opening.
E. Ensure doors are adjusted at the time of installation for proper operation.
F. Install sills in a full bed of sealant.
G. Separate aluminum and other corrodible surfaces from sources of corrosion or electrolytic action at points of contact with other materials by complying with the requirements specified under "Dissimilar Materials" in the Appendix to AAMA 101.
H. Provide all accessories such as fasteners, sealants and concealed anchorage needed for a complete, weatherproof installation.

3.3 ADJUSTING

A. Adjust operating panels and hardware to provide a tight fit at contact points and weatherstripping for smooth operation and weathertight closure.
B. Weatherstrips shall not bind or prevent sash or ventilator from closing easily and tight with weathertight contact between metal.
C. Lubricate hardware and moving parts.

3.4 FIELD QUALITY CONTROL & CLEANING

A. Clean aluminum surfaces immediately after installing sliding aluminum-framed glass doors. Avoid damaging finish.
B. Remove protective coating and excess glazing and sealants, dirt, and other substances.
C. Clean glass immediately after installing doors. Comply with manufacturer's recommendations for final cleaning and maintenance. Remove nonpermanent labels from glass surfaces.
D. Remove and replace glass broken, chipped, cracked, abraded, or damaged during the construction period.

END OF SECTION

SECTION 08 43 13 - ALUMINUM-FRAMED STOREFRONTS AND ENTRANCES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes:

1. Storefront framing.
2. Aluminum-framed glass doors.
3. Mullion covers, subframes, reinforcement and anchors, and sealants for the work of this Section.
4. Supplementary parts and components, such as inserts, clips, fasteners, anchors, bracing and other miscellaneous supports required for a complete, weatherproof installation.

B. Work installed but furnished in other Sections:

1. Section 08 71 00 for finish hardware on doors.
2. Section 08 80 00 for glazing.

C. Related work:

1. Section 08 32 13 for aluminum-framed sliding glass doors.
2. Section 08 35 13 for aluminum-framed stacking glass doors.
3. Section 08 71 00 for door hardware.
4. Section 08 80 00 for glazing.

1.2 ADMINISTRATIVE REQUIREMENTS

A. Delegated-Design Submittal: For aluminum-framed entrances and storefronts including analysis data signed and sealed by the qualified professional engineer responsible for their preparation. See Section 01 40 00 for additional requirements.

1.3 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.4 SUBMITTALS

A. Data: For each type of product.

1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.

B. Shop drawings:

1. Large scale dimensioned shop and erection drawings for the work of this Section showing the following:

a. Elevations.
b. Detail sections of typical composite members.
c. Hardware mounting heights.
d. Hardware schedule and indicate operating hardware types, quantities, and locations.
e. Expansion provisions.
f. Glazing details.

2. Include full-size isometric details of each type of vertical-to-horizontal intersection of aluminum-framed entrances and storefronts, showing the following:

    a. Joinery, including concealed welds.
    b. Anchorage.
    c. Expansion provisions.
    d. Glazing.
    e. Flashing and drainage.

3. Show connection to and continuity with adjacent thermal, weather, air, and vapor barriers.
4. Show relative layout of adjacent beams, columns, and slabs, all correctly dimensioned.
5. Identify shop and field sealants by product name and locate on shop drawings.
6. Identify welds, both shop and field, by AWS welding symbols.

C. Samples:

1. Cutaway sample: Of each vertical-to-horizontal framing intersection of systems, made from minimum 6-inch lengths of full-size components and showing details of the following.

    a. Joinery.
    b. Anchorage.
    c. Expansion provisions.
    d. Glazing.
    e. Identify samples gage, alloy, color and finish.

2. Structural-sealant joints construction, with specified finish and color.
3. Glazing gaskets: 12-inch long samples.

D. Calculations: The following for the work of this Section.

1. Prepare calculations in compliance with current design rules of AA, AISC, AISI, and ACI. Include analysis for wind and dead load on framing members, anchors, and concrete inserts.
2. Show section property computations for framing members. Show vertical and horizontal loads on curbs and other supports. Existing test reports will be acceptable substitute for calculations. Calculations shall be signed and sealed by a California-licensed professional engineer.
3. Do not increase allowable stresses or decrease applied loads for design wind loads, or wind loads in combination with other loads, where not permitted by Code, or if resultant allowable stress after increase is greater than or equal to yield stress.

E. Qualification Data:

1. For Installer.
2. For professional engineer's experience with providing delegated-design engineering services of the kind indicated, including documentation that engineer is licensed in the state in which Project is located.

F. Certification: Certified test results showing that entrance and storefront systems have been tested by a recognized testing laboratory or agency and comply with specified performance characteristics.

1.5 QUALITY ASSURANCE

A. Fabricator/installer’s qualifications: Single firm with a minimum of 5 years of successful experience fabricating and erecting work similar to that required for this Project.

B. Engineering responsibility:

1. Engineer, fabricate, assemble and erect the work of this Section to meet or exceed the specified design and performance criteria, and to provide watertight, structurally sound, self-draining assembly conforming to governing codes and regulations.
2. The assemblies shown on the Drawings and specified herein are intended to define design intent and minimum performance requirements. Do not change indicated profiles without the Architect's written consent.
3. Fasteners and connections are shown schematically. A California-licensed civil or structural engineer employed by the Contractor shall determine final types and sizes.

    a. In no case shall the fasteners or connections conflict with or require revision of the finish profiles of the assemblies specified herein or the supporting work.
    b. Connections to the structural frame shall not impose any eccentric loading, or induce twisting or warping.
    c. Connections to the structural frame shall be able to accommodate misalignment of the steel structure within limits allowed by the AISC tolerances.

C. Laboratory Mockup Testing Agency Qualifications: Qualified according to ASTM E699 for testing indicated.

D. Testing Agency Qualifications: Qualified according to ASTM E699 for testing indicated and acceptable to Owner and Architect.

E. Product Options: Information on Drawings and in Specifications establishes requirements for aesthetic effects and performance characteristics of assemblies. Aesthetic effects are indicated by dimensions, arrangements, alignment, and profiles of components and assemblies as they relate to sightlines, to one another, and to adjoining construction.

1. Do not change intended aesthetic effects, as judged solely by Architect, except with Architect's approval. If changes are proposed, submit comprehensive explanatory data to Architect for review.

1.6 MOCKUPS

A. Build mockups to verify selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for fabrication and installation.

1. Build mockup of typical wall area as shown on Drawings.
2. Testing shall be performed on mockups according to requirements in "Field Quality Control" Article.
3. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
4. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.7 HANDLING

A. Procedure: "Care and Handling of Architectural Aluminum from Shop to Site" published by AAMA.

1.8 WARRANTY

A. Special Warranty: Manufacturer agrees to repair or replace components of aluminum-framed entrances and storefronts that do not comply with requirements or that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, the following:

a. Structural failures, including, but not limited to, excessive deflection.
b. Noise or vibration created by wind and thermal and structural movements.
c. Deterioration of metals and other materials beyond normal weathering.
d. Water penetration through fixed glazing and framing areas.
e. Failure of operating components.

2. Warranty Period: 5 years from date of Substantial Completion.

B. Special Finish Warranty, Factory-Applied Finishes: Standard form in which manufacturer agrees to repair finishes or replace aluminum that shows evidence of deterioration of factory-applied finishes within specified warranty period.

1. Deterioration includes, but is not limited to, the following:

a. Color fading more than 5 Delta E units when tested according to ASTM D2244.
b. Chalking in excess of a No. 8 rating when tested according to ASTM D4214.
c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.

2. Warranty Period: 10 years from date of Substantial Completion.

C. Warrant the work of this Section against defective materials and workmanship for 2 years after Substantial Completion. Refer to Section 07 92 00 for sealant warranty.

D. Repair or replace, when repairs are acceptable to the College Representative, defective materials and workmanship during the warranty period at no cost to the College.

PART 2 - PRODUCTS

2.1 MANUFACTURER

A. Source Limitations: Obtain all components of aluminum-framed entrance and storefront system, including framing and accessories, from single manufacturer.

B. Storefront basis of design and permit approval: Arcadia Inc. These systems have been reviewed and approved by DSA.

1. AFG601T (2-inches x 6-inches).

~~1.~~a. See glass schedule for areas using 1-1/8” glass make up.

2. AFG451T (2-inches x 4-1/2-inches).

~~2.~~a. See glass schedule for areas using 1-1/8” glass make up.

~~3. Acceptable manufacturer: These may be acceptable, based on Architect's review and approval, for submittal to DSA. If one of these manufacturers are used and cannot reproduce DSA design and approval in a timely manner, then the Contractor shall be subject to a time and material back charge for any delays in the project. Architect approval is required prior to DSA submittal and DSA approval is required prior to installation.~~

~~1. Kawneer Co., Inc.~~
~~2. OldCastle BuildingEnvelope.~~
~~3. Or equal.~~

C. Entrances basis of design: Aluminum-framed doors, by Arcadia Inc.:

1. WS512 HD Heavy Duty Wide Stile.
~~1.~~2. 3000 series wide stile doors with glass make up per the glass schedule~~Type: Heavy Duty Wide Style WS512 HD.~~

D. Fixed storefront sections: Of the dimensions and profiles indicated.
E. Other Acceptable Manufacturers (Substitutions):

1. Substitutions: See Section 01 63 00-Product Substitution Procedures.

a. Substitution may or may not be accepted after Architect and Owner review with complete evaluation for content and schedule impact.
b. Substitutions shall include all costs for redesign with consequential changes by other Contractor trades along with the Architect and related approvals by governing agencies.

1) Revisions to shop drawings illustrating the proposed changes is not considered adequate for DSA review and approval.

~~a.~~c. Substitutions may be acceptable, based on Architect's review and approval, for submittal to DSA. If substituted, manufacturer cannot obtain DSA approval in a timely manner, then the contractor shall be responsible for any cost impact for time delays in the project schedule. Architect approval is required prior to DSA submittal and DSA approval is required prior to installation.

1) Kawneer Co., Inc.
2) OldCastle BuildingEnvelope.
~~D.~~3) Or equal.

2.2 DESIGN AND PERFORMANCE REQUIREMENTS

A. Delegated Design: Engage a qualified professional engineer, as defined in Section 01 40 00 - Quality Requirements, to design aluminum-framed entrances and storefronts for any system other than the basis of design system which has been approved by DSA.
B. General: Provide aluminum entrance and storefront systems capable of withstanding loads, and thermal, seismic and structural movement indicated without failure, based on testing manufacturer standard units in assemblies similar to those indicated for this Project. Failure includes the following.

1. Air infiltration and water penetration exceeding specified limits for exterior assemblies.
2. Framing members transferring stresses, including those caused by thermal and structural movement, to glazing units.

C. Glazing: Physically and thermally isolate glazing from framing members.
D. Glazing-to-glazing joints: Provide glazing-to-glazing joints that accommodate thermal and mechanical movements of glazing and system, prevent glazing-to-glazing contact, and maintain required edge clearances.
E. Wind loads

1. Provide assemblies in exterior walls, including anchorage, capable of withstanding wind-load design pressures prescribed by Code, but not less than 20 psf inward and outward.

2. Provide interior assemblies, including anchorage, capable of withstanding a lateral pressure of not less than 5 psf.
3. Limit deflection of framing members in a direction normal to wall plane to 1/175 of clear span or 3/4 inch, whichever is smaller.
4. Static-pressure test performance (exterior assemblies): Provide assemblies that do not evidence material failures, structural distress, failure of operating components to function normally, or permanent deformation of main framing members exceeding 0.2 percent of clear span when tested according to ASTM E 330.

    a. Test pressure: 150 percent of inward and outward wind-load design pressures.
    b. Duration: As required by design wind velocity; fastest 1 mile of wind for relevant exposure category.

F. Seismic loads: Provide assemblies, including anchorage, capable of withstanding the effects of earthquake motions calculated according to requirements of authorities having jurisdiction.

G. Dead loads:

1. Provide glazing members that will not deflect an amount, which will reduce glazing bite below 75 percent of design dimension when carrying full dead load.
2. Provide a minimum 1/8 inch clearance between members and top of glazing or other fixed part immediately below.
3. Provide a minimum 1/16 inch clearance between members and doors.

H. Live loads: Provide assemblies, including anchorage, that accommodate the supporting structure deflection from uniformly distributed and concentrated live loads indicated without failure of materials or permanent deformation.

I. Air infiltration:

1. Provide exterior storefront systems with permanent resistance to air leakage of not more than 0.06 cfm/square foot of fixed wall area when tested according to ASTM E 283 at a static air pressure difference of 6.24 psf.
2. Provide exterior single acting offset doors with air infiltration not exceeding 0.50 cfm/lineal foot of perimeter crack. A pair of 6-foot by 7-foot doors and frame shall not exceed 1 cfm/linear foot of perimeter crack.

J. Water penetration:

1. Provide exterior storefront systems that do not evidence water leakage through fixed glazing and frame areas when tested according to ASTM E 331 at minimum differential pressure of 20 percent of inward-acting wind-load design pressure as defined by ASCE 7, "Minimum Design Loads for Buildings and Other Structures," but not less than 8 psf.
2. Water leakage is defined as uncontrolled water infiltrating systems or appearing on systems' normally exposed interior surfaces from sources other than condensation.
3. Water controlled by flashing and gutters that is drained back to the exterior and cannot damage adjacent materials or finishes is not water leakage.

K. Thermal movements:

1. Provide exterior assemblies, including anchorage, that accommodate thermal movements of systems and supporting elements resulting from the following maximum change (range) in ambient and surface temperatures without buckling, damaging stresses on glazing, failure of joint sealants, damaging loads on fasteners, failure of doors or other operating units to function properly, and other detrimental effects.
2. Temperature change (range): 120-degree F. ambient, 180-degree F. material surfaces.

L. Movements of the structural-support: Provide assemblies that accommodate structural movements including, but not limited to, sway and deflection.

M. Dimensional tolerances: Provide entrance and storefront systems that accommodate dimensional tolerances of building frame and other adjacent construction.

N. Performance requirements for doors: Resistance to corner racking shall be tested by the "Dual Moment Load" test as follows.

1. Test section shall consist of a standard top door corner assembly. Side rail section shall be 24 inches long; top rail section shall be 12 inches long.
2. Anchor "top rail" positively to test bench so that corner protrudes 3 inches beyond the bench edge.
3. Anchor a lever arm positively to "side rail" at a point 19 inches from the inside edge of "top rail." Attach weight support pad at a point 19 inches from inner edge of "side rail".
4. Test section shall withstand a load of 170 lb. on the lever arm before reaching the point of a 1/18 inch gap at the stile/rail, joint or a 3-degree rotation in the stile. Further failure, defined as a rotation of the lever arm in excess of 45, shall not be reached before 270 lb.

2.3 STOREFRONT SYSTEMS

A. Framing Members: Manufacturer's extruded- or formed-aluminum framing members of thickness required and reinforced as required to support imposed loads.

1. Exterior Framing Construction: Thermally broken.
2. Glazing System: Retained mechanically with gaskets on four sides.
3. Glazing Plane: Front.
4. Finish: Superior-performance organic finish.
5. Fabrication Method: Field-fabricated stick system.
6. Aluminum: Alloy and temper recommended by manufacturer for type of use and finish indicated.
7. Steel Reinforcement: As required by manufacturer.

2.4 ENTRANCE DOOR SYSTEMS

A. Entrance Doors: Manufacturer's standard glazed entrance doors for manual-swing or automatic operation.

1. Door Construction: 1-3/4-inch (44.5-mm) overall thickness, with minimum ~~0.125~~ 0.188-inch- ~~(3.2-mm-)~~ thick, extruded-aluminum tubular rail and stile members. Mechanically fasten corners with reinforcing brackets that are deeply penetrated and fillet welded or that incorporate concealed tie rods.
2. Door Design:

a. Heavy Duty Wide Style; 5-inch nominal width.
~~2.~~b. 3000 series doors per CW drawings.

3. Glazing Stops and Gaskets: Square, snap-on, extruded-aluminum stops and preformed gaskets.

a. Provide nonremovable glazing stops on outside of door.

4. Finish: Match adjacent storefront framing finish.

2.5 ENTRANCE DOOR HARDWARE

A. Entrance Door Hardware: Hardware not specified in this Section is specified in Section 08 71 00 "Door Hardware."

B. General: Provide entrance door hardware and entrance door hardware sets indicated in door and frame schedule for each entrance door, to comply with requirements in this Section.

1. Entrance Door Hardware Sets: Provide quantity, item, size, finish or color indicated, and named manufacturers' products.
2. Sequence of Operation: Provide electrified door hardware function, sequence of operation, and interface with other building control systems indicated.
3. Opening-Force Requirements:

a. Egress Doors: Not more than 15 lbf (67 N) to release the latch and not more than 30 lbf (133 N) to set the door in motion and not more than 15 lbf (67 N) to open the door to its minimum required width.
b. Accessible Interior Doors: Not more than 5 lbf (22.2 N) to fully open door.

C. Designations: Requirements for design, grade, function, finish, quantity, size, and other distinctive qualities of each type of entrance door hardware are indicated in "Entrance Door Hardware Sets" Article. Products are identified by using entrance door hardware designations as follows:

1. Named Manufacturers' Products: Manufacturer and product designation are listed for each door hardware type required for the purpose of establishing minimum requirements. Manufacturers' names are abbreviated in "Entrance Door Hardware Sets" Article.
2. References to BHMA Standards: Provide products complying with these standards and requirements for description, quality, and function.

D. Pivot Hinges: BHMA A156.4, Grade 1.

1. Offset-Pivot Hinges: Provide top, bottom, and intermediate offset pivots at each door leaf.

E. Cylinders and Panic Exit Devices: As specified in Section 08 71 00 "Door Hardware."
F. Strikes: Provide strike with black-plastic dust box for each latch or lock bolt; fabricated for aluminum framing.
G. Operating Trim: BHMA A156.6.
H. Concealed Overhead Holders and Stops: BHMA A156.8, Grade 1.
I. Door Stops: As specified in Section 08 71 00 "Door Hardware."
J. Weather Stripping: Manufacturer's standard replaceable components.

1. Compression Type: Made of ASTM D2000 molded neoprene or ASTM D2287 molded PVC.
2. Sliding Type: AAMA 701/702, made of wool, polypropylene, or nylon woven pile with nylon-fabric or aluminum-strip backing.

K. Weather Sweeps: Manufacturer's standard exterior-door bottom sweep with concealed fasteners on mounting strip.
L. Thresholds: BHMA A156.21 raised thresholds beveled with a slope of not more than 1:2, with maximum height of 1/2 inch (12.7 mm).
M. Finger Guards: Manufacturer's standard collapsible neoprene or PVC gasket anchored to frame hinge-jamb at center-pivoted doors

2.6 GLAZING

A. Glazing: Comply with Section 08 80 00 - Glazing.

2.7 MATERIALS

A. Aluminum: Alloy and temper recommended by the manufacturer for strength and application of required finish, complying with ASTM B 221 for extrusions and ASTM B 209 for sheet or plate.

B. Steel mullion reinforcement, if required by wind loading and other considerations: Proprietary bent steel plate or structural steel shape complying with the following.

1. Hot-rolled sections: ASTM A 36.
2. Structural tube framing: ASTM A 500, Grade B.

C. Fasteners: 300 Series (18-8) non-magnetic stainless steel for all screws, bolts, nuts, washers and rivets, except for the following applicable to Self-drilling and self-tapping screws.

1. Comply with SAE J78, except shanks and heads of fasteners shall comply with SAE i429, Grade 5 with 827 MPa (120 ksi) tensile strength and Rockwell C34 maximum hardness.
2. Where additional corrosion resistance is required, such as where fastener heads are exposed to aggressive environments, shanks and heads of fasteners shall be made of Series 300 (18-8) stainless steel complying with ASTM F 593, Condition CW (i.e. cold-worked), 689 to 1034 MPa (100 to 150 ksi) tensile strength, Rockwell 895 to C32 hardness.
3. Emboss fastener heads with manufacturer’s mark for inspection purpose and to indicate fasteners comply with Specifications.
4. Carbon steel fasteners shall have corrosion-resistant, hexavalent chrome-free coating with a zinc-rich base coat and an aluminum-pigmented organic topcoat. Fastener shall withstand 800 hours test, without forming red rust, when tested according to ASTM B 11 7.
5. Emboss 300 series stainless steel fasteners with the manufacturers mark for inspection purpose and to indicate fasteners comply with Specifications and applicable standards. Fasteners shall have a galvanically-compatible finish and coating, hexavalent chrome-free, zinc plate base and an aluminum-pigmented organic topcoat.

D. Reinforcement: Where fasteners screw-anchor into aluminum less than 0.125-inch thick, reinforce the interior with aluminum or non-magnetic stainless steel to receive screw threads, or provide standard non-corrosive pressed-in splined grommet nuts.

1. Welding electrodes: As recommended by AWS for the type of metal to be welded and the conditions of use.

E. Brackets: Where feasible, provide high-strength aluminum brackets and reinforcements; otherwise provide non-magnetic stainless steel or steel complying with ASTM A 386.

F. Compression weatherstripping: Manufacturer's standard replaceable compressible weatherstripping gaskets of molded neoprene complying with ASTM D 2000 or molded silicone of the color selected by the City Engineer.

G. Sliding weatherstripping: Manufacturer's standard replaceable weatherstripping of wool, polypropylene, or nylon woven pile, with nylon fabric or aluminum strip backing, complying with AAMA 701.2.

H. Glass and glazing materials: As indicated on the Drawings and specified in Section 08 80 00.

I. Sealants and backup rods:

1. Within assemblies: Manufacturer standard non-drying, non-skinning sealant complying with AAMA 809.2.
2. Between assemblies and adjacent materials: As specified in Section 07 92 00.
3. Glazing sealants: Refer to Section 08 80 00.

J. Paint:

1. Exposed aluminum finishes: See below.
2. Shop primer for ferrous metal: Manufacturer or fabricator standard, fast-curing, lead-free, universal rust-inhibitive alkyd primer complying with performance requirements of FS TT-P645.

3. Shop primer for concealed aluminum surfaces: Alkyd barium metaborate made by one of the manufacturers listed in Section 09900, or bituminous paint.
4. Galvanizing repair paint: SSPC Paint No. 20, Type II (Organic), by Tnemec, Porter International, Valspar Corp., Ameron Protective Coatings, or DuPont Co.
5. Bituminous paint: Cold-applied asphalt mastic complying with SSPC Paint 12, but containing no asbestos fibers.

2.8 FABRICATION

A. Furnish shop drawings, inserts and similar items to other trades, at appropriate times as required for proper sequence of construction.

1. Verify dimensions of the supporting structure and other elements that precede this work before fabrication of the required components.
2. Provide erection tolerances corresponding with specified tolerances for other work wherever field measurements cannot be obtained.

B. Maintain the visual design concept shown, including member sizes, profiles and alignment of components.

C. Fabricate and assemble components with proper and acceptable provision for noiseless thermal expansion and contraction, fabrication and erection tolerances, adjoining building component tolerances, and dynamic movements.

D. Fabricate and assemble components with minimum perimeter clearances and shim spacing but enable installation and dynamic movement of perimeter seals.

E. Removable members such as glass stops, fillers or closures shall be extruded, and securely engaged into adjacent components. Fabricate extrusions to eliminate edge projection, bowing, and misalignment at joints.

F. Design and construct expansion joints so that they will be, and remain, permanently watertight, and will accommodate weather and building dynamics.

G. For surfaces exposed to view employ only materials which are free from alloy defects, die marks, scratches, streaks and other surface blemishes.

H. When using aluminum sheets, use material light enough to permit workability but heavy enough to accurately retain the brake shape or contour without oil-canning when fastened to backing or blocking.

I. Complete the fabrication and assembly of the components in the shop to the greatest extent possible to minimize field cutting, splicing, fastening, sealing and finishing.

1. Maintain provisions for expansion and movement.
2. Disassemble only as necessary for shipment and erection.
3. Provide secure attachment and support at joints, with hairline, flush fit between contacting members.

J. Complete the cutting, fitting, forming, drilling and grinding of metal before cleaning and applying specified finish. Remove arrises from cut edges and ease edges and corners to a radius of approximately 1/64 inch minimum, 1/32 inch maximum.

K. Welding:

1. Comply with industry standards for assembly and fabrication using system and rods for exposed metals that will provide texture match with materials being joined.
2. Grind exposed welds smooth and flush with parent metal using clean grinding wheels of a type that will not result in stains or discoloration.

L. Hardware:

1. Cut, reinforce, drill and tap doors and frames at the factory to receive hardware.
2. Provide hardware reinforcement of stainless steel or hot-dip galvanized steel secured by welding or stainless-steel screws.

M. Door fabrication:

1. Make proper allowance for clearances at jambs, meeting stile of pairs, head and threshold thickness and clearance.
2. Equip meeting stiles on pairs of doors with an adjustable astragal.
3. Close the top of out-swinging doors with a plate or inverted channel.
4. Cut, reinforce, drill and tap doors and frames at the factory to receive hardware. Provide hardware reinforcement of stainless steel or hot-dip galvanized steel secured by welding or stainless-steel screws.

2.9 EXPOSED ALUMINUM FINISHES

A. Superior-Performance Organic Finish, Four-Coat PVDF: Fluoropolymer finish complying with AAMA 2605 and containing not less than 70 percent PVDF resin by weight in both color coat and clear topcoat. (MT-1)

1. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
2. Color and Gloss: PPG Duranar UC51595XL Medium Gray. As indicated on Drawings.

2.10 SOURCE QUALITY CONTROL

A. Structural Sealant: Perform quality-control procedures complying with ASTM C1401 recommendations, including, but not limited to, assembly material qualification procedures, sealant testing, and assembly fabrication reviews and checks.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine adjacent construction and supports.
B. Verify that openings are within allowable tolerances, plumb, level, clean, will provide a solid anchoring surface, and that other conditions detrimental to the proper or timely completion of this work are corrected before proceeding with installation.

3.2 INSTALLATION

A. General:

1. Do not install defective components, including warped, bowed, dented, abraded and broken members, and glass with damaged edges.
2. Remove and replace members that have been damaged during installation or thereafter before final acceptance.
3. Do not cut, trim, or weld components during erection in a manner that would damage the finish, decrease their strength, or result in a visual imperfection or a failure in performance of the work.
4. Return components that require alteration to the shop for refabrication or replacement.
5. Install components level, plumb, true to line and with uniform tight joints and reveals. Attach to structure with non-staining and non-corrosive shims, anchors, fasteners and spacers.
6. Provide all accessories such as fastenings, sealants and concealed anchorage needed for a complete weatherproof installation.

B. Erection tolerances:

1. Provide adjustment within the assemblies to accommodate job variations.

2. Install the work of this Section within the following tolerances:

    a. Deviation from established vertical, horizontal, or designed position shall not exceed 1/8 inch in 12 feet of length of any member, or 1/4 inch in any total run in any line.
    b. Maximum offset from true alignment between 2 consecutive members placed end-to-end shall not exceed 1/16 inch.
    c. Maximum offset between glass framing members at corners of glazing pocket must not exceed 1/32 inch.

C. Assembly and anchorage:

1. Anchor components securely by bolting, welding or other permanent mechanical attachments system that will comply with specified requirements and permit movements that are intended or necessary.
2. Install slip-joint linings where required to ensure movement without damage of the components.
3. Provide tape separator between contact surfaces of dissimilar materials where there is a possibility of corrosive or electrolytic action.
4. Remove weld slag and apply primer over welds. Touchup shop applied paint damaged by welding or other causes.

D. Glazing:

1. Glaze assemblies as specified in Section 08 80 00.
2. Carefully match joints of glazing beads. Drive screws securing such beads fully and tighten with heads firmly seated.

E. Hanging doors:

1. Install finish hardware on doors in compliance with its manufacturer's instructions.
2. Hang doors with minimum clearance to frame and threshold to meet the performance criteria specified.
3. Hang doors and adjust hardware so doors operate freely for their entire travel, without sticking or binding, and with minimum clearance to frame to comply with performance criteria specified.

3.3 SEALANTS

A. The requirements of Section 07 92 00 apply to sealants used in this work. Seal all joints between the work of this Section and adjacent construction to be weathertight.

3.4 FIELD QUALITY CONTROL

A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.
B. Field Quality-Control Testing: Perform the following test on representative areas of aluminum-framed entrances and storefronts.

1. Water-Spray Test: Before installation of interior finishes has begun, areas designated by Architect shall be tested according to AAMA 501.2 and shall not evidence water penetration.

    a. Perform tests in each test area as directed by Architect. Perform at least three tests, prior to 10, 35, and 70 percent completion.

C. Aluminum-framed entrances and storefronts will be considered defective if they do not pass tests and inspections.
D. Prepare test and inspection reports.

3.5 ADJUSTING

A. Adjust door hardware for smooth operation according to hardware manufacturers' instructions.
B. Adjust door closers so that from an open position of 90 degrees, the time required to move the door to a position of 12 degrees from the latch is 5 seconds minimum.

END OF SECTION

SECTION 08 80 00 - GLAZING

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes:

1. Glazing for the Project except as noted below.
2. Glazing accessories.
3. Glazing sealants.

B. Related requirements:

1. Section 08 86 00 for unframed mirrors.
2. Section 10 28 00 for framed mirrors.

1.2 SUBMITTALS

A. Data: Manufacturer Product Data for glass, sealants, gaskets and glazing accessories.
B. Samples:

1. Twelve-inch square labeled Samples of each type and color of glass, with taped or ground edges.
2. Coated glass Samples shall show extremes of color range.
3. Glass indicated or required to be “heat-treated” need not be when submitting Samples.

C. Certification: Glass manufacturer’s certification as specified.

1. Product certificates signed by glazing materials manufacturers certifying that their products comply with specified requirements. Include wind pressure analysis, thermal stress analysis, including shading effects, and review of Shop Drawings stating that details are suitable for proposed glass products.
2. Separate certifications are not required for glazing materials bearing the manufacturer's permanent label designating type and thickness of glass, provided labels represent a quality control program of a recognized certification agency or independent testing agency acceptable to authorities having jurisdiction.

D. Glazing schedule: Use same designations indicated on Drawings for glazed openings in preparing a schedule listing glass type and thickness for each size opening and location.
E. Preconstruction adhesion and compatibility test report: From glazing sealant manufacturer indicating glazing sealants were tested for adhesion to glass and glazing channel substrates and for compatibility with glass and other glazing materials.
F. Product test reports: From a qualified testing agency indicating the following products comply with requirements, based on comprehensive testing of current products:

1. Tinted float glass.
2. Coated float glass.
3. Insulating glass.
4. Monothetic glass
5. Laminated glass.
6. Glazing sealants.
7. Glazing gaskets.

G. Labels: Provide NFRC Rating Labels as required by the California Energy Code. Reference compliance guide for information required.

1.3 QUALITY ASSURANCE

A. Glazier qualifications: Experienced installer who has completed glazing similar in material, design, and extent to that indicated for this Project; whose work has resulted in glass installations with a record of successful in-service performance; and who employs glass installers for this Project who are certified under the National Glass Association Glazier Certification Program as Level 2 (Senior Glaziers) or Level 3 (Master Glaziers).
B. Fabricator qualifications: When the glass manufacturer has a certification program, the fabricator shall have a current “Certified Fabricator” certificate form the glass manufacturer.
C. Source limitations for clear glass: Obtain clear float glass from one primary glass manufacturer.
D. Source limitations for tinted glass: Obtain tinted, heat absorbing, and light reducing float glass from one primary glass manufacturer for each tint color indicated.
E. Source limitations for coated glass: Obtain coated glass from one manufacturer for each type of coating and each type and class of float glass indicated.
F. Source limitations for insulating glass: Obtain insulating-glass units from one manufacturer using the same type of glass and other components for each type of unit indicated.
G. Source limitations for glazing accessories: Obtain glazing accessories from one source for each product and installation method indicated.
H. Tempered or Laminated safety glass, noted as SG on Door and Window Schedule on Drawings.
~~H.~~I. Safety glass:

1. Category II materials complying with testing requirements in 16 CFR 1201 and ANSI Z97.1.
2. Subject to compliance with the above, provide a permanent mark on safety glass with certification label of Safety Glazing Certification Council or another certification agency acceptable to AHJ.

~~I.~~J. Insulating glass certification program: Permanently marked either on spacers or on at least one component lite of units with appropriate certification label of the following inspecting and testing agency.

1. Insulating Glass Certification Council.
2. Associated Laboratories, Inc.
3. National Accreditation and Management Institute.

~~J.~~K. Mockups: Before glazing, build mockups for each glass product indicated below in accordance with the following requirements, using materials indicated for the completed Work.

1. Build mockups in the location and of the size indicated or, if not indicated, as directed by Architect.
2. Build mockups with the following kinds of glass to match glazing systems required for Project, including typical lite size, framing systems, and glazing methods:

    a. Heat-strengthened coated glass.
    b. Tempered glass.
    c. Coated insulating glass.

3. Obtain Architect's approval of mockups before starting fabrication.
4. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
5. Demolish and remove mockups when directed.
6. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

~~K.~~L. Manufacturer certification: Submit manufacturer certification that.

1. All materials to be used in the glazing system such as sealants, setting blocks, spacers, backing rods, metal finishes, etc. have been reviewed by the glass manufacturer.
2. These materials are compatible with the glass supplied to the Project site.
3. These materials will not cause deterioration, premature aging, and staining of adjacent materials.

~~L.~~M. Labeling:

1. Submit a certificate stating that the glass furnished for the Project complies with the Specifications.
2. Label each piece of heat-treated glass with a permanent logo etched in one corner to identify the fabricator.

1.4 HANDLING

A. Storage: Prevent damage to glass and glazing materials from condensation, temperature changes, direct exposure to sun, run-off, and other causes.

1.5 PROJECT CONDITIONS

A. Do not proceed with installation of bulk sealants under adverse weather conditions, or when temperatures are below or above manufacturer's recommended limitations for installation.

1.6 SPECIAL WARRANTIES

A. Warrant insulating glass for 5 years after Substantial Completion against fogging and loss of transparency and frost build-up between the glass panes due to defective materials or sealant failure.
B. Replace defective materials and workmanship during the warranty period at no cost to the Owner.

PART 2 - PRODUCTS

2.1 PRIMARY GLASS MANUFACTURERS

A. Basis of Design: Vitro Architectural Glass (formerly PPG Glass.)
B. Cardinal Glass Benson Global (formally AGC Flat Glass North America Ltd.)
C. Guardian Glass.
D. Pilkington Group.
E. Or equal.

2.2 CRITERIA AND PERFORMANCE REQUIREMENTS

A. General: Installed glazing systems shall withstand normal thermal movement and wind and impact loads (where applicable) without failure, including loss or glass breakage attributable to the following: defective manufacture, fabrication, or installation; failure of sealants or gaskets to remain watertight and airtight; deterioration of glazing materials; or other defects in construction.
B. Glass design: Glass thicknesses shown and heat treatment specified are minimum requirements based upon manufacturer's regularly published literature. The Architect makes no representations as to the accuracy of the literature or the conclusions derived therefrom. Confirm glass thicknesses by analyzing Project loads and in-service conditions. Provide glass lites for various size openings in nominal thicknesses indicated, but not less than thickness and

in strengths (annealed or heat-treated) required to meet or exceed the criteria specified below and with the CBC and ASTM E 1300.

C. Glass thickness and temper indicated have not been engineered. Design glass, including comprehensive engineering analysis according to the CBC by a qualified professional engineer under the Contractor's employ, using the following design criteria.

1. Design wind pressures:

   a. Positive: As indicated on structural Drawings. If not indicated, comply with ASCE/SEI "Minimum Design Loads for Buildings and Other Structures," unless otherwise prescribed by Code.
   b. Negative: 20 psf, unless otherwise indicated.

2. Vertical glazing: For glass surfaces sloped 15 degrees or less from vertical, design glass to resist design wind pressure based on glass type factors for short-duration load.
3. Sloped glazing: For glass surfaces sloped more than 15 degrees from vertical, design glass to resist each of the following combinations of loads.

   a. Outward design wind pressure minus the weight of the glass. Base design on glass type factors for short-duration load.

4. Probability of breakage for glass surfaces sloped less than 15 degrees from vertical: Design glass for a probability of breakage not greater than 0.008.
5. Probability of breakage for glass surfaces sloped more than 15 degrees from vertical: Design glass for a probability of breakage not greater than 0.001.
6. Maximum lateral deflection: For glass supported on all 4 edges, limit center-of-glass deflection at design wind pressure to not more than 1/50 times the short-side length or one-inch, whichever is less.
7. Differential shading: Design glass to resist thermal stresses induced by differential shading within individual glass lites.

D. Thermal movements: Allow for thermal movements from ambient and surface temperature changes acting on glass framing members and glazing components.

1. Temperature change: 120 deg F, ambient; 180 deg F, material surfaces.
2. Thermal and optical performance properties: Provide glass with performance properties specified based on manufacturer's published test data, as determined according to procedures indicated below:

   a. For monolithic glass lites, properties are based on units with lites 6 mm thick.]For insulating glass units, properties are based on units with lites 6 mm thick and a nominal 1/2-inch-wide interspace.
   c. Center of glass U values: NFRC 100 methodology using LBL-35298 WINDOW 4.1 computer program, expressed as Btu/ sq.-foot by hour by -degree F.
   d. Center of glass solar heat gain coefficient: NFRC 200 methodology using LBL-35298 WINDOW 4.1 computer program.
   e. Solar optical properties: NFRC 300.

2.3 GLASS MATERIALS

A. General:

1. Annealed Float glass: Shall comply with ASTM C 1036; heat-treated glass shall comply with ASTM A 1048.

2. Heat-Treated Float Glass: ASTM C 1048; Type I (transparent flat glass); Quality-Q3; of class, kind, and condition indicated.

    a. Fabrication Process: By horizontal (roller-hearth) process with roll-wave distortion parallel to bottom edge of glass as installed, unless otherwise indicated.
    b. Provide Kind HS (heat-strengthened) float glass in place of annealed float glass where needed to resist thermal stresses induced by differential shading of individual glass lites and to comply with glass design requirements specified in "Criteria and Performance Requirements" Article.
    c. For uncoated glass, comply with requirements for Condition A.
    d. For coated vision glass, comply with requirements for Condition C (other uncoated glass).
    e. Provide Kind FT (fully tempered) float glass in place of annealed or Kind HS (heat-strengthened) float glass where safety glass is indicated or required.

3. ASTM E 1300 Standard Practice for Determining Load Resistance of Glass in Buildings
4. ASTM E 2190 Standard Specification for Insulating Glass Unit Performance and Evaluation.
5. ANSI Z97.1 American National Standard for Safety Glazing Materials Used in Buildings - Safety Performance Specifications Method of Test.
6. US Consumer Product Safety Commission CPSC 16 CFR 1201 Safety Standard for Architectural Glazing Materials
7. Provide glass free from bubbles, smoke vanes, air holes, scratches and other defects.
8. Laminated glass shall comply with ASTM C 1172. Glass in the lamination shall be from the same manufacturer when heat-strengthened.
9. The same manufacturer shall make all tinted and reflective glass.
10. Fabricate tempered glass by horizontal (roller hearth) process with roll wave distortion parallel to bottom edge of glass as installed, unless otherwise indicated.

    a. Comply with Category II of CPSC 16 CFR Part 1201 or Class A of ANSI Z97.1. (2408.3.).

11. Comply with Code and the Drawings for glass in hazardous locations. Laminated glass subject to human impact shall comply with Category II of CPSC 16 CFR Part 1201 or Class A of ANSI Z97.1. (2408.3.).

    a. Note that safety glass shall be installed where required by the CBC including 2406 and 2408.3 as well as other requirements in Chapter 24.

12. Unless otherwise indicated or specified, overall thickness of each glass type and composite thickness of multiple layer glass types shall be consistent throughout the Project.
13. Provide insulating glass assemblies CBA rated by IGCC when tested in compliance with ASTM E 774, and permanently labeled with the appropriate certification label of IGCC, ALI or NCTL.

2.4 GLAZING MATERIALS

A. Setting block: Neoprene or, in the case of structural silicone glazing, dense extruded silicone; both with a hardness of 80 to 90 durometer Shore A with a minimum length of 4-inch or as required by GANA guidelines. For flush glazed skylights, provide L shaped setting blocks.
B. Side blocks: Neoprene or dense silicone with a hardness of 65 ±5 durometer Shore A.
C. Spacer: Neoprene, silicone, or EPDM, 50 to 60 durometer hardness, compatible with sealants used.

D. Sealants:

~~1. For structural glazing: High modulus (structural) silicone sealant, 2-component, non-acidic, neutral curing silicone which meets or exceeds Federal Specification TT-S-00227, Type II, Class B and ASTM C920, Type M, NS, Class 12.5.~~

~~a. Color: As selected by Architect.~~
~~b. Acceptable products:~~

~~1) Dowsil "995" or "DC 995." DC 983 is not acceptable for use with painted substrate without incorporation of special substrate preparation requirements utilizing Scotch Brite pads, alcohol and barrier primer.~~
~~2) Dowsil "999" (Glass Mullion Glazing System only).~~
~~3) General Electric "Ultra Glaze SSG 4400" and "Ultra Glaze 4000."~~
~~4) Tremco "Proglaze SSG."~~
~~5) Pecora "895" or 2-part "Fast Cure."~~

~~c. Painted surfaces in contact with structural silicone must be primed with a primer approved for use by the sealant manufacturer.~~

~~2.~~1. For primary seal of insulating units: Manufacturer standard sealant.
~~3.~~2. For all other conditions: Medium and low modulus (weatherseal) silicone sealant, one-part, non~~-~~acidic, neutral curing, Type S, Grade NS, Class 25, Use NT, capable of withstanding movements from plus 50 to minus 50 for medium modulus and plus 100 to minus 50 percent for low modulus based on original joint design.

a. Color: Match Architect's paint color for sealant.
b. Acceptable products:

1) Dowsil "795" and "790."
2) General Electric "Silpruf," "Silpruf LM."

c. Only low modulus sealant, such as Dowsil "790" or GE "Silpruf LM," shall be used when sealing to cementitious substrate.

E. Glazing gasket: Resilient, continuous neoprene, (except as specified below) extrusions, 40 to 60 Shore A durometer hardness, meeting the requirements of ASTM C 509 for cellular (closed-cell) material, and AAMA SG-1 for non-cellular (dense) material, with molded corners.

1. Gaskets shall have a continuous mechanical engagement to framing members and factory molded corners.
2. Gasket corners, whether molded or not, shall be bedded in elastomeric sealant compatible with glazing gaskets.
3. When in direct contact with silicone sealants, gaskets, spacers and setting blocks shall be heat cured silicone rubber~~-~~based material chemically compatible with the silicone sealant and with sufficient hardness for the specific purpose intended. Compatibility testing by the silicone sealant supplier/manufacturer shall be required.
4. Design interior and exterior gasket profiles to produce a glass edge pressure of 12 psf unless otherwise recommended by the glass manufacturer.

F. Compressible filler rod:

1. Closed cell or waterproof jacketed rod stock of synthetic rubber or plastic foam compatible with sealants used, flexible and resilient, with 5 to 10 psi compressive strength at 25 percent deflection.
2. Do not use vinyl foam stock.

G. Laminated Glass Interlayer:

1. Construction: Laminate glass with Ionoplast polymer interlayer to comply with interlayer manufacturer's written instructions.
2. Interlayer Thickness: Provide thickness not less than that indicated and as needed to comply with requirements.
3. Interlayer Color: Clear unless otherwise indicated.

H. Glass coating for sandblasted surfaces: CLO Ritec “ClearShield Coating" by CLO Glass Ltd.
I. Cleaner, primer and sealer: Type recommended by sealant or gasket manufacturer.
J. Partition closure: Michael Rizza Co., LLC “Partition Closures” consisting of an extruded aluminum retainer channel and a compressible solid silicone closure.
K. Sealer for acid-etched and sandblasted glass: Etch Sealer by Skyline (773.278.4660), or equal wax-free, specially formulated sealer to resist fingerprints and stains.

2.5 FABRICATION

A. Cutting:

1. Obtain sizes from Shop Drawings or by field measurement. Cut glass to fit each opening with at least the minimum edge clearance and bite on glass recommended by glass manufacturer.
2. When glass will be precut to sizes obtained from Shop Drawings, take field measurements of each opening before glazing to verify adequate bite on glass and minimum edge clearance.
3. Glaze openings, which do not fall within tolerances for which precut glass has been sized only with glass specially cut to fit such openings.
4. Do not nip glass edges. Edges may be wheel cut or sawed and seamed at manufacturer's option.

B. Edge quality of annealed and heat-strengthened glass:

1. Shark teeth shall not penetrate more than half of glass thickness.
2. Serration hackle shall not penetrate more than 10 percent of glass thickness.
3. Flare shall not exceed 0.062-inch as measured perpendicular to glass surface edge.
4. Bevel shall not exceed 0.062-inch.
5. Flake chip depth shall not exceed 0.031-inch and length or diameter shall not exceed 0.25-inch.
6. Rough chips are not permitted. Rough chips are those that exceed dimensional limits for flake chips.
7. For glass to be cut at site, provide glass 2-inch larger than required, in both dimensions, to facilitate cutting of clean-cut edges without seaming or nipping.
8. Do not cut, seam, nip, or abrade tempered and heat strengthened glass after tempering.
9. Provide flat ground edges with arised corners where glass edge is not covered by a metal stop.

C. When full height vision glass is shown (without intermediate horizontals or rails), safety glazing is only required on the inboard lite for Code compliance except on the ground floor or other areas where there is a walking surface on both sides. Alternately, if an aluminum rail is used on the interior of the framing, neither lite need not be safety glazing.
D. Glass in sloped glazing conditions (15 degrees or more from vertical) shall be laminated with both lites heat-strengthened. Fully tempered glass is not allowed, whether monolithic, laminated, or as the inboard lite of an insulated glass unit.

E. Insulating glass:

1. Provide black aluminum spacers with bent (not mitered or spliced) corners; only one seam is allowed in each spacer of each unit.
2. The date of the manufacture of the unit shall be discretely identified on the spacer (top of unit, left or right corner).

F. Identification: Identify tempered glass with a manufacturer-installed, removable paper designation as required by CBC section 2406.

G. Insulating-Glass Units, General: Factory-assembled units consisting of sealed lites of glass separated by a dehydrated interspace and complying with ASTM E 2188 / E 2189 for and with requirements specified in this Article.

1. Provide Kind HS (heat-strengthened) float glass in place of annealed glass where needed to resist thermal stresses induced by differential shading of individual glass lites and to comply with glass design requirements specified in Part 1 "Performance Requirements" Article.
2. Provide Kind FT (fully tempered) glass lites where safety glass is indicated or required.
3. Overall Unit Thickness and Thickness of Each Lite: Dimensions indicated for insulating-glass units are nominal and the overall thicknesses of units are measured perpendicularly from outer surfaces of glass lites at unit's edge.
4. Sealing System: Comply with requirements in Section 07920 - Joint Sealants. Dual seal, with primary and secondary sealants of polyisobutylene and silicone.
5. Spacer Specifications: Manufacturer's standard spacer material and construction complying with the following requirements:

a. Spacer Material: Aluminum with mill or clear anodic finish.
b. Desiccant: Molecular sieve or silica gel, or blend of both.
c. Corner Construction: Manufacturer's standard corner construction.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine conditions and measurements affecting the work of this Section at site.
B. Verify that openings and frames to be glazed are within allowable tolerances, plumb, level and square.
C. Inspect framing joint intersections to ensure that the offset in the joinery will not impose undue edge pressure on the glass in compliance with GANA, Glazing Manual, and Sealant Manual, guidelines.
D. Correct other detrimental conditions before proceeding with glazing.

3.2 STANDARDS AND PERFORMANCE

A. Watertight and airtight installation is required for each piece of glass installed in an exterior wall and skylight.
B. Each installation must withstand normal temperature changes, wind loading, and impact from normal operation for doors and windows, without failure of any kind including loss or breakage of glass, failure of sealants or gaskets to remain watertight and airtight, deterioration of glazing materials and other defects in the Work.
C. Installed glass shall be free from rattle.
D. Protect glass from damage at all times during handling, installation and operation of the building until Substantial Completion.
E. Comply with combined recommendations of glass manufacturer and manufacturer of sealants and other materials used in glazing, except where more stringent requirements are specified.

F. Except as recommended otherwise by the manufacturers of the glass and glazing materials, comply with GANA Glazing Manual and the following:

1. Provide minimum nominal glass bite of 0.375-inch on monolithic lites; 1/2-inch on insulated glass units.
2. Where joint movement will result in variable glass bite, increase nominal bit to provide 0.375-inch minimum bite and 0.25-inch minimum edge clearance.

G. Inspect each piece of glass immediately before installation and eliminate those with edge damage or face imperfections.

H. Unify appearance of each series of lights by setting each piece to match others as nearly as possible. Inspect each piece and set with pattern, draw and bow oriented in the same direction as other pieces.

3.3 PREPARATION FOR GLAZING

A. Immediately before glazing, clean the glazing channel and other framing members to receive glass.

1. Remove coatings not firmly bonded to the substrate.
2. Verify that framing is satisfactory to receive the glass.

B. Apply primer or sealer to joint surfaces when recommended by sealant manufacturer.

3.4 GLASS INSTALLATION

A. Structural glazing: Comply with the sealant manufacturer’s instructions and the following ASTM standards.

1. C 794: Sealant compatibility and adhesion to each substrate to be encountered on the Project.
2. C 1087: Sealant compatibility with backing.
3. C 1087: Sealant compatibility and lack of adhesion to bond breaker.
4. C 1184: Structural Glazing Specifications.
5. C 1401: Guide for Structural Glazing.

B. Erect each pane of glass square, plumb, and with uniform clearances between panel and rebates.

C. Follow glass manufacturer’s instructions and GANA Standards. Maintain minimum bed clearance between glass and frame.

D. Do not nip glass. Do not install glass with edge damage.

E. Install glass with required glass markings right side up so they can be read from the exterior.

F. Setting blocks:

1. Minimum length of 4 inches or as required by GANA guidelines; minimum width shall correspond to the glass thickness and retaining member but, in no case less than the glass thickness at point of contact.
2. Locate at quarter points, or in accordance with GANA glazing guidelines.
3. Secure against migration.
4. Shims used in conjunction with setting blocks must be of the same material, hardness, length and width as the setting blocks.

G. Side blocks:

1. Locate side blocks where required within the upper half of each jamb for each light.
2. Install block with 1/8-inch clearance between block and glass bearing surface.

3. Block shall be sufficient length to prevent point loading on the glass.
4. Side blocks are not required where an individual glass light is continuously sealed with silicone at 2 or more edges, when the sealant is installed immediately following the setting of the glass.

H. Provide spacers inside and out unless continuous gaskets are used. Use glass manufacturer recommended size and spacing.
I. Prevent exudation of sealant or compound by forming voids or installing filler rods in the channel at the heel of jambs and head (do not leave voids in the sill channels, except as needed for drainage and weep holes) depending on light size, thickness, and type of glass, and complying with manufacturer's recommendations.
J. Sealant shall not be adhered to, or placed against, the edge of a laminated glass unit interlayer.
K. Force sealants into channel to eliminate voids and to assure complete "wetting" or bond of sealant to glass and channel surfaces.
L. Tool exposed surfaces of sealants to provide a substantial "wash away" from the glass.
M. Install pressurized gaskets to protrude slightly out of the channel, so as to eliminate dirt and moisture pockets.
N. Clean and trim excess glazing materials from the glass, stops and frames promptly after installation, and eliminate stains and discolorations.
O. Where wedge shaped gaskets are driven into one side of the channel to pressurize the sealant or gasket on the opposite side, provide adequate anchorage to ensure that gasket will not "walk" out when subjected to dynamic movement.

1. Anchor gasket to stop with matching ribs, or with adhesive.

P. Clean, prime and mask structural silicone joints the same day when silicone is applied.

3.5 MIRROR INSTALLATION

A. See Section 08 86 00.

3.6 CURING/PROTECTING/CLEANING

A. Cure glazing sealants and compounds in compliance with their manufacturer's instructions and recommendations, to obtain high early bond strength, internal cohesive strength and surface durability.
B. Protect glass from breakage immediately upon installation. Do not apply markers of any type to glass.
C. Before Substantial Completion, remove and replace glass that is broken, chipped, cracked, abraded, stained or damaged in other way, including natural causes, accidents and vandalism.
D. Maintain glass in a clean condition during construction so that it will not be damaged by corrosive action and will not contribute (by wash-off) to the deterioration of glazing materials and other work.
E. Remove remaining labels and wash and polish glass on both faces not more than 4 days prior to Owner's acceptance of the work in each area. Comply with GANA 01-0300 and the glass manufacturer's recommendations.

3.7 GLASS SCHEDULE

A. See Exterior Elevations on Architectural Drawings.
B. Type GL-1A: Low-E Tinted Insulating Glass - Light sky-blue, low-reflective exterior appearance:

1. Solarban 70XL (2) Solarblue + Clear by Vitro Architectural Glass.
2. Minimum Performance Values: VLT 42 percent; SHGC 0.23; shading coefficient 0.26; exterior reflectance 8 percent; U-value winter 0.28; U-value summer 0.26.

3. Insulating Glass Unit Construction: 1/4 inch (6 mm) Solarblue glass, Solarban 70 solar control (sputtered) on second surface (2) + 1/2 inch (13 mm) air space + ~~1/4 inch (6 mm)~~(2) 3/16-inch laminated Clear glass.
4. Overall Unit Thickness: 1-1/8 inch.
5. Outdoor Lite: fully tempered float glass.
6. Interspace Content: Argon.
7. Indoor Lite: annealed ~~fully tempered~~(2) 3/16-inch laminated float glass.

C. GL-1B: Low-E Tinted Insulating Glass - Light sky-blue, low-reflective exterior appearance:

1. Solarban 70XL (2) Solarblue lite+ clear lite by Vitro Architectural Glass.
2. Minimum Performance Values: VLT 42 percent; SHGC 0.23; shading coefficient 0.26; exterior reflectance 8 percent; U-value winter 0.28; U-value summer 0.26.
3. Insulating Glass Unit Construction: 1/4 inch (6 mm) Solarblue glass, Solarban 70 solar control (sputtered) on second surface (2) + 1/2 inch (13 mm) air space + (2) 1/8-inch laminated clear glass.
4. Overall Unit Thickness: 1-inch.
5. Outdoor Lite: annealed fully tempered float glass.
6. Interspace Content: Argon.
7. Indoor Lite: annealed clear (2) 1/8-inch laminated float glass.

~~C.~~D. GL-2A: Low-E Tinted Insulating Glass - ~~Light sky-blue,~~ low-reflective ~~translucent~~ clear exterior appearance:

1. Solarban 70XL ~~(2) Solarblue + translucent~~ clear lite + clear glass lite by Vitro Architectural Glass.
2. Minimum Performance Values: VLT 64%; SHGC 0.27; exterior reflectance 12 percent.
~~2.~~3. Insulating Glass Unit Construction: 1/4-inch (6 mm) ~~Solarblue~~ clear glass, Solarban 70 solar control (sputtered) on second surface (2) + 1/2-inch (13 mm) air space + 1/4 inch (6 mm) clear ~~translucent~~ glass.
~~3.~~4. Overall Unit Thickness: 1 inch.
~~4.~~5. Outdoor Lite: fully tempered float glass.
~~5.~~6. Interspace Content: Argon.
7. Indoor Lite: annealed fully tempered clear~~translucent~~ float glass.

E. GL-2B: Low-E Tinted Insulating Glass - Clear, low-reflective exterior appearance:

1. Solarban 70XL Clear lite + clear glass lite by Vitro Architectural Glass.
2. Minimum Performance Values: VLT 64%; SHGC 0.27; exterior reflectance 12 percent.
3. Insulating Glass Unit Construction: 1/4-inch (6 mm) clear glass, Solarban 70 solar control (sputtered) on second surface (2) + 1/2-inch (13 mm) air space + (2) 3/16-inch laminated clear glass.
4. Overall Unit Thickness: 1-1/8 inch.
5. Outdoor Lite: fully tempered float glass.
6. Interspace Content: Argon.
7. Indoor Lite: annealed (2) 3/16-inch laminated clear float glass.

F. GL-2C: Low-E Tinted Insulating Glass - clear, low-reflective exterior appearance:

1. Solarban 70XL clear lite + clear glass lite by Vitro Architectural Glass.
2. Minimum Performance Values: VLT 64%; SHGC 0.27; exterior reflectance 12 percent.
3. Insulating Glass Unit Construction: 1/4-inch (6 mm) clear glass, Solarban 70 solar control (sputtered) on second surface (2) + 1/2-inch (13 mm) air space + (2) 1/8-inch laminated clear float glass.
4. Overall Unit Thickness: 1 inch.

5. Outdoor Lite: fully tempered float glass.
6. Interspace Content: Argon.
~~6.~~7. Indoor Lite: annealed (2) 1/8-inch laminated float glass.

~~D. GL-3: Low-E Tinted Insulating Glass - Light sky-blue, low-reflective translucent exterior appearance:~~

~~1. Solarban 70XL (2) Solarblue + translucent glass lite by Vitro Architectural Glass.~~
~~2. Insulating Glass Unit Construction: 1/4-inch (6 mm) Solarblue glass, Solarban 70 solar control (sputtered) on second surface (2) + 1/2-inch (13 mm) air space + 1/4 inch (6 mm) translucent glass.~~
~~3. Overall Unit Thickness: 1 inch.~~
~~4. Outdoor Lite: fully tempered float glass.~~
~~5. Interspace Content: Argon.~~
~~6. Indoor Lite: annealed fully tempered translucent float glass.~~

G. GL-4: Monothetic low-iron clear glass tempered glass.

1. Overall Unit Thickness: 1/4-inch.
2. Location: Interior glass doors.

~~E.~~H. GL-5: Tempered, two-ply laminated clear tempered glass with Ionoplast polymer interlayer.

1. Location: STC 50 Rated interior doors and windows~~Glass rails~~.

~~F. GL-5: Monothetic low-iron glass clear tempered glass.~~

~~1. Overall Unit Thickness: 1/4-inch.~~
~~2. Location: Interior glass doors.~~

~~G.~~I. GL-6: See Section 08 86 00 for unframed mirrors.

END OF SECTION

SECTION 11 61 33 - RIGGING SYSTEMS AND DRAPERIES

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. The work of this Section includes all labor, materials, equipment and services necessary to complete the Stage Rigging and Draperies installation, as shown on the drawings and specified herein, including, but not limited to, the following:

1. Pipe grid
2. Black masking
3. Cyclorama
4. Tracked, manually-drawn variable acoustics curtains, types DRP-01 and DRP-02 (with liner)
5. Additional support structures as required to meet the intent of the Contract Documents

B. Related sections include the following:

1. Support steel.
2. Finishes
3. Performance Lighting Systems
4. Common Work Results for Electrical
5. Interior Lighting Fixtures
6. Commissioning of Electrical Systems
7. Sound, Video and Communication Systems
8. Mechanical system.
9. Fire protection system.

1.3 FULLY WORKING SYSTEMS

A. Review Drawings and Specifications that affect work in this Section.

B. Notify Architect upon indication that work in this Section cannot be completed as specified or scheduled.

C. Provide additional parts or devices required for functional requirements of control systems at no extra cost to Owner.

1.4 DEFINITIONS

A. Furnish – supply equipment to the project for use or installation by others.

B. Install – install equipment provided to the project by others.

C. Provide – supply and install equipment.

1.5 ADMINISTRATIVE REQUIREMENTS

A. Delegated design: The work of this Section requires deferred approval and delegates design to the Contractor. The work of this Section has not been engineered and is not fully detailed on the Drawings, which indicate desired profiles and design intent.

1. The Contractor is responsible for engineering, fabricating and installing the work to withstand loads and other criteria prescribed by the California Building Code (CBC), indicated, and specified, within the physical limitations indicated on the Drawings.
2. A California-licensed professional engineer employed by the Contractor (CEOR) shall prepare drawings and calculations for this work, and seal and sign same.

1.6 QUALITY ASSURANCE AND STANDARDS

A. References to code, standards, specifications, and recommendations of technical societies, trade organizations, and governmental agencies will refer to the latest edition of such publications adopted and published prior to bid submittal. All codes and standards will be considered a part of this specification as if they were fully included.

B. Work and materials shall comply with rules and recommendations of:

1. Prevailing national, state and local building codes.
2. American Iron and Steel Institute (AISI).
3. American National Standards Institute (ANSI).
4. American Society of Mechanical Engineers (ASME).
5. American Society for Testing and Materials (ASTM).
6. American Welding Society (AWS).
7. Entertainment Services and Technology Association (ESTA).
8. Industrial Fasteners Institute (IFI).
9. International Organization for Standardization (ISO).
10. National Association of Chain Manufacturers (NACM).
11. National Fire Protection Institute (NFPA).
12. Society of Automotive Engineers (SAE).

C. Minimum design factor for lifted loads: 8:1. Design factor shall include the effects of static loads, dynamic impact loads and reductions for end terminations and bending ratios.

D. Minimum design factor for static loads: 6:1

E. Maximum fleet angle: 1-1/2 degrees.

F. Cable bending ratio for manually operated systems shall be at least 30 times the diameter of the cable. Motorized systems shall comply with the wire rope manufacturer’s minimum recommended bending ratio.

G. Wire rope clips shall be drop-forged.

H. Fasteners typically shall have a minimum SAE J429 Grade 5 or ISO R898 Class 8.8 rating. Bolts in tension shall have nuts of equivalent rating. Fasteners shall be self-locking or secured by alternate means to prevent loosening.

I. Shackles and turnbuckle jaws shall be screw pin or bolt type, moused with plastic tie-wrap after installation. Round pins are not acceptable.

J. Turnbuckles shall be durably marked by the manufacturer with the name or trademark of the manufacturer, size or rated load, and grade for alloy eyebolts.

K. Shackle bodies shall have durable markings by the manufacturer to show the name or trademark of the manufacturer, size, and rated load.

L. Shackle pins shall have durable markings by the manufacturer to show the name or trademark of the manufacturer, and grade, material type, or load rating.

M. This specification sets forth minimum safety standards, operational criteria, and minimum standards for quality in workmanship. It is the sole responsibility of the Contractor to design, engineer, furnish and install a safe, fully functional system in compliance with the design intent of the Contract Documents.

1. Engineering responsibility:

    a. Engineer, fabricate, assemble and erect the work of this Section to meet or exceed the specified design and performance criteria, and to provide structurally sound, rigging assemblies conforming to governing codes and regulations.
    b. The assemblies shown on the Drawings and specified herein are intended to define design intent and minimum performance requirements. Do not change indicated profiles without the Architect's written consent.
    c. Fasteners and connections are shown schematically. A California-licensed civil or structural engineer employed by the Contractor shall determine final types and sizes.

        1) In no case shall the fasteners or connections conflict with or require revision of the finish profiles of the assemblies specified herein or the supporting work.
        2) Connections to the supports shall not impose eccentric loading or induce twisting or warping.
        3) Connections to the structural frame shall be able to accommodate misalignment of the steel structure within limits allowed by the AISC tolerances.

1.7 SUBMITTALS

A. Bid Submittals

1. Bill of materials: Identify parts by common industry standard numbers and descriptions.
2. Cut Sheets: Manufacturer’s catalog datasheets of all products listed in bill of materials.
3. Statement: Manufacturer agrees to warranty provisions.
4. Projected Timetable: List time in weeks for following activities:

    a. Shop drawing preparation
    b. Fabrication
    c. Shipping to site
    d. System commissioning
    e. As-built drawing preparation

B. Shop Drawings

1. Format: Uniform sheet size.
2. Binding: Bind shop drawings of more than five drawings.
3. Shop drawings relating to the pipe grid shall be stamped by a structural engineer licensed in the state of California.
4. Shop drawings shall include:

    a. Title sheet listing all sheets in the submittal.
    b. Scale plans and elevations.
    c. All information necessary to explain fully the design features, appearance, function, fabrication, installation, and use of system components in all phases of operation.
    d. Electrical specification, components, one-line riser, and interconnections.
    e. Country of origin for equipment

5. Review: Fabrication shall not commence until Theatre Consultant and Architect determine that the shop drawings are in compliance with design intent of Contract Documents.
6. Revisions: Resubmit as required.

C. Calculations

1. Prepare calculations in compliance with current design rules of the CBC. Include analysis for wind and dead load on framing members, anchors, and concrete inserts.

    a. Show section property computations for framing members. Show vertical and horizontal loads on building supports. Existing test reports will be an acceptable substitute for calculations. Calculations shall be signed and sealed by a California-licensed professional engineer.

D. Manuals

1. Format: Letter and/or tabloid size paper.
2. Binding: Standard 3-ring binder.
3. Electronic Format: PDF files on USB flash drive.
4. Manuals shall include:

    a. Contractor contact information
    b. Manufacturer contact information
    c. System description
    d. Operation instructions, including safety measures
    e. Maintenance instructions, including recommended procedures and schedules for inspecting system components
    f. Equipment design parameters including safe working loads and duty cycles.
    g. Parts and subassembly lists
    h. Spare parts list and source information
    i. Catalog cuts for all purchased equipment

E. As-Built Drawings

1. Format: Letter and/or tabloid size paper.
2. Binding: Standard 3-ring binder.
3. Electronic Format: PDF files on USB flash drive.
4. Delivery: Within one month of system acceptance.
5. As-built drawings shall include:

    a. Final shop drawings.
    b. Final bill of materials.

F. Test Report Submittals

1. Submit all required testing certificates prior to installation of associated equipment.

1.8 WARRANTY

A. Manufacturer shall warrant equipment as follows:

1. According to guarantee provisions in General Conditions.
2. For three years from acceptance of systems, provide services detailed below:

    a. Provide for the Owner’s operating staff a technical and operational assistance hotline advice service at no additional cost for the duration of the warranty period. Such advice to be available during normal working hours and on evenings and weekends.
    b. Provide all required maintenance or replacement within 30 days of notification by the Owner, with the following exception: All required maintenance or replacement which affects the safe operation of the installation shall be accomplished within 48 hours.

B. Warranty period: Commence upon final acceptance by Owner.

PART 2 – PRODUCTS

2.1 ACCEPTABLE CONTRACTOR

1. H & H Specialties
   14850 Don Julian Road, Suite B
   City of Industry, CA 91746
   626.575.0776
2. LVH Entertainment Systems
   530 Los Angeles Avenue
   Suite #115-160
   Moorpark, CA 93021
   805.278.4584
3. Musson Theatrical
   890 Walsh Avenue
   Santa Clara, CA 95050
   408.986.0210

2.2 PIPE GRID

A. The pipe grid shall consist of 1-1/2-inch nominal diameter standard weight (Schedule 40) pipe connected with clamps. Paint pipes black.

B. Clamps shall be JR Clancy “Cross Grid Connectors”, or approved substitute. Provide a clamp at every pipe intersection. Clamps shall be black.

C. Pipe splices shall be made with an 18-inch-long, 1 - 9/16-inch diameter DOM tube with a minimum wall thickness of 3/16 inch. Fasten each side of the splice with two 3/8-inch bolts.

D. Design the hanger assemblies for the dead load of the pipe grid, plus a minimum live load of 30 pounds per linear foot with a 200 pound point load mid span, to a maximum anticipated total live load of 8,000 pounds.

E. Hangers penetrate a suspended acoustical ceiling. Coordinate installation sequencing as required.

2.3 SIGNAGE

A. Provide “Rigging Information” signs, as illustrated in the drawings. Locate as directed in the field by the Theatre Consultant.

B. Signs shall be dark blue lamicoid with gray engraving.

C. Provide one sign.

2.4 STAGE DRAPERY SCHEDULE

A. Stage drapery schedule is as follows:

1.

Description	Quantity	Height	Width	
Legs	8	~17’-0"	8'-0"	
Cyclorama	1	~17’-0"	24'-0"	
Acoustic Curtains	2	~~8'-6~~17’-0"		~10'-6"
Acoustic Curtains	11	~~8’-6~~17’-0”		~8’-0”

B. Field verify all conditions and drapery dimensions after pipe grid and track are installed and level.

2.5 MASKING DRAPERIES

A. FABRICS

1. Legs and Acoustic Curtains: 25 ounce, 100% Trevira CS Polyester, inherently flame retardant velour, KM Fabrics' "Charisma", or approved equal. Color: black. Liner: for acoustic curtains, provide Rose Brand "Avora Lining Plus", color: by architect from standard line.
2. Cyclorama: 100% Trevira CS IFR Polyester, 5.90 ounce per square yard, seamless fabric. Color: bleached white.
3. Fabrics shall be flame treated if required in a manner approved by the appropriate local agency, where applicable. A notarized affidavit shall accompany the draperies attesting that all fabrics have been flame treated in the approved manner.
4. No pieced horizontal or split widths of fabric shall be incorporated in any part of any drapery.
5. Fabrics of 1 color shall be from 1 dye lot.
6. Velour nap shall run in a consistent direction. Nap shall run up for black velour masking pieces.

B. DRAPERY FABRICATION

1. Masking legs are sewn flat and are unlined.
2. Acoustic curtains shall be sewn with box pleats to 100% fullness.
3. Acoustic curtain panels shall overlap according to the manufacturer's overlap master carriers. Panel widths shall be sized such that panels cover the full length of the track while overlapping.
4. Reinforce the top of each piece with polyester webbing weighing a minimum of 2.8 ounces per yard, and double stitched at the top. Provide machine-set black anodized No. 3 grommets on 1-foot centers.
5. Provide 36-inch-long, cotton No. 4 tie lines on all pipe-mounted pieces. Tie lines shall be black, except for the one at centerline, which shall be white. If a tie line is not on center, the two symmetrical about center shall be white.
6. Provide each tracked piece with oblong spring, carabiner type snaps.
7. Hem the bottoms of the legs with a 6-inch-deep double turned hem with a separate canvas chain pocket approximately 3 inches above the bottom of the face fabric. Provide No. 8 zinc coated chain.
8. Hem the bottoms of the cyclorama with a 6-inch-deep double turned hemmed pipe pocket. Line the pocket with nylon fabric to prevent tearing. Furnish appropriate lengths of bottom pipe for each piece. Thread and cap both ends of each pipe. Provide couplers.
9. Sew back the face fabric of each piece 4 inches on both sides. The sides of each drapery piece shall hang plumb within 2 inches.
10. Label each piece at both bottom corners with the dimensions of the piece, the manufacturer, and the date of manufacture. Labels shall be permanently sewn.
11. Install the tracked curtains on traveler track specified below.

2.6 TRAVELER TRACK

A. Curtain track and related hardware shall be H&H Specialties Model 300 track for manual walk-along operation. Supply track lengths with the minimum possible number of splices. Color: black.

B. Master and single carriers shall have nylon-tired wheels. Carriers shall have swivel eyes, trim chains, and rubber spacers. Master carriers for adjacent curtains shall have an overlap arm. Provide carriers on 1-foot centers. Carriers shall be black.

C. Provide end stops as required.

D. Provide one positioning pole hook with telescoping extension handle.

2.7 DRAPERY STORAGE HAMPERS

A. Provide a quantity of hampers sufficient to store all masking legs and the cyclorama.

B. Storage hampers shall have plywood tops and caster “donuts”.

2.8 PORTABLE EQUIPMENT

A. Provide the following portable equipment for the Assembly Room:

1. Description: 1.5” I.D. (1.9” O.D.) Pipe
   Type: Schedule 40
   Dimension: (8) at 8’-0”
   (2) at 12’-0”
   Finish: Matte Black

2. Description: Swivel Cheeseboroughs
   Dimension: 1-1/2”
   Finish: Black
   Quantity: 20

PART 3 – EXECUTION

3.1 COORDINATION

A. The Contractor is responsible for reviewing all drawings, specifications, and field conditions which affect the work in this Section. Notify the Architect whenever field measurements, analysis of the drawings and specifications, or progress of other trades indicates that the work in this Section cannot be completed as specified or as scheduled.

B. Within 6 weeks of the award of contract, and prior to the preparation of shop drawings, the Stage Rigging Contractor shall submit a written review of related work as it appears on the Contract Documents. The review shall identify errors, omissions or obstructions related to the installation and operation of the equipment in this Section. The sole intent of this written review is to identify potential problems as soon as possible. It is understood that some errors, omissions or obstructions may not be evident until the Rigging Contractor prepares shop drawings.

3.2 JOB CONDITIONS

A. The Contractor shall visit the site and verify all dimensions and existing conditions. The Contractor shall also be familiar with the work of adjoining trades and coordinate with their work.

B. The Contractor is ultimately responsible for the equipment fitting the intended spaces without interference.

3.3 INSTALLATION

A. Only trained personnel shall install the equipment in this Section.

B. Provide scaffolding and platforms as required for installation.

C. Use lock washers with all pipe clamps.

D. Secure all loose equipment, tools and debris from falling from the gridiron and galleries during all phases of the installation.

E. At the end of each day during the installation period, remove all refuse and scrap materials to collection points specified by the Owner Upon completion of the installation, leave all areas broom clean.

F. Locate all loose system parts as directed by the Owner.

3.4 PROTECTION OF EQUIPMENT

A. Protect the equipment in this Section from damage and deterioration, including rust, during all phases of the work, from the time of manufacture to installation.

B. Notify the General Contractor or Construction Manager in writing of jobsite conditions that would adversely affect the equipment after installation. Do not install the equipment if jobsite conditions beyond the control of the Rigging Contractor will result in damage or deterioration, including rust.

C. Rust resulting from flaws in manufacturing and finishing shall be covered under the Warranty.

3.5 FIELD QUALITY CONTROL

A. CEOR’s representative shall inspect the rigging installation prior to Substantial Compensation of the project and issue a statement that rigging is in compliance with the stamped drawings.

3.6 CLEANING AND REPAIR

A. When construction is complete, restore all system components to their delivered condition. This includes dusting, cleaning, and removal of construction materials such as fireproofing.

B. Repair any work or finishes that are damaged during installation by the Contractor for the work in this Section. This includes the work in this Section and the work of others. Where the work of others is damaged, reimburse the appropriate contractor for the repair.

3.7 OPERATION OF EQUIPMENT

A. Prior to completion of the installation and turnover to the Owner, the equipment in this section shall be operated by employees of the Contractor, those authorized by the Contractor, or those under the Contractor’s supervision.

B. The Contractor shall advise the General Contractor or Construction Manager in writing of any unauthorized operation of the equipment.

3.8 DRAPERY INSTALLATION

A. Hang all draperies as directed by the Owner for inspection and acceptance. If the Owner requests, return the draperies to their storage bags and hampers after inspection. The Owner shall assume responsibility for soiling and damage after acceptance.

B. Do not hang the draperies if environmental conditions in the building will be detrimental to the goods. Notify the Architect and the General Contractor or Construction Manager in writing of any adverse environmental conditions.

3.9 COMMISSIONING AND PUNCHLISTING

A. The Contractor shall work with the General Contractor or Construction Manager to arrange for a punchlisting period for the work in this Section. The punchlisting period shall take place at least 1 month before the first scheduled rehearsal on stage. Punchlisting shall consist of a minimum of an 8-hour day. The building schedule shall be such that no other conflicting or obstructing activity is taking place. Punchlisting shall include the operation of every component of each system specified here, including individual counterweight sets.

B. Prior to punchlisting, the Rigging Contractor shall commission the system and certify that the installation is complete and ready for punchlisting by the Theatre Consultant. If substantial portions of the installation are not complete, requiring the Consultant to make another punchlist trip, the Rigging Contractor shall compensate the Consultant for time spent and travel expenses. Compensation shall be at the Consultant’s prevailing hourly and per diem rates.

3.10 TRAINING

A. Assist the Owner in becoming familiar with the completed installation and personally instruct representatives of the Owner in the proper operation and maintenance of all equipment provided. Training shall be a minimum of 4 hours.

3.11 OWNER'S ACCEPTANCE

A. The Owner will accept the work in this Section upon the satisfactory completion of all punch list items.

B. Prior to final acceptance, the Owner reserves the right to use any completed portion of the work in this Section at no additional cost, unless said use poses a potential hazard to personnel or risks damage to the work in this Section or the work of others.

C. The Warranty period shall commence upon final acceptance by the Owner.

END OF SECTION

SECTION 26 09 61 - PERFORMANCE LIGHTING SYSTEMS

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This section includes furnishing the following equipment for installation as described under Section 260963:

1. Dimmer Racks
2. Dimmer Modules
3. Intelligent Breaker Panel
4. Panic Control System
5. Emergency Lighting Transfer System
6. Equipment Racks
7. House & Work Lighting Controls
8. Lighting Control Console & Accessories
9. Performance Lighting System Ethernet Network
10. Control Device Faceplates
11. Performance Lighting Outlet Devices
12. Spare Parts

B. Related sections include the following:

1. Performance Lighting Systems Installation
2. Common Work Results for Electrical
3. Interior Lighting Fixtures
4. Loose Performance Lighting Fixtures
5. Acoustical Shells
6. Rigging Systems and Draperies
7. Commissioning of Electrical Systems

1.3 FULLY WORKING SYSTEMS

A. Review Drawings and Specifications that affect work in this Section.

B. Notify Architect upon indication that work in this Section cannot be completed as specified or scheduled.

C. Provide additional parts or devices required for functional requirements of control systems at no extra cost to Owner.

1.4 DEFINITIONS

A. Dimmer Rack: Cabinet accommodating dimmer modules, load and line connections, and circuit protection.

B. Plug-In Module: Modular unit that installs in standardized mounting location within dimmer rack.

C. Dimmer Module: Plug-in module containing one or more dimmers.

D. Control Module: Plug-in module containing centralized control electronics for dimmer modules.

E. Data Communication Protocol: Signal that provides control and feedback communications between devices in control system.

F. DMX 512: Data communications protocol compliant to USITT DMX-512/1990 specification (ANSI E1.11-2004).

G. RDM: Data communications protocol compliant to ANSI/PLASA Remote Device Management specification (ANSI/PLASA E1.20 RDM).

H. ACN: Data communications protocol compliant to ANSI/PLASA Architecture for Control Networks specification (ANSI E1.17-2006 ACN & E1.31 Streaming ACN).

I. POE / Power Over Ethernet: 802.3AT compliant scheme of powering devices on an Ethernet system.

1.5 QUALITY ASSURANCE AND STANDARDS

A. References to code, standards, specifications, and recommendations of technical societies, trade organizations, and governmental agencies will refer to the latest edition of such publications adopted and published prior to bid submittal. All codes and standards will be considered a part of this specification as if they were fully included.

B. Work and materials shall comply with rules and recommendations of:

1. Prevailing national, state and local building codes.
2. UL, ETL, cUL, CSA and CE Labels – where materials and equipment are available under the continuing inspection and labeling service of applicable independent product testing and certification services, provide such labels, materials, and equipment.
3. National Fire Protection Associate (NFPA) Publication: National Electrical Code, NFPA70 as applicable to installation and construction of performance lighting and control equipment.
4. NEMA Compliance pertaining to components of performance lighting equipment.
5. United States Institute for Theatre Technology, Inc. (USITT) DMX512/1990 (ANSI E1.11-2004).
6. ANSI/PLASA Remote Device Management (ANSI/PLASA E1.20 RDM) and Architecture for Control Networks (ANSI E1.17-2006 ACN & E1.31 Streaming ACN) standards.
7. Institute of Electrical and Electronics Engineers, Inc. (IEEE) 802.3 and 802.11n.

1.6 SUBMITTALS

A. Bid Submittals

1. Bill of materials: Identify parts by common industry standard numbers and descriptions.
2. Cut Sheets: Manufacturer’s catalog datasheets of all products listed in bill of materials.
3. Statement: Manufacturer agrees to warranty provisions.
4. Projected Timetable: List time in weeks for following activities:

    a. Shop drawing preparation
    b. Fabrication
    c. Shipping to site
    d. System commissioning
    e. As-built drawing preparation

B. Shop Drawings

1. Format: Uniform sheet size.
2. Binding: Bind shop drawings of more than five drawings.
3. Shop drawings shall include:

    a. Pictorial drawings: All major components, sub-assemblies, parts list, dimensions, material and finish notes, quality assurance listings.
    b. Wiring diagrams: Components and interconnections to other components.
    c. Bill of materials: Accessories and spare parts not drawn.
    d. Not acceptable: Catalog cut sheets.

4. Review: Fabrication shall not commence until Theatre Consultant and Architect determine that the shop drawings are in compliance with design intent of Contract Documents.
5. Revisions: Resubmit as required.

C. Manuals

1. Format: Letter and/or tabloid size paper.
2. Binding: Standard 3-ring binder.
3. Electronic Format: PDF files on USB flash drive.
4. Manuals shall include:

   a. System description.
   b. Operation instructions, including safety measures.
   c. Maintenance instructions, including recommended procedures and schedules for inspecting system components.
   d. Catalog cut sheets for all purchased equipment.
   e. Recommended spare parts list.

D. As-Built Drawings

1. Format: Letter and/or tabloid size paper.
2. Binding: Standard 3-ring binder.
3. Electronic Format: PDF files on USB flash drive.
4. Delivery: Within one month of system acceptance.
5. As-built drawings shall include:

   a. Drawings of all system components.
   b. Control schematics and risers.
   c. Bill of materials.

1.7 PROJECT CONDITIONS

A. Submit: Written confirmation that related electrical work, as shown on Drawings, provides necessary physical accommodations or installation and operation of equipment.

B. Delivery: Within three weeks of award of contract.

1.8 WARRANTY

A. Manufacturer shall warrant equipment as follows:

1. According to guarantee provisions in General Conditions.
2. For two years from acceptance of systems, provide services detailed below:

   a. Technical and Operational Assistance Hotline: Shall be available during normal working hours, evening, and weekends at no additional cost.
   b. In-stock Spare Parts: Available for major assemblies within 24 hours of contact.

      1) Additional Cost: No charge during duration of warranty for exchanges not caused by misuse.

   c. Warranty period: Commence upon final acceptance by Owner.

PART 2 – PRODUCTS

2.1 ACCEPTABLE MANUFACTURER

A. The equipment shall be manufactured by the following:

1. Electronic Theatre Controls
   3031 Pleasant View Road

Middleton, WI 53562
608.831.4116

2. ~~Strand Lighting~~Vari-Lite
10911 Petal St
Dallas, TX 75238
214.647.7880

B. The equipment shall be supplied by only one of the following:

1. 4Wall Los Angeles
5435 W. San Fernando Road
Los Angeles, CA 90039
818.252.7481
2. BCT Entertainment
1281 N La Loma Circle
Anaheim, CA 92806
714.237.9270
3. Polaris Lighting
624 Irving Ave
Glendale, CA 91201
818.265.0330
4. PRG Los Angeles
1245 Aviation Place
San Fernando, CA 91340
818.252.2600b
5. Pro Sound & Video
11060 Randall Street
Sun Valley, CA 91352
818.765.3800

C. Additional companies wishing to bid shall submit the following 10 days before submission of bids, for review and approval by Theatre Consultant:

1. Firm history.
2. List of completed installations, comparable in scope to the job described here.
3. Minimum of 5 representative shop drawing sheets.
4. If requested, a current certified financial statement showing sufficient financial base for the size of job described here.

D. Furnishing: Equipment and services shall be provided by one manufacturer.

E. Experience: Manufacturer shall have been continuously engaged in production of performance lighting and control equipment for at least 20 years.

F. Emergency Support: Manufacturer shall have a toll-free, 24 hour emergency phone line. Response shall be within 30 minutes of phone call.

G. Substitutions: Substituted equal products shall not be allowed without prior approval of Architect, Electrical Engineer, Theatre Consultant, or Owner.

H. New products: Provide latest model of specified products provided latest model retains or exceeds characteristics of products specified herein. Manufacturer shall provide demonstration for Architect, Electrical Engineer, Theatre Consultant, or Owner.

I. Testing: Test and label all equipment at factory prior to shipment.

2.2 PARTS

A. All materials and equipment provided shall be new and of high quality.

2.3 GROUNDING

A. These systems shall be grounded, as shown on Drawings and in accordance with applicable codes and regulations and/or at the advice of the Manufacturer.

2.4 CIRCUIT BREAKERS

A. Conformity: All applicable codes and standards.

B. Interrupting capacity: 10,000 amperes SCCR for all primary and secondary circuit breakers unless otherwise specified.

C. Toggle Guard: Provide for branch circuit breakers in equipment rack component mounting panels, control device faceplates, and outlet device faceplates.

2.5 IDENTIFICATION LABELS

A. Provide labeling and signage for equipment as described herein and/or noted on the Drawings.

1. Equipment designations and headings: 1/4" height.
2. Secondary information: 3/16” height.

2.6 DIMMER RACKS

A. Basis of Design: Unison DRd power control system

B. General

1. Dimmer racks shall be dead front switch boards complete with all dimmers, control electronics, timers, circuit breakers, and wiring terminations. No external components shall be required.
2. Auxiliary racks shall be available to provide mounting of subcomponents including main circuit breakers, branch circuit breakers and control components.
3. Mounting: Floor mount, front access to allow back-to-back or side-by-side installation.
4. Electrical operation: 90 to 264 VAC 3 phase, 4 wire + ground, 47 to 63 Hz service.
5. Feed Size: Accept up to 400A per phase.
6. Power distribution: Copper buss bars. Aluminum buss bars are not acceptable.
7. Multiple rack bussing: As required, with optional equipment kit.
8. Listing and label: UL/cUL
9. Ventilation: forced filtered air using multiple low-noise fans providing redundancy in case of fan failure.
    a. Configure fans to turn on when control is energized.
    b. Maintain operating temperature of all components under full load when ambient temperature of dimmer room does not exceed 40°C/104°F.
    c. Fans shall remain on during thermal shutdown.
10. Provide racks configured to receive electrical services shown on electrical Drawings. Provide internal inter-rack bussing as required.
11. Provide terminals to accept feed and branch wire sizes shown on Drawings.
12. Fault current protection rating: 22,000 SCCR.
13. Key module spaces to accept only module amperage specified.
14. Module space circuit identification height: 1/4". Verify to match as-built conditions.
15. Dimmer bank signage: Permanently attached to equipment with following information:
    a. Project name
    b. Manufacturer name, toll-free service phone number, and job reference number
    c. "Designed by Stages Consultants" statement with phone number and web address
16. Dimmer rack section signage: Permanently attached to equipment with following information:

a. Performance venue name
b. Equipment designation
c. Feed size and source identification
d. Schedule of dimmer numbers listing use, circuit identification, dimmer type, and load; load information verified to match final as-built conditions

17. Mason Industries ND double deflection neoprene-in-shear type vibration isolation pads shall be provided for each dimmer rack. Neoprene shall be no harder than 50 durometer.

C. Electronics

1. Control electronics shall be microprocessor based, designed specifically for control of dimming systems.
2. Backlit, graphical LCD display shall access following information:

a. Rack setup
b. Rack status
c. Dimmer load
d. Temperature monitoring
e. Output voltage adjustment per dimmer module
f. System configuration
g. Operating parameters, presets, levels, fade times

3. Rack shall accept two DMX-512/1990 control signal inputs and one Category 5 or greater IEEE 802.3 Ethernet protocol control signals.
4. Opto-isolated contacted input shall be provided for panic system control.
5. Control modules shall directly support ANSI E1.31 (sACN) and ANSI E1.17 (ACN) network protocols. Control modules that do not support these protocols shall not be accepted.
6. Control signal input of each individual dimmer rack shall be fully opto-isolated from control signal input of any other rack, and fully opto-isolated from any control signal output.

2.7 DIMMER MODULES

A. SCR Dimmer Modules

1. Each module shall contain:

a. Circuit breakers

1) Fully magnetic
2) Trip current shall not be affected by ambient temperature
3) Rated for tungsten loads having an inrush of no less than 20 times normal current.
4) Switching duty application rating: 100%
5) Load rating: continuous operation at 100% load

b. Solid-state switching module

1) Encapsulated in high impact plastic cases
2) Isolation: 2,500 volts RMS between AC line and control lines

c. Toroidal filters

1) Reduce rate of current rise time.
2) Limit objectionable harmonics
3) Reduce lamp filament “sing”
4) Limit radio frequency interference on line and load conductors.

d. Power and control connectors

2. Key modules to prevent interchangeability of modules of differing capacity.
3. Module shall be capable of “hot patching” cold incandescent loads up to full rated capacity without malfunction with control signal at full.
4. Standard Rise Time Dimmers
    a. Dimmer shall have a rise time of not less than 500µs measured at 90 degrees conduction angle from 10% to 90% of output wave form with dimmer operating at maximum load. Voltage rate of rise (slew rate) must not exceed 300 mill volts per microsecond in any point of the wave under full load conditions.
5. High Rise Time Dimmers
    a. Dimmer shall have a rise time of not less than 800µs measured at 90 degrees conduction angle from 10% to 90% of output wave form with dimmer operating at maximum load. Voltage rate of rise (slew rate) must not exceed 210 mill volts per microsecond in any point of the wave under full load conditions.
6. Listing and label: UL/cUL

B. Non-Dim & Constant Modules

1. Non-dim modules shall utilize a latching type relay and have a full magnetic primary circuit breaker. Modules employing solid state relays shall not be acceptable.
2. Constant circuit modules shall distribute overcurrent protected power from the dimmer rack to non-dimmed loads. There shall be no moving parts other than the circuit breakers.
3. Module construction shall be similar in all respects to standard SCR dimmer modules above and shall be interchangeable with modules of the same rating.
4. Listing and label: UL/cUL

C. Electronic Low Voltage Modules

1. Each dimmer module shall use a solid-state relay (SSR) consisting of two MOSFET semi-conductors, and all required gating circuitry on the high-voltage side of an integral, opto-coupled control voltage isolator.
    a. Dimmers employing triac power devices, pulse transformers, or other isolating devices not providing at least 2,500V RMS isolation shall not be acceptable.
2. Power efficiency for ELV dimmers shall be at least 99 percent at full load with a no-load loss of 3V RMS.
3. Dimmer modules shall be available with current ratings of 10 amps (120 volts).
4. Module construction shall be similar in all respects to standard dimmer modules.
5. Circuit breakers shall be fully magnetic so the trip current is not affected by ambient temperature. Circuit breakers shall be rated for 100 percent switching duty applications.
6. Listing and label: UL/cUL.

D. Phase Adaptive Dimmer Module

1. Phase adaptive dimmer modules shall provide forward-phase or reverse-phase angle dimming specifically for LED replacement lamps.
2. Modules shall provide phase angle and min scale control.
3. Module shall contain transistor-based power devices, and all required gating circuitry on the high-voltage side of an integral, opto-coupled control voltage isolator.
    a. Dimmers employing triac power devices, pulse transformers, or other isolating devices not providing at least 3,000V RMS isolation shall not be acceptable.
4. The dimming engine shall have jitter reduction and dimmer curve smoothing software features.
5. Module construction shall be similar in all respects to standard dimmer modules.
6. Circuit breakers shall be fully magnetic so the trip current is not affected by ambient temperature. Circuit breakers shall be rated for 100 percent switching duty applications.

7. Listing and label: UL/cUL.

2.8 INTELLIGENT BREAKER PANELS

A. Basis of Design: Sensor IQ relay panel

B. General

1. Relay panel shall be dead front switch boards complete with all relays, control electronics, circuit breakers, and wiring terminations. No external components shall be required.
2. Mounting: Wall mount, surface or recessed.
3. Maximum Dimensions: 64” high x 20” wide x 5.25” deep.
4. Electrical operation: 120/208V 3 phase, 4 wire + ground.
5. Feed Size: Accept up to 400A per phase.
6. Listing and label: UL/cUL; UL508, UL67, UL924
7. Provide terminals to accept feed and branch wire sizes shown on Drawings.
8. Fault current protection rating: 65,000 SCCR.
9. Voltage Separation: Provide between high voltage and low voltage compartments.
10. Branch load circuit breakers shall be provided as required for branch load terminations.
    a. Listing and label: UL/cUL; UL489
    b. Integral mechanically held air gap relay
    c. Trip current shall not be affected by ambient temperature
    d. Rated for tungsten loads having an inrush of no less than 20 times normal current.
    e. Switching duty application rating: 100%
    f. Load rating: continuous operation at 100% load
    g. Rapid load switching: internal solenoid shall switch load when breaker at “on” position.
11. Branch circuit capacity: 48 poles, 15A to 30A one, two, and three-pole circuits as required.
12. Relay bank signage: Permanently attached to equipment with following information:
    a. Project name
    b. Manufacturer name, toll-free service phone number, and job reference number
    c. "Designed by Stages Consultants" statement with phone number and web address
13. Relay panel section signage: Permanently attached to equipment with following information:
    a. Performance venue name
    b. Equipment designation
    c. Feed size and source identification
    d. Schedule of relay numbers listing use, circuit identification, relay type, and load; load information verified to match final as-built conditions

C. Electronics

1. Control electronics shall be microprocessor based, designed specifically for control of dimming systems.
2. Backlit, graphical LCD display shall access following information:
    a. Breaker state
    b. Relay state
    c. Current draw
    d. Voltage
    e. Energy use over time
3. Rack shall accept DMX-512/1990 control signal input and one Category 5 or greater IEEE 802.3 Ethernet protocol control signals.

4. Opto-isolated contacted input shall be provided for panic system control.
5. Control modules shall directly support ANSI E1.31 sACN network protocol. Control modules that do not support these protocols shall not be accepted.
6. Control signal input of each individual dimmer rack shall be fully opto-isolated from control signal input of any other rack, and fully opto-isolated from any control signal output.

2.9 PANIC CONTROL SYSTEM

A. The panic control system shall instantly bring a programmable selection of dimmers and non-dim relays to full with the push of “Panic” button. Panic state shall be released with the push of “Normal” button.

B. The system shall always be enabled at every control location, regardless of the state of other control systems and independent of emergency power transfer relays.

C. Panic stations shall consist of the following:

1. Each panic control location shall consist of two EAO series 61 momentary pushbutton switches with requisite switching electronics.
2. Pushbutton momentary switches shall be illuminated, with colored lens engraved with button label.
3. One button shall be labeled “Normal” with green lens.
4. One button shall be labeled “Panic” with red lens and, hinged protective cover.

2.10 EMERGENCY LIGHTING TRANSFER SYSTEM

A. Basis of Design: ELTS2

B. General

1. Emergency lighting transfer system shall be mounted in NEMA 1 type enclosure with hinged locking door.
2. Enclosure Material: 14 gauge steel.
3. Mounting: Wall mount, front.
4. Maximum Dimensions (enclosure containing no more than 12 poles): 36” high x 24” wide x 9” deep.
5. Maximum Dimensions (enclosure containing no more than 24 poles): 48” high x 30” wide x 9” deep.
6. Electrical operation: 120/208V 3 phase, 4 wire + ground.
7. Feed Size: Accept up to 160A per phase.
8. Listing and label: UL/cUL
9. Provide terminals to accept feed and branch wire sizes shown on Drawings.
10. Fault current protection rating: 65,000 SCCR.
11. The emergency transfer system shall monitor three phases of the normal feed. Upon loss of power to one or more phases, normal system failure, or activation of the panic condition designated branch circuits shall be transferred from dimming system to second power source.
12. Transfer poles: Phase and neutral legs of each branch circuit load.
13. Transfer Switch Unit: Electrically-operated and mechanically-held.
14. Electrical operator: Single-solenoid mechanism, momentarily energized.
15. The switch shall be positively locked and unaffected by voltage variations or momentary outages such that constant contact pressure is maintained and temperature rise at contacts is minimized.
16. The transfer switch shall be rated to withstand the RMS symmetrical short circuit current without welding contacts.
17. Fire alarm interface: Isolated signal input shall automatically transfer loads to available secondary power source when facility fire alarm is activated.

18. Test Switch: Key-operated momentary switch for manual control.

C. Safety Standards: Comply with ANSI/UL1008, ANSI/NFPA 70, ANSI/NFPA 110.

D. Seismic Life-Safety Duty Applications: Comply with IBC-2000, -2003, -2006, -2009 and test all active and energized components to ICC AC-156.

E. Signage: Permanently attached to equipment with following information:

1. Performance venue name
2. Equipment designation
3. Feed size and source identification

2.11 EQUIPMENT RACKS

A. Basis of Design:

1. Middle Atlantic Products WR series for pull-out frame racks
2. Middle Atlantic Products DWR series for swing frame racks

B. General

1. Equipment rack shall be EIA compliant 19”, steel cabinet.
2. Color: Powder coat black
3. Rackrail Type: 10-32
4. Maximum Dimensions: 89” high x 24” wide x 33” deep.
5. Usable Depth: as required for specified equipment
6. Blank Filler Plates: Provide in un-used spaces. Internal space behind filler plates shall not be obstructed or used.
7. Panel Legends and Lines: Engraved and filled with engraver's enamel.
8. Provide non-combustible brackets, shelves, and other supports for heavy components and internal wiring assemblies and harnesses. Provide interior mounting angles to support work-writing tops and drawers.
9. Component Wiring: 36” long flexible cable harness to numbered barrier terminal block. Terminal block shall be attached to frames in line with associated panels and shall not interfere with adjacent components or filler panels.
10. Signage: Permanently attached to equipment with following information:

    a. Project name
    b. Performance venue name
    c. Equipment designation
    d. Feed size and source identification
    e. Manufacturer name, toll-free service phone number, and job reference number
    f. "Designed by Stages Consultants" statement with phone number and web address

2.12 HOUSE & WORK LIGHTING CONTROLS

A. Basis of Design: Unison Paradigm

B. General

1. Provide microprocessor based, solid state architectural control processor (ACP) that functions independently and in conjunction with lighting control console.
2. ACP shall be capable of controlling dimmer racks, relay panels, LED systems, automated lighting fixtures, and other device via DMX and ACN.
3. ACP functions:

    a. Station programming
    b. Macro sequencing
    c. Electronic lockout
    d. Room combine

e. Astronomical time clock events
f. Preset recall: 512
g. Fade time between presets
h. Rate of fade time modification
i. Concurrent preset recall

1) Multiple presets controlling the same attribute shall first interact based on priority and second based on latest takes precedence (LTP) or highest takes precedence (HTP) as configured.
2) A preset may be designated as an HTP override and shall cause HTP values to be discarded. It shall be possible to specify that a preset or attribute will persist when overridden.
3) When in use, the lighting control console shall override preset levels on a HTP basis. Where there are multiple external sources then priority and HTP shall be used to perform arbitration.

j. Record presets from lighting control console or other control sources on lighting system

4. Communication protocols:

a. DMX-512/1990
b. ANSI E1.31 (sACN)
c. ANSI E1.17 (ACN)
d. EIA-232 serial
e. Dry contact closure input and output
f. Network Time Protocol

5. Control channel capacity: 1,024 parameters

C. Master Stations

1. Master stations shall consist of backlit LED display

a. Minimum viewable display size: 7” WVGA
b. Minimum resolution: 800x480
c. Bezel: Aluminum
d. Touch interface: Capacitive with LED backlight
e. Viewing angle: 178° horizontal and vertical
f. Finish: Shown on drawings
g. Provide metal backbox and mounting frames

2. Connect to control system using category 5e or better wire.
3. Master stations shall provide control of lighting processor presets, sequences, fade times, macros, timeclock events, and interfaced external systems.
4. Master stations shall operate using graphic buttons, faders, and other images on programmable control pages. There shall at least 30 custom control pages available.
5. Graphic controls shall represent the active state of all presets, zones, and devices. Status indication shall be tracked across all stations in real-time, including tracking of fades on graphical fader controls.
6. Stations shall allow programming of multiple-level passcodes, page lockout, and visibility.
7. Control pages shall include:

a. House light presets (House Full, House Half, House Preset, House Out, Cleaning); work light presets (Pre-Show, Show, Post-Show, Rehearsal, Work, Off); system wide presets (Blackout, Night)
b. Performance lighting presets with snapshot record function
c. House light zone faders and House light master fader
d. Work light, run light, and non-dim zone control buttons
e. Lockout function to disable other stations and remote switches

f. Setup display for administrative functions

8. Page layout and interface functionality shall be determined by the Theatre Consultant following approval of shop drawings. Programming services shall be provided by the Manufacturer.

D. Entry Stations

1. Preset stations shall consist of programmable momentary pushbutton switches.

a. Finish: Shown on drawings
b. Provide flush or surface backbox

2. Pushbuttons shall provide control of a single channel, lighting processor preset, sequence, fade time, macro, timeclock event, and/or interfaced external system as required.
3. Preset Stations shall connect to control system using Manufacturer's recommended wire type, network topology, and communication protocols.

2.13 SPARE PARTS

A. Furnish 10% spare parts for all perishable items such as pilot light lamps and fuses.

B. Furnish 2% spare parts for all low voltage and line voltage connectors, minimum of 2 per type.

C. Furnish the following additional spare parts:

1. (2) Spare dimmer and relay modules of each type listed in the Drawings
2. (1) Spare dimmer rack control electronics module
3. (1) Manufacturer's Lighting Control Console spare parts package

2.14 LIGHTING CONTROL CONSOLE

A. Acceptable Control Console:

1. ETC Puck

B. General

1. Lighting control console shall be a microprocessor-based system specifically designed to provide complete control of performance lighting systems.

a. External multi-touch screen capability
b. Remote video support
c. Lighting network device control

1) Direct control of third party sACN/ACN devices
2) DMX512 / RDM hardware interfaces
3) Support MIDI, SMPTE and RS-232 interfaces

2. User interface shall be fully graphical with command line. Control commands shall be accepted as either command line or direct entry.
3. The main control shall consist of numeric keypad, dedicated control keys, context sensitive soft keys, level control wheel, and pointing device.
4. A blind display mode shall allow viewing and modification of all recordable attributes without affecting live stage levels.
5. A patch display mode shall be used to display and modify system control channels with their associated data.
6. Control and programming features for automated fixtures shall include a standard library of fixture profiles; ability to copy and edit existing profiles and create new profiles; and patch displays including channel and output addressing, 16-bit fade resolution, color characterization allowing color mixing and storing in hue and saturation or native device values.

7. Control channel data shall be recordable as cues, groups, submasters, palettes, effects, macros, curves, and patch contained in non-volatile electronic memory and stored as show data to internal storage or USB storage device.
8. Simultaneous playback of recorded cue lists shall be possible on up to 200 faders.
9. The console shall be capable of being placed in Tracking or Cue Only record mode by the user.
10. Integrated, integral virtual media server shall allow mappable images and animations to rig array. System shall be capable of 40 maps, 12 layers each.
11. User definable, interactive magic sheet displays shall allow graphical layout of channels, desk functions, and programming tools in live and blind operating modes. Provide standard symbol library and user-import tool for custom graphics.
12. A freely available offline editing application shall be provided for creation and modification of show data on a personal computer.
13. A personal computer running client software application shall be able to connect to a control system via the network and view current show data in a mirrored display environment.
14. The system shall allow remote control from a wireless handheld remote.
15. The system shall support configuration and operation of two consoles or a console and a dedicated processor as a main and fully tracking backup.

C. Provide the following control consoles:

1. Venue 4: ETC Nomad Puck

D. Provide with the console (2) external 24” multi-touch monitors, keyboard, mouse, and task lights.

E. Furnish the following console accessories:

1. Vinyl dust covers for the consoles and monitors. Dust covers shall cover top, sides, front and rear surfaces of equipment.
2. Cables for control console and remote video interface

a. 10’-0” power: 1
b. 25’-0” power: 1
c. 10’-0” Ethernet: 1
d. 25’-0” Ethernet: 1

3. Surge protected power strips for console and accessories: 1
4. Portable uninterruptible power supply, APC Smart-UPS 750VA: 1
5. 8 GB capacity USB storage keys: 2

2.15 PERFORMANCE LIGHTING SYSTEM ETHERNET NETWORK

A. Provide a fully functioning Ethernet system. Systems using proprietary formats or protocols other than TCP/IP shall not be accepted.

B. Network Components

1. Provide IEEE 802.3at 10/100/1000 L3 switches in quantities and locations shown in the Drawings and described herein.

a. Switches shall contain auto-sensing ports supporting 10Base-T, 100Base-T, and 1000Base-T. Switches shall support IEEE 802.3ab Type 1000Base-T standard.
b. Switches shall be rack mounted in standard 19” racks.
c. Switches shall have UTP ports on the front face for connection to other network devices via standard 19” patch panels.
d. Switches shall have high mean time between failure (MTBF) value as comparatively analyzed with industry standard 802.3at products.

e. Provide ports or media converter modules as required for UTP to Fiber-Optic conversion.
f. Provide switches in quantities and configurations having sufficient UTP ports for simultaneous connection of all patch bay ports assigned to performance lighting network devices.
g. Acceptable manufacturer shall be Cisco Systems or approved equal.

2. Provide Category 6a or better patch bays as required for termination of network cabling.

a. Patch bays shall be rack mounted in standard 19" racks.
b. Provide Category 6a or better patch cords as required for connection between the patch bays, switches, and other network devices.
c. Provide rack mounted standard 19" cable management systems for each patch panel.
d. Acceptable manufacturer shall be Hubbell or approval equal.

3. Provide Network Services Gateway in quantities and types as shown on Drawings.

a. Gateway shall support the following protocols:

1) Dynamic Host Control Protocol (DHCP) for automatic assignment of IP address
2) Dynamic Name Service (DNS)
3) Simple Network Time Protocol (sNTP) for automatic time assignment and synchronization
4) File Transfer Protocol (FTP) for configuration storage and backup
5) Windows File Sharing (SMB) for configuration and file storage and backup

b. Gateway shall support real-time logging and notifications of system errors.

1) Logging shall utilize a standard Syslog database.
2) Notifications shall be provided via email messages.

c. Gateway shall support storage of performance lighting system and system device configurations.

4. Provide DMX Gateways in quantities and types as shown on Drawings.

a. Gateways shall be intelligent Ethernet devices providing DMX & RDM data distribution over Ethernet data network. Nodes shall be connected using Category 6a or better wire, and powered via Ethernet connection using Power Over Ethernet (IEEE 802.3af). Ethernet connection receptacle shall be Neutrik Ethercon D-Series CAT5e receptacle.
b. Gateways shall directly support ANSI E1.31 (sACN) and ANSI E1.17 (ACN) network protocols. Gateways that do not support these protocols shall not be accepted.
c. There shall be as standard DMX512 5-pin XLR connectors on the front panel, or as shown on the drawings. It shall be possible to factory configure the connectors to be male or female to meet project requirements.
d. Gateways shall be remotely configured via network system wiring using manufacturer's software, control console interface, or standard Web Browser. Specific DMX channels input or output by Node shall be freely configurable by user. Configuration of Node shall be stored in non-volatile memory.

2.16 PERFORMANCE LIGHTING CONTROL DEVICE FACEPLATES

A. Faceplate: 1/8" (3mm) aluminum component mounting panel.

B. Surface back boxes: Supplied by performance lighting manufacturer

C. Floor boxes: As shown on drawings

D. Color: Powder coat black, or as shown on drawings

E. Legends: Engraved in component mounting panel and filled with engraver's enamel of contrasting color. Legends in black panels shall be white.

F. Components: As shown on drawings

G. DMX receptacles: Neutrik B-Series XLR receptacles.

H. Ethernet receptacles: Neutrik Ethercon CAT6a receptacles. Provide Neutrik HX-CAT6A parallel press tool for cable terminations.

I. Low voltage barrier: Install between control and power receptacles

J. Mounting hardware: Coordinate device mounting requirements as noted on drawings and per field conditions.

2.17 PERFORMANCE LIGHTING OUTLET DEVICES

A. Faceplate: 1/8" (3mm) aluminum component mounting panel.

B. Surface Back boxes: Supplied by performance lighting manufacturer

C. Floor boxes: As shown on drawings

D. Connector strips: As shown on drawings

E. Color: Powder coat black, or as shown on drawings

F. Legends: Engraved in component mounting panel and filled with engraver's enamel of contrasting color. Legends in black panels shall be white.

G. Components: As shown on drawings

1. Flush receptacles: Individually mounted, readily replaceable, and installed off-center to allow space for circuit identification labels.
2. Pigtail receptacles: Suitable strain relief grips for SOOW cables that engages cable's outer jacket.
3. Pigtail length: 18" (0.5M) or as shown on drawings.

H. Terminals: Provide numbered screw terminals on barrier terminal blocks for field connections within each device. Devices shall be internally wired by Manufacturer.

~~D.~~I. Mounting hardware: Coordinate device mounting requirements as noted on drawings and per field conditions.

PART 3 – EXECUTION

3.1 SUPERVISION OF INSTALLATION

A. Manufacturer shall provide instruction and supervision to the Division 26 Contractor as it pertains to the installation of these systems. Provide the necessary personnel for coordination meetings and site visits as requested by the Division 26 Contractor.

3.2 COMMISSIONING

A. Manufacturer shall provide the services of a qualified on-site engineering representative who shall perform the following:

1. Supervise and instruct equipment installer in all Manufacturer's requirements and specifications.
2. Prior to system energization, inspect the finished installation and confirm that the installation conforms to manufacturer's requirements and specifications. Supervise correction of any deficiencies and retest deficient items.

3. Manufacturer's engineering representative shall be present during energization of the system.
4. In conjunction with the equipment installer, measure and adjust the full dimmer output voltage at each performance lighting receptacle. Typical voltage shall be uniform at each receptacle regardless of branch wiring length. Specific voltage requirements shall be determined by the Theatre Consultant or Electrical Engineer.
5. Verify operation of all control devices and network wiring.
6. Configure all hardware and software to a “show ready” state, including:

    a. Network device addressing
    b. Ethernet switches configured for industry standard control protocols
    c. Dimmer and relay patch, dimmer curves, dimmer output voltage, control priority and similar variables
    d. Panic preset and fade time
    e. House light control zones, presets, sequences, fade times, macros, timeclock events, and interfaced external systems
    f. Lighting control console patched 1 to 1 for all control channels in system
    g. Console accessories such as remote video, tracking backup, and hand-held remote configured to operate with main lighting control console
    h. DMX node/gateway patch, priority, and soft labeling
    i. Lighting system computer software

B. Provide to the Architect and Theatre Consultant a written report confirming that the system has been properly installed and successfully energized within fourteen (14) days of energization.

3.3 DEMONSTRATION AND ACCEPTANCE

A. The Architect and Theatre Consultant (or their representatives) shall witness a full demonstration by the Manufacturer of each feature of each piece of equipment in the system. Comply with the following conditions:

1. The Manufacturer shall provide all necessary personnel and equipment, including lifts and ladders, to demonstrate fully the system’s compliance to the specifications.
2. Contractor’s project representative shall be present during testing as required.
3. Full and uninterrupted access to all areas shall be provided as necessary for complete testing and demonstration.
4. All loose equipment provided under this Section shall be on site and available for testing.
5. All architectural lighting fixtures circuited to the dimming system shall be installed and lamped.

B. Subject to satisfactory on-site demonstration, the Owner’s representative shall accept the equipment on behalf of the Owner.

C. Should the demonstration prove unsatisfactory, the Theatre Consultant and the Architect shall inform the Manufacturer in writing, and the Manufacturer shall rectify the problems. Problems shall be rectified in the shortest time possible. During this period of remedial work, the Owner shall have beneficial use of the equipment. The Warranty period shall commence upon final acceptance by the Owner.

3.4 TRAINING

A. Provide a factory field service representative to offer instruction to the owner’s staff in the proper operation and maintenance of the systems and software for at least 1 full day at a date and time convenient to the Owner.

END OF SECTION

SECTION 27 41 17 - SOUND, VIDEO, & COMMUNICATION SYSTEMS

PART 1 – GENERAL

1.1 GENERAL REQUIREMENTS

A. Work of this Section, as shown or specified, shall be in accordance with the requirements of the Contract Documents.

1.2 WORK INCLUDED

A. The Sound, Video & Communication System Contractor (SVCC) shall be responsible for all labor, equipment, material, and procedures required for the supply, fabrication, installation, commissioning, and warranty of the Sound, Video & Communication System (SVC) as specified herein and on the SVC Contract Drawings, including design and engineering responsibilities, and submission for review of shop drawings, reports, samples, and mock-ups. Detailed descriptions of these requirements are included in “Part 1 - General” and “Part 3 - Execution”.

B. Requirements Included:

1. The scope of work of this Section shall include, but not necessarily be limited to, the following systems, equipment, material, arrangements, and procedures as indicated and specified herein for:

   a. All labor, equipment and materials.
   b. Supply nonstandard back boxes and floor-boxes for installation by Electrical Contractor except where noted.
   c. Termination of all SVC equipment racks.
   d. Provide supplemental conduit, junction/pull boxes, fittings, and electrical hardware, as required for connection of Sound equipment to the Sound empty conduit system as supplied by Electrical division.
   e. All wire, wire pulling, and termination.
   f. All tools and measuring & testing equipment required for installation.
   g. Daily and final cleanup.
   h. Shop drawings, samples and mock ups, as built documentation, and operating manual.
   i. Testing and adjustment, interim shop inspection, initial test report, final site inspection, final test report, and demonstration and instruction.
   j. Guarantee and warranties, and maintenance and service contract.

C. Sound, Video & Communication System:

1. See detailed description of the following system and specific information about the equipment, components, and material in “Part 2 Products”:

   a. Sound, Video & Communication System: Permanent Sound, Video & Communication System, including speech and music reinforcement, archival audio & video recording, music, effects, and prerecorded tracks processing and playback and stage monitor/foldback, utilizing the following subsystems:
   b. Permanent loudspeaker positions, including rigging points, and cable management.
   c. SVC equipment racks, including appropriate cabinetry.

D. Related Requirements:

1. The following systems, equipment, material, arrangements, and procedures are not included in the scope of work of this Section. Coordinate all work of this Section with the work specified in other sections (exceptions as noted):

   a. A complete, pull-ready conduit system for installation of Sound, Video & Communication System wiring and devices—including all conduit and raceway, junction/pull boxes, standard back boxes, terminal cabinets and “pull group” boxes, fittings, drag line (pull line), electrical hardware, etc. (Electrical Contractor).
   b. Electrical power service—including transformers, feeder cable, distribution panels, branch circuit panelboards, and individual wall receptacles (Electrical Contractor).
   c. Sound, Video & Communication System “Sound, Video & Communication System” isolated ground AC power network (Electrical Contractor). Note: inter-rack AC power wiring, shall be the responsibility of the SC. Single-point termination to the racks shall be conducted on-site by the EC.
   d. Loudspeaker suspension points
   e. Equipment rack room (including lighting, furnishings, and finishes) (various Trades).
   f. Painting and finishing (except as noted below for Sound, Video & Communication System equipment).
   g. House telephone, data, life safety, fire alarm, and security systems (Electrical Contractor).

E. Definitions

1. In addition to the definitions in the General Conditions, the following also apply to this Section:

   a. The term “Consultant” refers to Stages Consultants.
   b. The terms “Sound, Video & Communication System Contractor”, “this Contractor”, “SVCC” as used in this specification refer to that contractor directly responsible for supply and installation of the Sound, Video & Communication System.
   c. The terms “engineer” and “engineering” as used in this specification refers to the interpretation, organization, and execution of the design of the Sound, Video & Communication System as provided in the Contract Documents.
   d. The term “supply” as used in this specification indicates that the Sound, Video & Communication System Contractor shall supply, free issue, including instruction and supervision for installation by others, such equipment, components, and material of the Sound, Video & Communication System so as to fulfill the intent of the Contract Documents.
   e. The term “provide” as used in this specification indicates that the Sound, Video & Communication System Contractor shall supply, fabricate, install, and make operable such equipment, components, and material of the Sound, Video & Communication System so as to fulfill the intent of the Contract Documents.
   f. The terms “preapproved equivalent” and “or as approved” as used in this specification indicate that acceptance shall be obtained from the Consultant. Refer to “Product Substitution” below.

g. The terms “NIC” or “not in contract” as used in this specification indicate an item or system that shall be furnished under another contract. Preparation for the future inclusion of such an item or system shall be limited to the extent outlined in the Contract Documents.
h. The terms “OEM” or “original equipment manufacturer” or “manufacturer” as used in this specification refer to a direct supplier to the Sound, Video & Communication System Contractor.
i. “UON” denotes “unless otherwise noted.”
j. “AFF” denotes “above finished floor.”
k. “U” denotes “rack unit,” as in “10U” to denote 10 standard 44mm (1.75”) rack units, for a total of 440mm (17.5”) of rack space.

1.3 SOUND, VIDEO & COMMUNICATION SYSTEM CONTRACTOR

A. Acceptable Contractors:

1. ATK Audiotek
28238 Avenue Crocker
Valencia, CA 91355
661.705.3700
2. Pro Sound
11060 Randall St
Sun Valley, CA 91352
818.765.3800
3. Morgan Sound
2004 196th St SW
Lynnwood, WA 98036
866.860.8233
4. Sound Com Systems
9918 Windisch Road
West Chester, OH 45069
513.860.4160
5. AVI-SPL
540 Huntmar Park Dr, Suite B
Herndon, VA 20170
703.796.9011
6. Sound Associates, Inc
979 Saw Mill River Road
Yonkers, NY 10710
914.963.3453
7. Avidex
20382 Hermana Cir
Lake Forest, CA 92630
949.428.6333

B. Sound, Video & Communication System Contractors:

1. Contractors wishing to bid for this project shall submit the following information:

a. Indicate the names of primary stock holders (in excess of 33-1/3%) and individuals, partnerships, or corporations with which the firm is currently affiliated in joint ventures.

b. List the principal officers, design and service engineers, and project managers. Provide an organizational structure flow chart.

c. Provide descriptions of Three (3) projects of comparable size, scope and nature for which the candidate has provided full services within the last five (5) years. These services should include: project management, system engineering, shop drawings, custom fabrication, installation, commissioning, training, and maintenance. For each project indicate the specifics of the scope of engineering, fabrication, and installation. Include name, address, and phone number of the owner, architect, Sound, Video & Communication System consultant, and the person(s) directly responsible for the operation and maintenance of the equipment in each facility.

d. List all current projects and their approximate contract value. Include name, address, and phone number of the owner, owner's representative, Sound, Video & Communication System consultant, and architect. For each project name the individual(s) who supervised the project management, system engineering, preparation of shop drawings, fabrication of components, installation of equipment, acceptance testing, and commissioning and training.

C. Contractor Submittal

1. All contractors shall submit two (2) copies of the following lists, schedules, and bills of material, including the names of manufacturers, manufacturers' model numbers, quantities, and prices:

a. Complete pricing information including base price, add-alternates, and unit prices.

b. A complete and accurate list of all of the equipment, components, and material specified in the Contract Documents.

c. A schedule of wire and cable as specified in the Contract Documents.

d. A list of requests for approval of equivalent equipment, components, material, or systems, per the requirements listed in "Product Substitution" below.

e. A list of test equipment to be used in system testing and adjustment, per the requirements listed in "Part 3 Execution: Testing and Adjustment."

f. A list and description of any equipment or material required for completion of this Section that is not included in the Contract Documents and is not shown on the Architectural or Electrical Contract Documents as being specified by other sections.

g. A list and description of any changes required to the installation of the empty conduit system, including but not limited to relocation or resizing or reduced or additional conduit, for Sound, Video & Communication System equipment provided by the Electrical Contractor.

h. A separate cost amount, per year, for a maintenance and service contract for a period of five (5) years. Include a complete description of services to be furnished and a schedule of planned maintenance visits. When the Sound, Video & Communication System Contract is awarded, the Contractor shall be obligated to furnish the services described, for the fees quoted, should the Owner elect to purchase this separate contract prior to the end of

the Guarantee and Warranty period. Refer to “Maintenance and Service Contract” below.

i. In the event that additional conduit is required to fulfill the intent of the Sound, Video & Communication System, the contractor shall include any additional wire.

j. Any financial or scheduling implications for additional work specified in other sections, as recommended by a contractor, shall be assessed prior to award of this Section.

D. Consultant Review

1. The Consultant shall refer to the lists, schedules, and bills of material outlined above in order to determine fulfillment of the requirements of the Contract Documents. These lists, schedules, and bills of material are included for the purpose of evaluation. The acceptance these submissions shall not be understood to relieve the Contractor of the responsibility of meeting any and all requirements of the Contract Documents.

E. Product Substitution

1. If an original equipment manufacturer or other supplier has permanently stopped fabrication of a specified item or has replaced an item with an almost identical item that has a new model number, the Contractor shall state this or, if there is sufficient time for amendment of the Contract Documents, notify the Consultant.
2. Contractors are advised that requests for approval of equivalent equipment, components, and material of other OEMs or suppliers are permitted. Such products shall be evaluated on the basis of equivalent quality and performance. The Consultant shall be the sole judge of performance equivalency and shall give written approval, by addendum, of all product substitutions. Provide sufficient catalog data, specifications, technical information, and samples to permit a complete evaluation by the Consultant.
3. While the equipment, material, arrangements, and procedures described in the Contract Documents indicate specific details for realization of the Sound, Video & Communication System, contractors may propose alternate products and details that shall fulfill the functional parameters of the outlined system. In such event, contractors shall submit a complete set of alternate Contract Documents not less detailed than these and following the same general format. Also submit a detailed statement indicating, paragraph by paragraph, where the equipment, material, arrangements, and procedures that shall be offered differ from those specified in the original Contract Documents.
4. Any changes to the original Contract Documents shall be evaluated and given written approval by the Consultant.

F. Responsibilities

1. Provide complete and working Sound, Video & Communication System as outlined in the Contract Documents.
2. Carry out work in accordance with best trade practices, and engineer, fabricate, provide and install all items in accordance with the Contract Documents, the manufacturers’ recommendations and in compliance with applicable codes, and consult with other trades performing adjoining work in order to provide an installation of first class quality.

G. Extent

1. Provide all labor, equipment, material, and procedures required, listed, scheduled, mentioned, or implied in the Contract Documents to engineer, fabricate, install, and commission the Sound, Video & Communication System.
2. Provide also all labor, equipment, material, and any necessary incidental items not specifically called for in the Contract Documents but required for a complete and satisfactory installation of the Sound, Video & Communication System.
3. Ensure that all equipment, components, and material specified or otherwise required to complete the installation are compatible with each other and with the conditions of expected use. Any errors, omissions or ambiguities in the Contract Documents are not to condition these requirements but shall be brought to the attention of the General Contractor and Consultant for evaluation of any possible effect on the intent of the Contract Documents. Submit all notifications in writing to the General Contractor and Consultant. Lack of such notification shall be understood to indicate acceptance of all requirements of the Contract Documents, and any future claims shall be rejected.

H. Coordination

1. Refer to the Project Electrical Drawings, to determine Sound, Video & Communication System device quantities and general locations. Refer to Project Architectural drawings for exact device locations.
2. Be familiar with the requirements of the Electrical Contract to ensure the coordination of the work in this Section with the work of the Electrical Contractor.
3. Provide the Electrical Contractor with drawings, diagrams, and other information in order to ensure proper coordination of the AC power system and Sound, Video & Communication System empty conduit installations. This work shall be part of this Contractor's early coordination effort and shall be provided in a timely manner according to a schedule of the project established by the General Contractor.
4. Coordinate work of this Section with the work of other trades so that all installations are executed in such a manner as to ensure proper system performance. Provide appropriate mounting of equipment and components and avoid conflicts in positioning of the various installations of other contractors and trades.
5. References to the General Contractor or other trades shall in no way modify the responsibility of this Contractor to provide a coordinated, complete, and working installation of all work required by the Contract Documents.
6. All drawings, schedules, RFIs, and other communication shall be coordinated with and submitted through the General Contractor.

I. Means and Methods

1. The Sound, Video & Communication System Contractor is solely responsible for the means and methods of all manufacturing and installation techniques, sequences and procedures of construction, and shall be responsible for coordination of these items with and through the General Contractor and the Consultant.

J. Sub-Contractors

1. Use of Sub-Contractors by the Sound, Video & Communication System Contractor shall in no way modify its responsibility.

K. Suppliers

1. Use of a product from a particular original equipment manufacturer, whether specified in the Contract Documents or substituted by the Sound, Video & Communication System Contractor, shall in no way modify its responsibility. Refer also to General Conditions.

L. Site Dimensions and Conditions

1. The Sound, Video & Communication System Contractor is solely responsible for the correctness of dimensions and quantities, shall verify site conditions, and obtain site dimensions and quantities required for proper installation of the work included in this Section; and shall be responsible for coordination of these with and through the General Contractor. The Sound, Video & Communication System Contractor shall take dimensions on site for all equipment and material that shall be provided (including custom fabricated components) and be entirely responsible for their accuracy.
2. Examine the work of other trades at the site to ensure that all aspects of the related work are in the proper condition to receive the work included in this Section.
3. Obtain through the General Contractor, where necessary, copies of relevant base building Contract Documents, including shop drawings, to ascertain existing field conditions not open to view (e.g., wall or ceiling construction).
4. In particular, verify all necessary field conditions including, but not limited to: the size, routing, and location of all conduit and raceway, pull/junction boxes, cast in-place back boxes, and accommodation of non-standard backboxes. Also verify size and configuration of the Equipment Rack Room. Such information is critical to the production of accurate shop drawings.
5. Provide any additional drawings, information, or templates where work by other trades must be modified for the proper installation and operation of the work included in this Section.
6. Do not begin manufacture of any custom fabricated equipment or components until satisfied that the devices, as designed, shall fit in the space available.
7. Provide all additional items required for the completion of the Sound empty conduit system, as supplied by the Electrical Contractor, including but not necessarily limited to conduit hardware, back boxes, and wire to accommodate site conditions, and in order to complete the interpretation of the Contract Documents with no change in the contract price. Any changes to equipment details and/or mounting details shall be reviewed and approved by the General Contractor and Consultant prior to shop fabrication or field installation.

M. Design and Engineering

1. The requirements outlined in the Contract Documents establish basic design parameters including means of operation, control, dimensions, and visual appearance. The Sound, Video & Communication System Contractor’s design responsibilities shall include:
2. Interpreting the Contract Documents so as to accomplish the purposes described.
3. Carrying out the execution of the work.
4. Executing modifications and additions to the details as may be required to fulfill the intent of the Contract Documents.

5. Maintaining the design/control/operation concepts as described in the Contract Documents.
6. The Contract Documents describe performance attributes of the systems that shall be provided under this Section and, as such, are not Professionally Engineered documents. This Contractor is responsible for the engineering of systems described in the Contract Documents.

N. Painting and Touch Up

1. The Sound, Video & Communication System Contractor shall be responsible for painting all Sound, Video & Communication System equipment and components exposed to view and shall also be responsible for the correction of minor cosmetic damage so that all Sound, Video & Communication System equipment and components are in clean and unblemished condition at the time of the final site inspection by the Owner and Consultant.
2. Any non-cosmetic damage shall be promptly repaired or replaced by this Contractor, prior to the final site inspection and without cost to the Owner.

O. Cleanup

1. Leave work areas clean and in proper order at the end of each work day. Coordinate with Owner's performance and rehearsal schedule, as required. Daily and final cleanup shall be to the satisfaction of the General Contractor and/or the Owner.

P. Omissions And/Or Errors

1. Omissions and/or errors within the Contract Documents shall not relieve this Contractor of the responsibility for providing a properly functioning installation of the Sound, Video & Communication System as outlined in "Part 2 - Products: System Description."

Q. Permits

1. Obtain all permits and pay all fees necessary for the execution of the work included in this Section.

R. Safety and Code Requirements

1. The Sound, Video & Communication System equipment, material, arrangements, and procedures shall conform to the applicable local building, electrical and safety codes and all other applicable code requirements, with industry standards of operation and practice, and applicable safety requirements. The completed installation shall allow the users to work and operate the Sound, Video & Communication System in a safe environment.
2. Regulations, codes of practice, and other reference documents cited in the Contract Documents shall apply to the work of this Section with the same authority as if included word for word in this specification.
3. Where provisions of the Contract Documents supplement those of cited reference documents, the more stringent provisions shall apply. Refer also to General Conditions.

1.4 SUBMITTALS

A. Project Timetable:

1. Submit a Sound, Video & Communication System project timetable for approval, after consultation with the General Contractor and the Consultant.
2. This timetable shall outline scheduling and dates for all project milestones including design and engineering, shop drawing submittal and review, sample and mock-up submittal and approval, shop fabrication, interim shop inspection, site installation, testing and adjustment, initial test report submittal and approval, final site inspection, programming, final test report submittal and approval, operating manual and as-built documentation submittal and approval, demonstration and instruction, and project completion.

B. Pre-Submittal Meeting:

1. The Sound, Video & Communication System Contractor shall meet with the General Contractor and the Consultant after the project timetable has been submitted and prior to beginning work on shop drawings. The project manager and chief project designer for the Sound, Video & Communication System Contractor must attend and be prepared to review the timetable, and to discuss the concepts described in the Contract Documents and proposed methods of execution of those concepts.

C. Shop Drawings:

1. Submit, through the General Contractor, shop drawings for submittal to the Consultant. Shop drawings shall include all information necessary to fully explain design features, engineering details, appearance, function, fabrication, mounting, installation, and interconnection of all equipment. This submittal shall include the following:
    a. Block diagrams (indicating all equipment interconnection and wiring).
    b. Schematic diagrams of custom circuitry and equipment.
    c. Equipment rack layouts.
    d. Custom receptacle plate, combination panel, and communication control pendant layouts (full scale drawings required).
    e. Custom mounting brackets.
    f. Mounting conditions and methods for all devices.
    g. Wiring distribution diagrams and wire pulling schedules.
    h. Detail drawings as required.
2. Submit names of the original equipment manufacturers or other suppliers, the specific model numbers of all Sound, Video & Communication System components, appropriate OEM catalog sheets, and technical data sheets. Submit also detailed descriptions of any required modifications to the specified equipment.
3. Submit a complete, itemized list of all equipment and material that shall be provided as part of the Sound, Video & Communication System. All equipment and material shall be listed by the same name, and in the same order as it appears in “Part 2 - Products.” Submit also similar lists for the portable equipment, spare parts, and test equipment to be supplied.
4. Shop drawings shall represent actual fabrication and installation details. Information on all shop drawings shall be designed, engineered, and drafted by this Contractor. Direct reproductions of contract drawings are not acceptable as shop drawings and shall be rejected.

5. Provide shop drawings separated into the various systems, where each set of drawings contains that information necessary to describe each system completely. The shop drawing submittal shall also include a fully referenced table of contents.
6. Consultant Review:
    a. The shop drawings shall be reviewed by the Consultant and shall be approved before the Sound, Video & Communication System Contractor begins fabrication and installation of any aspect of the Sound, Video & Communication System. Note that the review of shop drawings by the Consultant is to determine conformance with the design concept and with information included in the Contract Documents. Only those shop drawings returned to this Contractor with a satisfactory review status shall be used in the execution of this Section. Non-conformities and errors detected during the shop drawing review shall be noted on the drawings and returned to the Sound, Video & Communication System Contractor upon completion of the review. The Contractor is responsible for the completeness and accuracy of the shop drawings.
    b. Shop drawings or packages of shop drawings that are incomplete shall be marked “rejected” until such time as the complete set of relevant drawings is submitted. It is impossible for the Consultant to adequately review technical equipment submissions unless all details have been adequately represented.
    c. Approval of those shop drawings that include any non-conformities or errors that are not detected during the Consultant’s review shall not relieve this Contractor of the sole responsibility to provide an installation adhering strictly to the requirements of the Contract Documents.
    d. Shop drawing review does not include engineering calculations by the Consultant unless expressly indicated on the drawings.

D. Samples And Mock-Ups:

1. After review of appropriate shop drawings, submit one (1) sample each of the following items, clearly labeled with manufacturer name, model number, and other pertinent data, for approval by the Consultant:
2. All cloth and/or metal grille material, with integral framing or support construction where appropriate.
3. Custom paint samples for Sound, Video & Communication System devices requiring a change in color from that supplied by the manufacturer. Each sample shall be applied to a 150mm x 150mm (6” x 6”) piece of material closely matching the surface characteristics of each device type to be painted. On the back of each sample indicate the painting system, type of paint for each coat (including primer), the color and sheen of the finish coat, and description of the item(s) and location(s) where the color on the paint sample will be used.

E. Record Drawings:

1. Keep a complete set of white prints of the specification and all contract drawings for this Section of the work, as well as shop and installation drawings. Any changes made during installation should be carefully noted and transferred to the appropriate documents to show “as-installed” work in accordance with Section 1, Submittals.

2. At the time of the initial test report submission, submit one (1) corrected set of record drawings and shop/installation drawings for review by the Consultant.
3. Late changes or adjustments performed as corrections to punch list items or as change orders after practical completion of the contract, shall be reflected on updated record drawings by this Contractor.
4. After review by the Consultant, make any required revisions to the record drawings until the contents are satisfactory to the Consultant.

F. Operating Manual:

1. Provide one (1) copy of operating manuals in accordance with Section 1, Submittals. Mark each section with tabular dividers using permanent labels protected by plastic. All drawings (B-size and larger) shall be folded into individual vinyl pockets (sheet protectors). Include the following items:

   a. Title sheet labeled “Sound, Video & Communication System—Operating Manual”, project name, and date.
   b. Table of contents.
   c. Names, addresses, and phone numbers of Sound, Video & Communication System Contractor, sub-Contractors, and suppliers.
   d. Final version of the equipment list.
   e. System description.
   f. Operating instructions.
   g. Periodic maintenance procedures.
   h. List of all spare parts and equipment.
   i. Complete OEM data sheets, operating manuals, service manuals, and related documentation.
   j. Block and schematic diagrams of all systems.
   k. Plugging key plan, showing wiring and receptacles (i.e., a quick-reference chart of combination panels, wall receptacles, and patching only).
   l. Device, wiring, termination, and hardware schedules.
   m. List of equipment design parameters including safe working capacities, maximum simultaneous operations, and similar information.
   n. Maintenance instructions for finished surfaces and material.
   o. Record of performance (Final Test Report data) as demonstrated at final site inspection sessions.

2. Prepare one (1) draft copy of the Operating Manual for review by the Consultant four (4) weeks prior to the final site inspection. The document shall be clearly marked “FOR REVIEW.” After review by the Consultant, make any required revisions to the Operating Manual until the contents are satisfactory to the Consultant.

G. Mounted Block Diagram:

1. Provide prints of each Sound, Video & Communication System block diagram in the equipment rack room. Mount each diagram in a poster frame and securely mount in each control/rack room adjacent to the equipment racks. Block diagrams shall be of approved record drawings.

1.5 COMMISSIONING

A. Testing and Adjustment:

1. Perform tests and adjustments to the Sound, Video & Communication System at the project milestones indicated below, and as specifically outlined in “Part 3 - Execution: Testing and Adjustment.”

B. Interim Shop Inspection:

1. Test and demonstrate the functions of all systems, equipment, assemblies, and subassemblies of the Sound, Video & Communication System in the shop or factory no later than Six (6) weeks prior to project completion. Provide all test equipment, and perform all tests and demonstrations in the presence of the Consultant. The systems, equipment, and components that shall be tested and demonstrated include, but are not necessarily limited to, the following:

   a. Sound, Video & Communication System equipment, including playback computers, signal processing racks, amplification and loudspeakers.
   b. Notify the Consultant at least three (3) weeks prior to the date when all systems, equipment, assemblies, and subassemblies are complete and ready for testing. The equipment shall be made available to the Consultant for a period of at least one (1) week for testing and inspection prior to shipment. Do not ship any piece of equipment without either written verification of successful shop testing, or waiver of shop testing from the Consultant.
   c. Prepare a draft of the initial test report (outlined below), indicating all pre-installation or shop testing, and submit the report to the Consultant for review prior to shipment of equipment from this Contractor’s shop.

C. Initial Test Report:

1. Perform all testing outlined in this specification. This shall occur after substantial performance of the Sound, Video & Communication System, and before scheduling the final site inspection.
2. Submit a complete report on the results of all testing and adjustments for review by the Consultant, and also certify, in writing, that the work of this Section is complete, operational in every respect, and that the Sound, Video & Communication System are ready for the final site inspection.

D. Final Site Inspection:

1. Upon approval of the initial test report, the Sound, Video & Communication System Contractor shall notify the General Contractor and Consultant, in writing, and schedule the final site inspection for a time no later than four (4) weeks prior to the scheduled substantial completion of the project. During this inspection demonstrate all the tests described in this specification, and be prepared to demonstrate the operation of any or all portions of the Sound, Video & Communication System, as requested by the Consultant.
2. Furnish sufficient technicians to operate all equipment and to perform such tests and adjustments as may be required by the Consultant during this inspection. Provide also sufficient engineering and field service personnel to aid the Owner and Consultant, and to direct the technicians in testing, adjusting, and explaining the systems. Ensure that ladders and other means are provided to allow access to all devices to be tested. Ensure that no other work is scheduled in the audience chamber or stage areas during the time of this inspection. All temporary bracing,

scaffolding, etc., shall be removed to permit full operation of, and access to, all equipment.

3. Should the work inspected not be substantially performed at the time of first inspection, this Contractor shall compensate the Owner for any consulting and transportation costs incurred by the Owner and Consultant during all inspections.
4. If the system does not fulfill each and every aspect of the Contract Documents, make all necessary adjustments or other required changes in order to bring the installation into conformance with the Contract Documents at no additional cost to the Owner.

E. Installed System Measurement, Verification and Optimization:

1. Upon completion of the Final Test procedure, proceed with the comprehensive complex measurement of the electroacoustic performance of the various components of the performance-related sound equipment. This testing procedure includes all of the signal path leading up to and through the loudspeaker systems and their processors. This contractor shall provide a SMAART measurement system and will have subcontracted a Consultant-approved SMAART operator who will conduct the actual measurements and supervise the optimization of these systems. This measurement process shall be scheduled for a period of two (2) consecutive days. Ensure that no other work is scheduled in the ride area during the time of this procedure. All temporary bracing, scaffolding, etc., shall be removed to permit full operation of, and access to, all equipment.
2. Furnish sufficient technicians to help operate all Sound, Video & Communication System equipment and to perform the various corrective tasks that are revealed during this procedure, including rigging adjustments and polarity correction. Provide all required support equipment such as computer monitors, keyboards, two-way radios, etc. Ensure that ladders and other means are provided to allow access to all devices to be tested.

F. Programming:

1. Following completion of System Optimization, the Consultant and Project creative team will undertake a two-week Ride programming period. Contractor shall provide full technical personnel support during this process.

G. Final Test Report:

1. After completion of the final site inspection and system optimization, submit a final version of the complete report on all testing and adjustment outlined in this specification for review by the Consultant. The final test report shall be accompanied by a letter certifying that the Sound, Video & Communication System conform to the Contract Documents, that the installation is complete in all details, that the final site inspection is complete and successful, that the system optimization is complete in all details and that the system ready to be turned over to the Owner. Include printouts of SIM II measurement plots showing pre and post optimization.

H. Demonstration And Instruction:

1. Instruct the Owner and/or the facility’s operating personnel in the operation and care of the systems during two (2) separate sessions for not less than a total of eight (8) hours. This instruction shall include:

2. Operating procedures for proper use of all systems.
3. Proper maintenance of all systems.
4. Replacement procedures for user replaceable parts.
5. The first demonstration and instruction session shall occur directly after acceptance of the final test report. The second session shall occur at a time arranged by the Owner and/or the facility's operating personnel, and shall be no sooner than the next day and no later than one (1) month afterwards. The precise timing of these sessions shall be determined by the Owner, at the Owner's convenience. The sessions shall be videotaped by this Contractor on portable video equipment. A dvd of the recorded session shall be submitted to the Owner within one (1) week following the taping.
6. As a portion of this instruction, present the final, approved, version of the Operating Manual to the Owner, General Contractor and Consultant for preview at least two (2) weeks prior to the first instruction session. Review the contents of the Operating Manual with the Owner and/or the facility's operating personnel as part of the first session.

I. Guarantee And Warranties:

1. Furnish the Owner with a written guarantee in accordance with General Conditions, covering all engineering, equipment, material, and installation workmanship incorporated into the work of this Section, until one (1) year after date of substantial completion of the project.
2. Service Calls
    a. All guarantee and warranty work shall be carried out at no additional cost to the Owner for any labor, parts, shipping or transportation. Warranty replacement equipment shall be provided within 24 hours of official notice by the Owner.
3. Equipment Warranties
    a. Warranty of replacement equipment and components shall be the same as for the original devices, and shall begin on the date of installation of the replacement item. Replace spare parts used during the warranty period at no additional cost. Note all such replacement equipment and components in a written report to the Owner and the Consultant, and in an addendum to the Operating Manual.
    b. In the absence of a maintenance and service contract (outlined below), honor all extended warranties offered by original equipment manufacturers beyond the one (1) year guarantee outlined above. The Sound, Video & Communication System Contractor shall not be responsible for any labor, transportation, shipping, or miscellaneous costs not covered by the OEM incurred during service calls to repair or replace extended warranty equipment.
4. Follow-Up Testing and Adjustment
    a. Provide technicians to test and adjust the Sound, Video & Communication System, at a mutually agreed upon time, approximately six (6) months after substantial completion of the project. This follow-up visit shall include any needed testing and repair of all items covered under the guarantee, and testing and readjustment of all items identified in the maintenance procedures. Provide a written report to the Owner and

Consultant outlining the extent and results of the follow-up testing and adjustment.

5. Repeated Failures

a. If a particular component, part, or piece of equipment fails more than three times during the warranty period, the failure shall be deemed to be due to engineering and/or installation error. In this event take action within 24 hours of official notice by the Owner to modify or correct the defect by replacement of faulty equipment and/or changes to engineering concepts or installation methods.

J. Maintenance and Service Contract:

1. In addition to providing guarantee and warranty service, make available to the Owner a separate service contract to begin after expiration of the guarantee and warranties outlined above. The service contract shall be at the Owner's cost, renewable yearly, and available for the life of the Sound, Video & Communication System. This service contract may be provided directly by this Contractor or through an approved local or regional service center.
2. The service contract shall cover every item provided and supplied under this section of the contract. Service offered shall include, but not necessarily be limited to, repair of components, temporary equipment, replacement of parts, and a regular maintenance program for all equipment in the Sound, Video & Communication System. The service contract shall specify a guaranteed response time.

PART 2 – PRODUCTS

2.1 ASSEMBLY (DRAMA ART) ROOM 116:

A. Assembly (Drama Art) Room 116 will be a multi-purpose assembly, presentation and performance space. It will be equipped with a flexible system of wires and cables to allow for portable equipment to be utilized on an ad-hoc basis with supporting infrastructure and equipment to be permanently located within an equipment rack (SVC RACK 2) within an adjacent Electricity Closet (Room 121.) Additional supporting infrastructure and equipment will be permanently installed in adjacent rooms Utility (Room 120) and Dressing (Room 115.) The Assembly Room shall be supplied with an American with Disabilities Act compliant Assisted Listening System, which shall be fed by a permanently mounted stereo microphone, located in the ceiling. This same microphone shall also provide program feeds of the Assembly Room presentations to adjacent loudspeakers in the Open Air Lobby as well as the Dressing Room 115. All equipment shall be contractor nominated and subject to the owner's and consultant's review and approval.

1. Main Loudspeaker System – The main loudspeaker system shall be comprised of no fewer than Two (2) Full Range Loudspeakers (40Hz – 20kHz) and Two (2) Subwoofer Loudspeakers (20Hz – 120Hz) capable of providing even coverage throughout the Assembly Room and capable of providing continuous program levels of 100dB C-weighted with peak program ability not to exceed 120 dB C-weighted instantaneously. All loudspeakers should be equipped with de-mountable rigging hardware and safety equipment that will allow for them to be rigged overhead or ground-stacked. The Main Loudspeaker System shall be connected

using portable cables to infrastructure-based panels located throughout the room and, through a loudspeaker patch bay, to permanently installed power amplifiers which will derive their signal from a Digital Signal Processor (DSP.) The DSP shall be freely patchable through patch bays to allow for multiple ad-hoc configurations and controlled through computer network interface.

a. Two (2) Full Range Loudspeakers and Rigging

1) Basis of design: Fulcrum Acoustic DX-115

b. Two (2) Subwoofer Loudspeakers and Rigging

1) Basis of design: Fulcrum Acoustic Sub215L

c. Four (4) Loudspeaker Cables, 4 Channel, NL4, 25 Feet
d. Two (2) Loudspeaker Cables, 4 Channel, NL4, 50 Feet
e. One (1) Custom Loudspeaker Patch Panel

1) To be installed in SVC Rack 2

f. Two (2) 4-Channel Loudspeaker Amplifiers

1) 2000 Watts per channel @ 4 Ohms
2) Dante Network Audio Capable
3) To be housed in SVC Rack 2

g. One (1) Digital Signal Processor

1) Basis of design: Allen + Heath AHM64
2) Dante Network Audio Capable
3) 12 x 12 Analog Audio Input and Output
4) Network Controllable
5) Multiple recallable configurations
6) To be housed in SVC Rack 2

h. One (1) Analog Patch Bay

1) Capable of patching analog signals from all suitable infrastructure including Mic / Tie Lines from Assembly Room, SVC Rack 1, and the DSP.

2. Effect and Monitor Loudspeakers – The effect and monitor loudspeakers shall be comprised of no fewer than Four (4) Full Range Loudspeakers that shall be employed throughout the Assembly Room as-needed and capable of providing continuous program levels of 100dB C-weighted with peak program ability not to exceed 120 dB C-weighted instantaneously. All loudspeakers should be equipped with de-mountable rigging hardware and safety equipment that will allow for them to be rigged overhead or ground-stacked. The effect and monitor loudspeakers shall be connected using portable cables to infrastructure-based panels located throughout the room and, through a loudspeaker patch bay, to permanently installed power amplifiers which will derive their signal from the Digital Signal Processor (DSP) as stated above.

a. Four (4) Full Range Loudspeakers and Rigging

1) Basis of design: Fulcrum Acoustic FA-12

b. Four (4) Loudspeaker Support Stands

1) Basis of design: Ultimate Support TS90-B

c. Four (4) Loudspeaker Cables, 4 Channel, NL4, 25 Feet

d. Two (2) Loudspeaker Cables, 4 Channel, NL4, 50 Feet
e. Two (1) 4-Channel Loudspeaker Amplifiers

1) 800 Watts per channel @ 4 Ohms
2) Dante Network Audio Capable
3) To be housed in SVC Rack 2

3. Audio Console – The audio console shall provide a functional and expandable interface of the Assembly Room operators to allow for control of the Main Loudspeaker System and the Effects and Monitor Loudspeakers. It shall be connected using portable cables to infrastructure-based panels located throughout the room and, through a Category6 cabling patchbay, to the DSP as stated above and additional auxiliary stagebox.

a. One (1) Digital Mixing Audio Console

1) Basis of design: Behringer X-32
2) Provide with Dante Network Audio capability

b. One (1) Portable Digital Stagebox

1) Basis of design: Behringer S-32
2) Provide with hard-sided portable roadcase and power management.

c. Six (6) Category6e Shielded Twisted Pair Cables, 25 Feet
d. Six (6) Category6e Shielded Twisted Pair Cables, 50 Feet

4. Audio Playback Rack – Audio playback shall primarily consist of a Show Control Computer and Bluetooth Audio along with local analog I/O to the Audio Console. Networking switches are included The audio playback rack should contain the computer CPU, network switches, drawer storage, cable, and power management.

a. One (1) Show Control Computer

1) Basis of Design: Mac Mini MGNT3XX/A

a) 1 Terabyte Solid State Drive
b) 16 GB RAM
c) Wired Keyboard
d) Wired Mouse
e) 32 Inch 4k Display
f) 1 Thunderbolt to HDMI expansion
g) Dante Virtual Soundcard
h) QLab Pro License
i) CPU shall be Rack Mounted

b. One (1) Bluetooth Audio Interface

1) Basis of Design: Radial Engineering BT-Pro V2

c. Three (3) Dante Compatible 10-Port Network Switches

1) Basis of Design: Cisco CBS350-8T-E-2G

a) The switches shall be configured and identified for one each: Control Network, Dante Primary, and Dante Secondary

d. One (1) Portable Rack

1) Basis of Design: SKB Cases 1SKB-R8U

2) Provide integral power management with front LED lighting
3) Provide integral storage drawer

5. Production Communications – Provide a portable 2 channel production communications system.
   a. One (1) 2-Channel Production Communications Base Station
      1) Basis of Design: Clear-Com MS-702
   b. Two (2) 2-Channel Production Communications Belt Packs
      1) Basis of Design: Clear-Com RS-702
      2) Provide 6-Pin Adaptor per beltpack
   c. Four (4) 1-Channel Production Communications Belt Packs
      1) Basis of Design: Clear-Com RS-701
   d. Eight (8) Production Communications Headsets
      1) Basis of Design: Clear-Com CC-15
6. Wireless Microphones – A Four (4) channel wireless microphone package shall be provided with frequency- sharing transmitters, batteries, and charger to be incorporated into the Audio Playback Rack.
   a. One (1) Four (4) Channel Microphone Receiver
      1) Basis of Design: Shure ULXD4Q
   b. Four (4) Lavalier Transmitters with Microphone Elements
      1) Basis of Design: Shure ULXD1
   c. Four (4) Handheld Transmitters
      1) Basis of Design: Shure ULXD2/SM58
7. Assisted Listening System – Provide ADA Compliant Assisted Listening System
   a. One (1) Assisted Listening System
      1) Basis of Design: Listen Technologies LS-53-216
      2) Base station shall be housed in SVC Rack 2
8. Program Microphone – A permanently mounted stereo microphone shall be provided to provide program material to the Assisted Listening System, Dressing Room, and Outdoor Lobby.
   a. One (1) Program Microphone
      1) Basis of Design: Shure VP-88
9. Wired Microphone Package – Provide a compliment of loose wired microphones, cables, and microphone stands.
   a. Eight (8) Wired Vocal Microphones
      1) Basis of Design: Shure SM-58
   b. Eight (8) Wired Instrument Microphones
      1) Basis of Design: Shure SM-57
   c. One (1) Wired Kick Drum Microphone

1) Basis of Design: AKG D112

d. Two (2) Wired Condenser Microphones

1) Basis of Design: AKG 414

e. Thirty-two (32) Microphone Cables, XLR, 25’
f. Ten (10) Microphone Cables, XLR, 50’
g. Twenty (20) Microphone Stands, Tripod, Telescoping Boom

1) Basis of Design: K&M 210/9

h. Eight (8) Microphone Stands, Straight, Heavy Base

1) Basis of Design: K&M 260/1

10. Portable Video Equipment – Provide a portable video projector and projection screen.

a. Video Projector

1) Basis of Design: EPSON Pro Cinema 4050

b. Projection Screen

1) Basis of Design: Da-Lite Fast Fold Deluxe 88609

2.2 ANCILLARY SPACES TO ASSEMBLY (DRAMA ART) ROOM 116 :

A. Four ancillary spaces directly interact with the Assembly Room. They are as follows: Electrical Closet 121 where the bulk of the wire infrastructure and permanently installed equipment shall be located, Dressing Room 115 which houses a ceiling program loudspeaker and associated volume knob, the Open Air Lobby which has a series of four outdoor-rated program loudspeakers, and Utility Room 120 which houses some light infrastructure.

1. Electrical Closet 121

a. SVC Rack 2 – This rack shall serve as the primary termination location for infrastructure cabling and permanent installed equipment.

1) Basis of Design: Middle Atlantic WR-44-32
2) Provide pull out rack with integrated power and cable management.
3) The Electrical Contractor shall distribute power to the rack via junction boxes.
4) Equipment named above and below as being housed in this rack shall be installed.

b. Terminations – Provide custom or purpose ordered rack terminations for all wire and cable types routed to this rack. (Note: the Production Communications channels should be separately bussed throughout the project. I.e., all channel A intercom channels should be bussed together and all Channel B intercom channels should be bussed together)
c. Three (3) Dante Compatible 10-Port Network Switches

1) Basis of Design: Cisco CBS350-8T-E-2G

a) The switches shall be configured and identified for one each: Control Network, Dante Primary, and Dante Secondary

2. Dressing Room 115 – Provide a single channel program in-ceiling loudspeaker, associated volume controller, and amplification.
    a. One (1) In-Ceiling Loudspeaker
        1) Basis of Design: QSC-ADC4T-WH
    b. One (1) Volume Control
        1) Basis of Design: Atlas Sound VC-70V
    c. One (1) Channel of Amplification at 70V
        1) Amplifier may be used with a multi-channel 70V amplifier in conjunction with other 70V needs but it must remain on its own circuit.
        2) Amplifier shall have Dante audio networking
3. Open Air Lobby– Provide four (4) single channel, surface mounted, program loudspeakers, volume control, and amplification.
    a. Four (4) Surface Mount Loudspeaker
        1) Basis of Design: QSC-ADS-4T
        2) Refer to Architect Elevations for co-ordination
    b. One (1) Volume Control
        1) Basis of Design: Atlas Sound VC-70V
        2) To be housed in SVC Rack 2
    c. One (1) Channel of Amplification at 70V
        1) Amplifier may be used with a multi-channel 70V amplifier in conjunction with other 70V needs but it must remain on its own circuit.
        2) Amplifier shall have Dante audio networking

2.3 CLASSROOM (GENERAL) 108 :

A. This classroom will house a very basic Audio and Video presentation system comprising of two (2) surface mounted loudspeakers, a surface mount projection screen, and a ceiling mounted projector. Infrastructure between the wall of the classroom and the projector wall will provide video signal while networked audio through the SVC Rack 2 will provide audio signal.
    1. Classroom (General) 108
        a. Two (2) Surface Mount Loudspeaker
            1) Basis of Design: QSC-ADS-4T
            2) Refer to Architect Elevations for co-ordination
        b. Two (2) Channels of Amplification at 8 Ohm
            1) Amplifier may be used with a multi-channel 8Ohm / 70V amplifier in conjunction with other 70V needs but they must remain on their own circuits.
            2) Amplifier shall have Dante audio networking
        c. One (1) Analog Audio to Dante Network Converter
            1) Basis of Design: DINET-DAN-TX
        d. One (1) Projection Screen

1) Basis of Design: Da-Lite Model C 79043

e. One (1) Video Projector

1) Basis of Design: EPSON Pro Cinema 4050

f. One (1) Network Video Transceivers

1) Basis of Design: Kramer TP580 KIT

2.4 STUDY LABS ROOMS 125 AND 126 :

A. These study labs will function as “One Button Studios” where students may be able to record and edit their own multimedia presentations. As the technology is rapidly changing, the nominated contractor will need to suggest how best to accommodate the current standard, which can be found at: https://onebutton.psu.edu

1. Study Lab Room 125

a. One (1) One Button Classroom System

1) Basis of Design: Studiomatic "One Button Studio Pro"

2. Study Lab Room 126

a. One (1) One Button Classroom System

1) Basis of Design: Studiomatic "One Button Studio Pro"

2.5 CLASS LAB ROOM 129, SPECIAL CLASS LAB ROOMS 130 & 132, AV ROOM 131

A. At this time, this suite of rooms is scheduled as an infrastructure-only section of the project. SVC Rack 1 is scheduled to be installed, but space considerations may necessitate integrating with OFE and furniture. An allowance should be held for a potential rack and all patch bays associated with it.

1. AV Room 131

a. SVC Rack 1 – This rack shall serve as the primary termination location for infrastructure cabling.

1) Basis of Design: Middle Atlantic WR-44-32
2) Provide pull out rack with integrated power and cable management.
3) The Electrical Contractor shall distribute power to the rack via junction boxes.
4) Provide allowance for patch bays terminating all infrastructure cabling.

B.

PART 3 – EXECUTION

3.1 QUALITY ASSURANCE AND WORKMANSHIP

A. The Sound, Video & Communication System Contractor shall follow good working practices and fabricate and install items in accordance with the manufacturer’s recommendations and the Consultant’s specifications. Provide quality control procedures acceptable to the Owner and Consultant. Provide a

properly qualified site supervisor who shall carry out supervision duties only. Provide straight, plumb, true and aligned components throughout, and shall consult with other trades doing related work and adjoining work in order to provide an installation of first-class quality.

B. The Consultant reserves the right to reject any part of the installation not in compliance with the Contract Documents. The Sound, Video & Communication System Contractor shall carry out any necessary remedial work or replacement free of charge and without delay to the Owner.

C. A standard reference guide for the design, engineering, and installation of the Sound, Video & Communication System shall be Audio System Design and Installation, by Philip Giddings (Sams Publishing).

3.2 DEFINITIONS

A. Electrical Reference:

1. The following electrical references are used throughout the Sound, Video & Communication System specification:

a. Voltage: dBv = 20log(E1/E2)
b. Power: dB = 10log(P1/P2)
c. 0dBu = 0.775VRMS; ratio of voltages measured open circuit
d. 0dBv = 0.775VRMS; ratio of voltages measured open circuit
e. 0dBV = 1.0VRMS; ratio of voltages measured open circuit
f. 0dBm = 1mW; power level (typically 0.775V into 600-ohm load)
g. 0VU = +4dBm; power level referenced to 600 ohms

B. Electrical Characteristics:

1. Unless otherwise specified in the Contract Documents, electrical characteristics of the Sound, Video & Communication System equipment shall be as follows:

a. Microphone preamplifier inputs shall be balanced, have an impedance greater than or equal to 1.2k ohms, and designed to be driven from sources of 600 ohms or less.
b. Line inputs shall be balanced bridging, have an impedance greater than or equal to 10k ohms, and designed to be driven from sources of 10k ohms or less.
c. Line outputs shall be balanced, have an impedance less than or equal to 100 ohms, and designed to drive loads of 600 ohms or greater.

C. Connector Polarity: Proper polarity of connectors on combination panels, receptacle plates, rack panels, patch panels, and other devices fabricated and/or wired by this Contractor shall be established as follows: Polarity of connectors for OEM devices and equipment may be different, and should be wired to patch panels so as to maintain consistent system polarity.

1. Microphone and Line Level

a. Balanced Connection

XLR-3 connectors: pin 1 = ground/shield (do not connect to case); pin 2 = high (“hot”); and pin 3 = low (“cold”).

¼” T/R/S phone connectors: sleeve = ground/shield; ring = low (“cold”); and tip = high (“hot”).

b. Unbalanced Connection

XLR-3 connectors: pin 1 = ground/common/shield (do not connect to case); pin 2 = high (“hot”); and pin 3 = tie to pin 1 only.

¼” T/S phone connectors: sleeve = ground/common/shield; and tip = high (“hot”).

Phono (RCA) connectors: sleeve or shell = ground/common/ shield; and center pin = high (“hot”).

2. Multiconductor Application

a. Multipin connectors: Refer to the manufacturer’s specifications.

3. Data Connection

a. RJ45 connectors: Refer to the manufacturer’s specifications.

4. Video and RF Level

a. BNC-type connectors: sleeve or collar = ground/shield; and center pin = signal (“hot”).

5. Low Impedance Loudspeaker Level

a. Neutrik NL4 series connectors used for bi-amplified or passive (mono-amplified) Sound, Video & Communication System loudspeakers: pin “1+” = Low frequency or full-range driver “+”; pin “1-“ = Low frequency or full-range driver “-“; pin “2+” = High frequency driver “+”; pin “2-“ = High frequency driver “-“.

b. Neutrik NL4 series connectors used for 70.7 volt lines: pin “1+” = high (“hot”); pin “1-“ = N/C; pin “2+” = N/C; and pin “2-“ = low (“common”).

D. Transducer Polarity: Proper polarity of electro-acoustic transducers shall be established as follows, with exceptions as noted:

1. Microphone

a. Positive acoustic pressure on the microphone diaphragm produces a positive voltage on pin 2, with respect to pin 3 of the output connector.

2. Loudspeaker

a. Positive voltage applied to the (+) terminal produces a displacement of the loudspeaker cone away from the magnet, thus producing a positive acoustic pressure.

3.3 INSTALLATION

A. General:

1. All equipment except portable equipment shall be securely held in place with a safety factor of at least three; except that all equipment rigged overhead shall be so done using safe rigging practices and with rated hardware selected to meet a safety factor of at least ten. All equipment shall be installed in such a fashion as to present no safety hazard to operating personnel.

2. All equipment shall be adequately ventilated when operating under worst-case power dissipation.
3. All metal cabinets connected to the Sound, Video & Communication System audio ground network shall be effectively isolated from any conduit or other metallic component that is connected to the building electrical safety ground.
4. All installation work shall be carried out in a neat and orderly fashion.

B. Wiring:

1. Ensure by drawing review and field survey that the conduit/raceway infrastructure is sufficient for the proper installation of the specified and required wire and cable, and/or any approved-substitute types of wire and cable.
2. Do not begin pulling Sound, Video & Communication System wiring through the Sound, Video & Communication System Empty Conduit System until all conduit, pull boxes, etc. for each given run (point-to-point) are completely installed by the Electrical Contractor and ready for such wire and cable installation. Undertake a field inspection of the conduit system and pull boxes, reporting any missing conduit, harp edges, missing bushings or drag lines, blocked runs, etc., prior to attempting installation of wire and cable.
3. The Sound, Video & Communication System Contractor shall ensure that the wire and cable is installed in a manner that shall neither cause nor permit damage to the wire and cable throughout the installation process. Damaged wire and cable (including wire and cable spliced in violation of specified requirements) shall be rejected and replaced by this Contractor at no cost to the Owner.
4. All microphone level, line level, video/RF level, Data level, low impedance loudspeaker level, and AC power level wiring shall be restricted to individual and separate conduit systems.
5. All microphone and line level wiring shall be balanced and floating, unless otherwise indicated.
6. Take all necessary precautions to prevent electromagnetic, electrostatic, and radio frequency interference.
7. Care should be taken in wiring and installation to prevent damage to wire or equipment. All wire entering racks or other equipment shall have a service loop of at least four (4) feet unused (slack) length after termination. This service loop shall be neatly bundled and harnessed in place.
8. No splices shall be allowed in microphone, line level, video/RF or data cables unless it is physically impossible to install the wire in one length. Splices must be approved by the Consultant on a case-by-case basis. When approved, the following splicing methods may be used:

    a. Crimp-type “butt” splice connectors with an appropriately sized shrink tube for each conductor, as well as an overall shrink tube for all audio and intercom cable types.
    b. Female BNC “barrel” connectors for video/RF cable. Male BNC connectors shall be provided on cable ends at location of the splice.
    c. Female 8P8C (commonly known as RJ45) “barrel” connectors for Data cable. Male 8P8C connectors shall be provided on cable ends at the location of the splice.
    d. Splices in loudspeaker cable are permitted without prior approval by the Consultant. Such splices shall be kept to a minimum.

e. Any splices made shall occur only at junction boxes, pull boxes or other permanently accessible locations. Such splices shall be listed on a schedule provided with the as-built documentation.

C. Flexible Cords and Cables:

1. Flexible cords used shall be selected giving consideration to ambient and conductor temperatures, wear-resistance, flexing, and mechanical stress. Vulcanized rubber, butyl rubber, EP, or silicone rubber insulated cables shall be used in preference to PVC insulated types, wherever possible. All flexible cords and cables shall comply with the current edition of the applicable local Electrical Codes and appropriate regulations as identified in “Part 1 - General: Safety and Code Requirements”.
2. Flexible cables used as hanging or trailing leads, for power or control circuits, shall comply with the previous clause and shall, if under tension, be fitted with a strain-relief center core that shall be clamped at both ends to relieve the strain on conductors. Trailing leads shall be of a suitable length for the actual application.
3. The segregation of conductors carrying different category circuits shall be as defined in the applicable regulations (local, state and national Electrical Codes and elsewhere herein) and shall be maintained in all flexible cables used. Adequate insulation shall be ensured on all multicore and control circuits.
4. Where the final connection to any equipment is by means of a flexible cable, such flexible cable shall have the same current rating as the rest of the circuit. The current ratings for the ambient temperature shall be as given in the applicable local Electrical Code.

D. Labeling and Marking:

1. All Sound, Video & Communication System wire and cable shall be logically and permanently marked by the Sound, Video & Communication System Contractor. All wire shall be identified at each termination point, and shall be marked to indicate the discrete destination (i.e., a wire shall show the reference number of the jack or connector to which its other end is terminated). All cable markers shall bear the alphanumeric characters of the circuit shown on the approved shop drawings.
2. Wire and cable shall be marked with an approved system of durable identification markers, such as slip-on type PVC or neoprene sleeves, or with directly heat stamped characters. The use of computer-generated labeling systems, such as the Brady DAT-34 or DAT-37, is recommended. Cloth, vinyl or P-Touch tape-type markers are not acceptable.
3. The individual pairs of multipair cable and individual conductors of multiconductor cable shall be readily identified by permanent color coding of the wire insulation. Multipair or multiconductor cable that is identified only by means of the form or order of lay of individual wire is not acceptable.
4. All spare wire shall be marked “spare” at both ends and numbered consecutively. A “spare schedule” shall be provided indicating spare wire and cable numbers, locations and types.

E. Termination:

1. All connections and joints shall be made with rosin-core solder or an approved mechanical connector.
2. All multipin connectors shall have crimp-type gold-plated contacts.

3. All Contactor-terminated data cables & connections must be “certified” using industry-standard testing and verification equipment.
4. Where flexible cable joins fixed wiring the terminations shall be accomplished with either a pair of appropriate mating connectors or a suitable terminal block.
5. All terminations of shielded cables shall consist of a PVC or neoprene heat shrink sleeve covering the shield drain wire and an overall PVC or neoprene heat shrink sleeve covering the point at which the cable jacket and shield end.

F. Audio Grounding:

1. All shielded cables shall have their shields isolated from both the conduit system and any other shielded cables. Shields shall be continuous from source to input points. Shields shall be connected at input points only, with shields lifted at the source, except as noted below.
2. Microphone wiring shall have continuous shields from the microphone receptacle to microphone patch jack.
3. Tie-line patch points shall have continuous shield connection from one patch jack to another with no permanent connection to the audio ground network.
4. Unbalanced wiring, such as used in certain communication systems, shall have audio shields connected at device inputs and floated at device outputs. Strap shield to “low” side of unbalanced input.
5. No “doubling up” of ground points on multipin connectors or terminal blocks shall be allowed.

G. AC Power System:

1. AC power for the Sound, Video & Communication System, provided by the Electrical Contractor, is distributed at 120VAC, 60Hz. Refer to the electrical plans for further information.

H. Grounding:

1. The Sound, Video & Communication System audio ground network (“audio ground”), including ground source, ground conductors, and ground distribution points is provided by the Electrical Contractor. The isolation and ground continuity of this network, although the responsibility of the Electrical Contractor, shall be confirmed by the Sound, Video & Communication System Contractor prior to installation of equipment. Any ground shorts or faults shall be reported for correction by the Electrical Contractor.
2. The audio ground network shall be isolated from all other electrical grounds except at the source of the ground network, the building safety ground, specified to be of high quality. Therefore, if the connection between the audio ground network and the source of the ground is disconnected, no continuity between the audio ground and the building electrical ground shall exist.
3. The Sound, Video & Communication System audio ground network connects all Sound, Video & Communication System equipment positions together by a single, low impedance, ground network. All AC power wall receptacles in Sound, Video & Communication System areas, provided by the Electrical Contractor unless otherwise indicated, will be the isolated ground type, connected only to the associated audio ground spur in that area.
4. All Sound, Video & Communication System equipment racks containing active electronics shall be connected to the audio ground network,

except as otherwise noted in this specification. Caution must be exercised so that these racks are not permanently, or in any way during operation, capable of being accidentally connected to the building safety ground.

5. All conduits and back boxes containing Sound, Video & Communication System wiring shall be permanently connected to the building electrical safety ground.
6. Video (RF) and infrared (RF) devices, being unbalanced in nature, shall not be connected to the Sound, Video & Communication System audio ground network.

I. Electrical Safety:

1. No voltage in excess of 25V rms AC or 24V ripple free DC shall be exposed to touch in normal use or in any equipment by the withdrawal of modules or of any plug or connector or without the removal of suitably indelibly labeled covers.
2. Unless specifically excepted, all live electrical parts above 50V rms AC or 60V ripple free DC, including terminals, shall remain completely shrouded by insulation or grounded metal when the main access panels are removed. The separate shrouds or covers shall require a tool to remove them to prevent inadvertent contact with live parts.
3. In addition, where enclosures or items of equipment containing predominantly control, computer, or similar low voltage signals also contain voltages in excess of 50V rms AC or 60V ripple free DC, clear standard warning notices indicating the maximum voltage present shall be provided on all removable access panels. Similar warning notices shall be provided where voltages exceeding 120V are present in any enclosure or item of equipment and such a voltage would not reasonably be expected to be present.
4. Within enclosures, racks and panels identify with prominent, standard, and indelible signage, which circuit breakers or disconnects are to be switched off in order to isolate the equipment totally. Warning notices shall also be provided on all equipment that contains live terminals after operation of its circuit breaker or disconnect. These terminals must be completely shrouded to prevent inadvertent contact.
5. All equipment, control stations, equipment racks, enclosures, and all metal cases, raceways, and conduit shall be efficiently grounded. Special hand held or portable equipment that is not double insulated shall have duplicated grounding connections. All grounding shall be in accordance with the current edition of the applicable local, state and national Electrical Codes and as identified within this Section and Division 13.

J. Control System Voltage:

1. Control circuits shall generally be operated at a maximum of 24V AC or DC as appropriate, and in compliance with the protection described. Hand held control panels shall not contain line (120V) voltage unless approved. Special arrangements to feed movable panels with both line voltage and control voltage must provide suitable mechanical protection and ensure separation of services using the correct category of cable as defined in the codes and regulations identified in “Part 1 - General: Safety and Code Requirements”.

K. Equipment:

1. Operating parts of all equipment shall be suitably machined and finished. Tolerances, fits, finishes, etc., where not specified herein or indicated on the drawings, shall conform to best trade practices and the operational intent of the equipment.
2. All components shall be of new or recent manufacture, built within two (2) years of the date of installation and never used prior to installation.
3. All components and items used in Sound, Video & Communication System shall be by a recognized manufacturer specializing in professional Sound and electrical equipment and shall conform to applicable industry and code standards.
4. The quality of workmanship and materials of all equipment and components requiring custom fabrication shall be comparable to that of professional audio equipment as produced by specialized original equipment manufacturers.
5. All components used in the equipment installations shall be selected on the basis that each item, or a similarly performing substitute, will be obtainable by the Owner for a period of five (5) years should further spares be required.
6. All electronic components shall be readily available from at least two recognized manufacturers.
7. Custom firmware (EPROM, ROM, etc.) shall be supported by readily available spares.
8. All equipment forming part of a given system or installation, and all like components, spares and replacements shall be electrically and mechanically interchangeable.
9. Electrical and electronic components shall be selected for long operating life and reliability. The design of components and assemblies shall ensure that all such components work at a minimum of 25% less than their maximum ratings.
10. All integrated circuits containing program code and all circuits with twenty four or more pins shall be mounted in sockets.
11. All indicators, controls, fuses, relays, contactors, printed circuit cards, and other major components shall each be fitted with a permanent label indicating their type, rating, and duty to expedite any necessary replacement or fault finding. Where applicable, a means of identifying normally open, normally closed, and other contact configurations shall be marked on the component.
12. Annunciators, indicators, and fuses in individual power and electronic systems shall be standardized and approved by the Consultant before design is finalized. Indicating devices shall be of as few different types as possible and wherever practicable shall have a minimum life of 10,000 hours.
13. All contactors and relays (although not necessarily special approved types such as reed relays) shall be of the snap-track type developed for mounting inside equipment rack. Generally the contact rating shall be twice the expected maximum operating or inrush current whichever is the greater.
14. Fuses and circuit breakers shall be panel mounted. Fuses shall be mounted in indicating fuse holders, illuminated when the fuse has failed. Where fuses must be concealed they shall be easily accessible. All panels with concealed fuses shall be marked accordingly on the outside and shall have panel mounted indicator lights. Spare fuses shall be provided in holders mounted within the panel.
15. All internal switches shall be clearly and permanently labeled.

16. All connectors external to the equipment shall be of rugged metal construction with self-contained locking devices. Nonmetallic external connector shells are unacceptable.
17. All keyswitches and keylocks for similar components shall use the same key. Unless otherwise specified, keys shall be removable in all positions. Supply four (4) key copies for each keyswitch/keylock.
18. All edge connectors, ribbon cable connectors and headers shall have gold-plated contacts. All IC sockets shall be of a face-wipe, gas-tight design.

L. Assemblies:

1. Manufacturing, assembly, and wiring work shall be carried out by trained and experienced technicians.
2. Ensure that all parts and components of electrical, electronic, or computer installations are readily accessible for inspection, service, and maintenance. All components shall be replaceable without removal of operational components other than those mounted on or carrying the faulty component. All parts shall be replaceable without strain or damage to other parts.
3. Electrical and electronic systems shall be constructed as separately removable modules. Where a system comprises a large number of similar modules, these modules shall be designed so as to be easily interchangeable. Where such equipment is of a plug-in type, withdrawing or replacing the modules with the power “on” shall not cause damage to the units or to other equipment.
4. Electrically dissimilar modules or connectors shall not be able to be wrongly connected. Operating surfaces of control panels/consoles shall be of steel, aluminum, or other rigid material, reinforced where necessary to prevent noticeable panel deflection. Generally, all sides of a control panel shall be fully supported.
5. Where possible all control and connection panels shall have hinging or drawer access to electronics for installation and maintenance. Panels shall be held closed by captive quick locking hardware. Provide terminal strips, and neatly bundled wiring to facilitate access. Captive fasteners shall be provided for all removable panels or parts. Any inaccessible nuts shall be fixed. Countersunk or instrument head screws shall be used on external surfaces.

M. Custom Fabrication:

1. Particular attention shall be paid to the selection of operational components used on custom pendants and control panels. All such components shall be selected for long life under arduous conditions, including rough use in a dusty and dirty environment.
2. Pushbuttons, selector switches, key switches, operating knobs, handles, and similar shall all be rugged industrial-type components, firmly mounted and capable of giving long trouble-free service. Commercial-grade units will not be accepted.

N. Finishes:

1. Unless otherwise indicated, all steel equipment cabinets and panels shall be finished with one coat of primer and two coats of semi-gloss baked enamel after full degreasing and rust preventing processes. Colors shall be as selected by the Consultant or as specified herein.
2. Aluminum panel surfaces shall be anodized black or other color as indicated herein or on the drawings.

3. Finishes subjected to high temperatures shall be of heat-resistant epoxy or other durable high-temperature baked-on enamel finish.
4. Finishes shall be durable and capable of withstanding normal usage in the areas in which they are installed.

O. Equipment Racks:

1. All internal wiring of electrical, electronic or computer equipment shall be in accordance with the current editions of the applicable Electrical Code and governing regulations as identified in “Part 1 - General: Safety and Code Requirements”.
2. All internal wiring shall be of adequate mechanical strength as well as electrical current rating. Multistrand cables shall be used for low current wiring in preference to solid conductors. The current carrying capacity of all cables within equipment enclosures shall take account of de-rating factors and ambient temperatures in accordance with applicable local, state and national Electrical Code regulations.
3. All terminal strips shall be logically positioned and indelibly marked in accordance with the circuit drawings. Generous space shall be left for installation of the external cables.
4. All terminals, to which connections are to be made by Division 16, shall have clear markings that are unique for each terminal and are as identified on the shop drawings.
5. All internal wiring shall be color coded and contained within raceways. At least 40% space shall be available as initial spare capacity. All the conductors of a given power circuit shall be contained within the same conduit or raceway. All internal wiring shall be protected from mechanical damage.

P. Labeling:

1. All wall receptacle plates shall be engraved and filled to indicate the reference number of the circuit to which each is attached. Such numbers will, when applicable, be referenced to the patch panel jack to which the circuit connects. Refer to the contract drawings for reference numbers and designations.
2. Panels and receptacles must be readable in dim lighting. Quality of engraving and filling, letter sizes, etc. shall comply with “Part 2 – Products: Receptacle Plates” of this specification and as approved by the Consultant through shop drawing and sample submittal.
3. All legends shall be engraved and filled in a color as indicated on the drawings, unless otherwise noted below.
4. Where required, engraved, adhesive-backed lamacoid labels shall also be mechanically fixed in place only in those cases where there is no risk of damage to a device’s internal components or wiring.

Q. Noise from Equipment

1. The residual noise and hum output of the systems shall be such that PNC-15 or below can be measured at the center of main floor, and the character of the remaining noise must be random, with no audible discrete frequency components.
2. Where a control panel or rack is to be used or located in an operational area, such as on stage, a gallery, or control room, there shall be no acoustic noise associated with the panel. No internal cooling fans or similar moving or magnetic equipment shall be permitted unless approved by the Consultant in writing.

3. Operation of switches, pushbuttons, relays, solenoids, and similar shall not be audible to members of the audience (even in the control rooms with the window open).

R. Spare Parts

1. Supply spare parts to be stored on-site for all user serviceable equipment and systems. A sufficient quantity of bulbs, fuses, knobs, switches, and other miscellaneous parts shall be supplied. Refer to “Part 2 - Products” for spares of electronic and transducer parts to be supplied.
2. Label all spare parts with manufacturer’s part number, designation, description, and location(s) where part is used. Provide neatly labeled storage containers for all spare parts, including special static free wrapping for electronically sensitive parts.
3. The spare parts shall be released to the Owner after completion of the commissioning procedure.

S. Site Work

1. The Sound, Video & Communication System Contractor shall be responsible for delivery, storage and handling of equipment and tools during the period of the installation.

T. Painting

1. Except for special requirements as approved by the Consultant, each painting system shall use paint products of one manufacturer to ensure compatibility of primer and undercoat with top coats.
2. All paint products shall be factory prepared of the best grade and quality (front line) produced by the manufacturers, subject to approval by the Consultant.
3. Finish coats on components exposed to view at all locations shall be two (2) coats of approved finish.
4. The Sound, Video & Communication System Contractor shall be held wholly responsible for the finished appearance of the painting work. Painting will be in accordance with the highest standards of the trade.
5. All components exposed to view shall be shop painted to match approved samples.
6. Re-touch all shop painted or finished work wherever necessary or as directed, including unpainted screws and other fasteners. Prime paint all patched portions in addition to all other specified coats.

U. Protection Of Work

1. Shipping and Storage

a. The Sound, Video & Communication System Contractor shall be responsible for the satisfactory packing and protection of all components and materials for shipment from the factory to the site. Any items suffering damage during transit due to unsatisfactory packing shall be replaced without charge to the Owner.
b. All equipment shall be packed to withstand the intended method of transport and environmental conditions expected. This Contractor shall take full account of the effects of rough handling, temperature extremes, dust, heavy rain, direct sunlight, and high relative humidity (up to 99%) during transit and installation. The packing shall, where necessary, reduce the effects of condensation.

c. All equipment shall be packed in sturdy containers to provide mechanical protection during shipping and storage. Provide padding, etc., as necessary to protect the equipment from vibration and shock.

d. Inner plastic sheeting shall be provided to protect the equipment from moisture and dust. Such covers shall be kept on equipment until environmental conditions have stabilized and the installation areas have been completed.

e. No equipment shall be shipped to the job site by this Contractor until notification by the Contractor that storage facilities are available to protect the equipment prior to installation.

f. The Sound, Video & Communication System Contractor shall be responsible for storage and protection of portable equipment and components until turning these items over to the Owner during commissioning. Instruct the Owner as to the proper method of storage and protection of the equipment during installation.

g. Refer also to the General Conditions, as amended by the Supplementary Conditions.

2. Installation

a. Installation shall be authorized only when site conditions provide mechanical, electrical, and environmental protection suitable for the electronic equipment.

3. Special Protection of Electronic Equipment and Cable

a. This Contractor shall conform with the following minimum standards and procedures for the storage and protection of the equipment during installation:

b. Class 1 - Cable and distribution apparatus, back boxes, face plates, terminal boxes, and rack frames may be stored and installed in weather-protected spaces under “normal” construction site conditions provided that no electronic components are contained within devices and provided that storage boxes are sturdy, well sealed, and devices are protected with imperforate inner plastic sheeting. When installed, devices must be protected from dirt, dust and moisture by sturdy impermeable plastic sheeting, and completely covered with heavy corrugated cardboard, held in place securely by duct tape. Covers shall not be removed until the area is broom cleaned. Care shall be taken to prevent damage and prolonged exposure to improper site conditions during installation. In no case shall devices remain uncovered overnight during installation or while work is taking place causing high dirt dust or moisture levels in the area of placement.

c. Class 2 - Control panels, spare parts, and test equipment (except as listed under Class 3) shall be protected and treated as per the Class 1 devices with the following additional provisions: Equipment shall be stored in an air-conditioned secure space. Equipment shall not be shipped until such space exists on site and is approved by the Consultant and Contractor. Control panels with electronic components may be installed providing they are protected as described under Class 1 description above, but electronic components must be removed and shall not be installed until the area of installation is broom cleaned and all dirt, dust and moisture producing work is

completed in the area. All other equipment in this class shall not be installed until the area of installation is broom cleaned, "blown" clean with pressurized air, mopped, secure, and air conditioned.

d. Class 3 - Mixing consoles, filled equipment racks, and other electronic equipment shall not be shipped to site until the control rooms are finished, air conditioned, dust free, broom and mop cleaned, secure, and in all respects complete and ready for occupation. This class of equipment shall not be unpacked until the system is complete in all other respects. Under no circumstances may any equipment in this class be removed from the control rooms into or through spaces that are not cleaned, air conditioned, and complete.

3.4 TESTING AND ADJUSTMENT

A. General

1. Perform tests and adjustments to the Sound, Video & Communication System as outlined in this specification. These tests and adjustments shall be completed at the time(s) specifically indicated in "Part 1 - General: Commissioning."
2. Provide a minimum of two qualified technicians to assist in tests, adjustments, and final modifications during the testing and adjustment period.

B. Preparation

1. Ensure that all equipment racks, panels, and back boxes have been adequately cleaned of dirt, dust, and debris. Reassemble all equipment and replace all panels and covers with the necessary screws and/or other appropriate hardware prior to the final site inspection.
2. Before applying AC power to Sound, Video & Communication System equipment, perform a complete system inspection on the site to verify that all items are correctly installed and will operate safely as specified in the Contract Documents.
3. Verify also that each individual section of the Sound, Video & Communication System has been correctly installed and is fully operational.

C. Conditions

1. Do not use any major control equipment intended for installation in the Sound, Video & Communication System for the purpose of checking or testing wiring or circuitry until such time as requirements for "Class 3" equipment meet the environmental conditions described in "Special Protection of Electronic Equipment and Cable" above. Provide testing apparatus, substitute control equipment, or other devices for testing wiring and circuitry prior to the existence of these conditions at all locations of Sound, Video & Communication System equipment.
2. Electroacoustic measurements shall only be made once all interior room finishes are completed and all performance equipment is in place and operational. Such equipment includes, but is not necessarily limited to, audience chamber seating, acoustic isolation doors, acoustic canopies, and acoustic control curtains and banners.

D. Test Equipment

1. The following test equipment, provided at the expense of the Sound, Video & Communication System Contractor, shall be available on site during all testing and adjustment sessions, initial and final site inspections, and demonstration and instruction sessions. Provide all appropriate monitors, adapters, cables, and connectors necessary to interconnect the test equipment devices to each other and to the Sound, Video & Communication System equipment.
    a. Multi-Function Audio Signal Generator/Analyzer
        1) Neutrik Minirator MR2 / Minilyzer ML1, or approved equal
    b. Digital Multimeter
        1) Fluke 77 IV Series, or approved equal.
    c. Polarity Testing System
        1) LA Audio PC90 or approved equal
    d. Impedance Meter
        1) Goldline ZM-1, or approved equal.
    e. Sound Level Meter
        1) MiniAnylyzer, approved equal
    f. Two-channel FFT-Based Electroacoustic Analysis System
        1) SIA SMAART
        2) General: Computer-based electroacoustic measurement system requiring proprietary equipment and a certified operator. Provides dual-channel FFT transfer- function measurements, phase response, delay locator and real-time analysis and ability to perform these measurements with test signals and with program (music) occurring during performances.
    g. Two-Way Radios
        1) Motorola UHF, or approved equal.
        2) Quantity: Six (6) , with spare battery & charger.
2. Requests for alternate test equipment shall be submitted to the Consultant for approval shall meet or exceed the manufacturers' published specifications for the above components. No exceptions. Nonprofessional test equipment, including "custom-built" components, shall not be acceptable.

E. Procedure:

1. Perform the following tests and adjustments to the Sound, Video & Communication System. All test results and system adjustments shall be fully documented for inclusion in the Initial and Final Test Reports. Refer to "Part 1 - General: Commissioning".
2. Continuity
    a. All permanent Sound, Video & Communication System wire and cable shall be tested for continuity after installation in conduit and before termination in panels or racks. Also test for shorting contact between any and all conductors in a multipair or multiconductor cable and between each conductor and the

conduit (building safety ground). Use a continuity meter for all tests.

b. All Sound, Video & Communication System wirepaths shall be tested to ensure that device inputs and outputs, assigned to particular circuits or channels, terminate to the correct location, and that all corresponding labeling is accurate.

c. Measure and verify electrical and electroacoustic polarity of all Sound, Video & Communication System components to ensure that the entire system is properly connected (i.e., the system shall be “in phase”). Ensure that absolute polarity is maintained throughout all signal paths, regardless of patching or other routing changes.

d. Document all wiring or termination changes made in order to maintain system polarity.

3. Impedance

a. Measure and document the impedance of each microphone and line level line terminated with a 600-ohm 1% precision resistor, at 250Hz, 1kHz, and 4kHz, while disconnected from any device input. The load impedance value shall be greater than the resistive load.

b. Measure and document the impedance of each low-impedance loudspeaker line to an unconnected receptacle, at the patch panel, terminated at the opposite end with an 8-ohm 1% precision resistor, at 250Hz, 1kHz, and 4kHz, while disconnected from any device input. The load impedance value shall be greater than the resistive load.

c. Measure and document the impedance of each low-impedance (nominal 2 to 8-ohm) loudspeaker line while disconnected from the power amplifier. The load impedance value shall be greater than the total rated impedance of all connected loudspeaker drivers.

d. Test each full-range loudspeaker line at 63Hz, 250Hz, 1kHz, 4kHz, 8kHz, and 16kHz.

e. Test each band-limited loudspeaker line (i.e., bi-, tri-, or quad-amp systems) at the maximum number of test frequencies that fall within the frequency range of the driver under test.

f. Measure and document the impedance of each 70.7V loudspeaker line at 250Hz, 1kHz, 4kHz, and 8kHz, while disconnected from the power amplifier. The load impedance value shall be greater than the total rated impedance of all connected voice-coil transformers.

4. Radio Frequency Interference

a. Use a minimum 60 MHz bandwidth analyzer in conjunction with loudspeaker or infrared receiver/headset monitoring to ensure that the Sound, Video & Communication System under test is free of spurious oscillation and radio frequency interference (RFI). Measure and document all results.

5. Gain Structure

a. Set and document input and output gain controls on all Sound, Video & Communication System components to provide appropriate signal balance (i.e. unity gain) and optimum signal-to-noise ratio for each signal path. Unity gain shall be set

by adjusting the gain of each active device (excluding power amplifiers and mixer/amplifiers) for input level equals output level by using a reference signal of 0dBv pink noise at the mixing console output.

b. Ensure that a minimum of 18dB of headroom exists for each gain stage. The overall system gain (excluding mixer/preamplifiers, mixer/amplifiers, and power amplifiers) through any signal path from any input to any output shall be unity + 1.5dBv.

c. Conduct listening tests from center of coverage of each high-frequency horn device to determine that there is no audible hiss or distortion.

6. Electronic Signal Path

a. Measure and document frequency response, signal to noise ratio (S/N), maximum output before clipping, total harmonic distortion (THD), and any spurious noise and/or hum signals of all electronic components in the Sound, Video & Communication System. Measured values must be as published by the manufacturer, or better.

b. With unity gain levels set, measure and document electrical frequency response for all discrete signal paths from the mixer through each active device, including mixer/amplifier outputs with the loudspeaker lines disconnected. Also test typical signal paths through each combination of mixer input to output. Use a -60dBv (0.8mV RMS) sine wave signal at microphone inputs from 20Hz to 20kHz and a 0dBv (0.775 VRMS) sine wave signal from 20Hz to 20kHz at line level inputs. Deviation shall be within +/-1.0dBv from the range of 30Hz to 20kHz, or the specified bandpass for a particular circuit. (Refer to manufacturers' published data).

c. With unity gain levels set, measure and document signal to noise ratio for all discrete signal paths from the mixer through each active device with mixer input shorted.

d. Measure and document maximum output before clipping (headroom) and total harmonic distortion of each active device with methods recommended by the equipment manufacturer.

e. With unity gain levels set, measure and document any spurious noise and hum signals such as 60Hz, 120Hz with harmonics, high frequency oscillation, clicks, pops, or noise spikes for all discrete signal paths from the mixer through each active device, including the mixer/amplifier outputs with loudspeaker lines disconnected. If any unwanted signals are detected, troubleshoot and correct or modify as necessary.

7. Power Output

a. Measure and document the output power of each power amplifier and mixer/amplifier, using a sine wave oscillator with less than 0.5% THD as an input source. Terminate each power amplifier channel output with a load resistor to match the nominal loudspeaker impedance. Apply a 1KHz signal at a level to achieve 10 dB below full rated power output of the mixer/amplifier. Observe the sine wave with an oscilloscope to insure that full voltage for rated power can be reached without noticeable deformation of the waveform.

8. Buzzes, Rattles, Distortion

a. Apply a sine wave sweep at a slow rate from 30Hz to 10kHz at 6dB below full rated power output of each amplifier in the Sound, Video & Communication System with output connections made to all loudspeaker drivers or voice-coil transformers. Adjust test frequency range to compensate for band-limited low-voltage loudspeaker lines (i.e., bi-, tri-, or quad-amp circuits) or 70.7 volt loudspeaker lines. Listen carefully to each loudspeaker for electromechanical buzzes, rattles, distortion, or other objectionable noises and correct all causes of such defects. If cause is outside Sound, Video & Communication System equipment and/or the scope of this section of the contract, promptly notify the Owner and Consultant of the cause and suggested corrective procedure.

F. Sound, Video & Communication System Testing

1. The following Sound, Video & Communication System Tests shall be conducted as part of the SMAART measurement and optimization process. Sound, Video & Communication System Testing will require two 8-hour sessions scheduled to ensure quiet ambient noise levels in the test area. The Sound, Video & Communication System Contractor shall provide a certified SMAART technician to operate the SMAART System.

a. Sound Pressure Level: Measure and document sound pressure level of loudspeaker arrays throughout the seating areas and adjust suspended loudspeaker aiming, as necessary, to achieve a coverage of +/- 3dB, or better, with a peak continuous level of 105dB SPL. Take all readings at seated ear level height.

b. Loudspeaker Array Driver Alignment: Measure and document the loudspeaker driver alignment of the components of each loudspeaker array. Adjust precision signal delay units as necessary to achieve the best average signal alignment between adjacent components.

c. Frequency Response: Measure and document the frequency response of each loudspeaker array, as measured in both the reverberant field and near field (with windowed FFT methods), to ensure that the frequency response is within +/-3dB from 100Hz to 3kHz, and rolls off at a rate of 3dB/octave +/-3dB from 3kHz to 12kHz (and beyond, if possible). Apply the pink noise source at a line input of the mixing console. Adjust fixed Sound, Video & Communication System equalization as necessary. If discrepancies arise, the final curve shall be based on the average of the values measured. Hard copy documentation shall be recorded for both time-energy-frequency analysis and ISO one- third octave band frequency response measurement.

d. Speech Intelligibility: Perform subjective and/or objective speech intelligibility measurements or surveys throughout the facility and make adjustments as necessary to the Sound, Video & Communication System for maximum speech intelligibility. Submit proposed methods of testing to the Consultant for approval.

3.5 PROGRAMMING

A. At the completion of the Testing process, and in conjunction with the Consultant, Project Architect and Design Team, and other trades, the Sound, Video &

Communication System Contractor shall provide full time technical support for ten (10) 12-hour days of Ride Programming. Two (2) technicians shall be provided for the entire duration of the Programming period.

B. Technical personnel should be prepared to adjust loudspeaker positions, facilitate required changes to Sound, Video & Communication System equipment programming, and troubleshoot any technical problems that may arise during Ride Programming Sessions.

END OF SECTION

ADDENDUM A

SVC NARRATIVE AND EQUIPMENT

SECTION 32 33 13 – SITE BICYCLE RACKS AND LOCKERS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes:

1. Exterior bicycle racks.
2. Exterior bicycle lockers.
3. Accessories and installation materials.

1.2 SUBMITTALS

A. Data:

1. Manufacturer Product Data for bicycle racks and lockers, including finish. anchors, including test results for anchors in concrete.
2. Samples of sufficient size showing proposed finish on base metal.

B. Shop Drawings: At 1/8-inch scale minimum, show exact location of racks and lockers. Dimension from column lines or adjacent work.

C. Samples: Samples of sufficient size showing proposed finish on base metal.

D. Maintenance Data: For each bicycle rack.

1. Include recommended methods for repairing damage to the finish.

1.3 QUALITY ASSURANCE

A. Installer Qualifications: An experienced installer who has completed installation of bicycle racks and lockers similar in material, design, and extent to that indicated for this project and whose work has resulted in construction with a record of successful in-service performance.

B. Manufacturer Qualifications: A firm experienced in manufacturing bicycle racks similar to those required for this project and with a record of successful in-service performance.

C. Source Limitations: Obtain each color, finish, shape and type of bicycle rack from a single source with resources to provide components of consistent quality in appearance and physical properties.

D. Product Options: Drawings indicate size, shape and dimensional requirements of bicycle racks and are based on the specific system indicated.

1.4 HANDLING

A. Upon delivery, before signing for shipment, inspect for any damage and notate on the Bill .of Lading.

B. Store bicycle racks in original undamaged packages and containers until ready for installation.

C. Handle bicycle racks with sufficient care to prevent any scratches or damage to the finish.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Bike rack:

1. Provide bicycle racks manufactured by AAA Ribbon Bike Rack Co., a division of Brandir Internationals, Inc., www.ribbonrack.com.
2. Or equal.

B. Bike Lockers:

1. Provide bicycle lockers manufactured by Dura Bike Locker, a Division of Hannan Specialties Inc.
2. Or equal.

2.2 EXTERIOR BICYCLE RACKS

A. The Original Ribbon Rack: - 9 Capacity. Website: https://ribbonrack.com/products/

~~A.~~

2.3 EXTERIOR BICYCLE LOCKERS

A. Model DLSS by Dura Bike Locker, a Division of Hannan Specialties Inc. or equal
B. Size: 30-inches by 75-inches by 48-inches high.

2.4 MATERIALS

A. The Original Ribbon Bike Rack:

1. 2.375-inches OD X 0.154-inch wall thickness, schedule 40 ASTM A53/A500 hot dipped galvanized.
2. Installation Methods: In-ground mount is embedded into concrete base, as detailed.

B. Single bike lockers, surface-mounted on concrete.

1. Material:

a. G-90 galvanized steel bicycle locker.
b. Door and body: 16-gauge sheet metal.
c. Frames: 14-gauge sheet metal.
d. Perforations: Provide perforated doors and back walls.
e. Full length door hinge (ASTM A314): 16 gauge stainless steel.
f. 3-Point Locking bar Mechanism (ASTM A314): 1 inch wide by 1/4 inch thick stainless steel flat bar running beyond the full length of the door frame and into the top, threshold, and jamb (3-Points to insure Maximum Security).
g. Fasteners shall be zinc coated steel and shall be fastened from the inside.
h. Numbers: High Performance Black Vinyl Numbers.

C. Fasteners: Select anchors with capability to sustain, without failure, a load equal to 4 times the load imposed when installed in concrete, as determined by testing per ASTM E 488.

1. Drilled-in expansion anchors: Expansion anchors complying with FS FF-S-325, Group VIII (anchors, expansion,), Type I (internally threaded tubular expansion anchor); and machine bolts complying with FS FF-B-575, Grade S, by Hilti, Inc., ITW Ramset/ Red Head, Star Expansion Co. or The Rawlplug Co., Inc.
2. Chemical anchors: Chem-Stud by Rawlplug Co., Inc. or HIT C-100 System by Hilti used with machine bolts complying with FS FF-B-575, Grade S.

2.5 LOCKING SYSTEM

A. Stainless steel padlock style handle (padlock not included).

2.6 FINISH

A. The Original Ribbon:

1. Hot-dipped galvanized finish after fabrication.

B. The bike lockers: Graphite

1. TGIC powder-coat.
2. Color: Black.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify conditions and measurements affecting the work of this Section at site.
B. Correct detrimental conditions before proceeding with installation.

3.2 INSTALLATION

A. Bike rack:

1. In-ground mount: Install as detailed on Drawings and manufacturer’s recommendations.
2. Coordinate installation of bike racks with the work of Section 32 13 13.

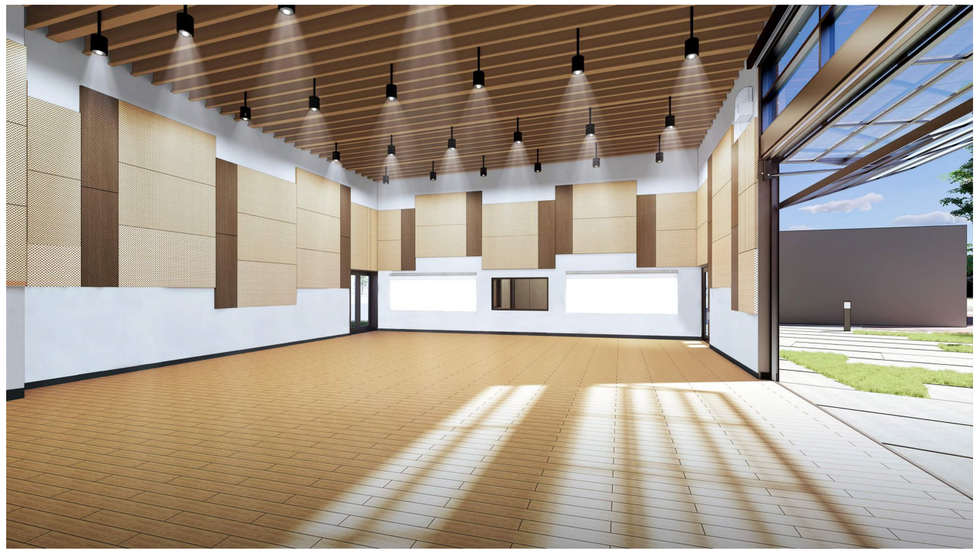
B. Bike lockers:

1. Install in accordance with the manufacturer's instructions.
2. Locate where shown on drawings. Assemble and anchor in accordance with the manufacturer's instructions.
3. Set bicycle lockers secured to construction, level and true to line, in correct relationship to adjacent structure and improvements.
4. Fasteners to secure lockers to concrete shall be located inside locker.

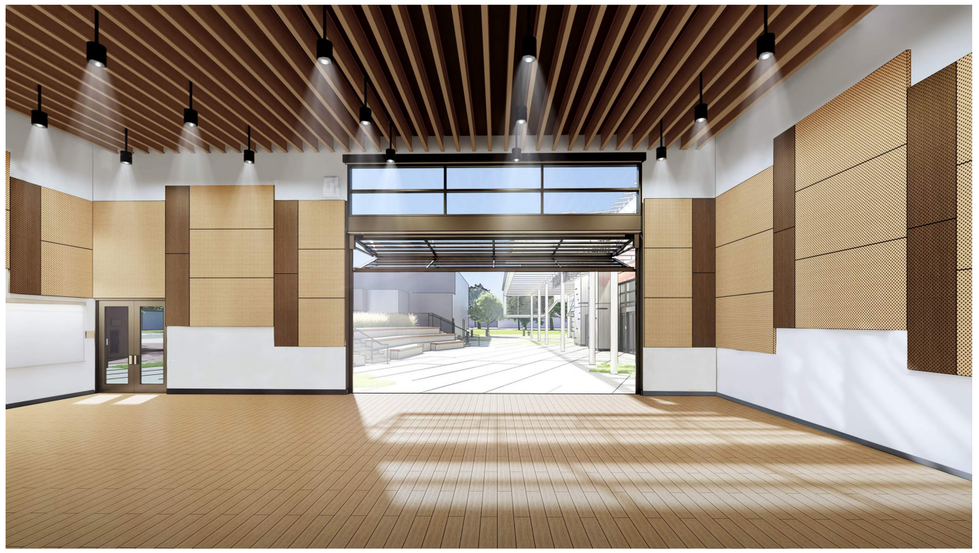
C. Install at locations indicated on Drawings in compliance with rack manufacturer's instructions and recommendations, plumb, level and securely anchored.
D. Touchup damaged galvanized surfaces as specified in Section 05 50 00.

END OF SECTION

1/23/2025 1:20:16 PM



VIEW OF LARGE CLASS LAB (MUSIC) 129 LOOKING WEST



VIEW OF LARGE CLASS LAB (MUSIC) 129 LOOKING NORTH

VIEW OF ASSEMBLY (DRAMA ART) LOOKING WEST

VIEW OF SPECIAL CLASS LAB 130 LOOKING WEST AND STUDY LAB (TYP) LOOKING SOUTH

VIEW OF CLASS LAB (MUSIC) 128 LOOKING SOUTH

VIEW OF CLASS LAB (MUSIC) 127 LOOKING WEST

CONCEPTUAL STAGE RENDERING FOR REFERENCE ONLY

Struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

LICENSED ARCHITECT HRAZTAN KEVLIAN 28719 RENEWAL DATE 04/30/25 STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

SHEET TITLE

RENDERINGS

SHEET NUMBER

SK006

7/29/2022 12:43:51 PM

GENERAL NOTES:

1. THE CONTRACTOR SHALL REVIEW ALL UTILITY PLANS AND UTILITY LOCATIONS IN THE FIELD AND SHALL NOTIFY THE LANDSCAPE ARCHITECT IF CONFLICTS WITH PLANT MATERIAL LOCATIONS EXIST.
2. THE CONTRACTOR SHALL REVIEW ALL CONTRACT DOCUMENTS TO ENSURE THERE ARE NO CONFLICTS IN FINAL PLACEMENT AND/OR PLACEMENT SEQUENCE AND STAGING OF ANY PLANT MATERIAL AS A RESULT OF OTHER SITE ELEMENTS, WALLS, UNDERGROUND STRUCTURES, OVERHEAD STRUCTURES, AND CONSTRUCTION ACTIVITIES. CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY IF CONFLICT(S) ARISE.
3. LANDSCAPE ARCHITECT RESERVES THE RIGHT TO SELECT AND TAG ALL TREES IN NURSERY PRIOR TO APPROVAL. ALL TAGGED TREES TO BEAR LANDSCAPE ARCHITECTS NUMBERED TAMPER-PROOF TAGS ON BOX OR CONTAINER. CONTRACTOR SHALL SUBMIT FOR APPROVAL PHOTOS OF EACH TAGGED, WITH EACH SUBMITTAL ENTRY CORRESPONDING TO TAG NUMBERS. SUBMITTAL ENTRIES TO CLEARLY INDICATE WHICH SIDE OF THE TREE WAS ORIENTED TOWARDS NORTH IN NURSERY.
4. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL PHOTOS OF ONE REPRESENTATIVE EXAMPLE OF EACH PLANT SELECTION. PHOTOS TO INCLUDE A PERSON OR MEASURING TAPE FOR SCALE PURPOSES. DELIVERED PLANTS TO MEET OR EXCEED THE QUALITY OF THIS REPRESENTATIVE SUBMITTAL.
5. ANY PLANT DEEMED NOT AVAILABLE BY THE CONTRACTOR SHALL BE NOTED IN THE BID AS A CONDITION OF THE BID. FAILURE TO QUALIFY AVAILABILITY OF SPECIFIED MATERIAL AS SPECIFIED SHALL MAKE THE CONTRACTOR RESPONSIBLE FOR SUPPLYING ALL MATERIALS. LANDSCAPE ARCHITECT RESERVES THE RIGHT TO CHANGE PLANT SPECIES, VARIETY, SPACING, AND/OR QUANTITY OF ANY PLANT MATERIAL THAT DOES NOT MEET EXACT SPECIFICATIONS, UNLESS UNAVAILABILITY OF SPECIFIED MATERIAL IS INDICATED AS A CONDITION OF BID . CONTRACTOR MAY ISSUE A PRE-BID RFI (IF PERMISSIBLE WITHIN BIDDING PROCEDURES) TO QUALIFY AN ALTERNATE.
6. THE MAINTENANCE PERIOD MAY NOT BEGIN UNTIL ALL IRRIGATION SYSTEMS ARE OPERATIONAL, ALL SPECIFIED MATERIALS ARE INSTALLED AND ACCEPTED BY LANDSCAPE ARCHITECT, AND AS-BUILT DRAWINGS ARE PROVIDED BY CONTRACTOR PER SPECIFICATIONS.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FURNISH PLANT MATERIALS FREE OF PESTS OR PLANT DISEASES. PRE-SELECTED OR TAGGED MATERIAL MUST BE INSPECTED BY THE CONTRACTOR AND CERTIFIED PEST AND DISEASE FREE. IT IS THE CONTRACTOR'S OBLIGATION TO WARRANTY ALL PLANT MATERIALS PER THE SPECIFICATIONS.
8. ALL PLANT MATERIAL SHALL BE APPROVED ON SITE BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
9. FINAL LOCATION OF ALL PLANT MATERIAL SHALL BE APPROVED ON SITE BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
10. ALL OVER-EXCAVATION REQUIRED TO MEET PLANTING SPECIFICATIONS SHALL BE DONE PRIOR TO PAVING IF PAVING WILL CONFLICT WITH EXCAVATION OF PLANTING PITS.
11. SEE SPECIFICATIONS FOR PLANTING REQUIREMENTS, MATERIALS, AND EXECUTION.
12. SEE SPECIFICATIONS FOR STAKING AND GUYING METHODS.
13. MULTI-TRUNK INDICATES (3) TRUNKS MIN., BRANCHED FROM BASE OF TREE.
14. ALL GROUND COVERS SHALL BE APPLIED IN ALL PLANTING AREAS INDICATED ON PLANS, AS WELL AS UNDER SHRUBS. GROUND COVER KEY INDICATIONS ARE SHOWN IN THE LEGEND.
15. GROUNDCOVERS SHALL BE TRIANGULARLY SPACED, UNLESS OTHERWISE INDICATED.
16. ALL PLANTED AREAS SHALL BE COVERED WITH 3" DEEP ORGANIC MULCH UNLESS OTHERWISE NOTED. SEE SPECIFICATIONS FOR MATERIAL REQUIREMENTS. SUBMIT 1 CU. FT. SAMPLE PRIOR TO APPLICATION.
17. A MINIMUM OF TWO (2) SOIL SAMPLES SHALL BE TAKEN BY THE CONTRACTOR AFTER GRADING OPERATIONS ARE COMPLETED FOR SOIL FERTILITY AND AGRICULTURAL SUITABILITY TESTING AND RECOMMENDATIONS. APPROVED LABORATORIES ARE SOIL AND PLANT LABS (714) 282-8777 OR WALLACE LAB (310) 615-0116. SEE SPECIFICATIONS FOR SOIL AMENDMENTS; THESE ARE SPECIFIED FOR BIDDING PURPOSES ONLY. PROVIDE LANDSCAPE ARCHITECT WITH SOILS REPORT PRIOR TO INSTALLATION OF MATERIALS.
18. SOIL DEEMED NOT AVAILABLE PER LANDSCAPE ARCHITECT'S SPECIFICATIONS SHOULD BE NOTED AS CONDITION OF THE BID. FAILURE TO QUALIFY THE AVAILABILITY OF SOIL PER SPECIFICATIONS SHALL MAKE THE CONTRACTOR RESPONSIBLE FOR SUPPLYING THE SPECIFIED SOIL.
19. FOR PROJECTS WHERE SOIL IS PLACED ON SUSPENDED SLAB OR OTHERWISE ON STRUCTURE, SOIL NOT TO EXCEED MAXIMUM SATURATION DENSITY IN POUNDS PER CUBIC FEET AS SPECIFIED IN SPECIFICATIONS. CONTRACTOR TO SUBMIT TESTING FOR APPROVAL BY STRUCTURAL ENGINEER OF RECORD.
20. ALL PLANT MATERIALS WITHIN THE RIGHT OF WAY SHALL BE PLANTED TO CONFORM TO GOVERNING AGENCY STANDARDS. ALL PLANTING IN PUBLIC RIGHT OF WAY TO RECEIVE PERMITS FROM APPROPRIATE PUBLIC WORKS PERMITTING AGENCIES.
21. PLANT QUANTITIES AS NOTED ON THE PLANS ARE FOR THE CONVENIENCE OF THE CONTRACTOR, LANDSCAPE ARCHITECT DOES NOT TAKE RESPONSIBILITY FOR THE ACCURACY OF THESE QUANTITIES AS NOTED ON THIS SCHEDULE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL PLANTS AS REQUIRED TO MEET ON-CENTER SPACING AS NOTED IN THE PLANT SCHEDULE AND/OR TOTAL COUNT AS REQUIRED PER PLANTING PLANS.
22. CONTRACTOR IS RESPONSIBLE FOR PROCURING ALL PLANTS PER SPECIFICATIONS CRITERIA, INCLUDING BUT NOT LIMITED TO CONTAINER SIZE, WIDTH, HEIGHT, SPREAD, CANOPY WIDTH AND HEIGHT, OR ANY OTHER PHYSICAL CHARACTERISTICS SPECIFIED UNDER COMMENTS IN THIS SCHEDULE.
23. PLANT MATERIAL SHALL BE GUARANTEED TO BE AVAILABLE AND MEET OR EXCEED REQUIRED SPECIFICATIONS ON ESTIMATED DATE OF START OF PLANTING.
24. A MINIMUM 3-INCH LAYER OF MULCH SHALL BE APPLIED ON ALL EXPOSED SOIL SURFACES OF PLANTING AREAS EXCEPT TURF AREAS, CREEPING OR ROOTING GROUNDCOVERS, OR DIRECT SEEDING APPLICATIONS WHERE MULCH IS CONTRAINDICATED. APPLY MULCH PER SPECIFICATIONS. LEAVE 2" SPACE WITHOUT MULCH AROUND THE BASE OF TREE TRUNKS, AND 1" SPACE AROUND SHRUBS. DO NOT COVER SHRUBS WITH MULCH.

1 ~~SEE SPECIFICATIONS FOR MATERIAL REQUIREMENTS. SUBMIT 1 CU. FT. SAMPLE PRIOR TO APPLICATION.~~

25. FOR SOILS LESS THAN 6% ORGANIC MATTER IN THE TOP 6 INCHES OF SOIL, ~~COMPOST AT A RATE OF A MINIMUM OF FOUR CUBIC YARDS PER 1,000 SQUARE FEET OF PERMEABLE AREA SHALL BE INCORPORATED TO A DEPTH OF SIX INCHES INTO THE SOIL.~~ REFER TO SPECS FOR AMENDMENT PROCEDURES
26. ~~ALL PLANTING TO COMPLY WITH GREEN BUILDING CODE, MWELO REQUIREMENTS, AND WHERE APPLICABLE CALFIRE DEFENSIBLE SPACE~~ REQUIREMENTS PER CALIFORNIA PUBLIC RESOURCES CODE 4291.
27. NO TREE(S) MAY BE REMOVED, MOVED, PRUNED, ROOT PRUNED, OR OTHERWISE ALTERED OR DAMAGED WITHOUT EXPLICIT APPROVAL FROM LANDSCAPE ARCHITECT AND/OR PER DEMOLITION PLANS. THE TERM "REMOVED" SHALL INCLUDE ANY ACT THAT WILL CAUSE A TREE TO DIE, INCLUDING BUT NOT LIMITED TO ACTS THAT INFLICT DAMAGE UPON THE ROOT SYSTEM OR OTHER PARTS OF THE TREE BY FIRE, APPLICATION OF TOXIC SUBSTANCES, OPERATION OF EQUIPMENT OR MACHINERY, CHANGING THE NATURAL GRADE OF LAND BY EXCAVATION OR FILLING WITHIN THE DRIP LINE AREA AROUND THE TRUNK, COMPACTION WITHIN THE DRIP LINE AREA, FLOODING OR CHANGE IN WATER TABLE AS A RESULT OF CONSTRUCTION ACTIVITY, DUMPING AND STAGING OF MATERIAL AND/OR EQUIPMENT WITHIN THE DRIP LINE AREA. SEE TREE PROTECTION NOTES BELOW.

PLANT SCHEDULE

TREES	CODE	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS		QTY
	ARB MUL	ARBUTUS X 'MARINA'	MARINA STRAWBERRY TREE MULTI-TRUNK	36" BOX	LOW		2
	CER OCC	CERCIS OCCIDENTALIS	WESTERN REDBUD	36" BOX	LOW		1
	PRO QNU	PROSOPIS GLANDULOSA 'AZT'	AZT THORNLESS HONEY MESQUITE	36" BOX	LOW		6
SHRUBS	CODE	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	SPACING	QTY
	AGA VIL	AGAVE VILMORINIANA	OCTOPUS AGAVE	5 GAL	LOW	36" o.c.	47
	ALO TGN	ALOE ARBORESCENS X FEROX 'TANGERINE'	TANGERINE ALOE	5 GAL	LOW	60" o.c.	7
	BAC SAR	BACCHARIS SAROTHROIDES	DESERTBROOM BACCHARIS	5 GAL	VERY LOW	60" o.c.	6
	BAC CEN	BACCHARIS X 'CENTENNIAL'	CENTENNIAL COYOTE BRUSH	1 GAL	VERY LOW	48" o.c.	65
	BOU XHA	BOUGAINVILLEA X 'HAWAIIAN TORCH'	HAWAIIAN TORCH BOUGAINVILLEA	5 GAL	LOW	24" o.c.	5
	CAR GRE	CARISSA MACROCARPA 'GREEN CARPET'	GREEN CARPET NATAL PLUM	1 GAL	LOW	30" o.c.	166
	CER APP	CEREUS PERUVIANUS	PERUVIAN APPLE CACTUS MULTI-TRUNK	15 GAL	VERY LOW	60" o.c.	7
	DAS WHE	DASYLIRION WHEELERI	GREY DESERT SPOON	5 GAL	VERY LOW	60" o.c.	6
	EUP VA4	EUPHORBIA AMMAK 'VARIEGATA'	VARIEGATED CANDELABRA SPURGE	15 GAL	LOW	60" o.c.	3
	FUR MAC	FURCRAEA MACDOUGALII	MACDOUGALL'S CENTURY PLANT	15 GAL	LOW	96" o.c.	3
	GRE SUP	GREVILLEA X 'SUPERB'	SUPERB GREVILLEA	15 GAL	LOW	60" o.c.	8
	LEU CL2	LEUCADENDRON X 'CLOUDBANK GINNY'	CLOUDBANK GINNY CONEBUSH	5 GAL	LOW	48" o.c.	15
	OPU GOM	OPUNTIA GOMEI 'OLD MEXICO'	OLD MEXICO PRICKLYPEAR	15 GAL	VERY LOW	72" o.c.	1
	PEN SPA	PENNISETUM SPATHIOLATUM	SLENDER VELDT GRASS	5 GAL	LOW	24" o.c.	586
	PRO MI2	PROTEA CYNAROIDES 'MINI KING'	MINI KING PROTEA	15 GAL	LOW	60" o.c.	1
	SAL CO6	SALVIA APIANA COMPACTA	COMPACT WHITE SAGE	1 GAL	VERY LOW	36" o.c.	44
	STI TEN	STIPA TENACISSIMA	NEEDLE GRASS	5 GAL	LOW	48" o.c.	17
GROUND COVERS	CODE	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	SPACING	QTY
	FES HSA	FESTUCA ARUNDINACEA 'MARATHON III'	MARATHON III FESCUE	SOD	LOW		905 SF

TREE PLANTING NOTES:

1. ALL PLANT MATERIALS SHALL BE IN ACCORDANCE WITH THE AMERICAN STANDARDS FOR NURSERY STOCK (ANSI Z60.1-2004). PLANT ACCORDING TO ANSI A300 PART 6.
2. DIG THE PLANTING HOLE A MINIMUM OF 2x WIDTH OF ROOTBALL FOR AT LEAST THE FIRST 12 INCHES OF DEPTH. BELOW 12 INCHES, DIG HOLE WIDE ENOUGH TO PERMIT ADJUSTING. DO NOT DIG THE HOLE DEEPER THAN ROOT BALL DEPTH.
3. SCARIFY THE SUBGRADE AND SIDES OF THE PLANTING HOLE WHEN PLANTING IN CLAY SOILS (MORE THAN 15% CLAY).
4. LIFT AND SET THE TREE BY ROOT BALL ONLY. DO NOT LIFT USING THE TREE TRUNK AND DO NOT USE TREE TRUNK AS A LEVER.
5. SET THE TOP OF THE ROOT BALL LEVEL WITH THE SOIL SURFACE OR SLIGHTLY HIGHER IF THE SOIL IS PRONE TO SETTLING.
6. AFTER THE TREE IS SET IN PLACE, REMOVE AND CLEAR THE ROOTBALL FROM CONTAINER MATERIAL, WOOD SLATS, BURLAP, WIRE AND STRAPS. WOOD

1 ~~SLATS OR BURLAP UNDERNEATH THE ROOT BALL MAY REMAIN IN PLACE.~~

7. BACKFILL WITH EXISTING SOIL THAT HAS BEEN WELL-TILLED OR BROKEN UP. ~~DO NOT ADD AMENDMENTS TO THE BACKFILL SOIL. AMEND THE SURFACE WITH MULCH.~~ REFER TO SPECS FOR AMENDMENT PROCEDURES
8. SEE SPECIFICATIONS FOR TREE STAKING, GUYING, OR ANCHORING REQUIREMENTS.
9. APPLY A 2-3" (SETTLED) DEPTH OF APPROVED MULCH TO THE PLANTING SURFACE. LEAVE A 2" SPACE AROUND THE TRUNK FOR AIR CIRCULATION.
10. PRUNING SHALL BE LIMITED TO DEAD, DISEASED, OR BROKEN LIMBS ONLY UNLESS OTHERWISE INDICATED IN CONTRACT DOCUMENTS, AND SHALL BE IN ACCORDANCE WITH ANSI A300 SPECIFICATIONS. PRUNING SHALL TAKE PLACE UNDER THE DIRECT SUPERVISION OF A LICENSED ARBORIST, AND PER LANDSCAPE ARCHITECT'S SPECIFICATIONS.
11. REMOVE ANY TRUNK WRAP REMAINING AT TIME OF PLANTING. NO WRAPS SHALL BE PLACED ON TRUNK.
12. REMOVE ALL TREE TAGS AND NURSERY IDENTIFICATION MATERIAL FROM TREE TRUNK/BRANCHES AT THE TIME OF INSTALL.

SHRUB PLANTING NOTES:

1. DIG PLANTING HOLE AT LEAST 2X THE WIDTH OF THE ROOT BALL OR CONTAINER.
2. SCARIFY SUBGRADE AND SIDES OF PLANTING HOLE WHEN PLANTING IN CLAY SOIL.
3. SET THE TOP OF THE ROOT BALL LEVEL WITH THE SOIL SURFACE, OR 1-2" ABOVE IF THE SOIL IS PRONE TO SETTLING.
4. IF CONTAINER GROWN PLANT, GENTLY SLIDE PLANT OUT OF CONTAINER. DISTURB THE ROOTS.
5. IF B&B PLANT, REMOVE BURLAP FROM AT LEAST THE TOP 12 INCHES OF THE ROOTBALL, WITHOUT DISTURBING THE ROOTBALL. REMOVE ALL CORD FROM THE TRUNK. REMOVE BURLAP AND WIRE
1. BASKET (IF PRESENT) FROM THE ROOT BALL.
6. BACK FILL THE PLANTING HOLE WITH EXCAVATED NATIVE SOIL, BROKEN UP OR TILLED. WATER TO REMOVE AIR POCKETS. ~~DO NOT ADD AMENDMENTS.~~ REFER TO SPECS FOR AMENDMENT PROCEDURES 1
7. PLACE APPROVED MULCH ON THE SURFACE TO A (SETTLED) DEPTH OF 1 TO 3 INCHES PER SPECIFICATIONS.

TREE PROTECTION NOTES:

1. REFER TO STANDARDS IN GENERAL SPECIFICATIONS FOR TREE PROTECTION.
2. DIAMETER OF PROTECTION ZONE SHOULD BE ONE FOOT FOR EACH INCH OF TRUNK DIAMETER AT BREAST HEIGHT, 1/2 HEIGHT OF TREE, OR PERIMETER OF DRIP LINE ZONE, WHICHEVER IS GREATER. THE PROTECTION ZONE SHALL BE 6 FOOT MINIMUM IN DIAMETER.
   TEMPORARY FENCING (6 FT HIGH) SHALL BE PLACED AT THE DRIPLINE OF THE TREE TO BE SAVED. FENCE SHALL COMPLETELY ENCIRCLE THE TREE(S). TO INSTALL FENCE POSTS, AVOID DRIVING POSTS OR STAKES INTO MAJOR ROOTS.
   DRIP LINE ZONE IS DEFINED AS AS THE OUTERMOST CIRCUMFERENCE OF THE TREE'S CANOPY, FROM WHICH WATER DRIPS ONTO THE GROUND.
3. DEAD TREES, SCRUB, OR UNDERGROWTH SHALL BE CUT FLUSH WITH ADJACENT GRADE. THERE SHALL BE NO SOIL DISTURBANCE UNDER THE DRIP LINE OF TREES TO BE PRESERVED.
4. TREATMENT OF ROOTS EXPOSED DURING CONSTRUCTION: FOR ROOTS OVER 1 INCH IN DIAMETER DAMAGED DURING CONSTRUCTION, MAKE A CLEAN STRAIGHT CUT TO REMOVE DAMAGED PORTION OF ROOT. ALL EXPOSED ROOTS SHOULD BE TEMPORARILY COVERED WITH DAMP BURLAP AND COVERED WITH SOIL OR MULCH AS SOON AS POSSIBLE TO PREVENT DRYING.
5. FOR PRUNING GUIDELINES, SEE ANSI A300.
6. NO EQUIPMENT OR MACHINERY SHALL BE USED WITHIN THE PROTECTION FENCE. WORK WITHIN THE PROTECTION ZONE SHALL BE DONE MANUALLY.
7. NO STOCKPILING OF MATERIALS, VEHICULAR TRAFFIC, OR STORAGE IS ALLOWED WITHIN THE LIMIT OF THE FENCING.
8. AVOID REGULAR FOOT TRAFFIC WITHIN THE PROTECTION ZONE.

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

RIOS
3101 W EXPOSITION PLACE
LOS ANGELES, CA 90018
PH: 323.785.1000
FAX: 323.785.1001
rios.com

LICENSED LANDSCAPE ARCHITECT — KEVIN R. ROSS — 7/31/23 — 01/17/23 — STATE OF CALIFORNIA

Compton College

COMPTON COLLEGE
VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD,
COMPTON, CA 90221-5393

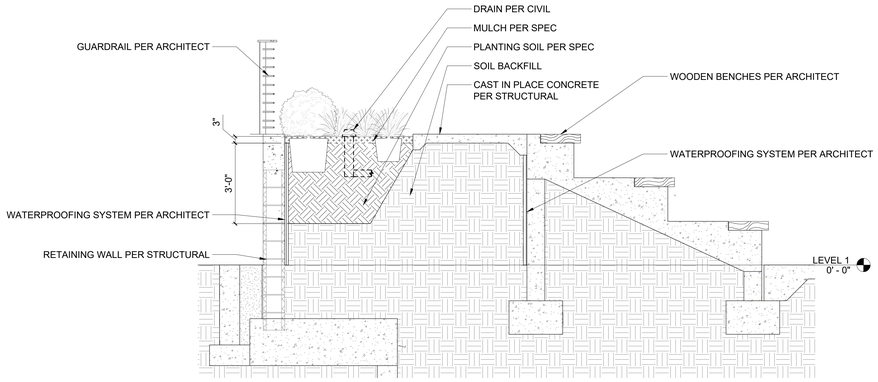
ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

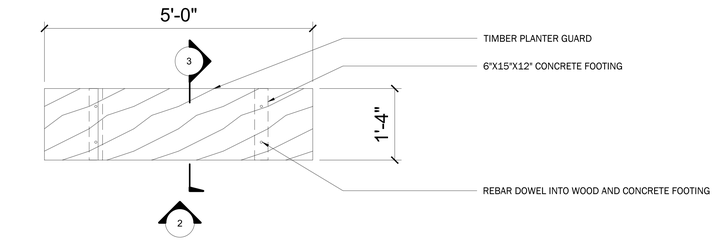
SHEET TITLE
PLANTING NOTES AND SCHEDULE

SHEET NUMBER
L700

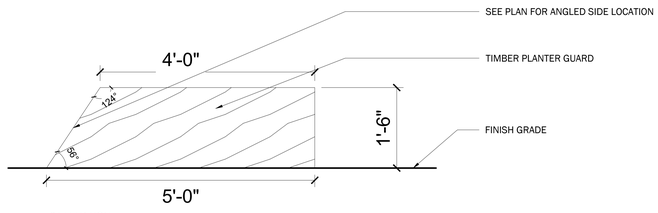
7/29/2022 12:43:51 PM



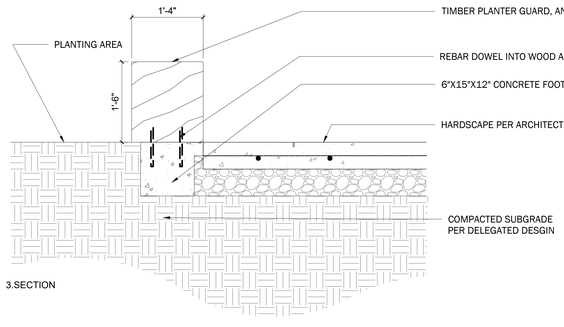
7 PLANTING @ AMPHITHEATER
1/2" = 1'-0" DETAIL-FILE



1.PLAN

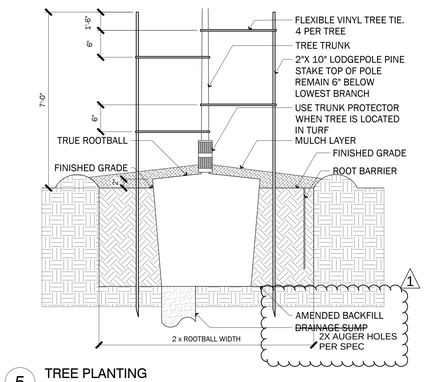


2.ELEVATION

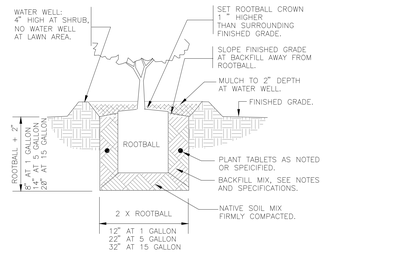


3.SECTION

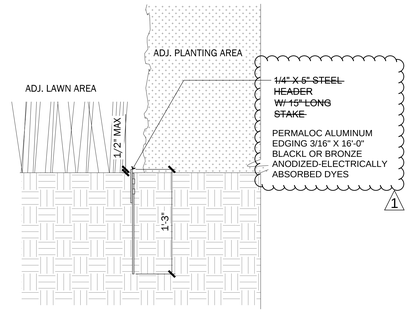
6 TIMBER PLANTER GUARD
1" = 1'-0" DETAIL-FILE



5 TREE PLANTING
1 1/2" = 1'-0" DETAIL-FILE

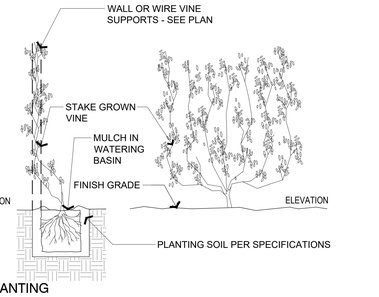


1 SHRUB PLANTING
1" = 1'-0" P-3-959-SA.102-07

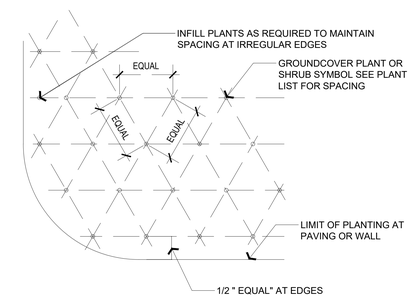


4 METAL EDGING
1 1/2" = 1'-0" DETAIL-FILE

NOTE:
ATTACH VINE TO FENCE OR WALL WITH GREEN STRETCH TIES. PROVIDE ATTACHMENT AS NECESSARY TO SUPPORT VINE IN A NATURAL ESPALIER FORM AS SHOWN ON ELEVATION. MINIMUM FOUR ATTACHMENTS POINTS.



3 VINE PLANTING
1" = 1'-0" P-3-959-SA.102-329333-11



2 TRANGULARLY SPACED PLANTING
1" = 1'-0" P-3-959-SA.102-329333-01

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

RIOS
3101 W EXPOSITION PLACE
LOS ANGELES, CA 90018
PH: 323.755.1000
FAX: 323.755.1001
rios.com

LICENSED LANDSCAPE ARCHITECT
KEVIN R. CONSIDINE
No. 5641
7/31/23
RENEWAL
01/17/23
DATE
STATE OF CALIFORNIA

Compton College

COMPTON COLLEGE
VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD,
COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

SHEET TITLE
PLANTING DETAILS

SHEET NUMBER
L750

2/27/2025 9:03:54 PM

LEGEND AND NOTES

1. SEE A171 FOR SLAB PLAN AND LOCATIONS OF EXTERIOR EDGE OF SLAB. SEE 6 / A802 FOR EXTERIOR WALL LOCATION IN RELATIONS WITH THE EDGE OF THE SLAB.
2. PROVIDE BACKING / ANCHORAGE / SUPPORT FOR ALL WALL AND CEILING MOUNTED EQUIPMENT, PLUMBING FIXTURES, RESTROOM ACCESSORIES / PARTITIONS, CABINETRY, MARKERBOARDS / TACKBOARDS, ETC., TYPICAL. SEE 18/S014
3. SEE A701 FOR INTERIOR WALL TYPES AND A801 FOR TYPICAL EXTERIOR WALL ASSEMBLY AND DETAILS

(N) INTERIOR WOOD STUD WALL
A4 — PARTITION TYPE

100 — (N) DOOR
DOOR NUMBER. SEE DOOR SCHEDULE A601

CLASSROOM — ROOM NAME
100 — ROOM NUMBER
800 SF — AREA

FEC — FIRE EXTINGUISHER CABINET, SEMI-RECESSED SEE 2 / A702

CASEWORK

FD — FLOOR DRAIN PER PLUMBING DRAWINGS

CHAINLINK FENCE. SEE SITE PLAN 1 / A011

ACOUSTIC DRAPERY SYSTEM & PRIVACY FABRIC CURTAINS

KEYNOTES	
001	
05 50 00.A1	ROOF LADDER
05 52 13.A1	CANE DETECTION RAIL. SEE 22/A803
10 28 00.A8	Mop And Broom Holder. See A411 Toilet and Shower Accessories Legend, item 18.
10 28 00.C1	Grab Bar. See A411 Toilet and Shower Accessories Legend.
22 10 00.A3	OVERFLOW DRAIN COVER. SEE PLUMBING FIXTURE SHEDULE P001 & 30 A802
22 10 00.A9	Mop Sink. See Plumbing Fixture Schedule on P001.
22 40 00.A1	DRINKING FOUNTAIN

STRUERE
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM
HRAZTAN AZATYAN — LICENSED ARCHITECT — 28719 — RENEWAL DATE 04/30/25 — STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

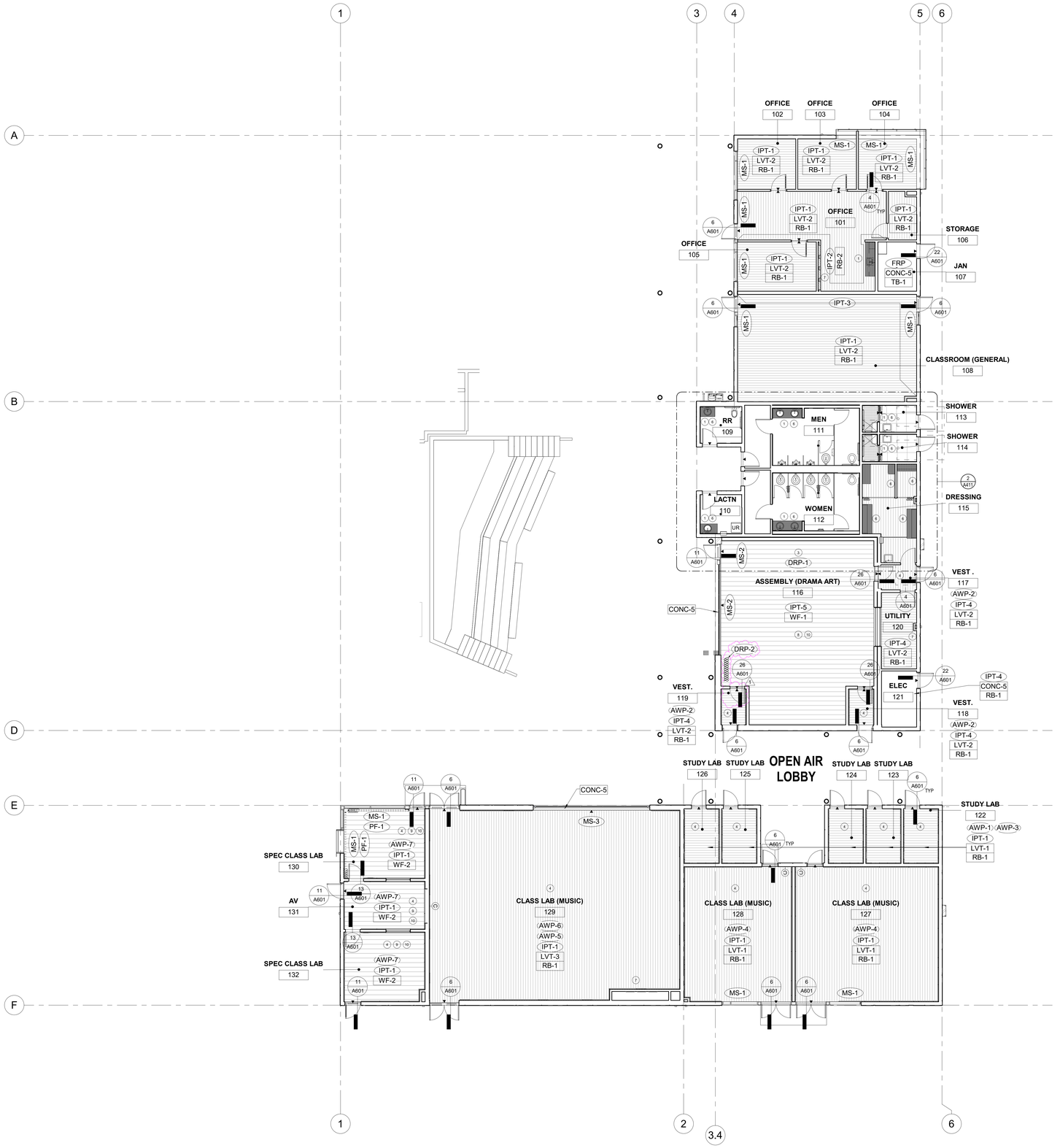
1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION		
	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

SHEET TITLE
FLOOR PLAN

SHEET NUMBER
A101

2/27/2025 9:04:00 PM



LEGEND AND NOTES

FINISH PLAN NOTES:

1. REFER TO SHEET A610 FOR INTERIOR FINISH MATERIAL SPECIFICATIONS
2. REFER TO 1 / A601 FOR FLOOR MATERIAL TRANSITION DETAILS.

FINISH PLAN KEYNOTES

1. FLOOR AND WALL FINISH TO EXTEND BELOW MILLWORK AS NEEDED, REFER TO ELEVATIONS
2. NOT USED.
3. REFER TO INTERIOR ELEVATIONS FOR DRAPERY LOCATIONS AND LENGTHS
4. REFER TO ELEVATIONS FOR AWP PATTERN, SIZES, AND LOCATIONS
5. FOR MATERIAL TRANSITION DETAILS REFER TO DETAIL 1 / A601
6. FOR MIRROR EXACT LOCATION AND HEIGHTS REFER TO ELEVATIONS
7. ALL SERVICE PANEL DOORS AND FRAMES TO BE PAINTED TO MATCH ADJACENT WALL IN SEMI-GLOSS FINISH.
8. HARDWOOD PERFORMANCE FLOORING SYSTEM. SEE DETAIL 1 / A901
9. HARDWOOD PERFORMANCE FLOORING SYSTEM. SEE DETAIL 6 / A901
10. VENTED RUBBER BASE BY HARDWOOD MANUFACTURER. COLOR TO BE BLACK.

FINISH PLAN LEGEND

- FLOOR MATERIAL TRANSITION
- WALL / FLOOR / BASE — MATERIAL TAG
- BUILT IN MILLWORK. REFER TO ELEVATIONS AND SECTIONS.
- CONC-5 CLEAR CONCRETE SEALER OVER EXPOSED CONCRETE
- WF-1 HARDWOOD PERFORMANCE FLOORING
- WF-2 HARDWOOD PERFORMANCE FLOORING
- TL-1 24"X24" PORCELAIN FLOOR TILE
- TL-6 2"X4" PORCELAIN FLOOR TILE
- LVT-1 LUXURY VINYL TILE
- LVT-2 LUXURY VINYL TILE

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM
LICENSED ARCHITECT HRAZTAN KEVIN AN 28719 RENEWAL DATE 04/30/25 STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

SHEET TITLE

FINISH PLAN

SHEET NUMBER

A131

1/23/2025 1:19:26 PM

LEGEND AND NOTES

FURNITURE PLAN NOTES:

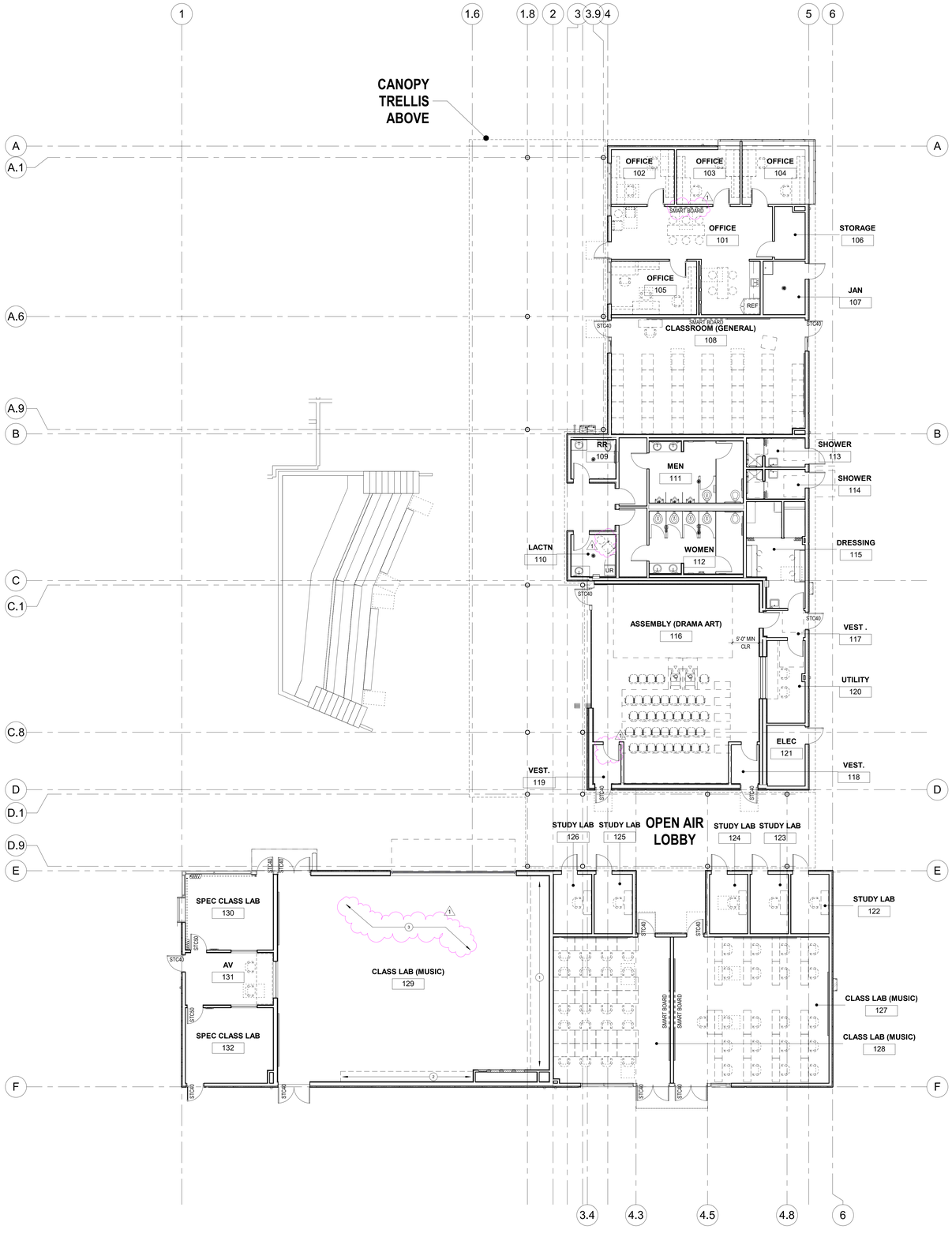
1. FURNITURE LAYOUT SHOWN ON THIS PLAN IS A SUGGESTED LAYOUT AND IS FOR REFERENCE ONLY.

FURNITURE PLAN LEGEND:

30" X 48" CLEAR FLOOR SPACE

FURNITURE PLAN KEYNOTES

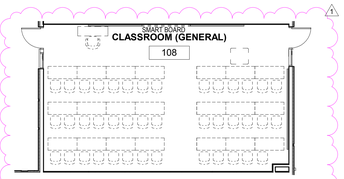
1. MUSIC INSTRUMENT STORAGE CABINETS, OFOI
2. MUSIC SHEET STORAGE CABINETS, OFOI
3. REFER TO SHEET TP101 FOR PROPOSED FURNITURE LAYOUT AND CONFIGURATIONS, OFOI



1 FURNITURE PLAN
1/8" = 1'-0"

EQUIPMENT LEGEND (GROUP 2)

SYMBOL	DESCRIPTION	UTILITY HOOK-UP REQUIRED M	E	T	P	MANUFACTURER / MODEL NO.	PROVIDED BY:	INSTALLED BY:
REF	REFRIGERATOR, BOTTOM-FREEZER		X			GE / GDE21EYKFS		
UR	REFRIGERATOR-UNDERCOUNTER		X			ULINE / ADA24R		



2 CLASSROOM 108 ALTERNATIVE LAYOUT
1/8" = 1'-0"

FOR REFERENCE ONLY

Structure
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM
LICENSED ARCHITECT HRAZTAN KEVLIAN 28719 RENEWAL DATE 04/30/25 STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

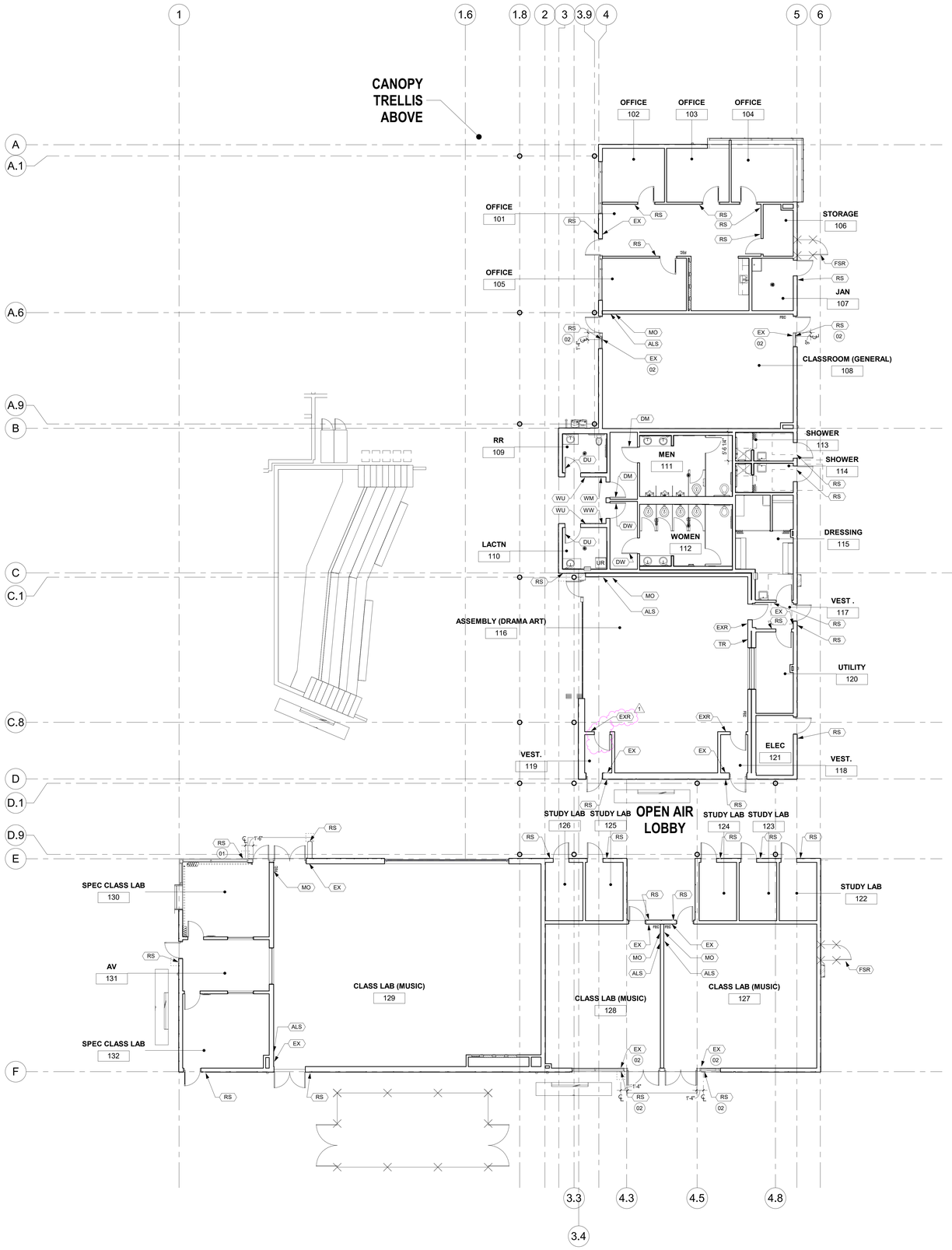
SHEET TITLE

FURNITURE PLAN

SHEET NUMBER

A141

1/23/2025 1:19:30 PM



LEGEND AND NOTES

SIGNAGE NOTES:

A. REFER TO TYPICAL SIGNAGE LOCATION DETAIL 1 / G024

B. REFER TO TYPICAL RAISED CHARACTER AND BRAILLE REQUIREMENTS DETAIL 2 / G024

C. REFER TO SIGNAGE DETAILS ON SHEET G024.

D. FINAL ROOM NUMBERS AND NAMES FOR SIGNAGE ARE TO BE COORDINATED WITH THE COLLEGE.

SIGNAGE PLAN KEYNOTES:

01 ALL SIGNS AT GLAZING TO HAVE BLANK BACK PLATE.

02 ALL SIGNS AT GLAZING THAT ARE BACK-TO-BACK, ENSURE ATTACHEMENT ADHESIVE IS NOT VISIBLE.

SIGNAGE LEGEND:

ALS "ASSISTIVE LISTENING DEVICE" SIGN (INTERIOR WALL MOUNT)

DU
DW
DM TOILET ROOM SYMBOL (DOOR MOUNT), SEE DOOR SCHEDULE AND DETAILS

EX TACTILE "EXIT SIGN (INTERIOR) (WALL MOUNT)

FSR "FIRE SPRINKLER RISER" SIGN

ISA ACCESSIBILITY/EXIT SIGN DIAGRAM (WALL MOUNT)

MO "MAXIMUM OCCUPANCY" SIGN (INTERIOR WALL MOUNT)

RS ROOM NAME/NUMBER SIGN WITH INSERT (WALL-MOUNT), SEE DOOR SCHEDULE

TR THEATER RIGGING INFO SIGN (WALL MOUNT)

WU
WW
WM TOILET ROOM SYMBOL (WALL MOUNT), SEE DOOR SCHEDULE AND DETAILS

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM
LICENSED ARCHITECT HRAZTAN KEITIAN 28719 RENEWAL DATE 04/30/25 STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE	DESCRIPTION	
	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

SHEET TITLE

SIGNAGE PLAN

SHEET NUMBER

A151

2/27/2025 9:04:15 PM

INTERIOR LIGHT FIXTURE LEGEND

- LT-01 / LT-01A / LT-01B / LT-01C — (LT-01 / LT-01A / LT-01B / LT-01C) LED RECESSED LINEAR FIXTURE 6'-0" LONG
- LT-02 — (LT-02) LED RECESSED LINEAR FIXTURE 4'-0" LONG
- LT-03 / LT-03A / LT-03B / LT-03C / LT-03D — (LT-03 / LT-03A / LT-03B / LT-03C / LT-03D) LED RECESSED DOWN LIGHT 4" DIAMETER
- LT-04 — (LT-04) LED PENDANT DOWN LIGHT, MH 8'-6"
- LT-05 — (LT-05A / LT-05B) LED RECESSED DOME LIGHT 3'-0" DIAMETER, MH 8'-0"
- LT-06 — (LT-06) LED PENDANT DOWNLIGHT, MH 18'-0"
- LT-07 / LT-07A — (LT-07 / LT-07A) LED LINEAR PENDANT FIXTURE, MH 9'-0", 8'-0" LONG
- LT-08 / LT-08A / LT-08B / LT-08C — (LT-08 / LT-08A / LT-08B / LT-08C) LED CONTINUOUS LINEAR SURFACE MOUNTED FIXTURE, MH 8'-0"
- LT-09 / LT-09A — (LT-09 / LT-09A) LED WALL MOUNTED LINEAR FIXTURE, 6'-0" LONG; LT-06 MT 6'-6", LT-09A MH 7'-0"
- LT-10 — (LT-10) LED WALL MOUNTED LINEAR WALL WASHER FIXTURE 10'-0" LONG, MH 8'-0"
- LT-11 — (LT-11) LED RECESSED LINEAR WALL WASHER FIXTURE 6'-0" LONG
- LT-12 — (LT-12) LED ROUND PENDANT FIXTURE, MH 17'-0"
- LT-13 — (LT-13) LED UNDER CABINET FIXTURE
- EXIT SIGN
- LT-14 — (LT-14) WALL MOUNTED MAKE UP LIGHTS, MH 8'-0" MH REFER TO SHEET A412
- LT-15 — (LT-15) LED LINEAR UTILITARIAN WALL MOUNTED FIXTURE, MH 8'-0"
- LT-16 — (LT-16) LED TAPE LIGHT AT MIRROR. REFER TO SHEET A412

EXTERIOR LIGHT FIXTURE LEGEND

- (ELT-01) NOT USED
- ELT-02 / ELT-02B / ELT-02C / ELT-02D / ELT-02F — (ELT-02 / ELT-02B / ELT-02C / ELT-02D / ELT-02F) EXTERIOR LED WALL SCONCE, REFER TO ELEVATIONS
- ELT-03 / ELT-03A — (ELT-03 / ELT-03A) EXTERIOR LED CONTINUOUS RECESSED LINEAR FIXTURE AT AMPHITHEATER. REFER TO SHEETS A711 AND A712.
- ELT-04 / ELT-04A — (ELT-04 / ELT-04A) EXTERIOR LED RECESSED LINEAR FIXTURE AT CANOPY. REFER TO SHEET A733. ELT-04A TO FIT ENTIRE LENGTH OF NICHE.
- ELT-04B — (ELT-04B) EXTERIOR LED CONTINUOUS SURFACE MOUNTED FIXTURE AT CANOPY. REFER TO SHEET A721.
- ELT-05 / ELT-05A / ELT-05B — (ELT-05 / ELT-05A / ELT-05B) EXTERIOR LED RECESSED LINEAR DOWNLIGHT. REFER TO SHEETS A734 AND A735.
- ELT-06 — (ELT-06) EXTERIOR LED CONTINUOUS SURFACE MOUNTED LINEAR FIXTURE AT CANOPY SIGNAGE. REFER TO SHEET A732.
- ELT-07 — (ELT-07) EXTERIOR LED RECESSED STEP LIGHTS AT AMPHITHEATER
- ELT-08 — (ELT-08) EXTERIOR LED CONTINUOUS SURFACE MOUNTED FIXTURE AT LARGE COMPTON LOGO. REFER TO SHEET A731.
- ELT-09 — (ELT-09) EXTERIOR LED BOLLARD FIXTURE LOCATIONS DIMENSIONED ON HARDSCAPE PLAN A012
- ELT-10 — (ELT-10) EXTERIOR LED RECESSED DOWNLIGHT. MH 8'-0". REFER TO16 / A733
- ELT-11 — (ELT-11) EXTERIOR LED CONTINUOUS SURFACE MOUNTED FIXTURE UNDER BAY WINDOW. MH 3'-6". REFER TO 17 / A603. POSITION SO FIXTURE AND EXPOSED WIRING NOT VISIBLE FROM ABOVE. ANY EXPOSED EXTERIOR WIRING TO HAVE CONDUIT.
- ELT-12 — (ELT-12) EXTERIOR WALL MOUNTED LED 'ON-AIR' FIXTURE. MH: SEE ELEVATIONS
- E (INV) — LETTER 'E' OR 'INV' AFTER LIGHT FIXTURE TYPE DESIGNATION DENOTES EMERGENCY FIXTURE

CEILING LEGEND

- OFFICE — ROOM NAME
- 100 — ROOM NUMBER
- +9'-0" — CEILING HEIGHT, A.F.F.
- MS-# — MECHOSHADE SEE A610 FOR FINISH INFORMATION. SEE 6/A904, 10/A904, 21/A904, AND 22/A904 FOR DETAILS
- EXPOSED TO DECK
- PAINTED GYP BOARD CEILING
- (ACT-1) 2X2 ACOUSTICAL CEILING GRID AND TILE, NRC 0.55, COLOR: WHITE
- (ACT-2) 2X2 ACOUSTICAL CEILING GRID AND TILE, NRC 0.75, COLOR: WHITE
- (ACT-3) 2X2 ACOUSTICAL CEILING GRID AND TILE, NRC 0.75, COLOR: BLACK
- (ACP) 2" THICK FIBERGLASS PANELS ATTACHED TO UNDERSIDE OF DECK REFER TO 2 / A601 FOR ATTACHEMENT DETAIL
- NOT IN SCOPE
- SUSPENDED LIGHT GRID RIGGING (DEFERRED APPROVAL) BOTTOM OF GRID AT 17'-0" AFF
- LIGHT GRID ATTACHED TO BOTTOM OF EXTERIOR CANOPY
- ACOUSTIC CURTAIN AND WALK-ALONG CURTAIN TRACK (@ ASSEMBLY 116) PRIVACY CURTAIN WALK-ALONG CURTAIN TRACK (@DRESSING 115 & SPEC. CLASS LAB 130)
- MECHANICAL SUPPLY
- MECHANICAL RETURN
- MECHANICAL EXHAUST
- SPRINKLER HEADS. SEE FP201
- ACCESS PANEL. REFER TO DETAIL 25 / A904
- ⊡SP — AV SPEAKER, GRID-IRON MOUNTED
- ⊡SPW — AV SPEAKER, WALL MOUNTED
- ⊡SPC — AV SPEAKER, FLUSH CEILING MOUNTED
- CLOCK

KEYNOTES - RCP

01 AT EXTERIOR CANOPY, SIGNAGE, BENCH, AND AMPHITHEATER LIGHT FIXTURE EXACT LOCATION AND MOUNTING HEIGHT REFER TO ELEVATIONS AND BUILDING SECTIONS.
02 LIGHT GRID ATTACHED TO BOTTOM OF EXTERIOR CANOPY 12 / A721
03 OUTLINE OF HARDSCAPE BELOW
04 ALL EXPOSED WOOD STRUCTURAL ELEMENTS TO BE FREE OF CONSTRUCTION AND/OR MANUFACTURER GRAFFITI.
05 ALL EXPOSED CEILING PIPES, SPRINKLERS, MECHANICAL DUCTS AND LIGHT GRID TO BE PAINTED IPT-5 IN FLAT FINISH.
06 ALL EXPOSED WOOD STRUCTURAL ELEMENTS TO BE PAINTED IPT-5 IN FLAT FINISH.
07 PROVIDE AND INSTALL POWER/DATA AND INFRASTRUCTURE TO MOUNT PROJECTOR. COORDINATE EXACT LOCATION WITH COLLEGE. SEE DETAIL 23 / A904
08 LIGHT FIXTURE TO ALIGN WITH CENTERLINE OF DOORS.
09 LIGHT FIXTURE TO START AT SEAM.
10 LIGHT FIXTURE TO ALIGN WITH END EDGE OF SIGNAGE.
11 SIGNAGE.
12 EXIT LIGHT SIGN SHALL BE MOUNTED FROM ROOF STRUCTURE AND IN SUCH AS TO BE PLACED IN FRONT OF CURTAINS.

REFLECTED CEILING PLAN NOTES:

A. T-BAR CEILING ASSEMBLY SHALL COMPLY WITH ALL REQUIREMENTS NOTED IN DSA IR 25-2.13.
B. SUSPENDED GYPSUM BOARD CEILING ASSEMBLY SHALL COMPLY WITH ALL REQUIREMENTS NOTED IN DSA IR 25-3.13.
C. FOR ALL CEILING DETAILS REFER TO SHEET A904.
D. REFER TO SHEET A610 FOR INTERIOR FINISH MATERIAL SPECIFICATIONS.
E. REFER TO ENGINEERING DRAWINGS FOR MECHANICAL AND ELECTRICAL EQUIPMENT SUPPORT DETAILS.
F. REFER TO THE ENGINEERING PLANS FOR LIGHT FIXTURE SPECIFICATION AND LIGHTING CONTROL SYSTEMS.
G. ALL LIGHT SWITCHES AND THERMOSTATS SHALL BE GANGED TOGETHER WHERE POSSIBLE.
H. SPRINKLER HEADS IN GYP. BD. CEILINGS AND ACT SHALL BE FULLY RECESSED WITH WHITE COVERS. BLACK COVERS AT UTILITY 120.
I. SPRINKLERS AT ROOMS WITH NO FINISHED CEILING SHALL BE UPRIGHT RESPONSE HEADS.
J. SPRINKLER HEADS AND OTHER PENETRATIONS SHALL HAVE 2 INCH OVERSIZE RING, SLEEVE, OR ADAPTOR THROUGH THE CEILING TO ALLOW FOR FREE MOVEMENT OF AT LEAST 1 INCH IN ALL HORIZONTAL DIRECTIONS.
K. LIGHTING, MECHANICAL FIXTURES, CABLE TRAYS, ELECTRICAL CONDUITS, ETC. SHALL HAVE VERTICAL AND LATERAL SUPPORTS INDEPENDENT OF THE CEILING.
L. REFER TO SHEETS A301A THROUGH A302B FOR MORE INFORMATION ON EXTERIOR MATERIALS.
M. FOR PENDENT FIXTURE LATERAL RESTRAINING DETAIL SEE 24 / A904
N. ALL EXPOSED CONSTRUCTION INCLUDING BUT NOT LIMITED TO DUCTS, CONDUITS, AND STRUCTURE SHALL BE PAINTED, U.O.N.
O. UNDERCABINET LIGHTING TO EXTEND FULL LENGTH OF CABINET.
P. DOWNLIGHTS, SENSORS, SPEAKERS, SPRINKLER HEADS, ETC SHALL BE CENTERED ON ACOUTSTIC CEILING TILE, U.N.O.
Q. EXPOSED EXTERIOR WIRING SHALL BE PROTECTED INSIDE CONDUIT, U.N.O.

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM
LICENSED ARCHITECT HRAZTAN AZATYAN 28719 RENEWAL DATE 04/30/25 STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION		
	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

SHEET TITLE
REFLECTED CEILING PLAN

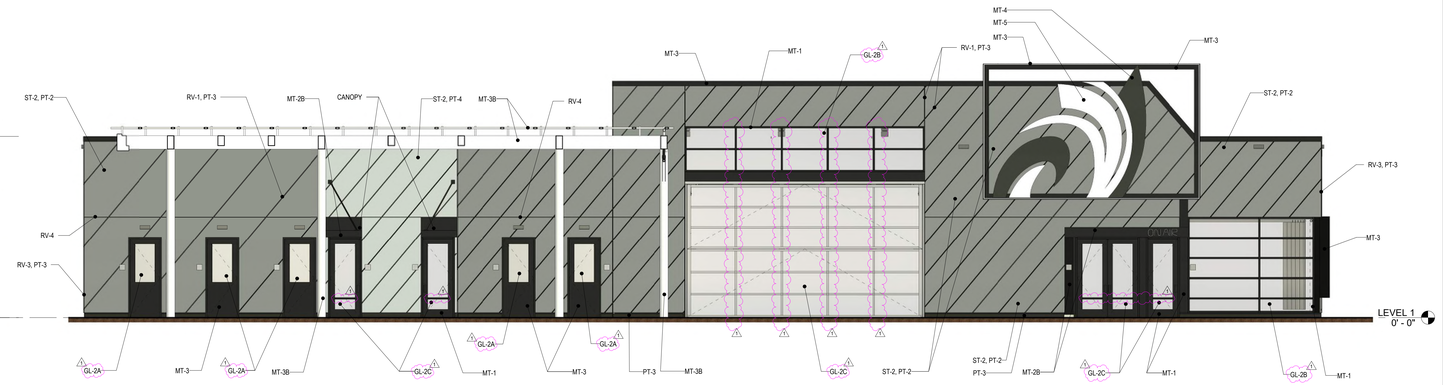
SHEET NUMBER
A201

2/27/2025 7:41:49 PM

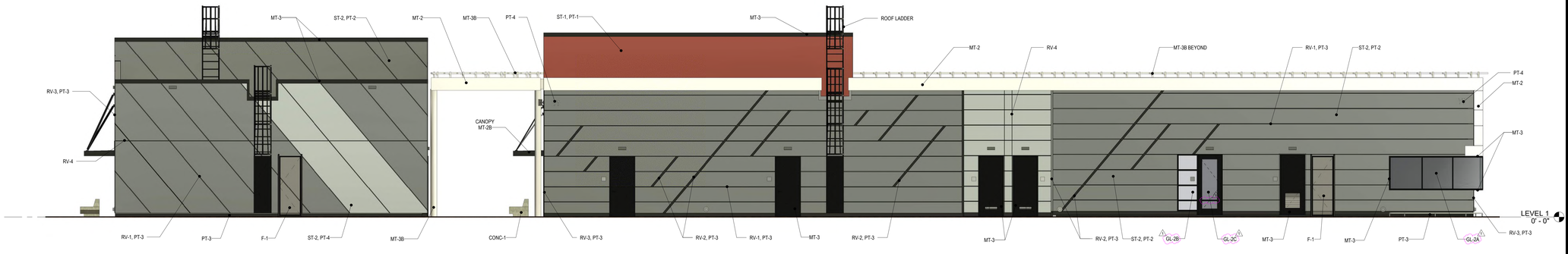
1 OPEN AIR LOBBY - COLOR
3/16" = 1'-0"

2 OPEN AIR LOBBY B - COLOR
3/16" = 1'-0"

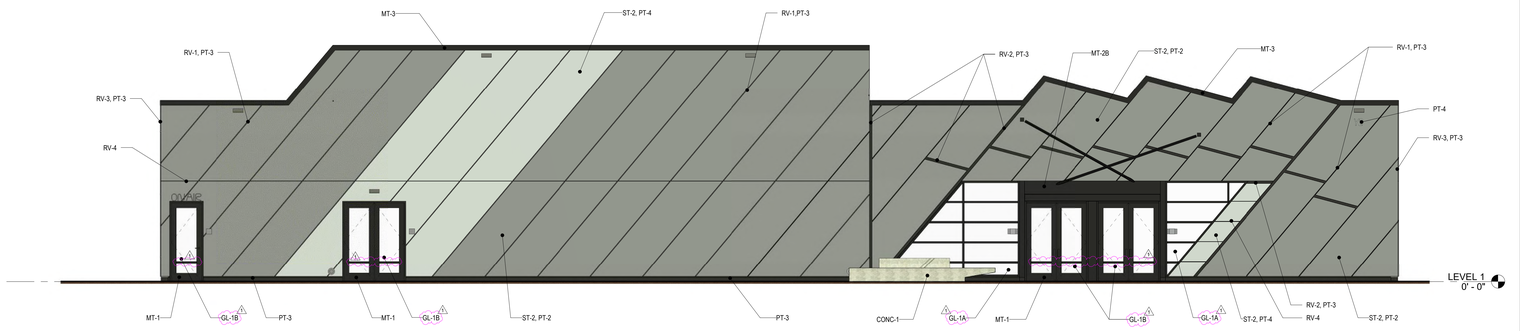
5 SOUTH OPEN AIR LOBBY - COLOR
3/16" = 1'-0"



3 NORTH ELEVATION B - COLOR
3/16" = 1'-0"



4 EAST ELEVATION A - COLOR
3/16" = 1'-0"



6 SOUTH ELEVATION A - COLOR
3/16" = 1'-0"

COMPTON COLLEGE VISUAL AND PERFORMING ARTS - MATERIALS LIST:

CMU-1

CONCRETE MASONRY UNITS AT AMPHITHEATER WALLS. BASIS OF DESIGN TO BE ANGELUS PRECISION BLOCK IN STACK BOND PATTERN, MORTAR TO BE GRAY SPEC MIX. SECTION 042200 CONCRETE UNIT MASONRY.

CONC-1

CAST IN PLACE CONCRETE AT BENCHES AND OTHER EXPOSED CONCRETE. SMOOTH SACKED FINISH. FILL AND PATCH FORMWORK PANEL FASTENERS NOT TO BE NOTICEABLE. CONCRETE TO BE PREPARED TO MINIMIZE AIR BUBBLES. POLISH TOP EXPOSED SEATING SURFACES. SEE SECTION 03 330 0 ARCHITECTURAL CONCRETE.

CONC-2

CONCRETE AT PAVING. NATURAL GRAY TOPCAST WASH OFF FINISH CONCRETE PAVING TOPCAST #3 RETARDER (ALTERNATE: LIGHT SANDBLAST IF ACCEPTED BY ARCHITECT AT TIME OF FIELD SAMPLE APPROVAL). SEE SECTION 32 13 00 ARCHITECTURAL CONCRETE PAVING.

CONC-3

NOT USED

CONC-4

CAST IN PLACE BOARD FORMED CONCRETE AT AT AMPHITHEATER WALLS. ARCHITECTURAL GRADE. FORMWORK TO IMPRINT 4" NOMINAL WOOD BANDS PATTERN ON CONCRETE VISIBLE SURFACES, FORMWORK INTERIOR TO BE SHAPED TO ALLOW FOR 1/2" BLEEDING JOINTS BETWEEN 4" WOOD BANDS. BOARDS TO BE ANGLED 50 DEGREES FROM GROUND PLANE, SEE ELEVATIONS FOR DIRECTION OF SLANT. FILL AND PATCH FORMWORK PANEL FASTENERS NOT TO BE NOTICEABLE. CONCRETE TO BE PREPARED TO MINIMIZE AIR BUBBLES. WHEN EXPOSED POLISH TOP EXPOSED SURFACE OF WALLS. SEESECTION 03 33 00 ARCHITECTURAL CONCRETE.

F-1

8 FOOT HIGH CHAINLINK FENCE PROVIDE BLACK PVC COATED FINISH FOR ALL METAL COMPONENTS THROUGHOUT. USE 2" MESH CHAINLINK FENCE OPENINGS MEASURED HORIZONTALLY. USE 9 GAUGE. PROVIDE PVC VINYL SLATS FOR PRIVACY AND SECURITY. DOUBLE WALL SLATS COLOR TO BE REDWOOD. SLATS ARE TO BE INSERTED DIAGONALLY. SECTION 323122 PVC-CLAD CHAIN LINK FENCING

GL-1A

1 1/8" INSULATED GLAZING UNIT (1/4" EXT. + 1/2" AIR SPACE + (2) 3/16" LAMINATED INT.) AT SOUTH WINDOWS. USE VITRO ARCHITECTURAL GLASS. PRODUCT: SOLARBAN 70 SOLAR CONTROL LOW-E GLASS. FINISH: SOLARBAN 70 (2) SOLARBLUE + CLEAR. USE WARM EDGE SPACER. CONTACT: TREVOR HALL 657.243.6267, TRHALL@VITRO.COM. FOR IGU CONTACT: IRENE GONZALEZ 323.659.0063. SECTION 088000 GLAZING.

GL-1B

1" INSULATED GLAZING UNIT (1/4" EXT. + 1/2" AIR SPACE + (2) 1/8" LAMINATED INT.) AT SOUTH DOORS. USE VITRO ARCHITECTURAL GLASS. PRODUCT: SOLARBAN 70 SOLAR CONTROL LOW-E GLASS. FINISH: SOLARBAN 70 (2) SOLARBLUE + CLEAR. USE WARM EDGE SPACER. CONTACT: TREVOR HALL 657.243.6267, TRHALL@VITRO.COM. FOR IGU CONTACT: IRENE GONZALEZ 323.659.0063. SECTION 088000 GLAZING.

GL-2A

1" INSULATED GLAZING UNIT (1/4" EXT. + 1/2" AIR SPACE + 1/4" INT.) AT EXTERIOR WINDOWS AND DOORS WHERE NOTED. USE VITRO ARCHITECTURAL GLASS. PRODUCT: SOLARBAN 70 SOLAR CONTROL LOW-E GLASS. FINISH: SOLARBAN 70 (2) CLEAR + CLEAR. USE WARM EDGE SPACER. CONTACT: TREVOR HALL 657.243.6267, TRHALL@VITRO.COM. FOR IGU CONTACT: IRENE GONZALEZ 323.659.0063. SECTION 088000 GLAZING.

GL-2B

1 1/8" INSULATED GLAZING UNIT (1/4" EXT. + 1/2" AIR SPACE + (2) 3/16" LAMINATED INT.) AT EXTERIOR WINDOWS WHERE NOTED. USE VITRO ARCHITECTURAL GLASS. PRODUCT: SOLARBAN 70 SOLAR CONTROL LOW-E GLASS. FINISH: SOLARBAN 70 (2) CLEAR + CLEAR. USE WARM EDGE SPACER. CONTACT: TREVOR HALL 657.243.6267, TRHALL@VITRO.COM. FOR IGU CONTACT: IRENE GONZALEZ 323.659.0063. SECTION 088000 GLAZING.

GL-2C

1" INSULATED GLAZING UNIT (1/4" EXT. + 1/2" AIR SPACE + (2) 1/8" LAMINATED INT.) AT EXTERIOR DOORS WHERE NOTED. USE VITRO ARCHITECTURAL GLASS. PRODUCT: SOLARBAN 70 SOLAR CONTROL LOW-E GLASS. FINISH: SOLARBAN 70 (2) CLEAR + CLEAR. USE WARM EDGE SPACER. CONTACT: TREVOR HALL 657.243.6267, TRHALL@VITRO.COM. FOR IGU CONTACT: IRENE GONZALEZ 323.659.0063. SECTION 088000 GLAZING.

MT-1

PAINTED ALUMINUM MULLIONS AT ALL EXTERIOR WINDOWS AND ALUMINUM DOOR ASSEMBLIES AND STOREFRONT ALUMINUM ASSEMBLIES. USE PPG DURANAR UCS1595XL MEDIUM GRAY. WWW.PPGMETALCOATINGS.COM CONTACT: 888.PPG.IDEA. SECTION 084313 ALUMINUM-FRAMED STOREFRONTS AND ENTRANCES

MT-2

COMPOSITE METAL PANEL AT TRELLIS FASCIA AND CORNICE ELEMENTS. USE ALUCOBOND SILVER METALLIC PVDF-2/GLOSS LEVEL 20. NO RIVETS OR THREADED FASTENERS VISIBLE FROM EXTERIOR (INCLUDES ALL SITE LINES OF JOINT CONDITIONS). CONTACT: JOE PEBLEY 858.382.5166 JOE.PEBLEY@3ACOMPOSITES.COM. SECTION 074219 COMPOSITE METAL PANELS. SEE ACM SHEETS ACM001-ACM011.

MT-2B

COMPOSITE METAL PANEL AT CANOPY ELEMENTS. USE ALUCOBOND JLR GRAY METALLIC PVDF-2/GLOSS LEVEL 20. NO RIVETS OR THREADED FASTENERS VISIBLE FROM EXTERIOR (INCLUDES ALL SITE LINES OF JOINT CONDITIONS). CONTACT: JOE PEBLEY 858.382.5166 JOE.PEBLEY@3ACOMPOSITES.COM. SECTION 074219 COMPOSITE METAL PANELS. SEE ACM SHEETS ACM001-ACM011

MT-3

PAINTED EXPOSED EXTERIOR STEEL BEAMS, MISC STEEL ASSEMBLY, STEEL GUARDRAIL ASSEMBLY, STEEL PAINTED FENCE ASSEMBLY, AND HOLLOW METAL STEEL DOOR ASSEMBLIES AND FRAMES. PAINT TO BE 3-COAT ZINC/EPOXY/METALLIC FLUOROPOLYMER SYSTEM. USE TNEMEC PAINT. TOPCOAT TO BE SERIES 1078V METALLIC FLUORONAR. COLOR TO BE 61MT DARK ALUMINUM. CONTACT: CHRIS HILLE 720.278.4817, CHILLE@TNEMEC.COM, WWW.TNEMEC.COM. SECTION 099600 HIGH PERFORMANCE COATINGS.

MT-3B

PAINTED EXPOSED EXTERIOR STEEL COLUMNS, BEAMS AT TRELLIS. PAINT TO BE 3-COAT ZINC/EPOXY/METALLIC FLUOROPOLYMER SYSTEM. USE TNEMEC PAINT. TOPCOAT TO BE SERIES 1078V METALLIC FLUORONAR. COLOR TO BE BRIGHT ALUMINUM. CONTACT: CHRIS HILLE 720.278.4817, CHILLE@TNEMEC.COM, WWW.TNEMEC.COM. SECTION 099600 HIGH PERFORMANCE COATINGS.

MT-4

PAINTED STEEL COMPTON COLLEGE GRAPHIC BASE COLOR. PAINT TO BE 3-COAT ZINC/EPOXY/METALLIC FLUOROPOLYMER SYSTEM. USE TNEMEC PAINT. TOPCOAT TO BE SERIES 1078V METALLIC FLUORONAR. COLOR TO BE 75MT BLACK BRONZE. CONTACT: CHRIS HILLE 720.278.4817, CHILLE@TNEMEC.COM, WWW.TNEMEC.COM. SECTION 099600 HIGH PERFORMANCE COATINGS.

MT-5

PAINTED STEEL COMPTON COLLEGE GRAPHIC ACCENT COLOR. PAINT TO BE 3-COAT ZINC/EPOXY/METALLIC FLUOROPOLYMER SYSTEM. USE TNEMEC PAINT. TOPCOAT TO BE SERIES 1078V METALLIC FLUORONAR. COLOR TO BE 45MT LIGHT STEEL. CONTACT: CHRIS HILLE 720.278.4817, CHILLE@TNEMEC.COM, WWW.TNEMEC.COM. SECTION 099600 HIGH PERFORMANCE COATINGS.

MT-6 (NOT USED)

MT-7 (NOT USED)

MT-8

PREFORMED WALL PANEL, MORIN MATRIX MX-1 WITH EXPOSED FASTENERS. USE PERFORATED CIRCULAR STAGGERED HOLES: 3/16" ROUND ON 5/16" STAGGERED CENTERS, 33% OPEN AREA, FINISH TO BE FLUROPON PVDF KYNAR500. COLOR TO BE DOVE GRAY, BACKSIDE OFF-WHITE WASH COAT. USE ALUMINUM 0.05" THICKNESS. CONTACT: 1.800.640.6501, WWW.MORINCORP.COM. SECTION 074213 PREFORMED WALL PANELS.

PT-1

EXTERIOR BASE PAINT. USE SHERWIN-WILLIAMS SW 7584 RED THEATRE. WWW.SHERWIN-WILLIAMS.COM CONTACT: SHERWIN-WILLIAMS PASADENA 626.396.1142. SECTION 099000 PAINTING, 09900A PAINT FINISH SCHEDULE.

PT-2

EXTERIOR BASE PAINT. USE SHERWIN-WILLIAMS SW 7076 CYBERSPACE. WWW.SHERWIN-WILLIAMS.COM CONTACT: SHERWIN-WILLIAMS PASADENA 626.396.1142. SECTION 099000 PAINTING, 09900A PAINT FINISH SCHEDULE.

PT-3

EXTERIOR PAINT AT REVEALS AND EXTERIOR FACE OF CONCRETE CURBS. USE SHERWIN-WILLIAMS SW 6258 TRICORN BLACK. WWW.SHERWIN-WILLIAMS.COM CONTACT: SHERWIN-WILLIAMS PASADENA 626.396.1142. SECTION 099000 PAINTING, 09900A PAINT FINISH SCHEDULE.

PT-4

EXTERIOR BASE PAINT ACCENT. USE SHERWIN-WILLIAMS SW 7071 GRAY SCREEN. WWW.SHERWIN-WILLIAMS.COM CONTACT: SHERWIN-WILLIAMS PASADENA 626.396.1142. SECTION 099000 PAINTING, 09900A PAINT FINISH SCHEDULE.

RV-1

3/4" WIDE x 3/4" DEEP PAINTED EXT STUCCO PLASTER HORIZONTAL, VERTICAL, AND DIAGONAL REVEALS. BASIS OF DESIGN: FRY REGLET CHANNEL SCREED PCS-75-75. COLOR TO MATCH PT-3. FRYREGLET.COM. SECTION 092400 LATH & PORTLAND CEMENT PLASTER.

RV-2

3" WIDE x 3/4" DEEP PAINTED EXT STUCCO PLASTER DIAGONAL REVEAL. BASIS OF DESIGN: FRY REGLET CHANNEL SCREED PCS-75-300, TYP. BASIS OF DESIGN: FRY REGLET FPM-75-300, WHERE ADJACENT TO STOREFRONT. COLOR TO MATCH PT-3. SECTION 092400 LATH & PORTLAND CEMENT PLASTER.

RV-3

3/4" WIDE x 3/4" DEEP PAINTED EXT STUCCO PLASTER VERTICAL CORNER REVEAL. BASIS OF DESIGN: FRY REGLET X CORNER MOLDING PXM-75-75. COLOR TO MATCH PT-3. SEE DETAIL. SECTION 092400 LATH & PORTLAND CEMENT PLASTER// A802

RV-4

1/4" WIDE x 1/4" DEEP REGLET. SECTION 092400 LATH & PORTLAND CEMENT PLASTER.

RF-1

BASE ROOFING MEMBRANE TO BE PVC THERMOPLASTIC MEMBRANE ROOFING. USE SARNAFIL G410 80, COLOR TO BE WHITE. CONTACT: ROB MALES 562.676.0459 ROB@DESIGNTINC.COM. SECTION 075419 PVC ROOFING.

ST-1

EXTERIOR COLOR COAT STUCCO CEMENT PLASTER. USE LA HABRA 20/30 SAND FLOAT FINISH. BASE COLOR TO BE BASE 200 X-278 (42) TRABUCO. STUCCO TO BE PAINTED PT-1. WWW.LAHABRASTUCCO.COM CONTACT: TED JONES 714.778.2266. SECTION 092400 LATH & PORTLAND CEMENT PLASTER.

ST-2

EXTERIOR COLOR COAT STUCCO CEMENT PLASTER. USE LA HABRA 20/30 SAND FLOAT FINISH. BASE COLOR TO BE BASE 200 X-16 (57) SILVER GREY. STUCCO TO BE PAINTED PT-2. WWW.LAHABRASTUCCO.COM CONTACT: TED JONES 714.778.2266. SECTION 092400 LATH & PORTLAND CEMENT PLASTER.

WD-1

GLULAM AT AMPHITHEATER BENCH SEATS. BASIS OF DESIGN TO BE GLULAM PLUS DOUGLAS FIR 3 1/8" DEEP x 17 3/4" WIDE. FOR FINISH SEE SPECIFICATIONS SECTION 061813 GLUED-LAMINATED BEAMS.

NOTES:

CONTRACTOR TO SUBMIT SAMPLES OF ALL MATERIALS AND FINISHES SPECIFIED HEREIN FOR ARCHITECT'S APPROVAL PRIOR TO INSTALLATION. CONTRACTOR IS TO MAKE EVERY EFFORT TO ORDER MATERIALS SPECIFIED HEREIN IN A TIMELY MANNER TO TAKE INTO ACCOUNT LEAD TIMES ASSOCIATED WITH MATERIALS SPECIFIED HEREIN.

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM
LICENSED ARCHITECT HRAZTAN KEVLIAN 28719 RENEWAL DATE 04/30/25 STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

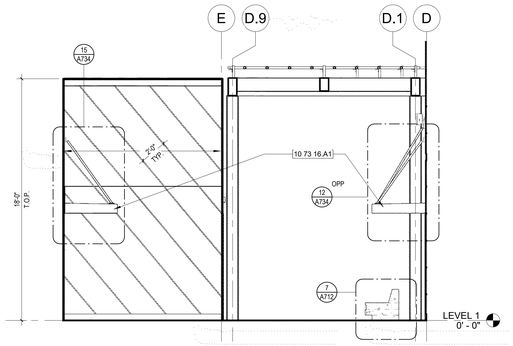
ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

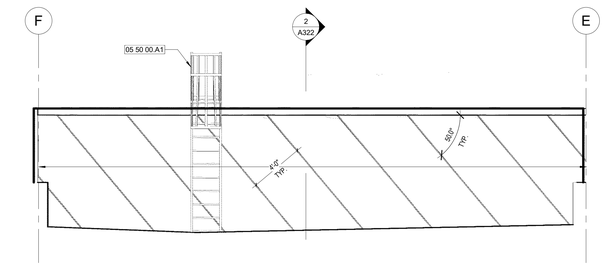
SHEET TITLE
ELEVATIONS - MATERIAL

SHEET NUMBER
A301A

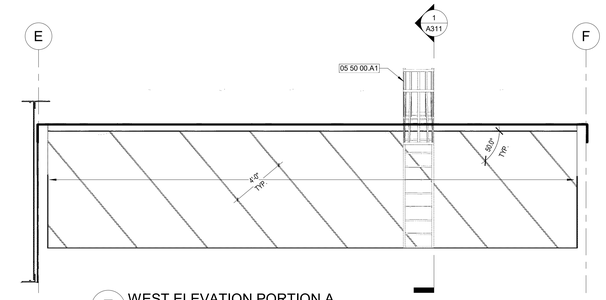
2/27/2025 7:42:26 PM



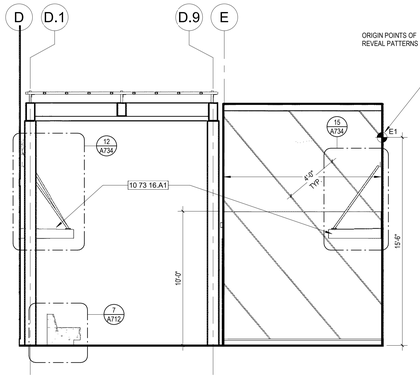
9 SOUTH ELEVATION OPEN AIR LOBBY
1/4" = 1'-0"



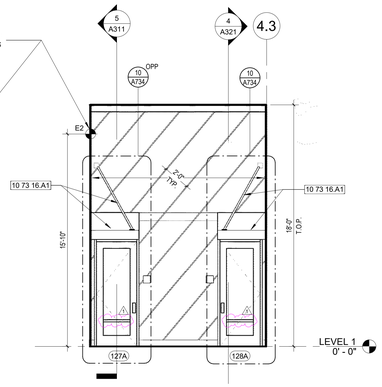
8 EAST ELEVATION PORTION A
1/4" = 1'-0"



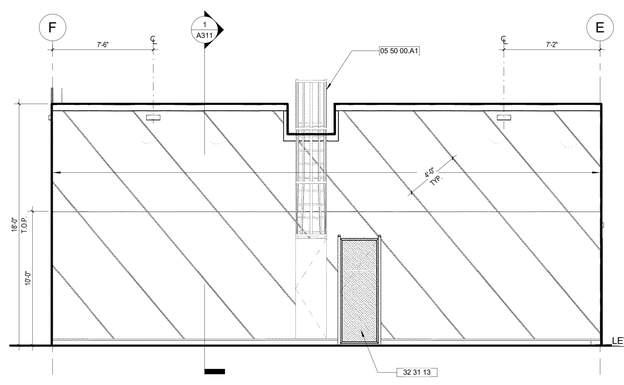
7 WEST ELEVATION PORTION A
1/4" = 1'-0"



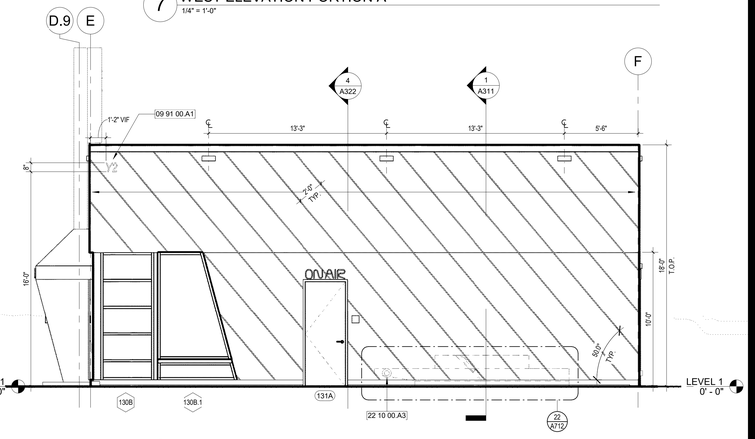
6 WEST ELEVATION OPEN AIR LOBBY
1/4" = 1'-0"



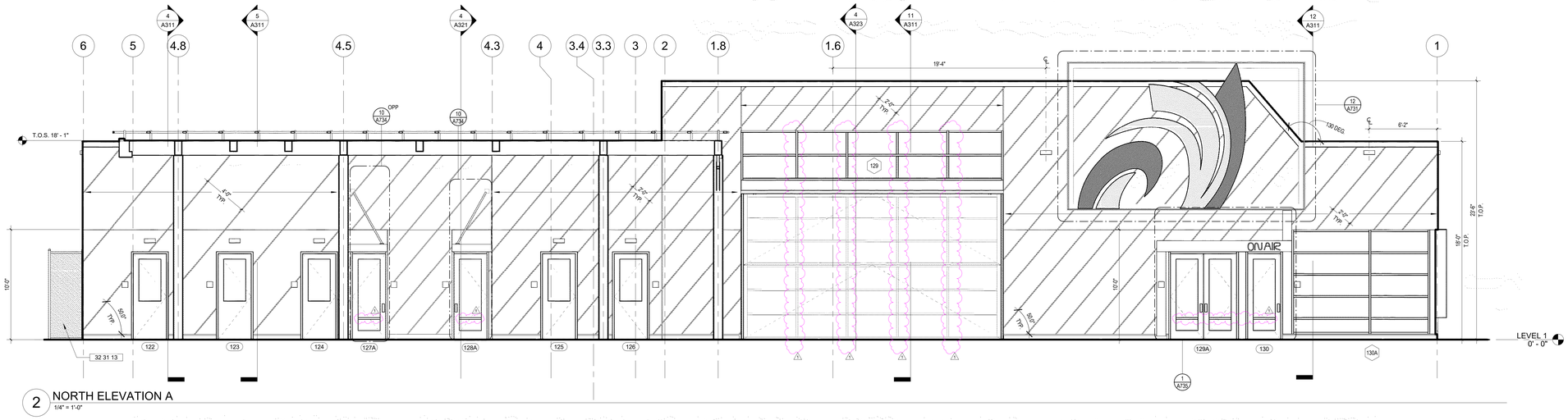
5 NORTH ELEVATION OPEN AIR LOBBY
1/4" = 1'-0"



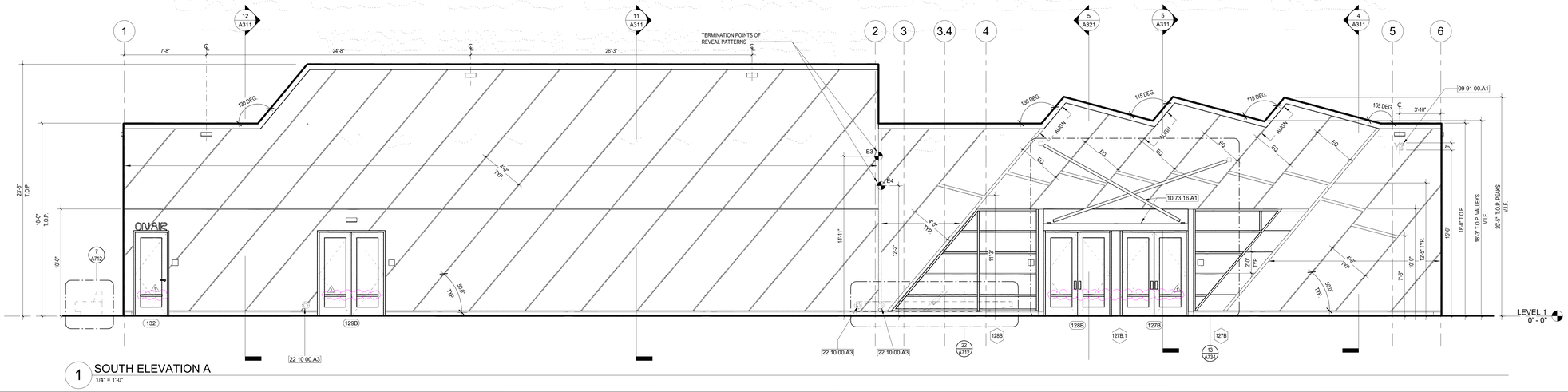
4 EAST ELEVATION A
1/4" = 1'-0"



3 WEST ELEVATION A
1/4" = 1'-0"



2 NORTH ELEVATION A
1/4" = 1'-0"



1 SOUTH ELEVATION A
1/4" = 1'-0"

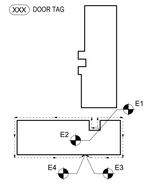
KEYNOTES	
05 50 00.A1	ROOF LADDER
09 91 00.A1	BUILDING ID SIGN (PER CBC 502.1), PAINTED. FONT SHALL BE ARIAL ITALIC. SEE ELEVATION SHEETS A301A AND A302A FOR COLOR INFO.
10 73 16.A1	CANOPY AND STL SUPPORT RODS
22 10 00.A3	OVERFLOW DRAIN COVER. SEE PLUMBING FIXTURE SHEDULE P001 & 30 A852
32 31 13	CHAINLINK FENCE AND GATE

LEGEND AND KEY

E1 WORK POINT, TOP OF REVEAL

XXX WINDOW TAG

XXX DOOR TAG



Struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM
LICENSED ARCHITECT HRAZTAN KEVLIAN 28719 RENEWAL DATE 04/30/25 STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION		
	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

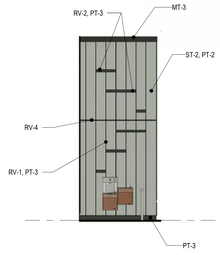
SHEET TITLE

ELEVATIONS

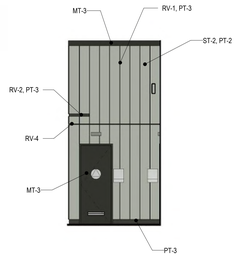
SHEET NUMBER

A301B

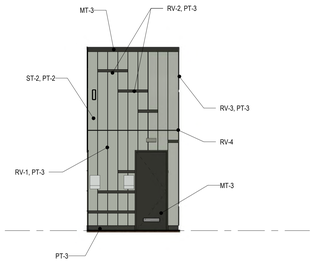
2/27/2025 7:46:50 PM



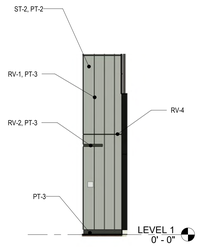
4 RESTROOM ENTRY NORTH - COLOR
3/16" = 1'-0"



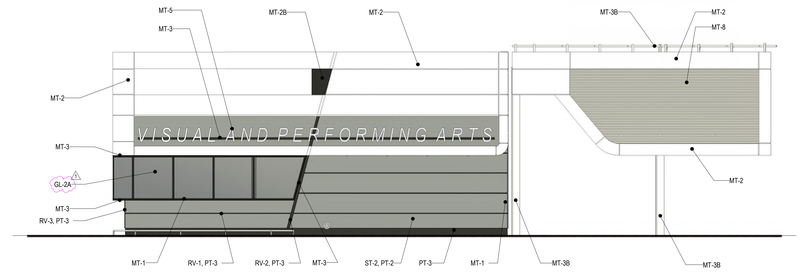
3 RESTROOMS ENTRY - COLOR
3/16" = 1'-0"



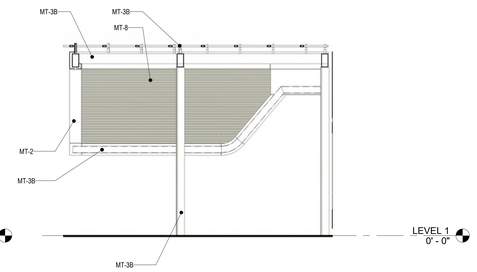
6 RESTROOMS ENTRY C - COLOR
3/16" = 1'-0"



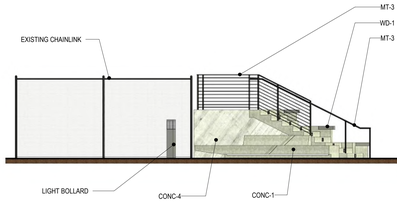
5 RESTROOM ENTRY SOUTH - COLOR
3/16" = 1'-0"

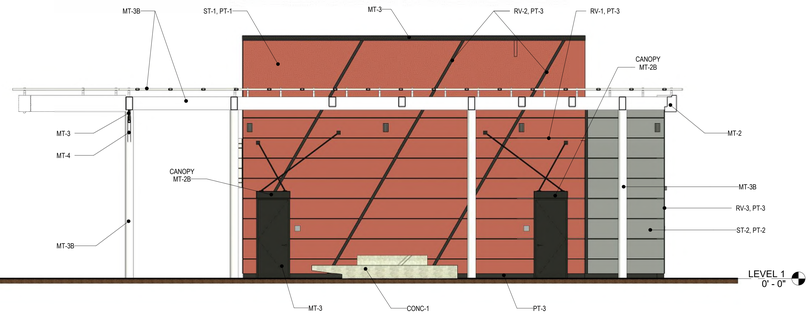


8 NORTH ELEVATION A - COLOR
3/16" = 1'-0"

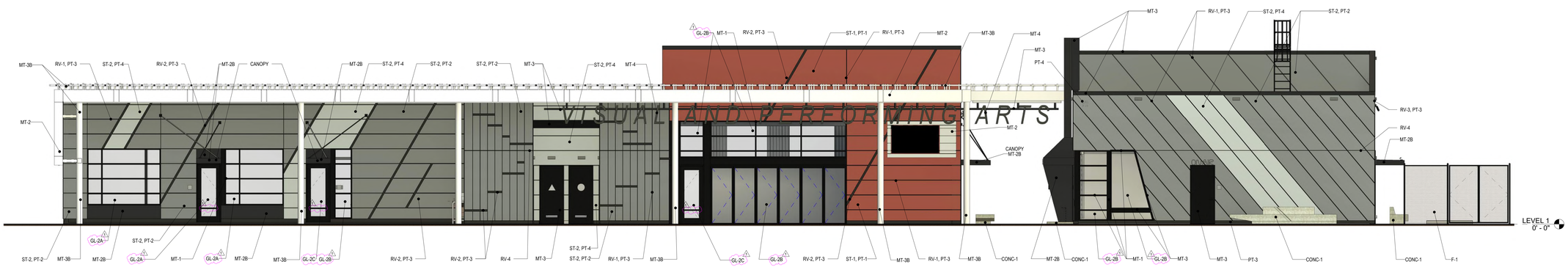


7 SOUTH ELEVATION C - COLOR
3/16" = 1'-0"





2 SOUTH ELEVATION B - COLOR
3/16" = 1'-0"



1 WEST ELEVATION - COLOR
3/16" = 1'-0"

COMPTON COLLEGE VISUAL AND PERFORMING ARTS - MATERIALS LIST:

CMU-1

CONCRETE MASONRY UNITS AT AMPHITHEATER WALLS. BASIS OF DESIGN TO BE ANGELUS PRECISION BLOCK IN STACK BOND PATTERN, MORTAR TO BE GRAY SPEC MIX. SECTION 042200 CONCRETE UNIT MASONRY.

CONC-1

CAST IN PLACE CONCRETE AT BENCHES AND OTHER EXPOSED CONCRETE. SMOOTH SACKED FINISH. FILL AND PATCH FORMWORK PANEL FASTENERS NOT TO BE NOTICEABLE. CONCRETE TO BE PREPARED TO MINIMIZE AIR BUBBLES. POLISH TOP EXPOSED SEATING SURFACES. SEE SECTION 03 330 0 ARCHITECTURAL CONCRETE.

CONC-2

CONCRETE AT PAVING. NATURAL GRAY TOPCAST WASH OFF FINISH CONCRETE PAVING TOPCAST #3 RETARDER (ALTERNATE: LIGHT SANDBLAST IF ACCEPTED BY ARCHITECT AT TIME OF FIELD SAMPLE APPROVAL). SEE SECTION 32 13 00 ARCHITECTURAL CONCRETE PAVING.

CONC-3

NOT USED

CONC-4

CAST IN PLACE BOARD FORMED CONCRETE AT AT AMPHITHEATER WALLS. ARCHITECTURAL GRADE. FORMWORK TO IMPRINT 4" NOMINAL WOOD BANDS PATTERN ON CONCRETE VISIBLE SURFACES, FORMWORK INTERIOR TO BE SHAPED TO ALLOW FOR 1/2" BLEEDING JOINTS BETWEEN 4" WOOD BANDS. BOARDS TO BE ANGLED 50 DEGREES FROM GROUND PLANE, SEE ELEVATIONS FOR DIRECTION OF SLANT. FILL AND PATCH FORMWORK PANEL FASTENERS NOT TO BE NOTICEABLE. CONCRETE TO BE PREPARED TO MINIMIZE AIR BUBBLES. WHEN EXPOSED POLISH TOP EXPOSED SURFACE OF WALLS. SEESECTION 03 33 00 ARCHITECTURAL CONCRETE.

F-1

8 FOOT HIGH CHAINLINK FENCE PROVIDE BLACK PVC COATED FINISH FOR ALL METAL COMPONENTS THROUGHOUT. USE 2" MESH CHAINLINK FENCE OPENINGS MEASURED HORIZONTALLY. USE 9 GAUGE. PROVIDE PVC VINYL SLATS FOR PRIVACY AND SECURITY. DOUBLE WALL SLATS COLOR TO BE REDWOOD. SLATS ARE TO BE INSERTED DIAGONALLY. SECTION 323122 PVC-CLAD CHAIN LINK FENCING

GL-1A

1 1/8" INSULATED GLAZING UNIT (1/4" EXT. + 1/2" AIR SPACE + (2) 3/16" LAMINATED INT.) AT SOUTH WINDOWS. USE VITRO ARCHITECTURAL GLASS. PRODUCT: SOLARBAN 70 SOLAR CONTROL LOW-E GLASS. FINISH: SOLARBAN 70 (2) SOLARBLUE + CLEAR. USE WARM EDGE SPACER. CONTACT: TREVOR HALL 657.243.6267, TRHALL@VITRO.COM. FOR IGU CONTACT: IRENE GONZALEZ 323.659.0063. SECTION 088000 GLAZING.

GL-1B

1" INSULATED GLAZING UNIT (1/4" EXT. + 1/2" AIR SPACE + (2) 1/8" LAMINATED INT.) AT SOUTH DOORS. USE VITRO ARCHITECTURAL GLASS. PRODUCT: SOLARBAN 70 SOLAR CONTROL LOW-E GLASS. FINISH: SOLARBAN 70 (2) SOLARBLUE + CLEAR. USE WARM EDGE SPACER. CONTACT: TREVOR HALL 657.243.6267, TRHALL@VITRO.COM. FOR IGU CONTACT: IRENE GONZALEZ 323.659.0063. SECTION 088000 GLAZING.

GL-2A

1" INSULATED GLAZING UNIT (1/4" EXT. + 1/2" AIR SPACE + 1/4" INT.) AT EXTERIOR WINDOWS AND DOORS WHERE NOTED. USE VITRO ARCHITECTURAL GLASS. PRODUCT: SOLARBAN 70 SOLAR CONTROL LOW-E GLASS. FINISH: SOLARBAN 70 (2) CLEAR + CLEAR. USE WARM EDGE SPACER. CONTACT: TREVOR HALL 657.243.6267, TRHALL@VITRO.COM. FOR IGU CONTACT: IRENE GONZALEZ 323.659.0063. SECTION 088000 GLAZING.

GL-2B

1 1/8" INSULATED GLAZING UNIT (1/4" EXT. + 1/2" AIR SPACE + (2) 3/16" LAMINATED INT.) AT EXTERIOR WINDOWS WHERE NOTED. USE VITRO ARCHITECTURAL GLASS. PRODUCT: SOLARBAN 70 SOLAR CONTROL LOW-E GLASS. FINISH: SOLARBAN 70 (2) CLEAR + CLEAR. USE WARM EDGE SPACER. CONTACT: TREVOR HALL 657.243.6267, TRHALL@VITRO.COM. FOR IGU CONTACT: IRENE GONZALEZ 323.659.0063. SECTION 088000 GLAZING.

GL-2C

1" INSULATED GLAZING UNIT (1/4" EXT. + 1/2" AIR SPACE + (2) 1/8" LAMINATED INT.) AT EXTERIOR DOORS WHERE NOTED. USE VITRO ARCHITECTURAL GLASS. PRODUCT: SOLARBAN 70 SOLAR CONTROL LOW-E GLASS. FINISH: SOLARBAN 70 (2) CLEAR + CLEAR. USE WARM EDGE SPACER. CONTACT: TREVOR HALL 657.243.6267, TRHALL@VITRO.COM. FOR IGU CONTACT: IRENE GONZALEZ 323.659.0063. SECTION 088000 GLAZING.

MT-1

PAINTED ALUMINUM MULLIONS AT ALL EXTERIOR WINDOWS AND ALUMINUM DOOR ASSEMBLIES AND STOREFRONT ALUMINUM ASSEMBLIES. USE PPG DURANAR UCS1590XL MEDIUM GRAY. WWW.PPGMETALCOATINGS.COM CONTACT: 888.PPG.IDEA. SECTION 084313 ALUMINUM-FRAMED STOREFRONTS AND ENTRANCES

MT-2

COMPOSITE METAL PANEL AT TRELLIS FASCIA AND CORNICE ELEMENTS. USE ALUCOBOND SILVER METALLIC PVDF-2/GLOSS LEVEL 20. NO RIVETS OR THREADED FASTENERS VISIBLE FROM EXTERIOR (INCLUDES ALL SITE LINES OF JOINT CONDITIONS). CONTACT: JOE PEBLEY 858.382.5166 JOE.PEBLEY@3ACOMPOSITES.COM. SECTION 074219 COMPOSITE METAL PANELS. SEE ACM SHEETS ACM001-ACM011.

MT-2B

COMPOSITE METAL PANEL AT CANOPY ELEMENTS. USE ALUCOBOND JLR GRAY METALLIC PVDF-2/GLOSS LEVEL 20. NO RIVETS OR THREADED FASTENERS VISIBLE FROM EXTERIOR (INCLUDES ALL SITE LINES OF JOINT CONDITIONS). CONTACT: JOE PEBLEY 858.382.5166 JOE.PEBLEY@3ACOMPOSITES.COM. SECTION 074219 COMPOSITE METAL PANELS. SEE ACM SHEETS ACM001-ACM011

MT-3

PAINTED EXPOSED EXTERIOR STEEL BEAMS, MISC STEEL ASSEMBLY, STEEL GUARDRAIL ASSEMBLY, STEEL PAINTED FENCE ASSEMBLY, AND HOLLOW METAL STEEL DOOR ASSEMBLIES AND FRAMES. PAINT TO BE 3-COAT ZINC/EPOXY/METALLIC FLUOROPOLYMER SYSTEM. USE TNEMEC PAINT. TOPCOAT TO BE SERIES 1078V METALLIC FLUORONAR. COLOR TO BE 61MT DARK ALUMINUM. CONTACT: CHRIS HILLE 720.278.4817, CHILLE@TNEMEC.COM, WWW.TNEMEC.COM. SECTION 099600 HIGH PERFORMANCE COATINGS.

MT-3B

PAINTED EXPOSED EXTERIOR STEEL COLUMNS, BEAMS AT TRELLIS. PAINT TO BE 3-COAT ZINC/EPOXY/METALLIC FLUOROPOLYMER SYSTEM. USE TNEMEC PAINT. TOPCOAT TO BE SERIES 1078V METALLIC FLUORONAR. COLOR TO BE BRIGHT ALUMINUM. CONTACT: CHRIS HILLE 720.278.4817, CHILLE@TNEMEC.COM, WWW.TNEMEC.COM. SECTION 099600 HIGH PERFORMANCE COATINGS.

MT-4

PAINTED STEEL COMPTON COLLEGE GRAPHIC BASE COLOR. PAINT TO BE 3-COAT ZINC/EPOXY/METALLIC FLUOROPOLYMER SYSTEM. USE TNEMEC PAINT. TOPCOAT TO BE SERIES 1078V METALLIC FLUORONAR. COLOR TO BE 75MT BLACK BRONZE. CONTACT: CHRIS HILLE 720.278.4817, CHILLE@TNEMEC.COM, WWW.TNEMEC.COM. SECTION 099600 HIGH PERFORMANCE COATINGS.

MT-5

PAINTED STEEL COMPTON COLLEGE GRAPHIC ACCENT COLOR. PAINT TO BE 3-COAT ZINC/EPOXY/METALLIC FLUOROPOLYMER SYSTEM. USE TNEMEC PAINT. TOPCOAT TO BE SERIES 1078V METALLIC FLUORONAR. COLOR TO BE 45MT LIGHT STEEL. CONTACT: CHRIS HILLE 720.278.4817, CHILLE@TNEMEC.COM, WWW.TNEMEC.COM. SECTION 099600 HIGH PERFORMANCE COATINGS.

MT-6 (NOT USED)

MT-7 (NOT USED)

MT-8

PREFORMED WALL PANEL, MORIN MATRIX MX-1 WITH EXPOSED FASTENERS. USE PERFORATED CIRCULAR STAGGERED HOLES: 3/16" ROUND ON 5/16" STAGGERED CENTERS, 33% OPEN AREA, FINISH TO BE FLUROPON PVDF KYNAR500. COLOR TO BE DOVE GRAY, BACKSIDE OFF-WHITE WASH COAT, USE ALUMINUM 0.05" THICKNESS. CONTACT: 1.800.640.6501, WWW.MORINCORP.COM. SECTION 074213 PREFORMED WALL PANELS.

PT-1

EXTERIOR BASE PAINT. USE SHERWIN-WILLIAMS SW 7584 RED THEATRE. WWW.SHERWIN-WILLIAMS.COM CONTACT: SHERWIN-WILLIAMS PASADENA 626.396.1142. SECTION 099000 PAINTING, 09900A PAINT FINISH SCHEDULE.

PT-2

EXTERIOR BASE PAINT. USE SHERWIN-WILLIAMS SW 7076 CYBERSPACE. WWW.SHERWIN-WILLIAMS.COM CONTACT: SHERWIN-WILLIAMS PASADENA 626.396.1142. SECTION 099000 PAINTING, 09900A PAINT FINISH SCHEDULE.

PT-3

EXTERIOR PAINT AT REVEALS AND EXTERIOR FACE OF CONCRETE CURBS. USE SHERWIN-WILLIAMS SW 6258 TRICORN BLACK. WWW.SHERWIN-WILLIAMS.COM CONTACT: SHERWIN-WILLIAMS PASADENA 626.396.1142. SECTION 099000 PAINTING, 09900A PAINT FINISH SCHEDULE.

PT-4

EXTERIOR BASE PAINT ACCENT. USE SHERWIN-WILLIAMS SW 7071 GRAY SCREEN. WWW.SHERWIN-WILLIAMS.COM CONTACT: SHERWIN-WILLIAMS PASADENA 626.396.1142. SECTION 099000 PAINTING, 09900A PAINT FINISH SCHEDULE.

RV-1

3/4" WIDE x 3/4" DEEP PAINTED EXT STUCCO PLASTER HORIZONTAL, VERTICAL, AND DIAGONAL REVEALS. BASIS OF DESIGN: FRY REGLET CHANNEL SCREED PCS-75-75. COLOR TO MATCH PT-3. FRYREGLET.COM. SECTION 092400 LATH & PORTLAND CEMENT PLASTER.

RV-2

3" WIDE x 3/4" DEEP PAINTED EXT STUCCO PLASTER DIAGONAL REVEAL. BASIS OF DESIGN: FRY REGLET CHANNEL SCREED PCS-75-300, TYP. BASIS OF DESIGN: FRY REGLET FPM-75-300, WHERE ADJACENT TO STOREFRONT. COLOR TO MATCH PT-3. SECTION 092400 LATH & PORTLAND CEMENT PLASTER.

RV-3

3/4" WIDE x 3/4" DEEP PAINTED EXT STUCCO PLASTER VERTICAL CORNER REVEAL. BASIS OF DESIGN: FRY REGLET X CORNER MOLDING PXM-75-75. COLOR TO MATCH PT-3. SEE DETAIL. SECTION 092400 LATH & PORTLAND CEMENT PLASTER/ A802

RV-4

1/4" WIDE x 1/4" DEEP REGLET. SECTION 092400 LATH & PORTLAND CEMENT PLASTER.

RF-1

BASE ROOFING MEMBRANE TO BE PVC THERMOPLASTIC MEMBRANE ROOFING. USE SARNAFIL G410 80, COLOR TO BE WHITE. CONTACT: ROB MALES 562.676.0459 ROB@DESIGNTWC.COM. SECTION 075419 PVC ROOFING.

ST-1

EXTERIOR COLOR COAT STUCCO CEMENT PLASTER. USE LA HABRA 20/30 SAND FLOAT FINISH. BASE COLOR TO BE BASE 200 X-278 (42) TRABUCO. STUCCO TO BE PAINTED PT-1. WWW.LAHABRASTUCCO.COM CONTACT: TED JONES 714.778.2266. SECTION 092400 LATH & PORTLAND CEMENT PLASTER.

ST-2

EXTERIOR COLOR COAT STUCCO CEMENT PLASTER. USE LA HABRA 20/30 SAND FLOAT FINISH. BASE COLOR TO BE BASE 200 X-16 (57) SILVER GREY. STUCCO TO BE PAINTED PT-2. WWW.LAHABRASTUCCO.COM CONTACT: TED JONES 714.778.2266. SECTION 092400 LATH & PORTLAND CEMENT PLASTER.

WD-1

GLULAM AT AMPHITHEATER BENCH SEATS. BASIS OF DESIGN TO BE GLULAM PLUS DOUGLAS FIR 3 1/8" DEEP x 17 3/4" WIDE. FOR FINISH SEE SPECIFICATIONS SECTION 061813 GLUED-LAMINATED BEAMS.

NOTES:

CONTRACTOR TO SUBMIT SAMPLES OF ALL MATERIALS AND FINISHES SPECIFIED HEREIN FOR ARCHITECT'S APPROVAL PRIOR TO INSTALLATION. CONTRACTOR IS TO MAKE EVERY EFFORT TO ORDER MATERIALS SPECIFIED HEREIN IN A TIMELY MANNER TO TAKE INTO ACCOUNT LEAD TIMES ASSOCIATED WITH MATERIALS SPECIFIED HEREIN.

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

LICENSED ARCHITECT HRAZTAN KEVLIAN 28719 RENEWAL DATE 04/30/25 STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

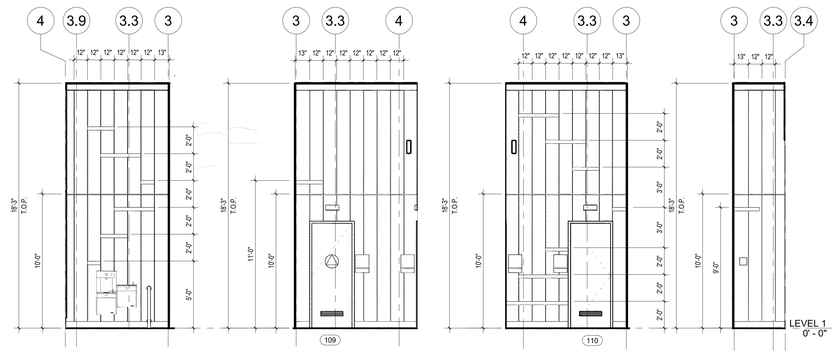
SHEET TITLE

ELEVATIONS - MATERIAL

SHEET NUMBER

A302A

2/27/2025 7:47:04 PM

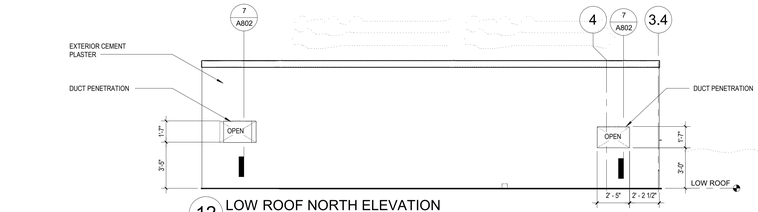


11 RESTROOM ENTRY NORTH
1/4" = 1'-0"

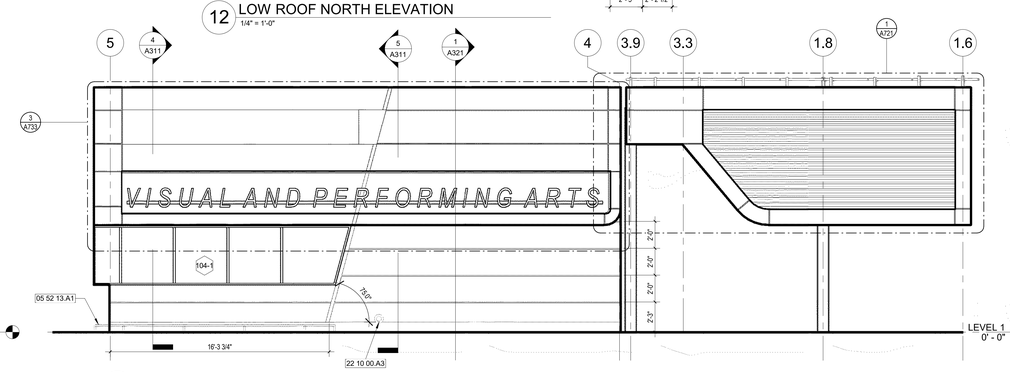
10 RESTROOMS ENTRY
1/4" = 1'-0"

9 RESTROOMS ENTRY C
1/4" = 1'-0"

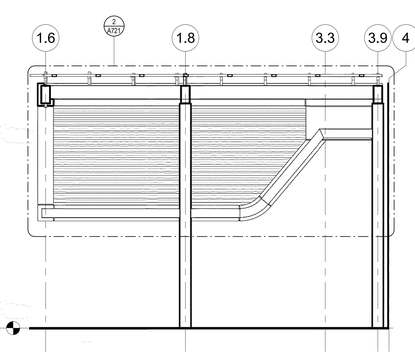
8 RESTROOM ENTRY SOUTH
1/4" = 1'-0"



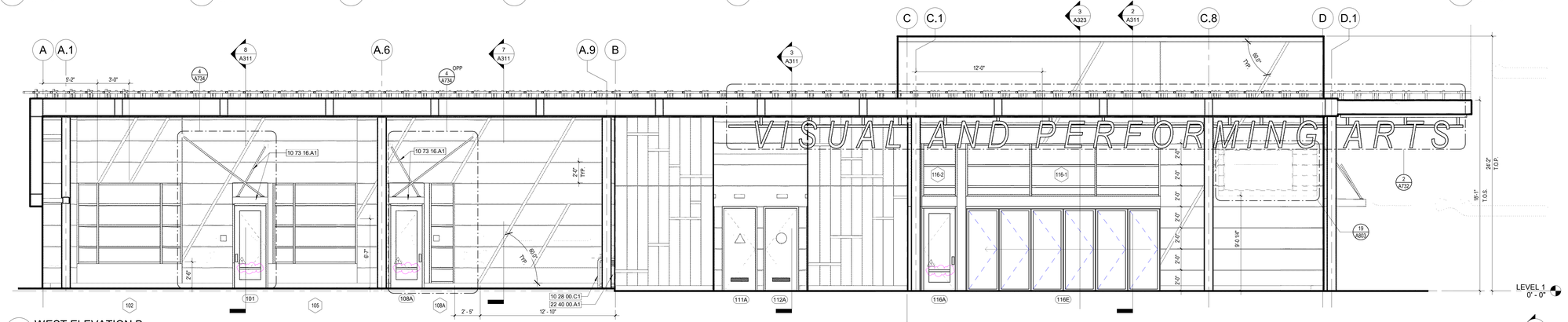
12 LOW ROOF NORTH ELEVATION
1/4" = 1'-0"



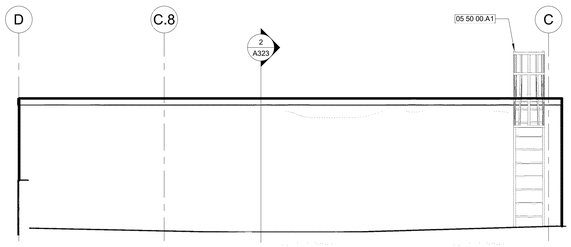
7 NORTH ELEVATION B
1/4" = 1'-0"



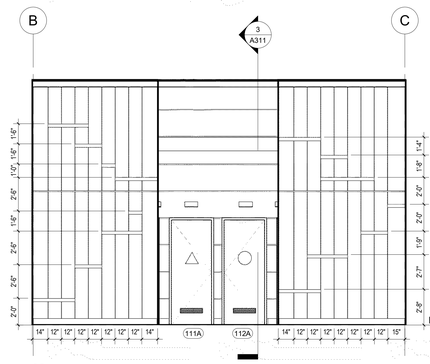
6 SOUTH ELEVATION C
1/4" = 1'-0"



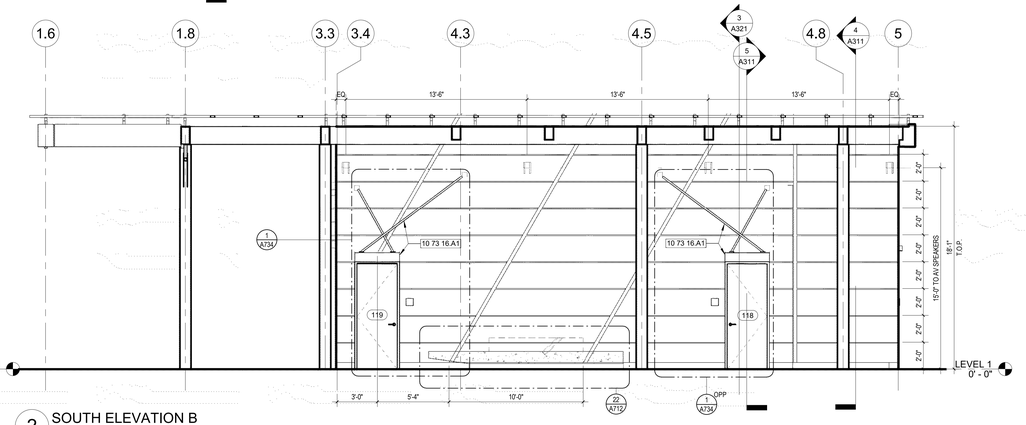
5 WEST ELEVATION B
1/4" = 1'-0"



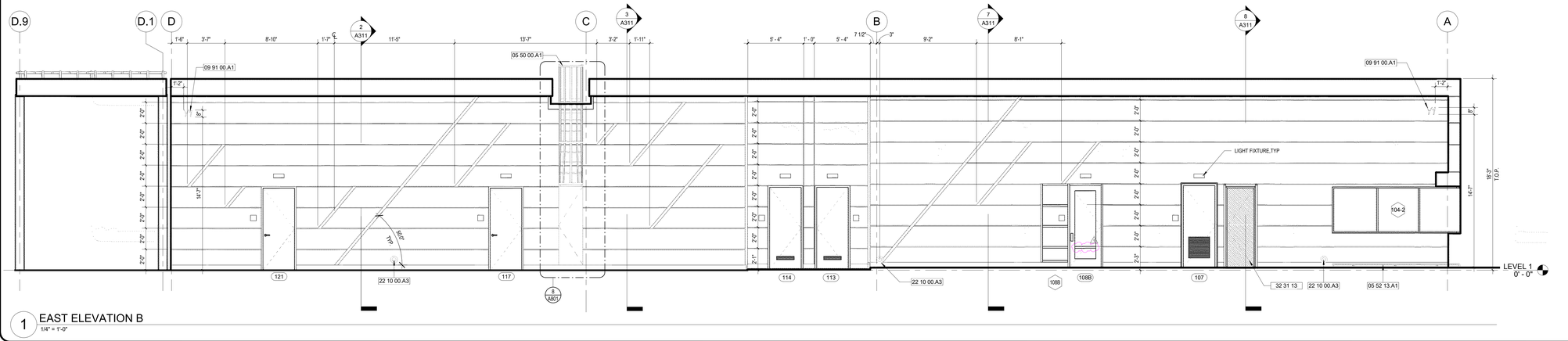
4 EAST ELEVATION PORTION B
1/4" = 1'-0"



3 WEST ELEVATION C
1/4" = 1'-0"



2 SOUTH ELEVATION B
1/4" = 1'-0"



1 EAST ELEVATION B
1/4" = 1'-0"

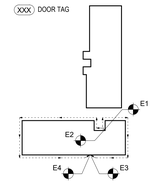
KEYNOTES	
05 50 00.A1	ROOF LADDER
05 52 13.A1	CANE DETECTION RAIL. SEE 22/A803
09 91 00.A1	BUILDING ID SIGN (PER CBC 502.1), PAINTED. FONT SHALL BE ARIAL ITALIC. SEE ELEVATION SHEETS A301A AND A302A FOR COLOR INFO.
10 28 00.C1	Grab Bar. See A411 Toilet and Shower Accessories Legend.
10 73 16.A1	CANOPY AND STL SUPPORT RODS
22 10 00.A3	OVERFLOW DRAIN COVER. SEE PLUMBING FIXTURE SHEDULE P001 & 30 AB02
22 40 00.A1	DRINKING FOUNTAIN
32 31 13	CHAINLINK FENCE AND GATE

LEGEND AND KEY

E1 WORK POINT, TOP OF REVEAL

XXX WINDOW TAG

XXX DOOR TAG



Struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

LICENSED ARCHITECT HRAZTAN KEVIN AZTIAN 28719 RENEWAL DATE 04/30/25 STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION		
	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

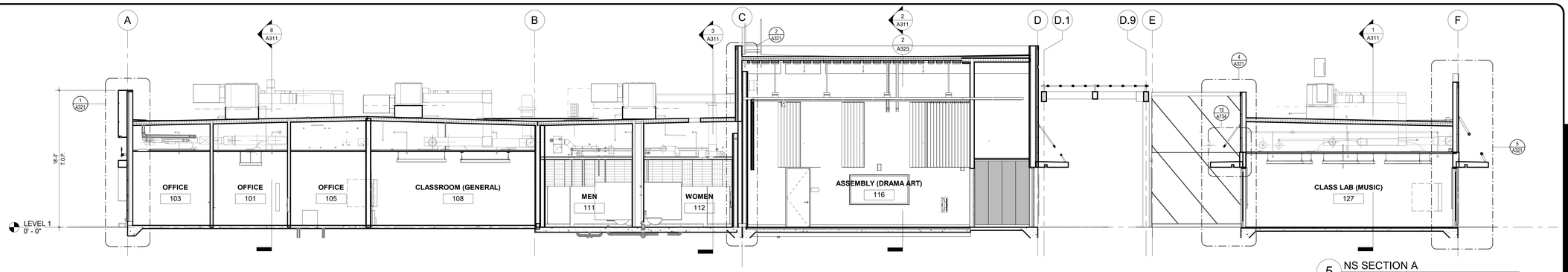
SHEET TITLE

ELEVATIONS

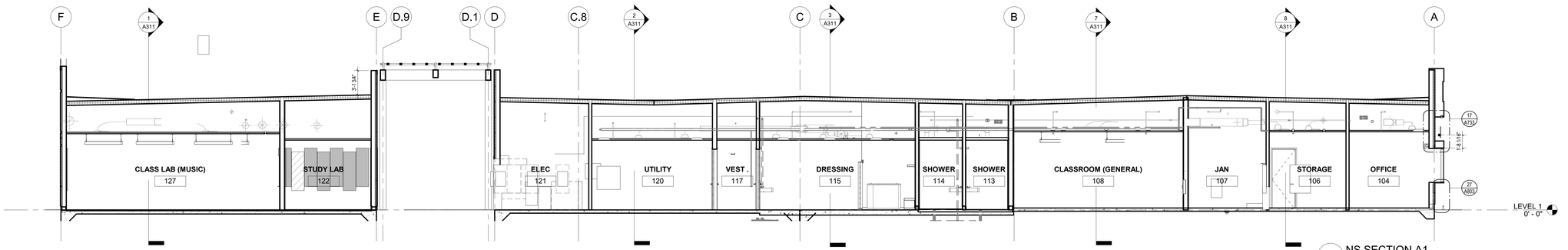
SHEET NUMBER

A302B

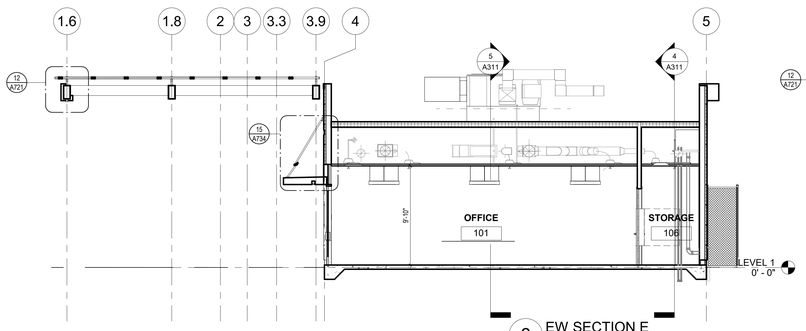
1/23/2025 1:19:50 PM



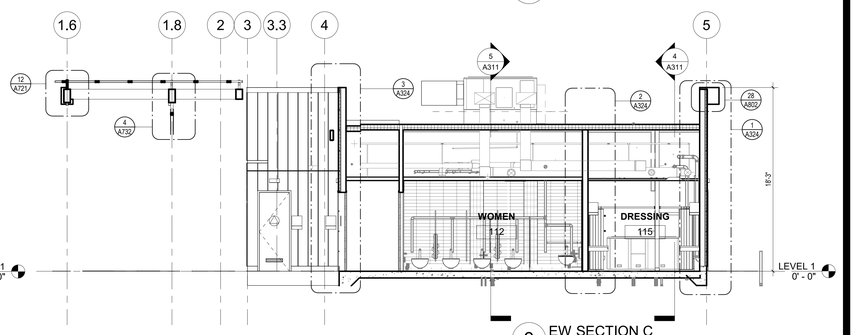
5 NS SECTION A
3/16" = 1'-0"



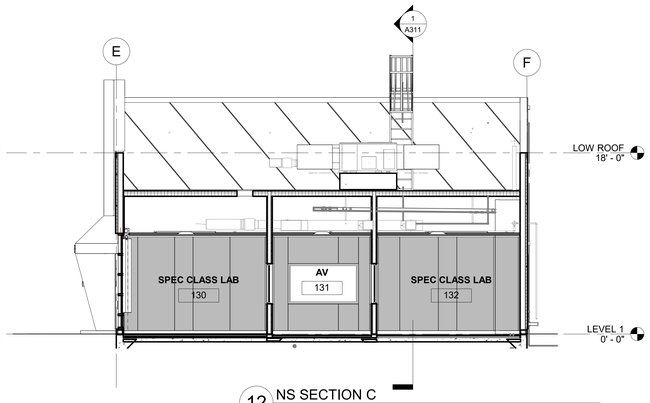
4 NS SECTION A1
3/16" = 1'-0"



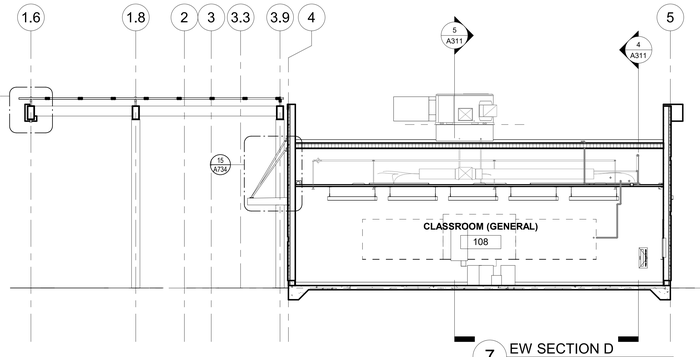
8 EW SECTION E
3/16" = 1'-0"



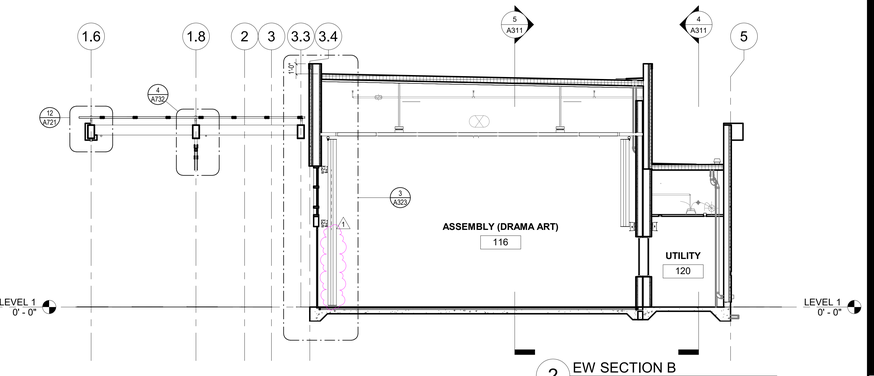
3 EW SECTION C
3/16" = 1'-0"



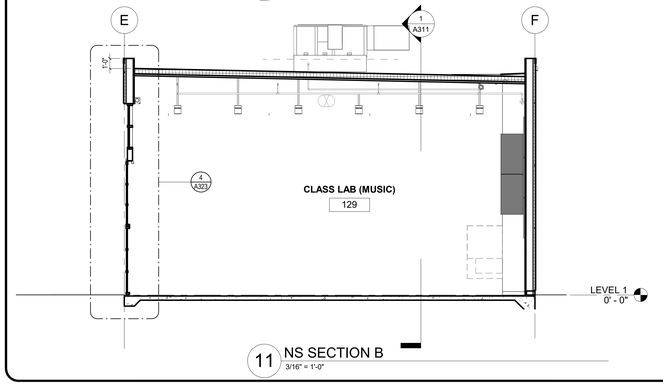
12 NS SECTION C
3/16" = 1'-0"



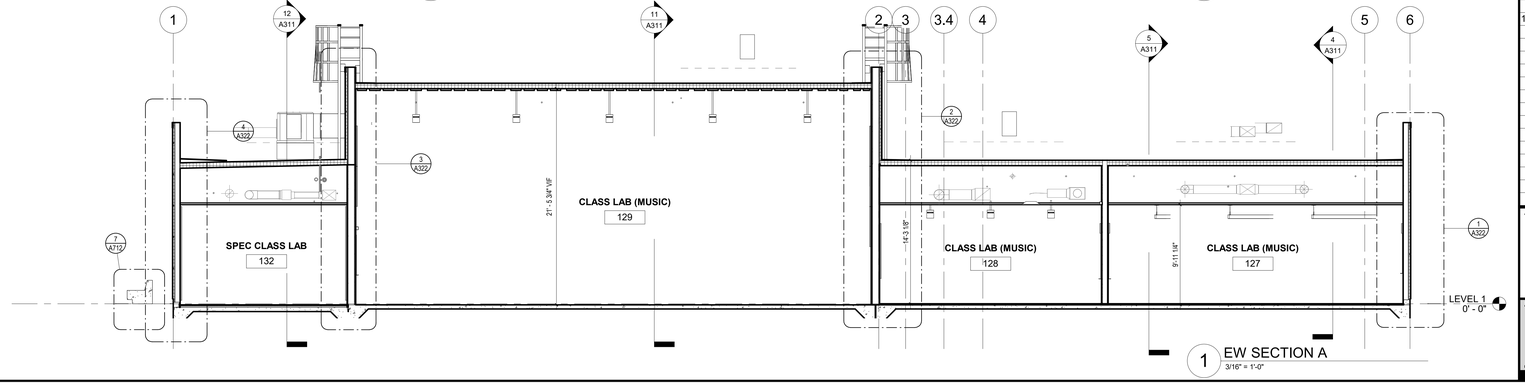
7 EW SECTION D
3/16" = 1'-0"



2 EW SECTION B
3/16" = 1'-0"



11 NS SECTION B
3/16" = 1'-0"



1 EW SECTION A
3/16" = 1'-0"

Struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM
LICENSED ARCHITECT HRAZTAN AZATYAN 28719 RENEWAL DATE 04/30/25 STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

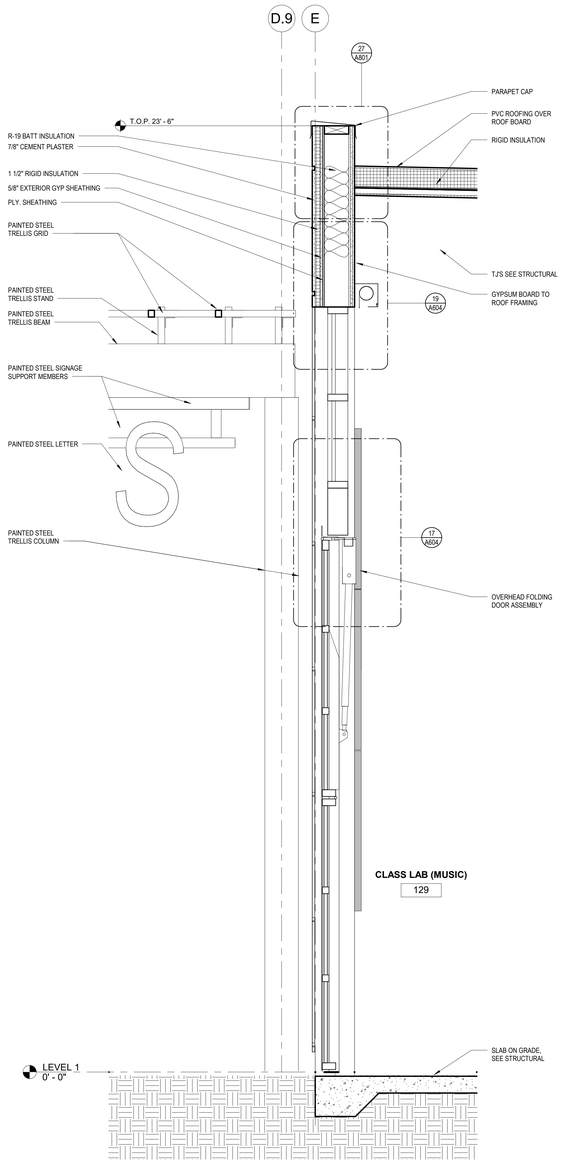
SHEET TITLE

BUILDING SECTIONS

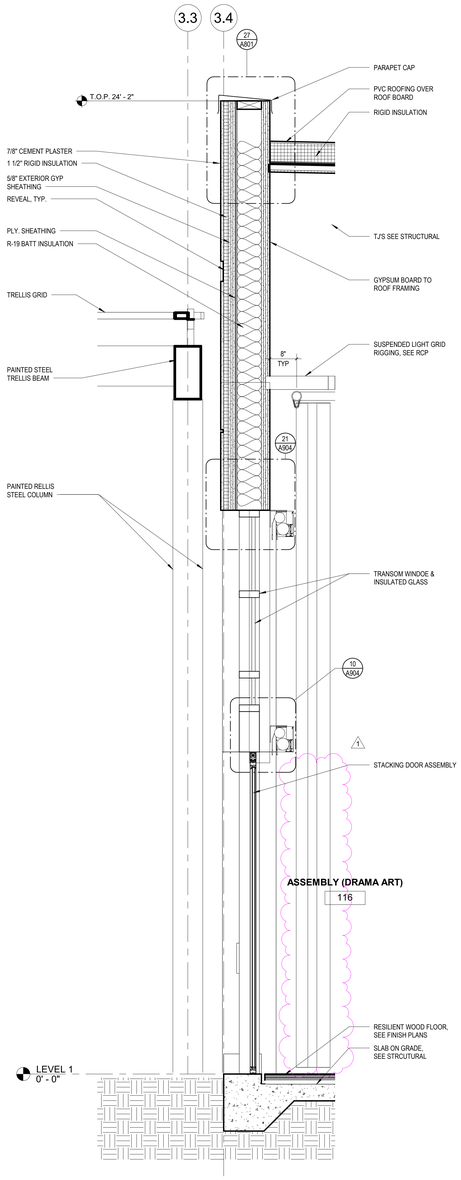
SHEET NUMBER

A311

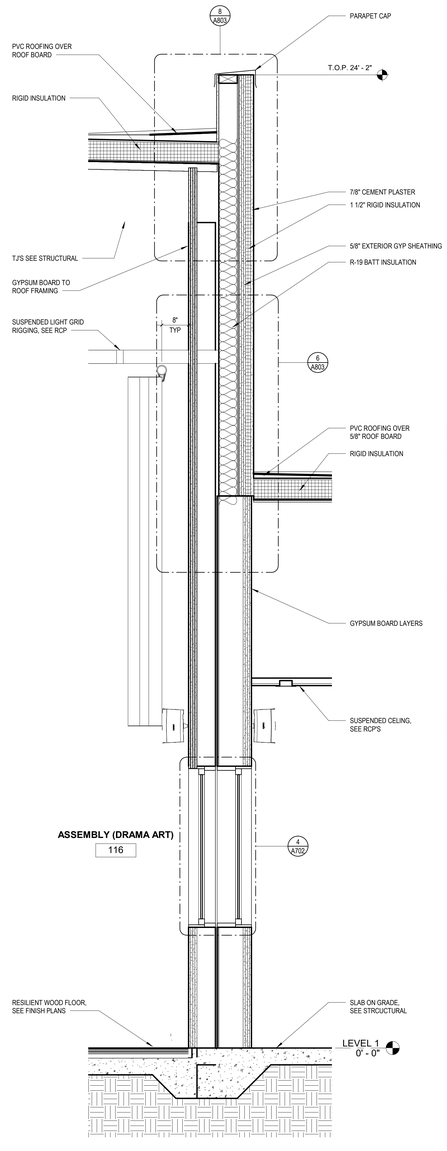
1/23/2025 1:19:52 PM



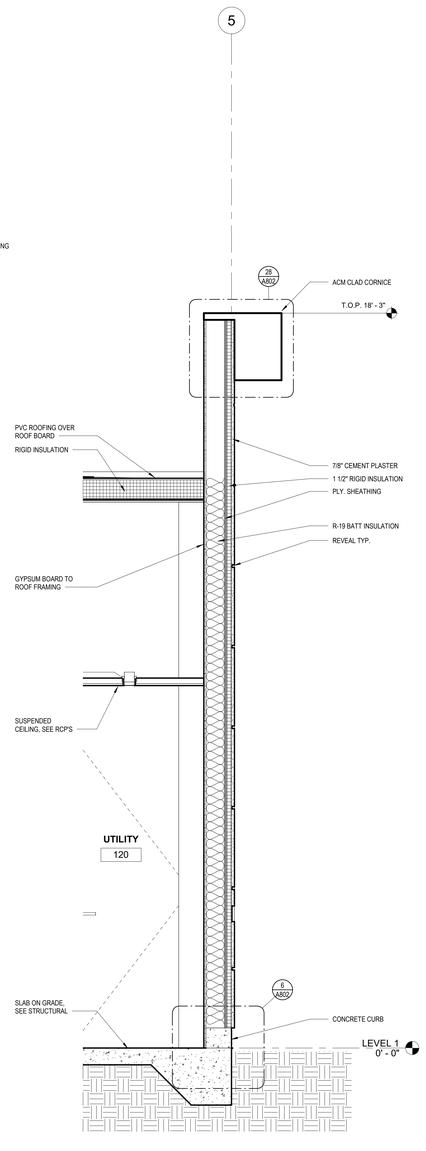
4 EW SECTION B AT CLASS LAB
3/4" = 1'-0"



3 EW SECTION B AT ASSEMBLY
3/4" = 1'-0"



2 EW SECTION B AT ASSEMBLY / UTILITY
3/4" = 1'-0"



1 EW SECTION B AT UTILITY
3/4" = 1'-0"

Struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM
LICENSED ARCHITECT HRAZTAN KEITH AN 28719 RENEWAL DATE 04/30/25 STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

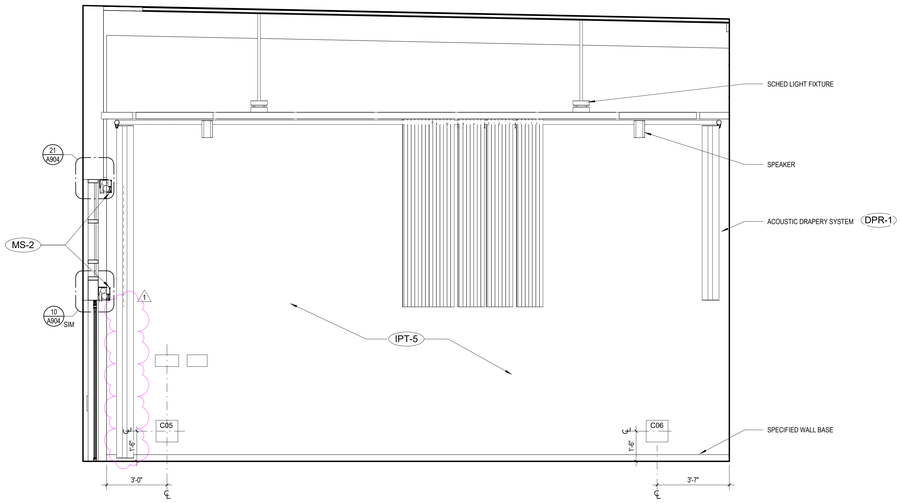
SHEET TITLE

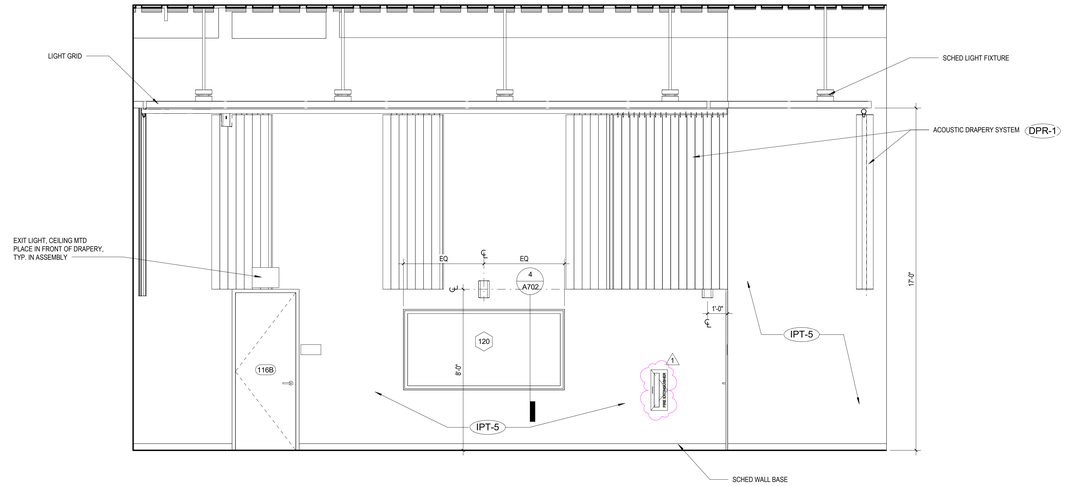
WALL SECTIONS

SHEET NUMBER

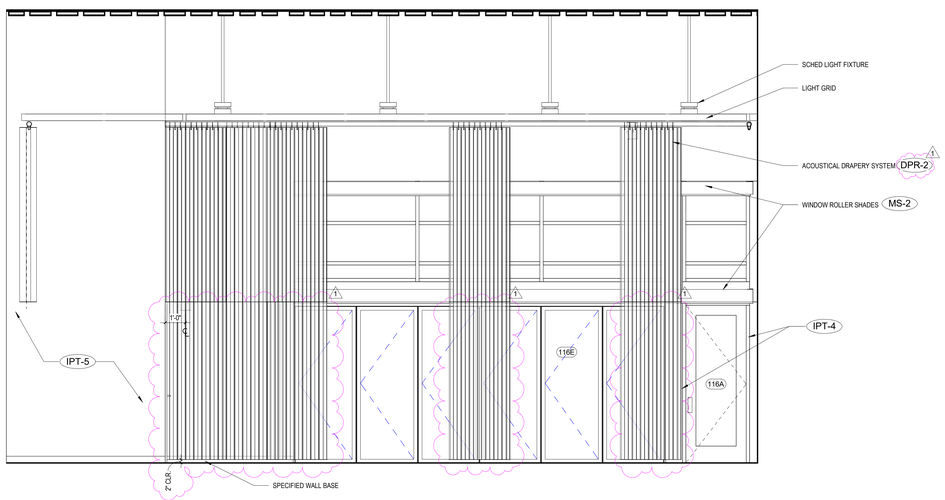
A323

2/12/2025 4:22:14 PM

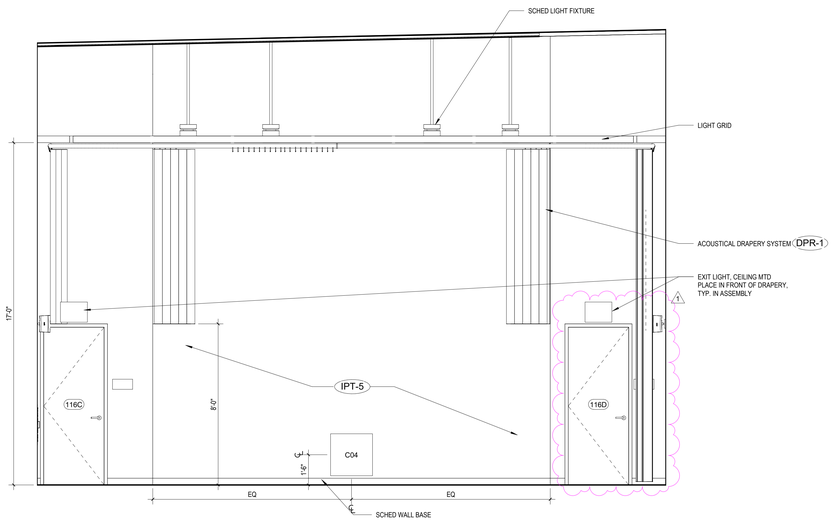




2 ASSEMBLY NORTH ELEVATION
3/8" = 1'-0"

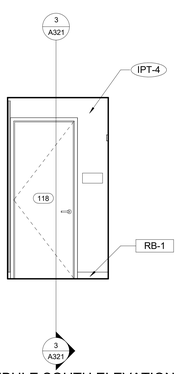


1 ASSEMBLY EAST ELEVATION
3/8" = 1'-0"

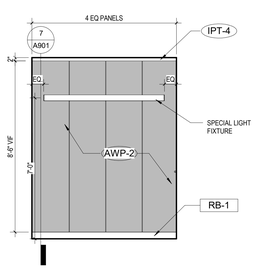


4 ASSEMBLY WEST ELEVATION
3/8" = 1'-0"

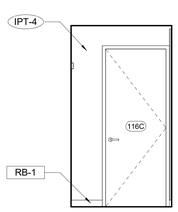
3 ASSEMBLY SOUTH ELEVATION
3/8" = 1'-0"



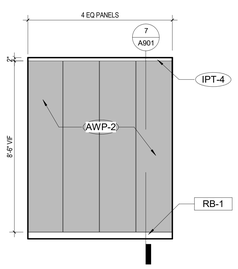
8 VESTIBULE SOUTH ELEVATION
3/8" = 1'-0"



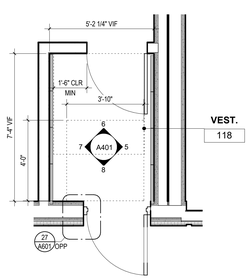
7 VESTIBULE WEST ELEVATION
3/8" = 1'-0"



6 VESTIBULE NORTH ELEVATION
3/8" = 1'-0"



5 VESTIBULE EAST ELEVATION
3/8" = 1'-0"



9 VESTIBULE - PLAN
3/8" = 1'-0"

Struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM
LICENSED ARCHITECT HRAZTAN KEVLIAN 28719 RENEWAL DATE 04/30/25 STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD,
COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

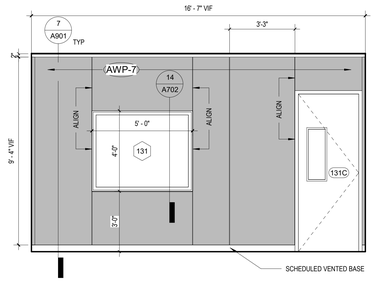
SHEET TITLE

INTERIOR ELEVATIONS & PLAN

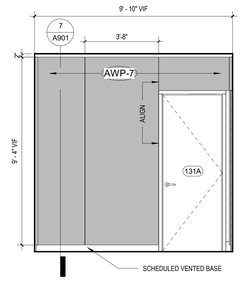
SHEET NUMBER

A401

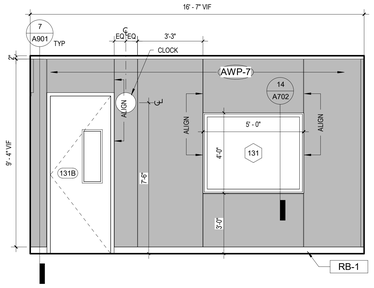
1/23/2025 1:20:05 PM



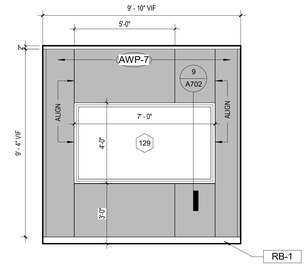
4 AV SOUTH ELEVATION
3/8" = 1'-0"



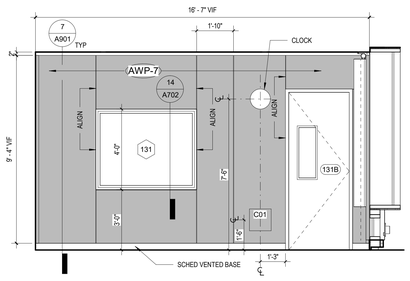
2 AV WEST ELEVATION
3/8" = 1'-0"



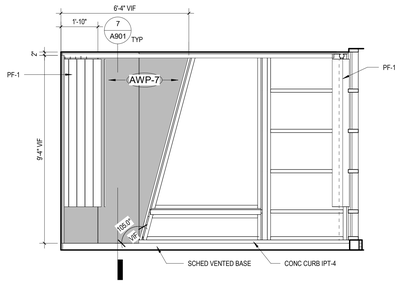
3 AV NORTH ELEVATION
3/8" = 1'-0"



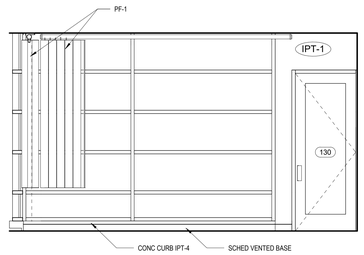
1 AV EAST ELEVATION
3/8" = 1'-0"



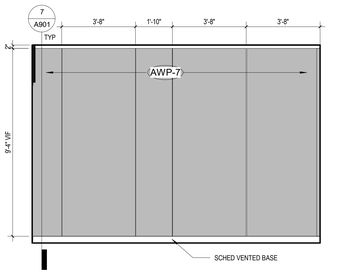
8 SPECIAL CLASS LAB 130 SOUTH ELEVATION
3/8" = 1'-0"



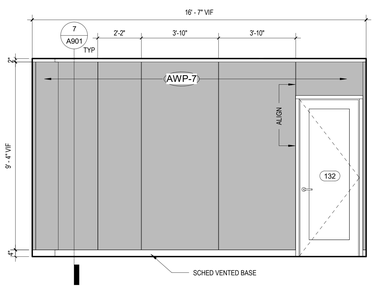
7 SPECIAL CLASS LAB 130 WEST ELEVATION
3/8" = 1'-0"



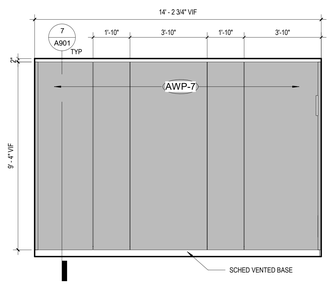
6 SPECIAL CLASS LAB 130 NORTH ELEVATION
3/8" = 1'-0"



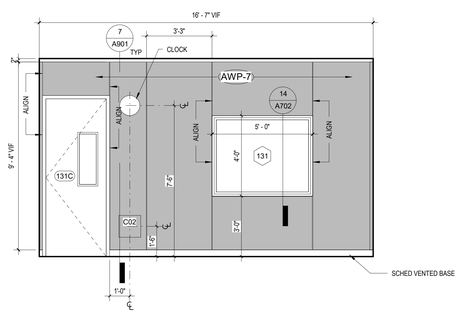
5 SPECIAL CLASS LAB 130 EAST ELEVATION
3/8" = 1'-0"



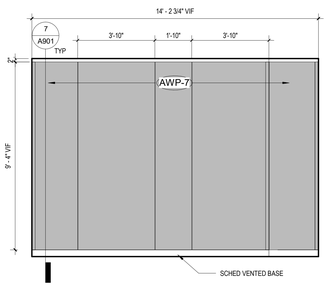
12 SPECIAL CLASS LAB 132 SOUTH ELEVATION
3/8" = 1'-0"



11 SPECIAL CLASS LAB 132 WEST ELEVATION
3/8" = 1'-0"

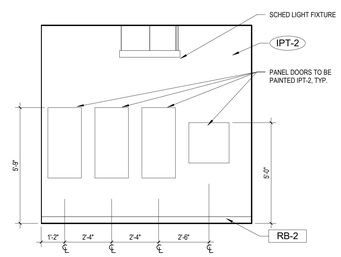


10 SPECIAL CLASS LAB 132 NORTH ELEVATION
3/8" = 1'-0"

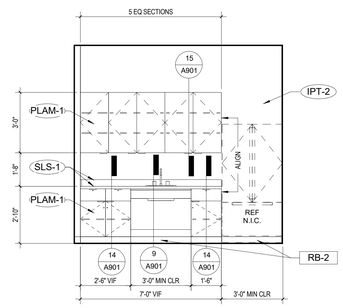


9 SPECIAL CLASS LAB 132 EAST ELEVATION
3/8" = 1'-0"

15 OFFICE 101 NORTH ELEVATION
3/8" = 1'-0"



14 OFFICE 101 BREAK AREA WEST ELEVATION
3/8" = 1'-0"



13 OFFICE 101 BREAK AREA ELEVATION
3/8" = 1'-0"

Struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM
LICENSED ARCHITECT HRAZTAN AZATYAN 28719 RENEWAL DATE 04/30/25 STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

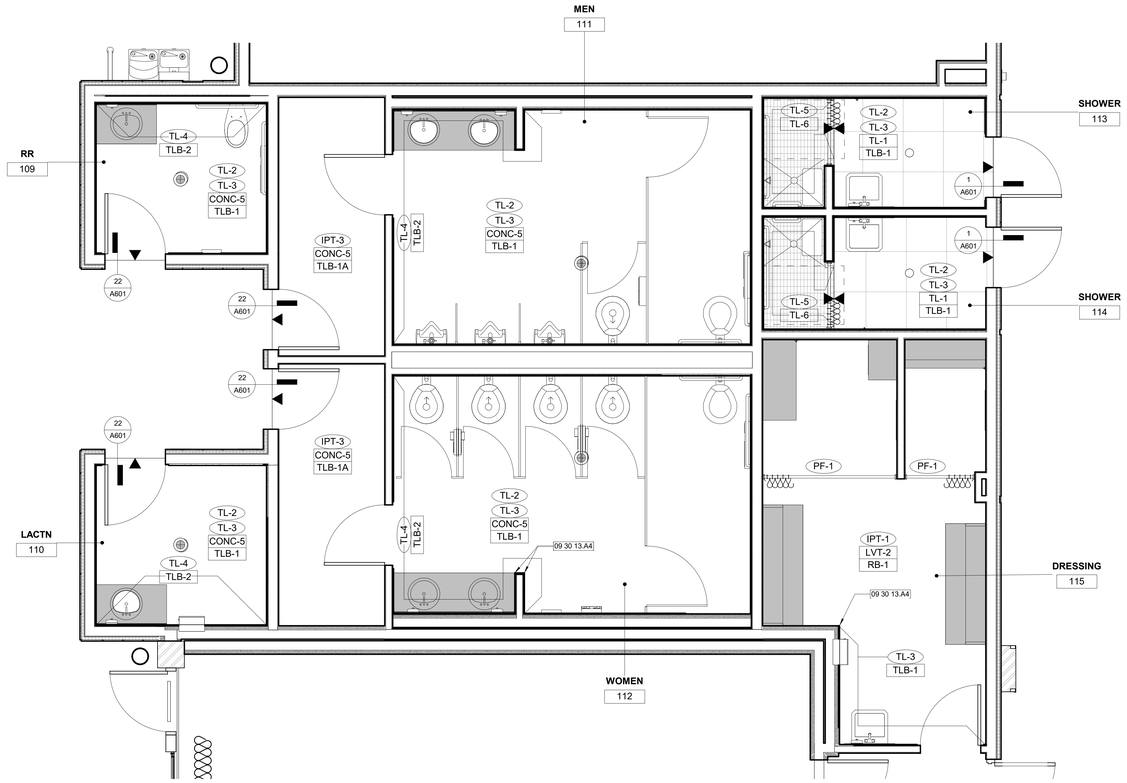
ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

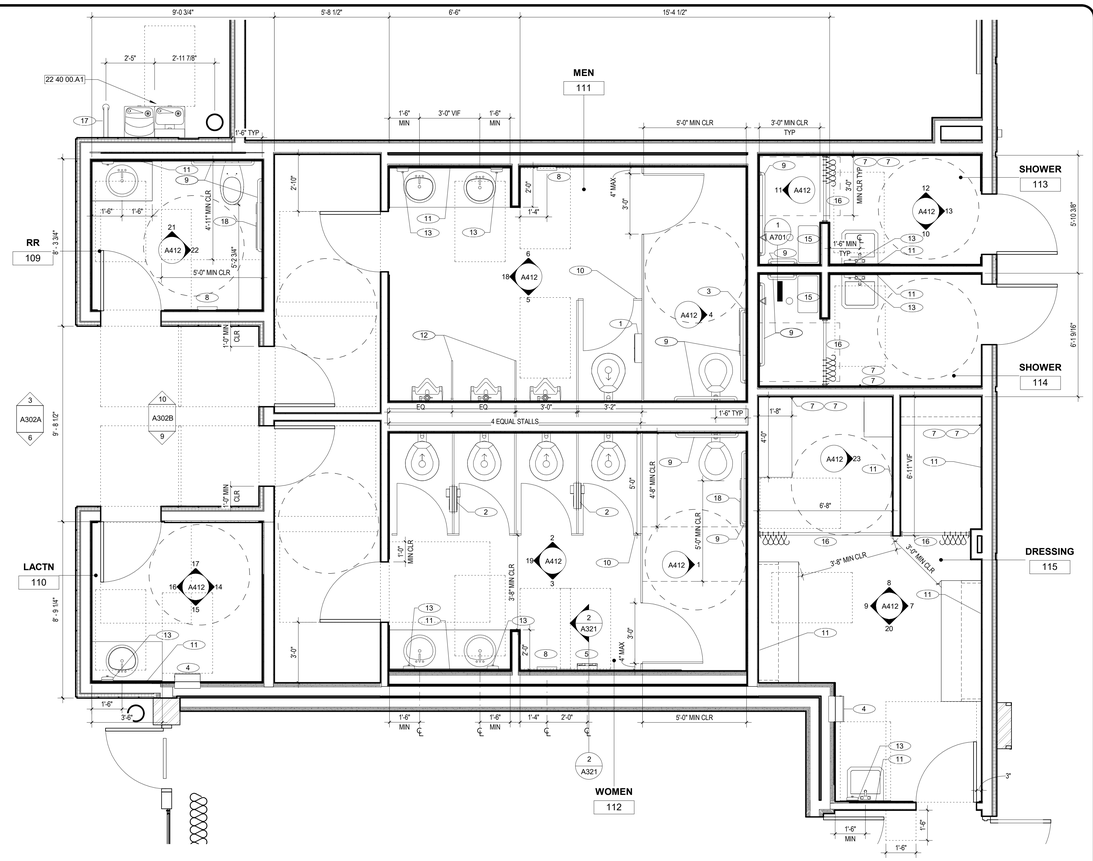
SHEET TITLE
INTERIOR ELEVATIONS

SHEET NUMBER
A404

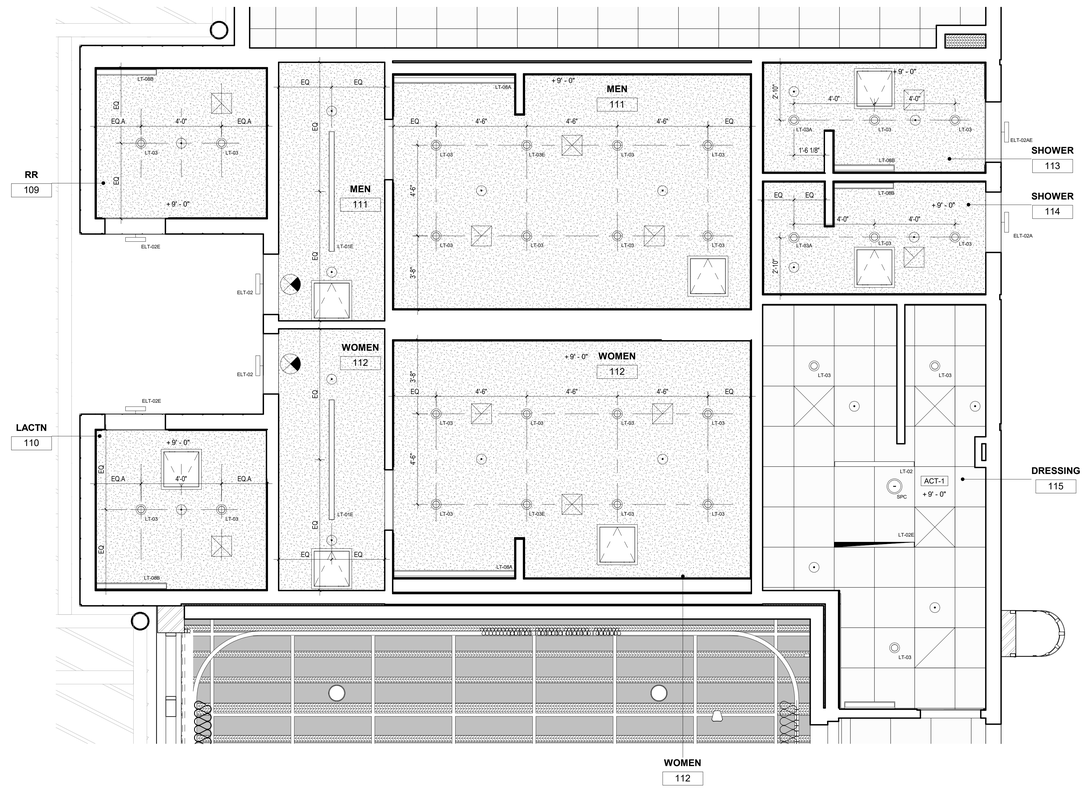
2/27/2025 7:47:19 PM



2 ENLARGED RESTROOM FINISH PLAN
3/8" = 1'-0"



1 ENLARGED RESTROOM ACCESSORY PLAN
3/8" = 1'-0"



4 ENLARGED RESTROOM RCP
3/8" = 1'-0"

	TOILET AND SHOWER ACCESSORIES LEGEND
1	SURFACE-MOUNTED SEAT-COVER AND TOILET TISSUE DISPENSER. FOR MEN'S BATHROOM. USE BOBRICK B-3479.
2	PARTITION-MOUNTED TOILET SEAT-COVER DISPENSER, SANITARY NAPKIN DISPOSAL, AND TOILET TISSUE DISPENSER. (SERVES TWO TOILET COMPARTMENTS) FOR WOMEN'S BATHROOM. USE BOBRICK B-357.
3	SURFACE-MOUNTED SEAT-COVER AND TOILET TISSUE DISPENSER. B-30929
4	RECESSED CONVERTIBLE AUTOMATIC, UNIVERSAL ROLL TOWEL DISPENSER EQUIPPED WITH LED LIGHT/WASTE RECEPTACLE. BOBRICK B-3974
5	SEMI RECESSED MOUNTED NAPKIN/TAMPON VENDOR. FOR WOMEN'S BATHROOM. USE BOBRICK B-3706 25.
6	COAT HOOK WITH BUMPER. USE BOBRICK B-212 AT AT EACH TOILET STALL
7	COAT HOOK. USE BOBRICK B-542 AT SHOWERS.
8	SEMI RECESSED HAND DRYER USE BOBRICK B-3725
9	GRAB BARS, 1 1/2" DIA. BY 18 GA S.S. TUBING. USE BOBRICK B-6806 SERIES. 48" LONG SIDE WALL, 42" LONG BACK WALL. 42" LONG IN AMBULATORY STALL, 12" VERTICAL AT SHOWER. USE BOBRICK B-6806 SERIES WITH BASE. USE STAINLESS STEEL 1/4" -20 BOLTS AND NUTS PER MANUFACTURER RECOMMENDATIONS
10	TOILET PARTITIONS – BOBRICK DURALINE SERIES CGL 1186 FLOOR AND CEILING MOUNTED. USE BOBRICK B-38 SERIES. COLOR: FORMICA 910-58 GRAPHITE GRAFIX MATTE FINISH
11	MIRRORS, GL-6, SEE ELEVATIONS FOR DIMENSIONS
12	URINAL SCREEN MATCH TOILET PARTITION FINISH
13	SOAP DISPENSER – SURFACE MOUNTED CAMPUS STANDARD OFCI
14	SURFACE MOUNTED MOP/BROOM HOLDER AND RAG HOOKS. USE BOBRICK B239
15	SHOWER SEAT BOBRICK B-5182. COLOR TBD
16	SHOWER ROD – BOBRICK B-6107 CLASSIC SERIES HEAVY DUTY SHOWER CURTAIN ROD,36" SHOWER CURTAINS AND HOOKS. BOBRICK 204-2
17	DRINKING FOUNTAIN GRAB BAR - 1 1/2" DIAMETER STAINLESS STL B-8127/36
18	SURFACE-MOUNTED SEAT-COVER AND TOILET TISSUE DISPENSER B-30919

FINISH LEGEND

- FLOOR MATERIAL TRANSITION
- WALL / FLOOR / BASE — MATERIAL TAG
- BUILT IN MILLWORK, REFER TO ELEVATIONS AND SECTIONS.
- CONC-5 SEALED CONCRETE
- TL-1 24"X24" PORCELAIN FLOOR TILE
- TL-6 2X4 PORCELAIN FLOOR TILE

RCP LEGEND

- GYP BD CEILING IPT-1, TYP
- 2X2 ACOUSTIC CEILING TILE SYSTEM
- MECHANICAL DIFFUSERS
- SPRINKLER HEADS. SEE FP201
- ACCESS PANEL. REFER TO DETAIL 25 / A904
- SPC — SPEAKER. SEE SVC102

FLOOR PLAN LEGEND

- 30" X 48" CLEAR FLOOR SPACE
- 60" DIA. CLEAR FLOOR SPACE

GENERAL NOTES

1. REFER TO SHEET A610 FOR ADDITIONAL FINISH MATERIALS INFORMATION.
2. REFER TO G023 FOR ACCESSIBILITY INFORMATION.

KEYNOTES

09 30 13.A4	Wall Outside Corner Metal Protection
22 40 00.A1	DRINKING FOUNTAIN

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM
LICENSED ARCHITECT HRAZTAN KEITH AN 28719 RENEWAL DATE 04/30/25 STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

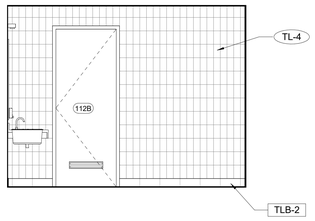
ISSUE DESCRIPTION

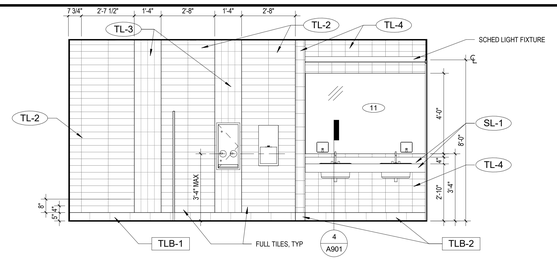
	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

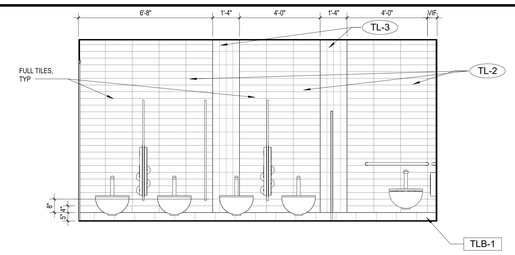
SHEET TITLE
ENLARGED RESTROOM PLANS

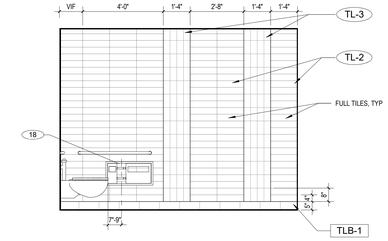
SHEET NUMBER
A411

2/27/2025 7:47:38 PM

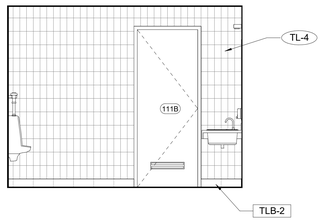




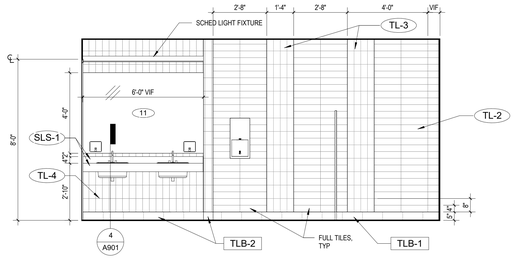




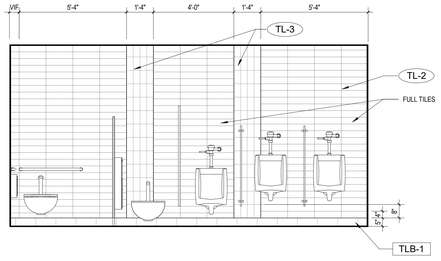
19 WOMEN WEST ELEVATION
3/8" = 1'-0"



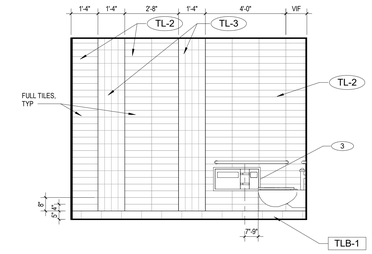
3 WOMEN'S RESTROOM SOUTH ELEVATION
3/8" = 1'-0"



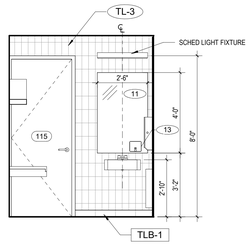
2 WOMEN'S RESTROOM NORTH ELEVATION
3/8" = 1'-0"



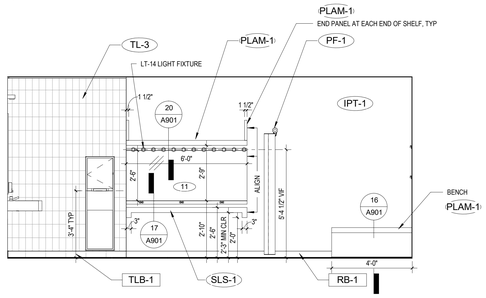
1 WOMEN'S ACCESSIBLE TOILET STALL
3/8" = 1'-0"



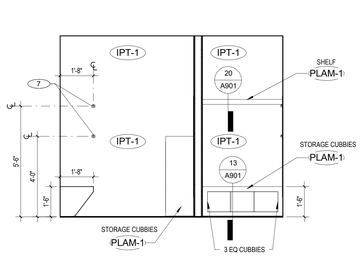
18 MEN'S RESTROOM WEST ELEVATION
3/8" = 1'-0"



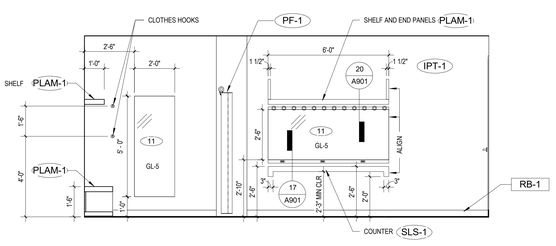
6 MEN'S RESTROOM NORTH ELEVATION
3/8" = 1'-0"



5 MEN'S RESTROOM SOUTH ELEVATION
3/8" = 1'-0"



4 MEN'S ACCESSIBLE STALL
3/8" = 1'-0"



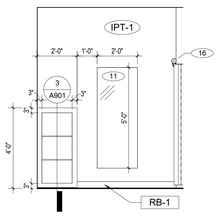
GENERAL NOTES

1. REFER TO SHEET A610 FOR ADDITIONAL FINISH MATERIALS INFORMATION.
2. REFER TO G023 FOR ACCESSIBILITY INFORMATION.

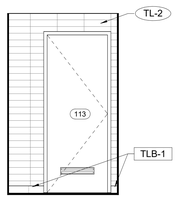
FINISH LEGEND

WALL	MATERIAL TAG - WALL
BASE	MATERIAL TAG - WALL BASE
1	TOILET ACCESSORY TAG
	TL-2
	TL-3
	TL-4
	TL-5
	TLB-1

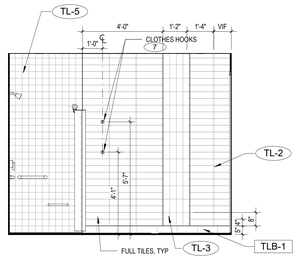
20 DRESSING ROOM SOUTH ELEVATION
3/8" = 1'-0"



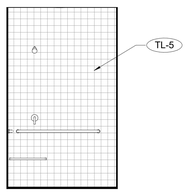
9 DRESSING ROOM WEST ELEVATION
3/8" = 1'-0"

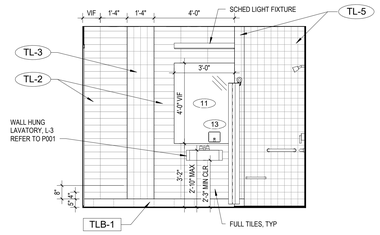


8 DRESSING ROOM NORTH ELEVATION
3/8" = 1'-0"



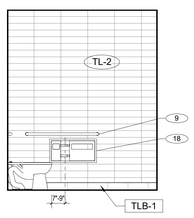
7 DRESSING ROOM EAST ELEVATION
3/8" = 1'-0"



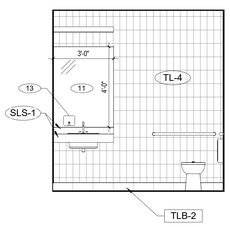


	TOILET AND SHOWER ACCESSORIES LEGEND
1	SURFACE-MOUNTED SEAT-COVER DISPENSER AND TOILET TISSUE DISPENSER. FOR MEN'S BATHROOM. USE BOBRICK B-3479.
2	PARTITION-MOUNTED TOILET SEAT-COVER DISPENSER, SANITARY NAPKIN DISPOSAL, AND TOILET TISSUE DISPENSER. (SERVES TWO TOILET COMPARTMENTS) FOR WOMEN'S BATHROOM. USE BOBRICK B-357.
3	SURFACE-MOUNTED SEAT-COVER AND TOILET TISSUE DISPENSER B-3092E
4	RECESSED CONVERTIBLE AUTOMATIC, UNIVERSAL ROLL TOWEL DISPENSER EQUIPPED WITH LED LIGHTING AND WASTE RECEPTACLE. BOBRICK B-3974
5	SEMI RECESSED MOUNTED NAPKIN/TAMPON VENDOR. FOR WOMEN'S BATHROOM. USE BOBRICK B-3706 25.
6	COAT HOOK WITH BUMPER. USE BOBRICK B-212 AT AT EACH TOILET STALL
7	COAT HOOK. USE BOBRICK B-542 AT SHOWERS.
8	SEMI RECESSED HAND DRYER USE BOBRICK B-3725
9	GRAB BARS, 1 1/2" DIA. BY 18 GA S.S. TUBING. USE BOBRICK B-6806 SERIES. 48" LONG SIDE WALL, 42" LONG BACK WALL. NOTCH AT BACK TO ACCEPT SOAP DISH. TYPICAL AT SHOWER. NOTCH AT BACK TO BACK GRAB BARS. USE STAINLESS STEEL 1/4" -20 BOLTS AND NUTS PER MANUFACTURER RECOMMENDATIONS
10	TOILET PARTITIONS – BOBRICK DURALINE SERIES CGL 1186 FLOOR AND CEILING MOUNTED SOLID PHENOLIC MATERIAL COLOR: FORMICA 515-58 GRAPHITE GRAFIX MATTE FINISH
11	MIRRORS, GL-6, SEE ELEVATIONS FOR DIMENSIONS
12	URINAL SCREEN MATCH TOILET PARTITION FINISH
13	SOAP DISPENSER – SURFACE MOUNTED CAMPUS STANDARD OFCI
14	SURFACE MOUNTED MOP/BROOM HOLDER AND RAG HOOKS. USE BOBRICK B239
15	SHOWER SEAT BOBRICK B-5192. COLOR TBD
16	SHOWER ROD – BOBRICK B-6107 CLASSIC SERIES HEAVY DUTY SHOWER CURTAIN ROD 36". ⚠1 SHOWER CURTAINS AND HOOKS. ⚠2 BOBRICK 204-2.
17	DRINKING FOUNTAIN GRAB BAR - 1 1/2" DIAMETER STAINLESS STL B-818298
18	SURFACE-MOUNTED SEAT-COVER AND TOILET TISSUE DISPENSER B-30919

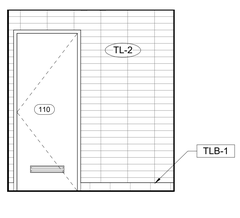
23 ACCESSIBLE DRESSING RM EAST
3/8" = 1'-0"



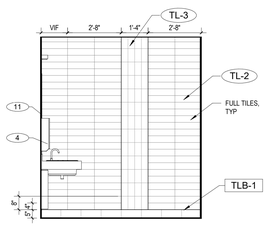
13 SHOWER EAST ELEVATION
3/8" = 1'-0"



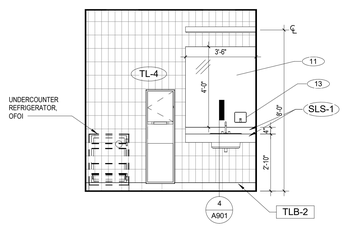
12 SHOWER NORTH ELEVATION
3/8" = 1'-0"

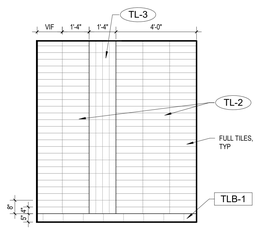


11 SHOWER WEST ELEVATION
3/8" = 1'-0"



10 SHOWER SOUTH ELEVATION
3/8" = 1'-0"





22 ALL GENDER RESTROOM 2
3/8" = 1'-0"

21 ALL GENDER RESTROOM 1
3/8" = 1'-0"

17 ALL GENDER RESTROOM 109 SOUTH OPP SIM LACTATION ROOM NORTH ELEVATION
3/8" = 1'-0"

16 ALL GENDER RESTROOM 109 WEST OPP SIM LACTATION ROOM WEST ELEVATION
3/8" = 1'-0"

15 LACTATION ROOM SOUTH ELEVATION
3/8" = 1'-0"

14 LACTATION ROOM EAST ELEVATION
3/8" = 1'-0"

Struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM
LICENSED ARCHITECT HRAZTAN AZATYAN 28719 RENEWAL DATE 04/30/25 STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

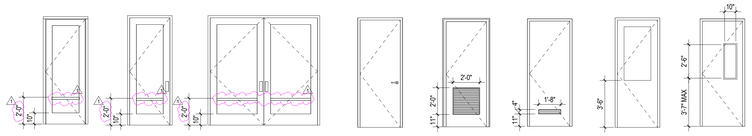
SHEET TITLE

RESTROOM ELEVATIONS

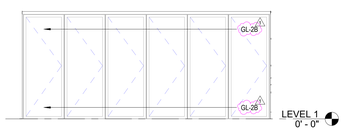
SHEET NUMBER

A412

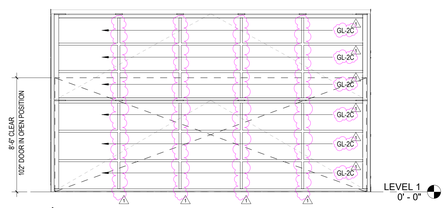
2/27/2025 7:47:50 PM



A INTERIOR
B EXTERIOR
C EXTERIOR
D EXTERIOR
D1 EXTERIOR W/ LOUVER
D2 EXTERIOR W/ LOUVER
E EXTERIOR
F INTERIOR STC 50



G
EXTERIOR
STACKING
BASIS OF DESIGN: ARCADIA 10000 OASIS



J
EXTERIOR
BI-FOLD
BASIS OF DESIGN: CROWN BIFOLD (SEE SPEC)

DOOR TYPES

DOOR SCHEDULE

Mark	ROOM NAME	DOOR TYPE	HEIGHT	WIDTH	THICKNESS	DOOR MATERIAL	DOOR FINISH	FRAME MATERIAL	FRAME FINISH	FIRE RATING	HDWR GROUP	HARDWARE REMARKS	HEAD	JAMB	THRESHOLD	COMMENTS
101	OFFICE	B	7' - 10"	3' - 0"	0' - 1 3/4"	AL/GL	MT-3	ALUM	MT-1		3.5	CARD READER	1 CW5.04	1, 3 CW5.05	6 A601 / 2 CW5.04	GL-2A
102	OFFICE	A	7' - 10"	3' - 0"	0' - 1 3/4"	WD/GL	PLAM-1	ALUM	IPT-4		15		8 A601 / 3 CW5.02	7 A601 / 3 CW6.03	4 A601	GL-4
103	OFFICE	A	7' - 10"	3' - 0"	0' - 1 3/4"	WD/GL	PLAM-1	ALUM	IPT-4		15		8 A601 / 3 CW5.02	7 A601 / 3 CW6.03	4 A601	GL-4
104	OFFICE	A	7' - 10"	3' - 0"	0' - 1 3/4"	WD/GL	PLAM-1	ALUM	IPT-4		15		8 A601 / 3 CW5.02	7 A601 / 3 CW6.03	4 A601	GL-4
105	OFFICE	A	7' - 10"	3' - 0"	0' - 1 3/4"	WD/GL	PLAM-1	ALUM	IPT-4		15		8 A601 / 3 CW5.02	7 A601 / 3 CW6.03	4 A601	GL-4
106	STORAGE	D	7' - 10"	3' - 0"	0' - 1 3/4"	WD	PLAM-1	ALUM	IPT-4		14		8 A601 / 3 CW5.02	7 A601 / 3 CW6.03	4 A601	
107	JAN	D1	7' - 10"	3' - 0"	0' - 1 3/4"	HM	MT-3	HM	MT-3		9	CARD READER	23 A601	21 A601	22 A601	
108A	CLASSROOM (GENERAL)	B	7' - 10"	3' - 0"	0' - 1 3/4"	AL/GL	MT-3	ALUM	MT-1		3	CARD READER	1 CW5.07	1, 3 CW6.05	6 A601 / 2 CW5.04	STC 40, GL-2C
108B	CLASSROOM (GENERAL)	B	7' - 10"	3' - 0"	0' - 1 3/4"	AL/GL	MT-3	ALUM	MT-1		5		3 CW5.06	2 CW6.07 / 3 CW6.06	6 A601 / 2 CW5.04	STC 40, GL-2C
109	RR	D2	7' - 10"	3' - 0"	0' - 1 3/4"	HM	MT-3	HM	MT-3		16	CARD READER	23 A601	21 A601	22 A601	
110	LACTN	D2	7' - 10"	3' - 0"	0' - 1 3/4"	HM	MT-3	HM	MT-3		8	CARD READER	23 A601	21 A601	22 A601	
111A	MEN	D2	7' - 10"	3' - 0"	0' - 1 3/4"	HM	MT-3	HM	MT-3		11		23 A601	21 A601	22 A601	
111B	MEN	D2	7' - 10"	3' - 0"	0' - 1 3/4"	HM	MT-3	HM	MT-3		17		3 A601	2 A601	-	
112A	WOMEN	D2	7' - 10"	3' - 0"	0' - 1 3/4"	HM	MT-3	HM	MT-3		11		23 A601	21 A601	22 A601	
112B	WOMEN	D2	7' - 10"	3' - 0"	0' - 1 3/4"	HM	MT-3	HM	MT-3		17		3 A601	2 A601	-	
113	SHOWER	D2	7' - 10"	3' - 0"	0' - 1 3/4"	HM	MT-3	HM	MT-3		8.5	CARD READER	23 A601	21 A601	1C A601	
114	SHOWER	D2	7' - 10"	3' - 0"	0' - 1 3/4"	HM	MT-3	HM	MT-3		8.5	CARD READER	23 A601	21 A601	1C A601	
115	VEST.	D	7' - 10"	3' - 0"	0' - 1 3/4"	HM	IPT-4	HM	MT-3		16		3 A601	2 A601	4 A601	
116A	ASSEMBLY (DRAMA ART)	B	7' - 10"	3' - 0"	0' - 1 3/4"	AL/GL	MT-1	ALUM	MT-1		5		1 CW5.04	11 - 21 A604 / 1 CW6.05 / 2 CW6.10	11 A601 / 2 CW5.04	STC 40, GL-2C
116B	VEST.	D	7' - 10"	3' - 0"	0' - 1 3/4"	HM	IPT-4	HM	IPT-4		12	PANIC HDWR	18 A601	17 A601	2B A601	
116C	ASSEMBLY (DRAMA ART)	D	7' - 10"	3' - 0"	0' - 1 3/4"	HM	IPT-4	HM	IPT-4		12	PANIC HDWR	3 A601	2 A601	2B A601	
116D	ASSEMBLY (DRAMA ART)	D	7' - 10"	3' - 0"	0' - 1 3/4"	HM	IPT-4	HM	IPT-4		12	PANIC HDWR	3 A601	2 A601	2B A601	
116E	ASSEMBLY (DRAMA ART)	G	8' - 0"	18' - 6"	0' - 1 3/4"	AL/GL	MT-3	ALUM	MT-3				28 A604 / 1, 2 CW5.10	22 2B A604 / 1, 2, 3 CW6.11 / 2 CW6.10	2T A604 / 3 CW5.10	STACKING DOOR, GL-2B
117	VEST.	D	7' - 10"	3' - 0"	0' - 1 3/4"	HM	MT-3	HM	MT-3		7	PANIC HDWR	23 A601	21 A601	22 A601	STC40
118	VEST.	D	7' - 10"	3' - 0"	0' - 1 3/4"	HM	MT-3	HM	MT-3		7	PANIC HDWR	28 A601	27 A601	22 A601	STC40
119	VEST.	D	7' - 10"	3' - 0"	0' - 1 3/4"	HM	MT-3	HM	MT-3		7	PANIC HDWR	28 A601	27 A601	22 A601	STC40
120	UTILITY	D	7' - 10"	3' - 0"	0' - 1 3/4"	HM	IPT-4	HM	IPT-4		13	CARD READER	3 A601	2 A601	4 A601	
121	ELEC	D	7' - 10"	3' - 0"	0' - 1 3/4"	HM	MT-3	HM	MT-3		9	CARD READER	23 A601	21 A601	22 A601	
122	STUDY LAB	E	7' - 10"	3' - 0"	0' - 1 3/4"	HM	MT-3	HM	MT-3		10	CARD READER	23 A601	21 A601	22 A601	GL-2A
123	STUDY LAB	E	7' - 10"	3' - 0"	0' - 1 3/4"	HM	MT-3	HM	MT-3		10	CARD READER	23 A601	21 A601	6 A601	GL-2A
124	STUDY LAB	E	7' - 10"	3' - 0"	0' - 1 3/4"	HM	MT-3	HM	MT-3		10	CARD READER	23 A601	21 A601	6 A601	GL-2A
125	STUDY LAB	E	7' - 10"	3' - 0"	0' - 1 3/4"	HM	MT-3	HM	MT-3		10	CARD READER	23 A601	21 A601	6 A601	GL-2A
126	STUDY LAB	E	7' - 10"	3' - 0"	0' - 1 3/4"	HM	MT-3	HM	MT-3		10	CARD READER	23 A601	21 A601	6 A601	GL-2A
127A	CLASS LAB (MUSIC)	B	7' - 10"	3' - 0"	0' - 1 3/4"	AL/GL	MT-3	ALUM	MT-3		3	CARD READER, PANIC HDWR	4 CW5.10	3 CW6.02	6 A601 / 2 CW5.04	STC 40, GL-2C
127B	CLASS LAB (MUSIC)	B	7' - 10"	6' - 0"	0' - 1 3/4"	AL/GL	MT-1	ALUM	MT-1		6	CARD READER, PANIC HDWR	1 CW5.04	1 CW6.08/2 CW6.04/3 CW6.05	6 A601 / 2 CW5.04	STC 40, GL-1B
128A	CLASS LAB (MUSIC)	B	7' - 10"	3' - 0"	0' - 1 3/4"	AL/GL	MT-1	ALUM	MT-1		3	CARD READER	4 CW5.10	3 CW6.02	6 A601 / 2 CW5.04	STC 40, GL-2C
128B	CLASS LAB (MUSIC)	B	7' - 10"	6' - 0"	0' - 1 3/4"	AL/GL	MT-1	ALUM	MT-1		6		1 CW5.04	1 CW6.08/2 CW6.04/3 CW6.05	6 A601 / 2 CW5.04	STC 40, GL-1B
129A	CLASS LAB (MUSIC)	B	7' - 10"	6' - 0"	0' - 1 3/4"	AL/GL	MT-1	ALUM	MT-1		1	PANIC HDWR	1 CW5.04	1 CW6.05 / 2 CW6.04	6 A601 / 2 CW5.04	STC 40, GL-2C
129B	CLASS LAB (MUSIC)	B	7' - 10"	6' - 0"	0' - 1 3/4"	AL/GL	MT-1	ALUM	MT-1		1	PANIC HDWR	3 CW5.09	3 CW6.04	6 A601 / 2 CW5.04	STC 40, GL-1B
129C	CLASS LAB (MUSIC)	J	13' - 2 1/2"	22' - 7 3/4"	0' - 2"	STEEL	MT-3	STEEL	MT-3		18		17 A604	11 A604	16 A604	STC 40, GL-2C
130	SPEC CLASS LAB	B	7' - 10"	3' - 0"	0' - 1 3/4"	AL/GL	MT-1	ALUM	MT-1		3	CARD READER	1 CW5.04	1 CW6.01 / 1 CW6.04	11 A601	STC 40, GL-2C
131A	AV	D	7' - 10"	3' - 0"	0' - 1 3/4"	HM	MT-3	HM	MT-3		10.5	CARD READER	23 A601	11 A601	11 A601	STC40
131B	AV	F	7' - 10"	3' - 0"	0' - 1 7/8"	STEEL	IPT-4	STEEL	IPT-4		13.5	CARD READER	13 A601	12 A601	13 A601	STC50, GL-5
131C	AV	F	7' - 10"	3' - 0"	0' - 1 7/8"	STEEL	IPT-4	STEEL	IPT-4		13.5	CARD READER	13 A601	12 A601	13 A601	STC50, GL-5
132	SPEC CLASS LAB	B	7' - 10"	3' - 0"	0' - 1 3/4"	AL/GL	MT-1	ALUM	MT-1		3	CARD READER	3 CW5.09	3 CW6.04	2 CW5.04	STC 40, GL-1B

DOOR NOTES:

1. DOORS SHALL BE 1 3/4" THICK UNLESS NOTED OTHERWISE.
2. LOUVERS IN EXTERIOR DOORS SHALL BE VANDAL-PROOF, SECURITY TYPE.
3. EXTERIOR DOOR REQUIREMENTS:

   ALL EXTERIOR DOORS IN BUILDINGS, INCLUDING BUT NOT LIMITED TO DOORS OF TOILETS AND STORAGE ROOMS, SHALL CONFORM WITH THE REQUIREMENTS OF THE LATEST EDITION OF THE CALIFORNIA BUILDING CODE.

   a. EXIT DOOR SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.

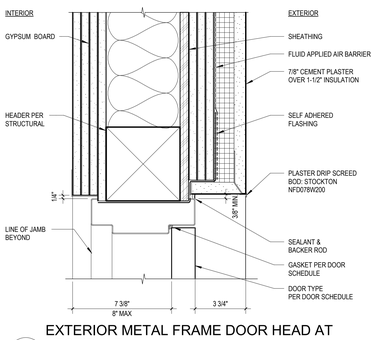
   b. HAND ACTIVATED DOOR OPENING HARDWARE SHALL BE CENTERED BETWEEN 34" MINIMUM AND 44" MAXIMUM ABOVE FINISH FLOOR. (CBC 11B-404.2.7)

   c. DEAD BOLTS ARE NOT PERMITTED UNLESS OPERABLE WITH A SINGLE EFFORT LEVER TYPE HARDWARE.

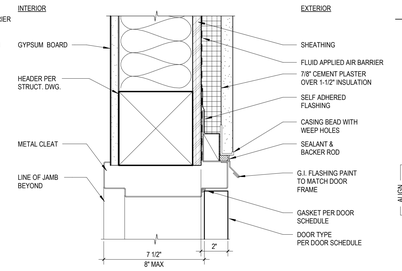
   d. ALL ROOMS SERVING AN OCCUPANCY LOAD OF 50 OR GREATER AND DOORS LOCATED ON THE DISCHARGE OF EXIT CORRIDORS ARE REQUIRED TO BE PROVIDED WITH PANIC HARDWARE (CBC 1010.1.10)

   e. ALL FIRE DOOR LABELS SHALL COMPLY WITH CBC 716.2.9.1

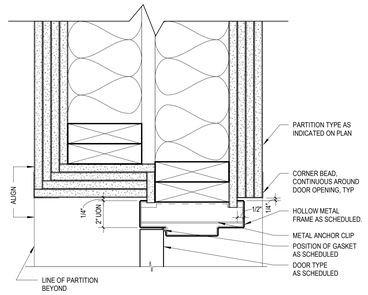
4. SEE SPECIFICATION SECTION 08 71 00 FOR DOOR HARDWARE INDEX AND DOOR HARDWARE SETS.
5. FINAL ROOM NUMBERS AND NAMES FOR SIGNAGE ARE TO BE COORDINATED WITH THE COLLEGE.
6. CARD READER SHALL BE MOUNTED AT MAX 48" AFF.



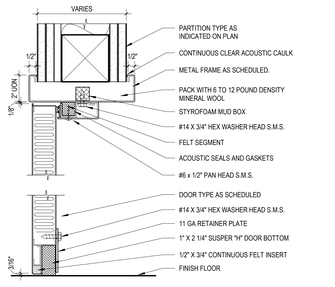
28 EXTERIOR METAL FRAME DOOR HEAD AT VESTIBULE
3" = 1'-0"



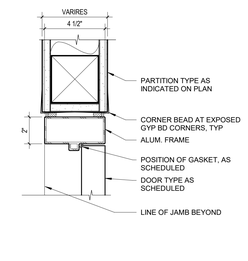
23 EXTERIOR METAL FRAME DOOR HEAD
3" = 1'-0"



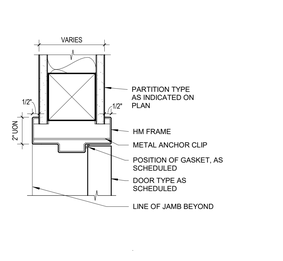
18 DOOR HEAD AT ASSEMBLY
3" = 1'-0"



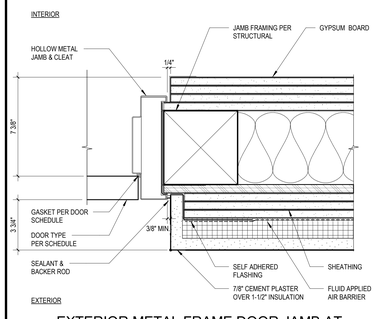
13 STL FRAME HEAD / SILL DTL-INTERIOR STC50
3" = 1'-0"



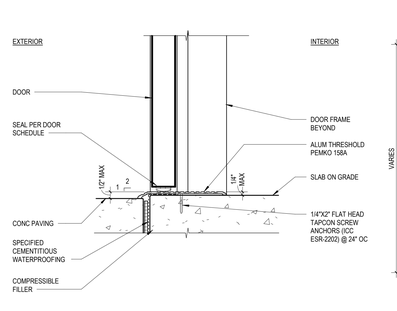
8 ALUM FRAME HEAD DETAIL-INTERIOR
3" = 1'-0"



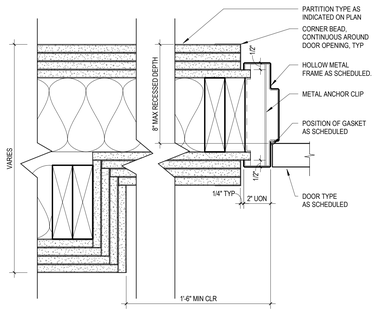
3 HM FRAME HEAD DETAIL-INTERIOR
3" = 1'-0"



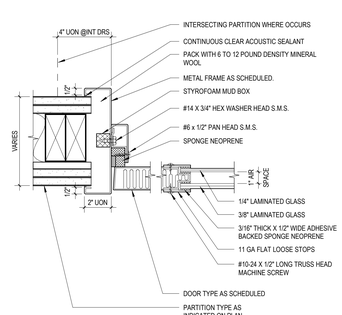
27 EXTERIOR METAL FRAME DOOR JAMB AT VESTIBULE
3" = 1'-0"



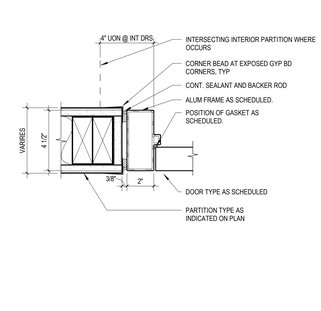
22 EXTERIOR METAL FRAME DOOR THRESHOLD
3" = 1'-0"



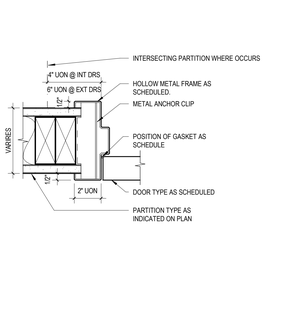
17 DOOR JAMB AT ASSEMBLY
3" = 1'-0"



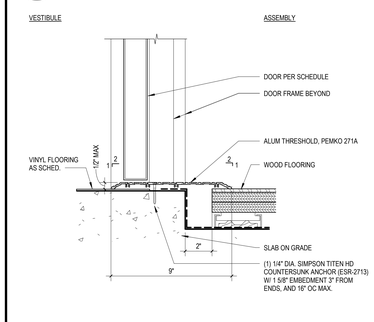
12 STL FRAME JAMB DETAIL-INTERIOR STC50
3" = 1'-0"



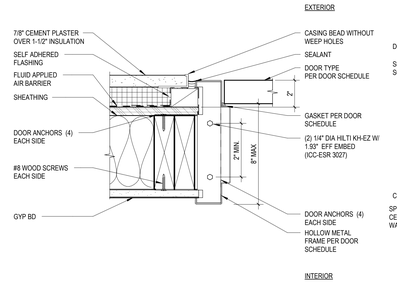
7 ALUM FRAME JAMB DETAIL-INTERIOR
3" = 1'-0"



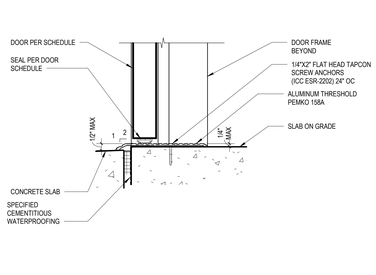
2 HM FRAME JAMB DETAIL-INTERIOR
3" = 1'-0"



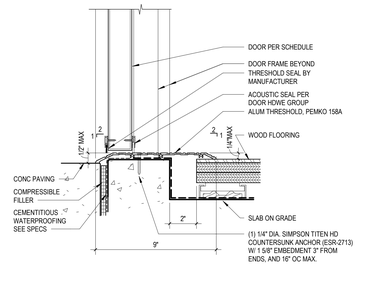
26 INTERIOR DOOR THRESHOLD
3" = 1'-0"



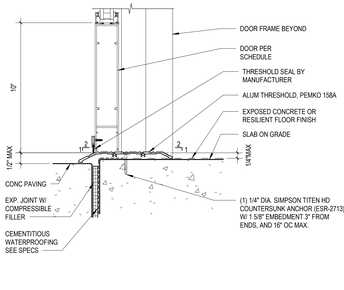
21 EXTERIOR METAL FRAME DOOR JAMB
3" = 1'-0"



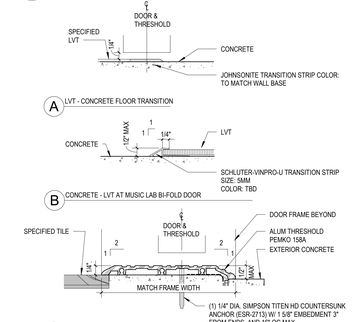
16 EXTERIOR METAL FRAME DOOR THRESHOLD
3" = 1'-0"



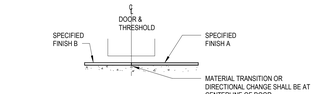
11 EXTERIOR DOOR THRESHOLD B
3" = 1'-0"



6 EXTERIOR STOREFRONT DOOR THERSHOLD A
3" = 1'-0"



1 THRESHOLD DETAILS - INTERIOR
6" = 1'-0"



4 THRESHOLD DETAIL - INTERIOR
6" = 1'-0"

Struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAM@STRUERE.COM
WWW.STRUERE.COM
LICENSED ARCHITECT HRAZTAM KEITH AN 28719 RENEWAL DATE 04/30/25 STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

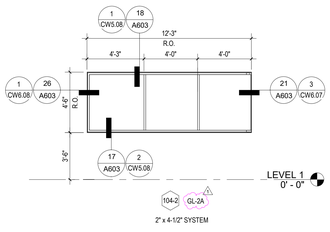
SHEET TITLE

DOOR SCHEDULE & DETAILS

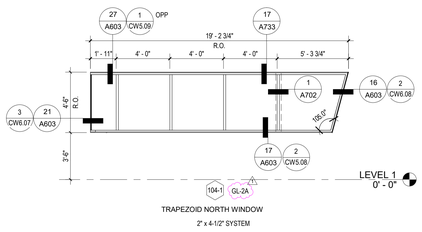
SHEET NUMBER

A601

2/27/2025 7:48:02 PM

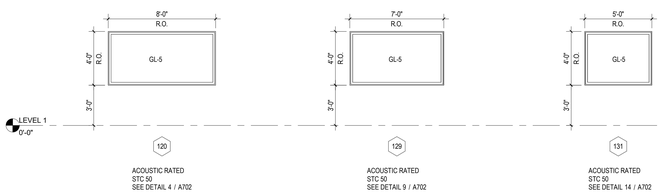


2" x 4-1/2" SYSTEM



TRAPEZOID NORTH WINDOW

2" x 4-1/2" SYSTEM



ACOUSTIC RATED
STC 50
SEE DETAIL 4 / A702

ACOUSTIC RATED
STC 50
SEE DETAIL 9 / A702

ACOUSTIC RATED
STC 50
SEE DETAIL 14 / A702

INTERIOR WINDOWS
1/4" = 1'-0"

NOTES AND LEGEND:

1. SEE A301A AND A302A FOR EXTERIOR FINISH MATERIAL SCHEDULE
2. REFER TO STOREFRONT DRAWING CW SERIES FOR STOREFRONT SYSTEM AND ATTACHMENT

GL-1A: EXTERIOR INSULATED GLAZING UNIT

GL-1B: EXTERIOR INSULATED GLAZING UNIT

GL-2A: EXTERIOR INSULATED GLAZING UNIT.

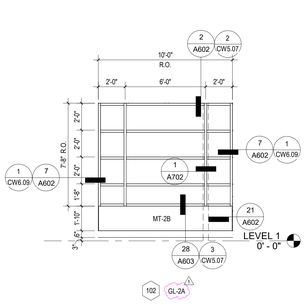
GL-2B: EXTERIOR INSULATED GLAZING UNIT.

GL-2C: EXTERIOR INSULATED GLAZING UNIT.

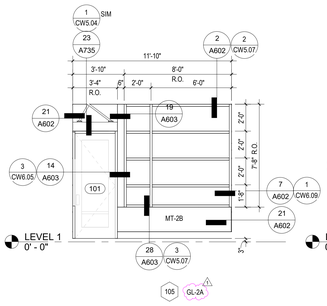
GL-3: NOT USED

GL-4: 1/4" CLEAR GLASS, FULLY TEMPERED

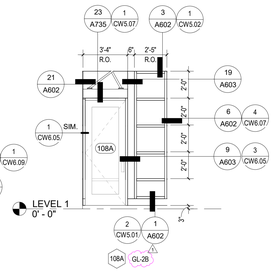
GL-5: 1/4" LAMINATED GLASS



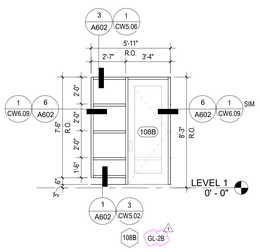
2" x 4-1/2" SYSTEM



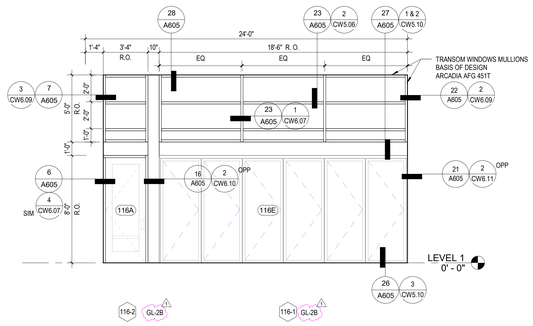
2" x 4-1/2" SYSTEM



2" x 6" SYSTEM

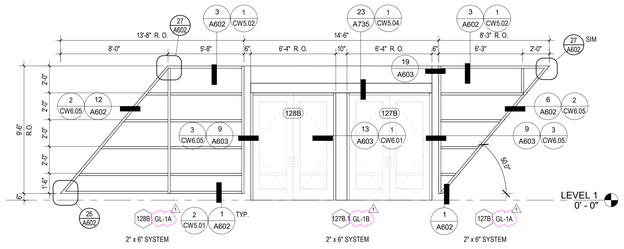


2" x 4-1/2" SYSTEM



2" x 4-1/2" SYSTEM

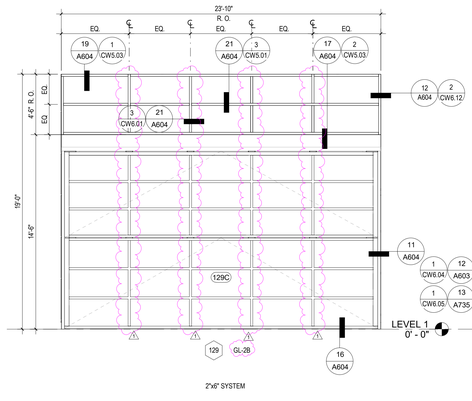
2" x 4-1/2" SYSTEM



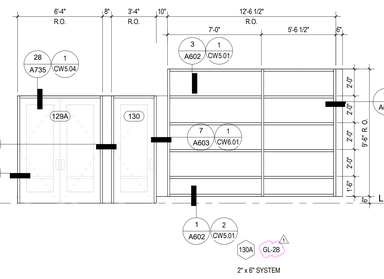
2" x 6" SYSTEM

2" x 6" SYSTEM

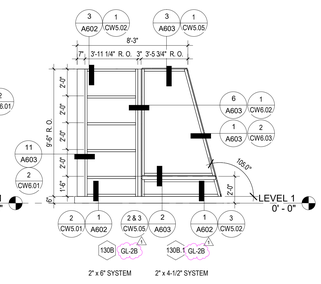
2" x 6" SYSTEM



2"x6" SYSTEM

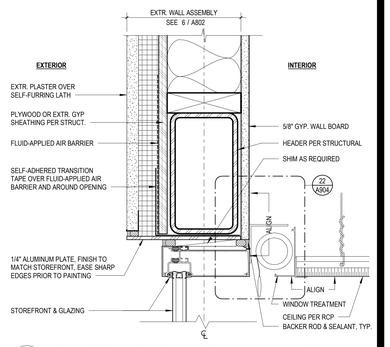


2" x 6" SYSTEM



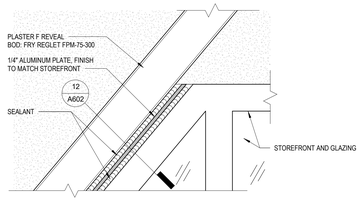
2" x 6" SYSTEM

2" x 4-1/2" SYSTEM

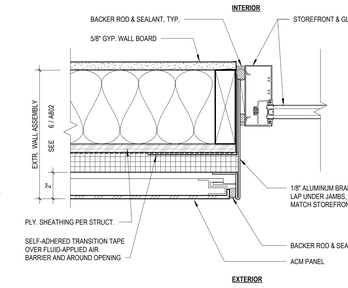


28 EXTERIOR CUTRAIN WALLS /STOREFRONTS
1/4" = 1'-0"

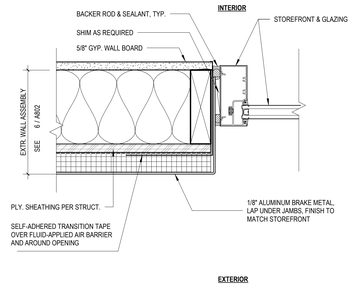
3 STOREFRONT HEAD WITH ALUM. PLATE
3" = 1'-0"



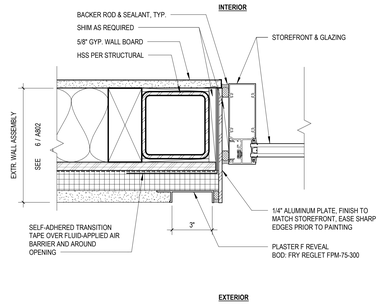
27 ALUMINUM PLATE AT STOREFRONT ELEVATION TOP
3" = 1'-0"



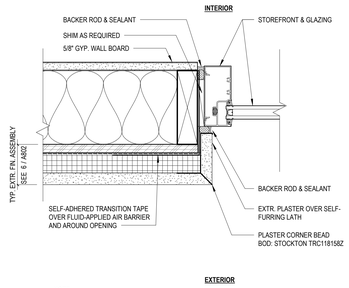
22 STOREFRONT JAMB AT ACM
3" = 1'-0"



17 STOREFRONT JAMB AT BRAKE METAL
3" = 1'-0"

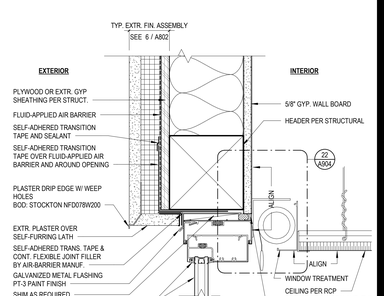


12 STOREFRONT JAMB AT REVEAL
3" = 1'-0"

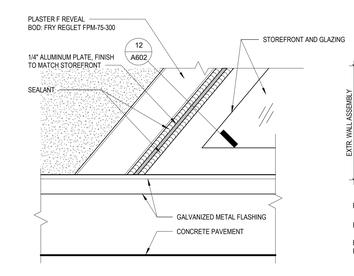


NOTE:
FOR BALANCED INFO, SEE DETAIL 2 / A602

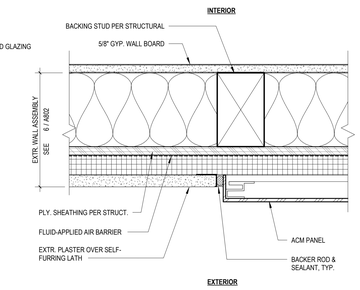
7 TYP. STOREFRONT JAMB
3" = 1'-0"



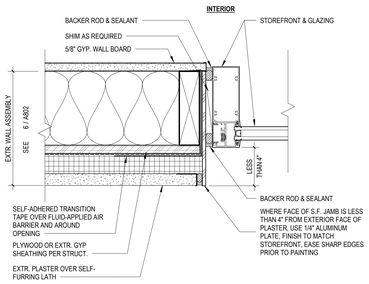
2 TYP. STOREFRONT HEAD
3" = 1'-0"



26 ALUMINUM PLATE AT STOREFRONT ELEVATION BOTTOM
3" = 1'-0"

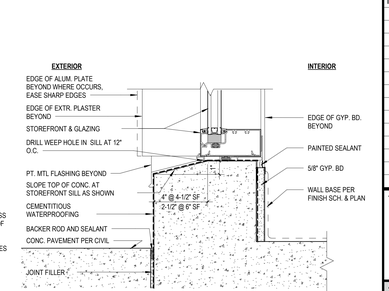


21 ACM TO PLASTER TRANSITION
3" = 1'-0"



NOTE:
FOR BALANCED INFO, SEE DETAIL 3 / A602

6 TYP. STOREFRONT JAMB WITH ALUM. PLATE
3" = 1'-0"



1 TYP. STOREFRONT SILL
3" = 1'-0"

GENERAL NOTES:
1. SEE ACM SHEETS ACM001 - ACM011 FOR ACM PANEL ATTACHMENTS AND DETAILS

Structure
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM
LICENSED ARCHITECT HRAZTAN KEITH AN 28719 RENEWAL DATE: 04/30/25 STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

SHEET TITLE
OPENING SCHEDULE & DETAILS

SHEET NUMBER
A602

2/12/2025 4:22:14 PM

09 64 66 WOOD FLOORING

WF-1
HARDWOOD PERFORMANCE FLOORING SYSTEM
MANUFACTURER: ROBBINS SPORTS SURFACES
MODEL: BIO-CHANNEL CLASSIC OR EQUAL
DESCRIPTION: 1/4" WET-DRY PROCESS, S2S, OIL-TEMPERED HARDBOARD, 8' EDGES PARALLEL TO LONG AXIS OF STAGE & PERPENDICULAR TO BIO CHANNEL. RED ROSIN PAPER BETWEEN FINISH FLOOR AND SUB-FLOOR.
THICKNESS: 3"
FINISH: BLACK FLAT PAINT
NOTES: INCLUDE MISC. ASSOCIATED TRANSITION STRIP AND VENTED WALL BASE AS REQUIRED. COLOR: BLACK.
CONTACT: JIM COLLA, 602.615.8749, jcolla@robbinsfloor.com

NOTE: FINISHES TO COMPLY WITH FLAME SPREAD AND SMOKE RATING FOR INTERIOR WALL
AND CEILING FINISHES PER CBC TABLE 803.13, AS BASED ON ASTM E84 OR UL 723.

WF-2
HARDWOOD PERFORMANCE FLOORING SYSTEM
MANUFACTURER: ROBBINS SPORTS SURFACES
MODEL: BIO-CHANNEL CLASSIC OR EQUAL
DESCRIPTION: 1X3 NOMINAL (3/4"X2-1/2"), EDGE GRAIN T&G, END MATCHED MAPLE BOARDS RUN PERPENDICULAR TO BIO-CHANNELS. RED ROSIN PAPER BETWEEN FINISH FLOOR AND SUBFLOOR.
THICKNESS: 3-1/4"
FINISH: CONTINUOUS STRIP XL 2ND AND BETTER GRADE, 2.5" WIDE
NOTES: INCLUDE MISC. ASSOCIATED TRANSITION STRIP AND VENTED WALL BASE AS REQUIRED. COLOR: BLACK.
CONTACT: JIM COLLA, 602.615.8749, jcolla@robbinsfloor.com

NOTE: FINISHES TO COMPLY WITH FLAME SPREAD AND SMOKE RATING FOR INTERIOR WALL
AND CEILING FINISHES PER CBC TABLE 803.13, AS BASED ON ASTM E84 OR UL 723.

11 61 33 RIGGING SYSTEMS AND DRAPERIES

DRP-1
ACOUSTICAL DRAPERY AT ASSEMBLY
ROSE BRAND: VL250036
STYLE: VELOUR
COLOR: CHARISMA BLACK
SIZE: 54 " WIDE, IFR 25 OZ
REFER TO WRITTEN SPECIFICATIONS
CONTACT: 800.360.5056 ROSEBRAND.COM

DRP-1
ACOUSTICAL DRAPERY AT ASSEMBLY
ROSE BRAND: VL250036
STYLE: VELOUR
COLOR: CHARISMA BLACK
SIZE: 54 " WIDE, IFR 25 OZ
BACK LINER COLOR: BLACK
REFER TO WRITTEN SPECIFICATIONS
CONTACT: 800.360.5056 ROSEBRAND.COM

12 36 61 QUARTZ SURFACING

SLS-1
QUARTZ SOLID SURFACE:
CEASAR STONE AT COUNTERTOPS AND 4" BACK SPLASH
COLOR: 4120 RAVEN
CONTACT: TODD CARPENTER, 818.277.3009, Todd.Carpenter@caesarstoneus.com

09 30 00 TILING

TL-1
PORCELAIN FLOOR TILE
TRINITY TILE - DURAZZO
COLOR: GREY
SIZE: 24"X24"
FINISH: TEXTURED
GROUT SIZE: 1/8"
INSTALL: REFER TO ENLARGED RESTROOM PLAN
CONTACT: PATRICK ORR, 503.330.4377, patrick@uniqmaterials.com

TLB-1
PORCELAIN COVED WALL BASE TILE
DALTILE – NATURAL HUES
STYLE: Q36126 FLAT TOP COVE BASE
COLOR: PEARL WHITE 63
SIZE: 5"X12"
GROUT SIZE: 1/8"
CONTACT: ANGELA REED, 310.490.2286, angela.reed@daltile.com

TLB-1A
PORCELAIN COVED WALL BASE TILE
DALTILE – NATURAL HUES
STYLE: Q36125 ROUND TOP COVE BASE
COLOR: PEARL WHITE 63
SIZE: 6"X12"
GROUT SIZE: 1/8"
CONTACT: ANGELA REED, 310.490.2286, angela.reed@daltile.com

TL-2
GLAZED CERAMIC WALL MAIN TILE
DALTILE – COLORMATCH COLLECTION
COLOR: MATTE PEARL WHITE 63
SIZE: 4"X16"
FINISH: MATTE
INSTALL: STRAIGHT JOINT
CONTACT: ANGELA REED, 310.490.2286, angela.reed@daltile.com

TLB-2
PORCELAIN COVED WALL BASE TILE
DALTILE – NATURAL HUES
STYLE: Q36126 FLAT TOP COVE BASE
COLOR: BURGUNDY QH47
SIZE: 5"X12"
GROUT SIZE: 1/8"
CONTACT: ANGELA REED, 310.490.2286, angela.reed@daltile.com

TL-3
GLAZED CERAMIC WALL TILE
DALTILE - COLORMATCH COLLECTION
COLOR: MATTE PEARL WHITE 63
SIZE: 4"X8"
GROUT SIZE 1/8"
CONTACT: ANGELA REED, 310.490.2286, angela.reed@daltile.com

TL-4
GLAZED CERAMIC WALL TILE
DALTILE - COLORMATCH COLLECTION
COLOR: MATTE BURGUNDY 47
SIZE: 4"X8"
GROUT SIZE 1/8"
CONTACT: ANGELA REED, 310.490.2286, angela.reed@daltile.com

TL-5
GLAZED CERAMIC WALL TILE
DALTILE - NATURAL HUES COLLECTION
COLOR: BURGUNDY QH47
SIZE: 4"X4"
GROUT SIZE 1/8"
CONTACT: ANGELA REED, 310.490.2286, angela.reed@daltile.com

TL-6
FLOOR PORCELAIN MOSAIC TILE AT SHOWERS
DALTILE – KEYSTONES
SIZE: 2"X4"
COLOR: ARCTIC WHITE D617
FINISH: MATTE
INSTALL: STRAIGHT-JOINT
CONTACT: ANGELA REED, 310.490.2286, angela.reed@daltile.com

06 41 16 PLASTIC-LAMINATE-CLAD ARCHITECTURAL CASEWORK

MILLWORK CABINET DRAWER PULLS
MOCKETT DP269B 7 7/8" DROP EDGE DRAWER PULL. FINISH TO BE BRUSHED BLACK (90)

09 65 19 RESILIENT TILE FLOORING

LVT-1
LUXURY VINYL TILE
SHAW CONTRACT
STYLE: BRANCHING OUT 5MM - 4256V
COLOR: PLAINS OAK - 56250
PLANK SIZE: 6"X48"
CONSTRUCTION: 20 MIL, 5MM
INSTALLATION: DIRECT GLUE, STAGGER, REFER TO FINISH PLAN AND SPECIFICATIONS
CONTACT: SHEILA DONHAM, 310.927.0082, Sheila.donham@shawcontract.com

LVT-2
LUXURY VINYL TILE
SHAW CONTRACT
STYLE: SOUNDSCAPE - 4063V
COLOR: INK - 63549
PLANK SIZE: 6"X48"
CONSTRUCTION: 20 MIL, 5MM
INSTALLATION: DIRECT GLUE, STAGGER, REFER TO FINISH PLAN AND SPECIFICATIONS
CONTACT: SHEILA DONHAM, 310.927.0082, Sheila.donham@shawcontract.com

LVT-3
LUXURY VINYL TILE
SHAW CONTRACT
STYLE: BRANCHING OUT 5MM - 4256V
COLOR: PLAINS OAK - 56250
PLANK SIZE: 6"X48"
CONSTRUCTION: 20 MIL, 5MM
INSTALLATION: INCLUDE A 2 MIL SHEET OF POLYETHYLENE PLASTIC ADHERED TO THE SLAB WITH A SPRAYWAY FAST TRACK 85 SPRAY ADHESIVE.
STAGGER, REFER TO FINISH PLAN
CONTACT: SHEILA DONHAM, 310.927.0082, Sheila.donham@shawcontract.com

12 24 16 ROLLER SHADES

MS-1
WINDOW ROLLER SINGLE SHADE - MOTORIZED
MECHOSHADE
SHADE – ECOVEIL SHEER
SERIES: 6850 - 1% OPEN
COLOR: 6862 GRAPHITE
PROVIDE CATCH BIN BRACKET AT SHADES ABOVE 25' A.F.F. AND FINISHED END CAPS
INSTALLATION: WALL MULLION MOUNTED WITH FASCIA AT ACT CEILING – REFER TO ARCHITECURAL DETAILS 22/A904.
FASCIA: BLACK
CONTACT: JESSE RUSS, 213.687.2471, jesse@architype.net

MS-2
WINODW ROLLER DOUBLE SHADE – MOTORIZED
MECHOSHADE
SHADE 1 – CLASSIC BLACKOUT
SERIES: 0700 - OPAQUE
COLOR: 0703 BLACK/BLACK
SHADE 2 – ECOVEIL
SERIES: 1750 - 1% OPEN
COLOR: 1754 BLACK/BROWN
PROVIDE CATCH BIN BRACKET AT SHADES ABOVE 25' A.F.F. AND FINISHED END CAPS
INSTALLATION: WALL MULLION MOUNTED WITH FACIA – REFER TO ARCHITECURAL DETAILS 10/A904 & 21/A904.
FASCIA COLOR: BLACK
CONTACT: JESSE RUSS, 213.687.2471, jesse@architype.net

MS-3
WINODW ROLLER SINGLE SHADE – MOTORIZED
MECHOSHADE
SHADE – ECOVEIL SHEER
SERIES: 6850 - 1% OPEN
COLOR: 6862 GRAPHITE
PROVIDE CATCH BIN BRACKET AT SHADES ABOVE 25' A.F.F. AND FINISHED END CAPS
INSTALLATION: WALL MULLION MOUNTED WITH FACIA – REFER TO ARCHITECURAL DETAIL 6/A904.
FASCIA COLOR: BLACK
CONTACT: JESSE RUSS, 213.687.2471, jesse@architype.net

12 22 00 CURTAINS AND DRAPES

PF-1
PRIVACY FABRIC
CARNEGIE STYLE: BIJOUX
COLOR: 6868 10
FINISH: NONE
CONTACT: HOKULEA DUFFETT, 323.898.6446, hduffett@carnegiefabrics.com
NOTES: PROVIDE AND INSTALL SPECIFIED CURTAIN CEILING TRACK AND HARDWARE

06 41 16 PLASTIC-LAMINATE-CLAD ARCHITECTURAL CASEWORK

PLAM-1
PLASTIC LAMINATE:
WILSONART AT CABINETS AND BENCHES AND WOOD DOORS
STYLE: BLOND ECHO 7939K-18
CONTACT: WILSONART.COM

09 65 10 RESILIENT WALL BASE

RB-1
WALL RUBBER BASE:
JOHNSONITE
COLOR: 63 BURNT UMBER B
SIZE: 4" HIGH

RB-2
WALL RUBBER BASE:
JOHNSONITE
COLOR: 15 CABERNET
SIZE: 4" HIGH

09 84 33 ACOUSTICAL PERFORATED WOOD WALL PANELS

AWP-5
ACOUSTICAL PERFORATED WOOD WALL PANELS
SOUNDPLY BY NAVY ISLAND
SOUNDPLY RF-M25
PANEL THICKNESS: 1"
PANEL SIZES: VARIES, REFER TO INTERIOR ELEVATIONS
EDGE PROFILE: SQUARE
FINISH: MAPLE PLAIN SLICED
INSTALLATION: Z-CLIP MOUNTING PER MANUFACTURERE'S RECOMMENDATION
CONTACT: DIANA HALL, 651.451.4454 X 240, diana.hall@navyisland.com

AWP-6
ACOUSTICAL PERFORATED WOOD WALL PANELS
SOUNDPLY BY NAVY ISLAND
SOUNDPLY RF-M25
PANEL THICKNESS: 1"
PANEL SIZES: VARIES, REFER TO INTERIOR ELEVATIONS
EDGE PROFILE: SQUARE
FINISH: WALNUT PLAIN SLICED
INSTALLATION: Z-CLIP MOUNTING PER MANUFACTURERE'S RECOMMENDATION
CONTACT: DIANA HALL, 651.451.4454 X 240, diana.hall@navyisland.com

AWP-7
ACOUSTICAL PERFORATED WOOD WALL PANELS
SOUNDPLY BY NAVY ISLAND
SOUNDPLY RF-M51
PANEL THICKNESS: 2"
PANEL SIZES: VARIES, REFER TO INTERIOR ELEVATIONS
EDGE PROFILE: SQUARE
FINISH: MAPLE PLAIN SLICED
INSTALLATION: Z-CLIP MOUNTING PER MANUFACTURERE'S RECOMMENDATION
CONTACT: DIANA HALL, 651.451.4454 X 240, diana.hall@navyisland.com

03 35 53 INTERIOR CONCRETE FLOOR SEALER

CONC-5
CLEAR CONCRETE SEALER OVER EXPOSED CONCRETE. CONTRACTOR TO PROVIDE MOCK-UP FOR ARCHITECT'S APPROVAL.

09 78 00 FRP WALL PANELS

FRP-1
FIBERGLASS REINFORCED PLASTIC
MARLITE – STANDARD FRP WALL PROTECTION
COLOR: WHITE P100
TEXTURED
SIZE: 4'X8'
CLASS A RATING
CONTACT: WWW.MARLITE.COM

08 80 00 GLAZING

GL-4
INTERIOR GLASS AT INTERIOR WOOD DOORS
1/4" THICK CLEAR SAFETY GLASS
REFER TO ELEVATIONS FOR LOCATIONS AND SIZES

GL-5
1/4" THICK LAMINATED GLASS, STC 50
INTERIOR STC RATED WINDOWS
REFER TO ELEVATIONS FOR LOCATIONS AND SIZES

08 86 00 MIRRORED GLASS

GL-6
INTERIOR MIRRORS.
REFER TO ELEVATIONS FOR LOCATIONS AND SIZES.

09 90 00 PAINTING

IPT-1
INTERIOR PAINT - TYPICAL COLOR
SHERWIN-WILLIAMS
COLOR: SW 7006 EXTRA WHITE
EGGSHELL FINISH AT WALLS,
FLAT AT CEILINGS, SEMI GLOSS AT RESTROOM, SHOWERS AND OTHER WET AREA WALLS AND CEILINGS

IPT-2
INTERIOR PAINT - ACCENT COLOR
SHERWIN-WILLIAMS
COLOR: SW 7584 RED THEATRE
EGGSHELL FINISH AT WALLS, SEMI GLOSS AT WET AREAS.

IPT-3
INTERIOR PAINT - ACCENT COLOR
SHERWIN-WILLIAMS
COLOR: SW 7015 REPOSE GRAY
EGGSHELL FINISH AT WALLS

IPT-4
INTERIOR PAINT - ACCENT COLOR
SHERWIN-WILLIAMS
COLOR: SW 7674 PEPPERCORN
EGGSHELL FINISH AT WALLS, FLAT AT CEILINGS, SEMI GLOSS AT RESTROOMS, SHOWERS AND OTHER WET AREAS, SEMI GLOSS AT DOORS AND DOOR FRAMES.

IPT-5
INTERIOR PAINT - ACCENT COLOR
DUNN EDWARDS
COLOR: DEA002 BLACK
EGGSHELL FINISH AT WALLS, FLAT AT CEILINGS, FLAT AT ALL EXPOSED STRUCTURAL ELEMENTS, MECHANICAL DUCTS AND EXPOSED DECK.

09 51 13 ACOUSTICAL CEILING TILE

ACT-1
ACOUSTICAL CEILING TILE:
ARMSTRONG CANYON 9/16" BEVELED TEGULAR #1494 (OR EQUAL)
TILE SIZE: 2'X2', COLOR WHITE
GRID: SILHOUETTE 1/8" REVEAL
CONTACT: MATT NEWMAN, 213.408.9957, Mpnewman@armstrongceilings.com

ACT-2
ACOUSTICAL CEILING TILE:
ARMSTRONG CALLA 9/16" SQUARE TEGULAR #2824WH (OR EQUAL)
TILE SIZE: 2'X2', COLOR WHITE
GRID: SILHOUETTE 1/8" REVEAL
CONTACT: MATT NEWMAN, 213.408.9957, Mpnewman@armstrongceilings.com

ACT-3
ACOUSTICAL CEILING TILE:
ARMSTRONG CALLA 9"/16" SQUARE TEGULAR #2824BK (OR EQUAL)
TILE SIZE: 2'X2', COLOR BLACK
GRID: SILHOUETTE XL 1/8" REVEAL
CONTACT: MATT NEWMAN, 213.408.9957, Mpnewman@armstrongceilings.com

09 52 00 ACOUSTICAL CEILING PANEL

ACP
ACOUSTICAL CEILING PANELS
OWENS CORNING SELECT SOUND ACOUSTIC BOARD INSULATION
THICKNESS: 2" FIBERGLAS
SIZES: 4x8 +/- PANELS PER REFLECTED CEILING PLANS
COLOR: BLACK
INSTALLATION: DIRECT ATTACHMENT TO EXPOSED DECK PER MANUFACTURER'S RECOMMENDATION.
CONTACT: Rob Baroudi, 419 248 5489, robby.baroudi@owenscorning.com

09 84 33 ACOUSTICAL PERFORATED WOOD WALL PANELS

AWP-1
ACOUSTICAL PERFORATED PAINTED WOOD PANELS
SOUNDPLY BY NAVY ISLAND
SOUNDPLY RF-M51 PAINTED FINISH
MATCH SAMPLE # D32052
PANEL THICKNESS: 2"
PANEL SIZE: VARIES REFER TO INTERIOR ELEVATIONS
PAINT COLOR: SW 7674 PEPPERCORN (IPT-4)
SHEEN: 10 DEGREES
EDGE PROFILE: SQUARE
INSTALLATION: Z-CLIP MTG PER MANUF. RECOMMENDATIONS
CONTACT: DIANA HALL, 651.451.4454 X240
diana.hall@navyisland.com

AWP-2
ACOUSTICAL PERFORATED PAINTED WOOD PANELS
SOUNDPLY BY NAVY ISLAND
SOUNDPLY RF-M51 PAINTED FINISH
MATCH SAMPLE # D32052
PANEL THICKNESS: 2"
PANEL SIZE: VARIES REFER TO INTERIOR ELEVATIONS
PAINT COLOR: SW 9685 AFTER THE STORM (IPT-5)
SHEEN: 10 DEGREES
EDGE PROFILE: SQUARE
INSTALLATION: Z-CLIP MTG PER MANUF. RECOMMENDATIONS
CONTACT: DIANA HALL, 651.451.4454 X240
diana.hall@navyisland.com

AWP-3
ACOUSTICAL PERFORATED PAINTED WOOD PANELS
SOUNDPLY BY NAVY ISLAND
SOUNDPLY RF-M51 PAINTED FINISH
MATCH SAMPLE # D32052
PANEL THICKNESS: 2"
PANEL SIZE: VARIES REFER TO INTERIOR ELEVATIONS
PAINT COLOR: SHERWIN WILLIAMS SW 7584 RED THEATRE (IPT-2)
SHEEN: 10 DEGREES
EDGE PROFILE: SQUARE
INSTALLATION: Z-CLIP MTG PER MANUF. RECOMMENDATIONS
CONTACT: DIANA HALL, 651.451.4454 X240
diana.hall@navyisland.com

AWP-4
ACOUSTICAL PERFORATED PAINTED WOOD PANELS
SOUNDPLY BY NAVY ISLAND
SOUNDPLY RF-M25 PAINTED FINISH
MATCH SAMPLE # D32052
PANEL THICKNESS: 1"
PANEL SIZE: VARIES REFER TO INTERIOR ELEVATIONS
PAINT COLOR: SHERWIN WILLIAMS SW 7674 PEPPERCORN (IPT-4)
SHEEN: 10 DEGREES
EDGE PROFILE: SQUARE
INSTALLATION: Z-CLIP MTG PER MANUF. RECOMMENDATIONS
CONTACT: DIANA HALL, 651.451.4454 X240
diana.hall@navyisland.com

STRUERE
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

LICENSED ARCHITECT HRAZTAN KETTYAN 28719 RENEWAL DATE 04/30/25 STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD,
COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

SHEET TITLE
INTERIOR FINISH MATERIALS

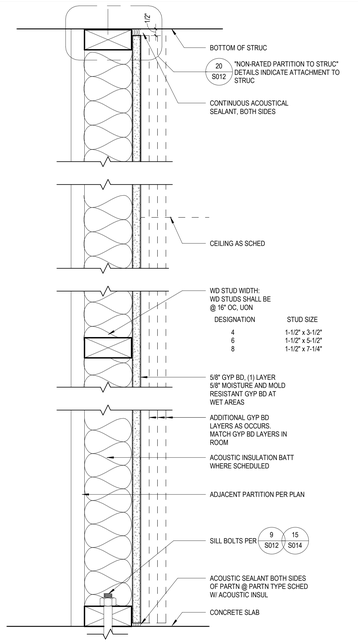
SHEET NUMBER
A610

1/23/2025 1:20:09 PM

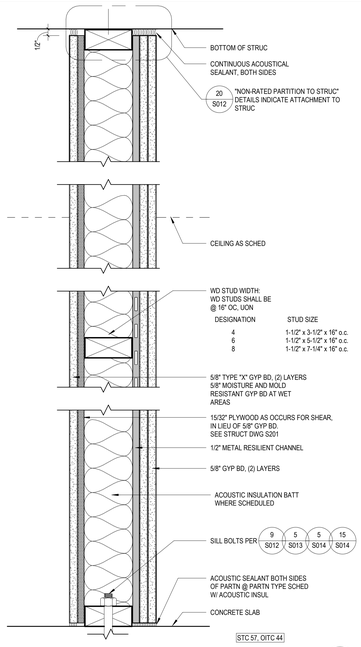
PARTITION TYPE GENERAL NOTES

1. PARTITION TYPES ARE DESIGNATED BY THE SYMBOL ILLUSTRATED BELOW. ALL REQUIREMENTS OF THE PARTITION TYPE SHALL APPLY TO THE THE FULL EXTENTS OF THE PARTITION.
2. SEE LIMITING HEIGHTS TABLE FOR GAUGE OF METAL STUDS.
3. PARTITIONS SHALL COMPLY WITH ADDITIONAL REQUIREMENTS AS INDICATED BY THE MODIFIERS SHOWN BELOW.
4. ACOUSTICAL AND THERMAL INSULATION SHALL FILL FULL DEPTH OF EACH METAL STUD CAVITY.
5. ACOUSTICAL AND THERMAL INSULATION IN A CEILING PLENUM SHALL BE INCAPSULATED.
6. STAGGER JOINTS IN GYP BD WHEN MULTIPLE LAYERS OF GYP BD ARE REQUIRED.

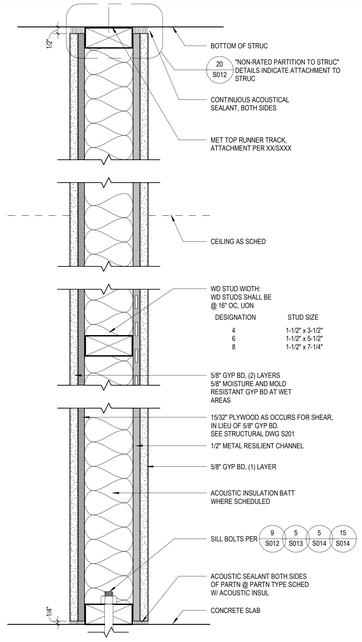
PARTITION TYPE TAG:



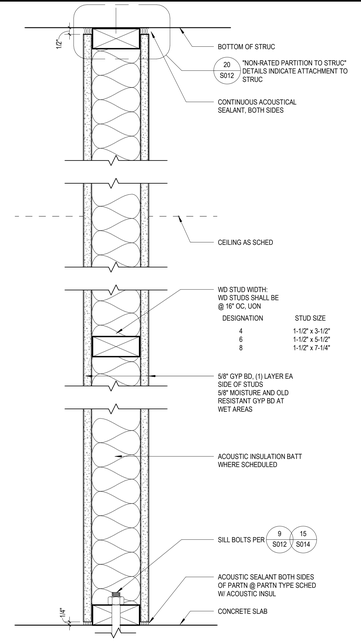
F TYPE F FURRED PARTITION, NON RATED
3" = 1'-0"



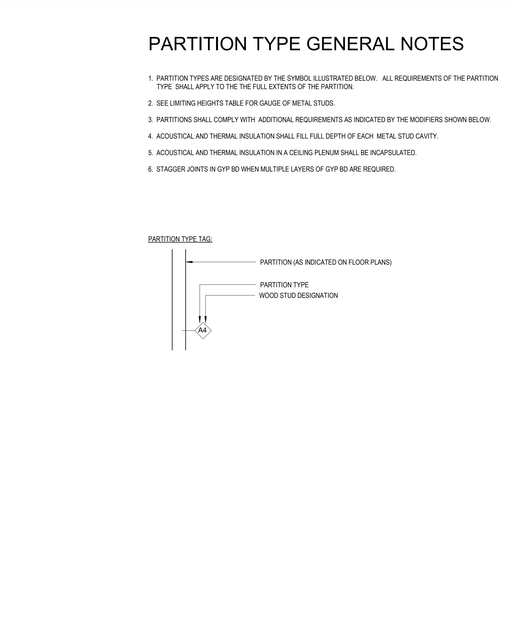
C TYPE C FULL HT PARTITION, NON RATED
3" = 1'-0"

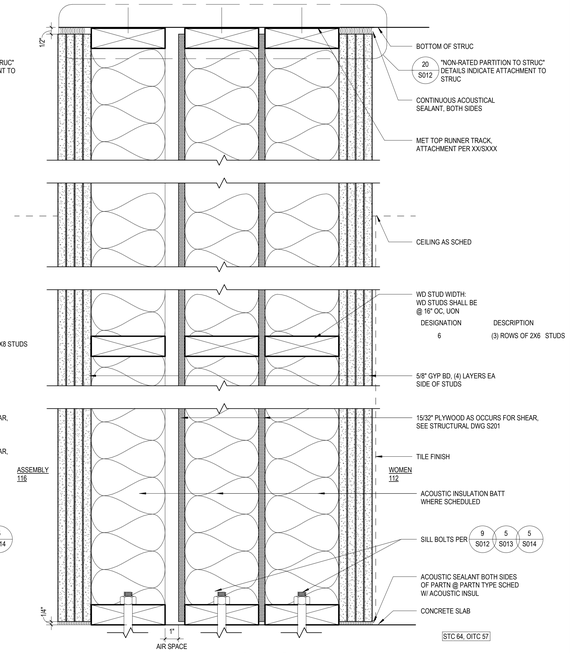


B TYPE B FULL HT PARTITION, NR, SHEAR
3" = 1'-0"



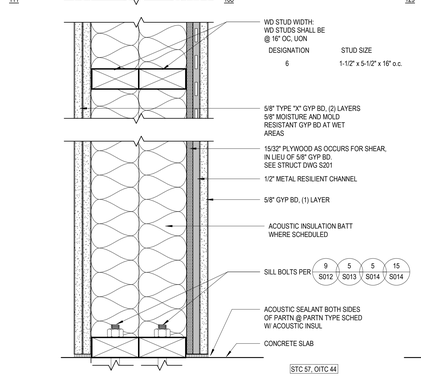
A TYPE A FULL HT PARTITION, NON RATED
3" = 1'-0"



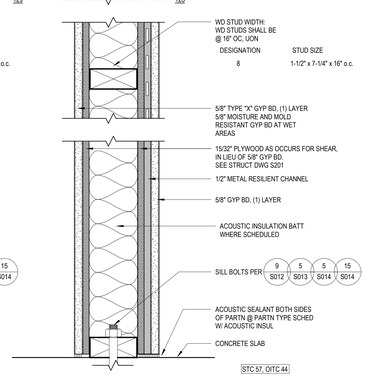


D TYPE D FULL HT PARTITION, NON RATED
3" = 1'-0"

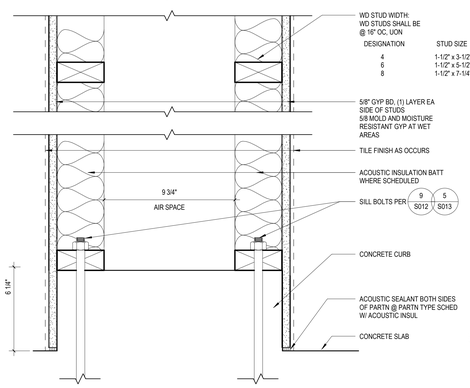
D6* TYPE D6* FULL HT PARTITION, NON RATED AT WOMEN 112_ASSEMBLY 116
3" = 1'-0"



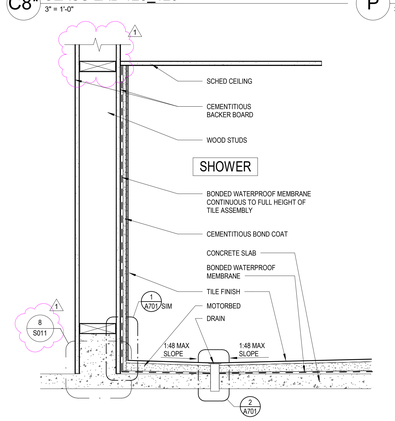
C6* TYPE C6* FULL HT PARTITION, NON RATED AT MEN 111_GEN CLSRM 108
3" = 1'-0"



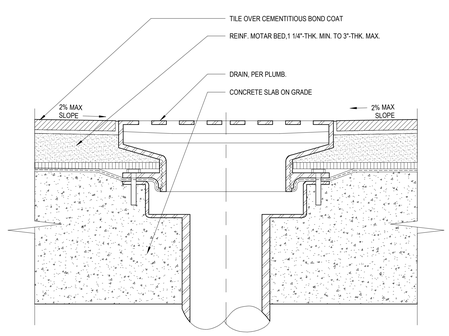
C8* TYPE C8* FULL HT PARTITION, NON RATED AT CLASS LAB 128_129
3" = 1'-0"



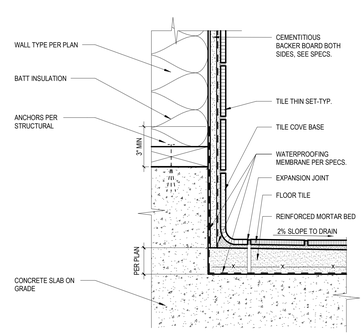
P TYPE F FULL HT NON RATED PLUMBING WALL
3" = 1'-0"



3 TYPICAL SHOWER DETAIL
1 1/2" = 1'-0"



2 SHOWER DRAIN
6" = 1'-0"



1 BASE DETAIL AT SHOWER STALL
3" = 1'-0"

Structure
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

LICENSED ARCHITECT HRAZTAN KEVITIAN 28719 RENEWAL DATE 04/30/25 STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

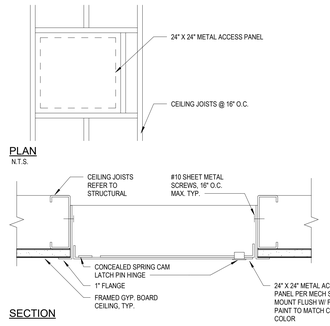
SHEET TITLE

PARTITION TYPES

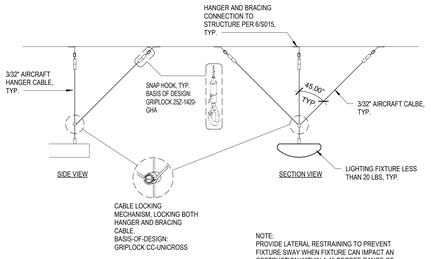
SHEET NUMBER

A701

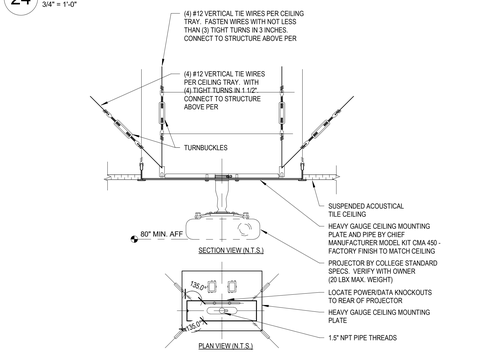
1/23/2025 1:20:15 PM



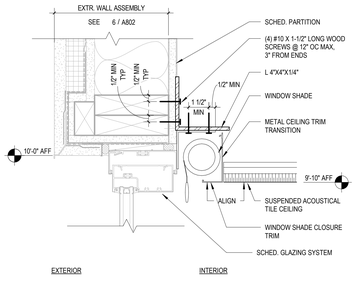
25 ACCESS PANEL
3" = 1'-0"



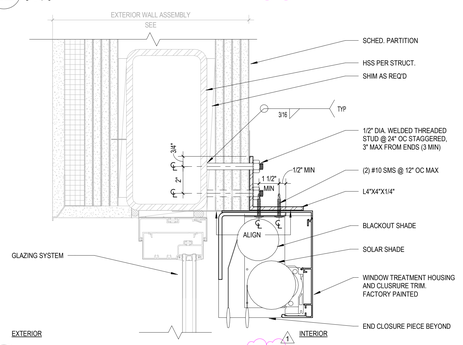
24 PENDANT FIXTURE LATERAL RESISTANCE
3/4" = 1'-0"



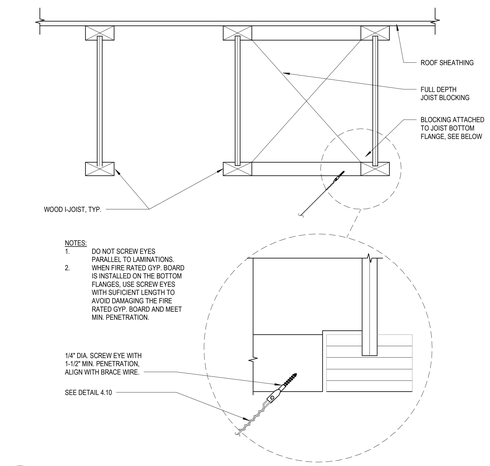
23 PROJECTOR MOUNT CEILING TRAY
1 1/2" = 1'-0"



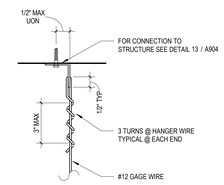
22 WINDOW SHADE AT ACT CEILING (MS-1)
3" = 1'-0"



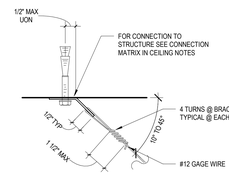
21 WINDOW SHADE AT ASSEMBLY (MS-2)
3" = 1'-0"



20 BRACE WIRE CONNECTION TO WOOD I-JOIST
1 1/2" = 1'-0"
IR 25-2-19 DETAIL 4.36

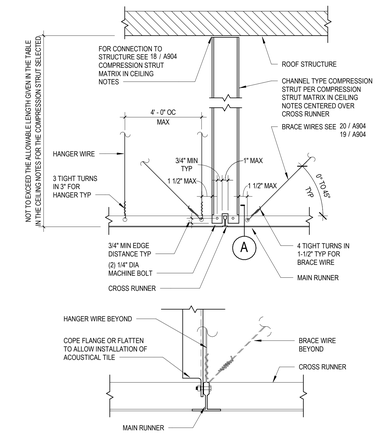


HANGER WIRE



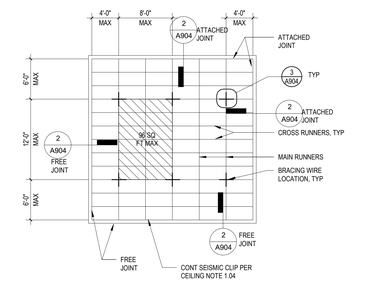
BRACING WIRE

15 HANGER & BRACING WIRE CONN. TYP. WIRE TURNS
3" = 1'-0"
IR 25-2-19 DETAIL 4.10

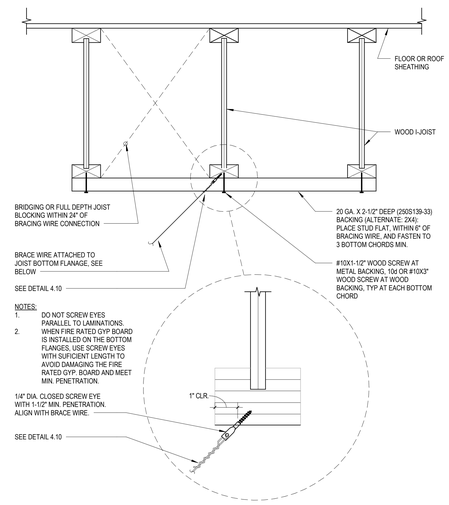


A SECTION

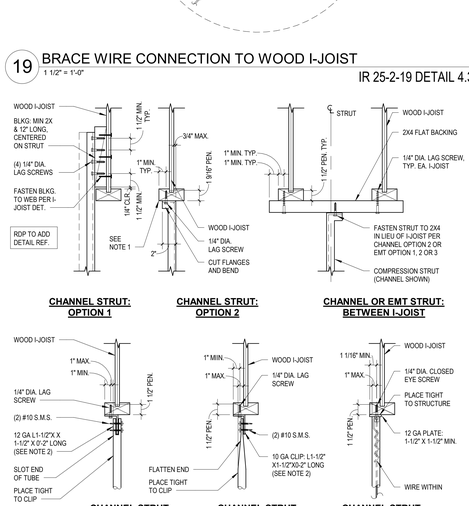
9 CHANNEL TYPE STRUT
1 1/2" = 1'-0"
IR 25-2-19 DETAIL 3.10



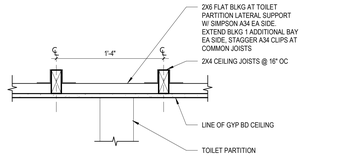
5 TYPICAL CEILING PLAN FOR 8'-0" X 12'-0" BRACE ASSEMBLY SPACING
1/8" = 1'-0"
IR 25-19 DETAIL 2.11



19 BRACE WIRE CONNECTION TO WOOD I-JOIST
1 1/2" = 1'-0"
IR 25-2-19 DETAIL 4.37

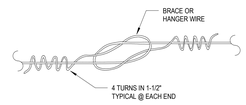


18 STRUT CONNECTION TO I-JOIST
1 1/2" = 1'-0"
IR 25-2-19 DETAIL 5.52



17 TOILET PARTITION CEILING ATTACHMENT
1 1/2" = 1'-0"

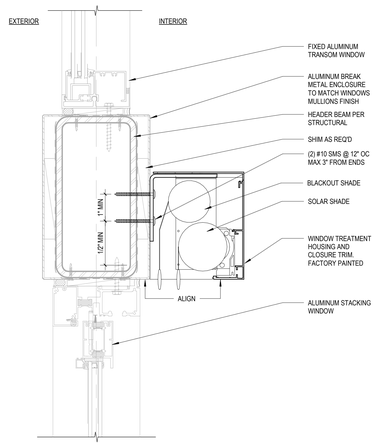
HANGER WIRE ONLY



HANGER OR BRACE WIRE

NOTES:
1. WIRE SPLICES ARE SHOWN LOOSELY TIED FOR ILLUSTRATIVE PURPOSES ONLY AND SHALL BE DRAWN TIGHT TO COMPLETE INSTALLATION WHEN CONSTRUCTED.
2. WIRE LOOPS SHALL BE TIGHTLY WRAPPED AND SHARPLY BENT TO PREVENT ANY VERTICAL MOVEMENT OR ROTATION WITHIN THE LOOPS.
3. EACH HANGER AND BRACE WIRE SHALL BE SPLICED NO MORE THAN ONCE ALONG ITS LENGTH.

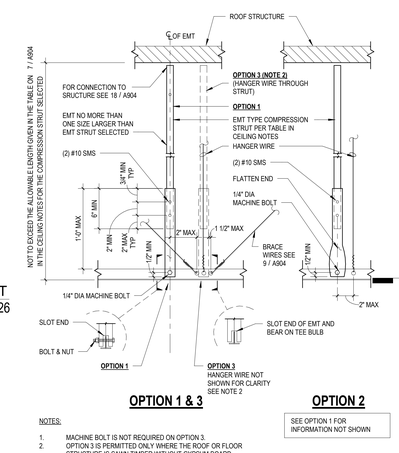
11 CEILING WIRE SPLICES
3" = 1'-0"
IR 25-2-19 DETAIL 6.10



10 DUAL SHADE WITH HOUSING (MS-2)
3" = 1'-0"

BRACING WIRE

A SECTION



OPTION 1 & 3

OPTION 2

SEE OPTION 1 FOR INFORMATION NOT SHOWN

NOTES:
1. MACHINE BOLT IS NOT REQUIRED ON OPTION 3.
2. OPTION 3 IS PERMITTED ONLY WHERE THE ROOF OR FLOOR STRUCTURE IS SAWN TIMBER WITHOUT GYPSUM BOARD.

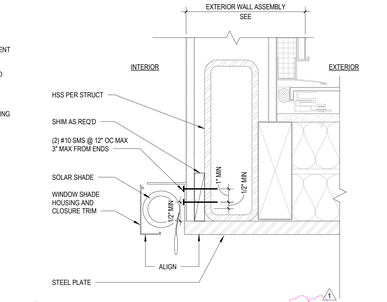
8 EMT TYPE STRUT
1 1/2" = 1'-0"
IR 25-2-19 DETAIL 3.20

COMPRESSION STRUT TABLE

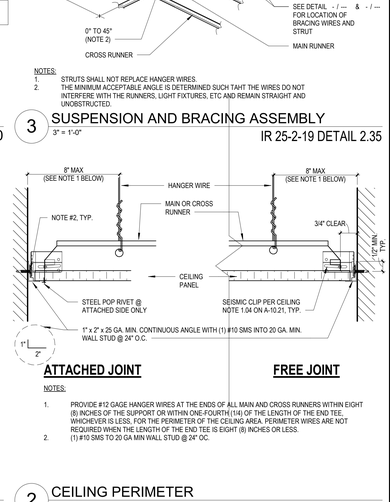
COMPRESSION STRUT EMT SECTION	MAXIMUM LENGTH
1/2" DIAMETER EMT (0.042" WALL THICKNESS)	3' - 11"
3/4" DIAMETER EMT (0.049" WALL THICKNESS)	6' - 4"
1" DIAMETER EMT (0.057" WALL THICKNESS)	9' - 9"
1 1/4" DIAMETER EMT (0.065" WALL THICKNESS)	12' - 9"
1 1/2" DIAMETER EMT (0.065" WALL THICKNESS)	14' - 9"
2" DIAMETER EMT (0.065" WALL THICKNESS)	18' - 10"

COMPRESSION STRUT CHANNEL SECTION	MAXIMUM LENGTH
250S125-33	5' - 0"
250S137-33	6' - 10"
362S137-33	8' - 0"
250137-43	8' - 10"
400S137-43	10' - 10"

7 COMPRESSION STRUT TABLE
3" = 1'-0"
IR 25-2-19 DETAIL 3.21



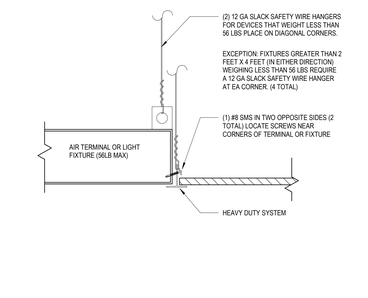
6 WINDOW SHADE WITH HOUSING (MS-3)
3" = 1'-0"



3 SUSPENSION AND BRACING ASSEMBLY
3" = 1'-0"
IR 25-2-19 DETAIL 2.35

NOTES:
1. PROVIDE #12 GAGE HANGER WIRES AT THE ENDS OF ALL MAIN AND CROSS RUNNERS WITHIN EIGHT (8) INCHES OF THE SUPPORT OR WITHIN ONE-FOURTH (1/4) OF THE LENGTH OF THE END TEE, WHICHEVER IS LESS, FOR THE PERIMETER OF THE CEILING AREA. PERIMETER WIRES ARE NOT REQUIRED WHEN THE LENGTH OF THE END TEE IS EIGHT (8) INCHES OR LESS.
2. (1) #10 SMS TO 20 GA MIN WALL STUD @ 24" OC.

2 CEILING PERIMETER
3" = 1'-0"
IR 25-2-19 DETAIL 2.60



1 LT FIXTURES / AIR TERMINAL SUPPORT DETAIL
3" = 1'-0"
IR 25-2-19 DETAIL 2.80

Struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

LICENSED ARCHITECT HRAZTAN AZATYAN 28719 RENEWAL DATE 04/30/25 STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

SHEET TITLE
INTERIOR DETAILS - CEILING

SHEET NUMBER
A904

7/28/2022 8:42:32 AM

PROJECT INFORMATION :

PROJECT:

COMPTON COLLEGE - VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD ,
COMPTON, CA 90221-5393

GLAZING CONTRACTOR:

X

PROJECT DESIGN CRITERIA

STRUCTURAL DESIGN CRITERIA

1. GOVERNING CODE:
   ALL WORK SHALL BE IN CONFORMANCE WITH THE CALIFORNIA BUILDING CODE 2019 EDITION (CBC 2019), INCLUDING ALL AMENDMENTS AND SUPPLEMENTS BY GOVERNING CODE AUTHORITY, AND OTHER CODES AND STANDARDS REFERENCED IN THE CONTRACT DOCUMENTS. ALL CODES AND STANDARDS REFERENCED IN CONTRACT DOCUMENTS SHALL BE THE LATEST EDITION AS NOTED BY CBC 2019, CHAPTER 35, UNO.

2. GOVERNING CODE AUTHORITY:
   THE DIVISION OF THE STATE ARCHITECT (DSA) - STRUCTURAL SAFETY.

3. GRAVITY DESIGN LOADS:

   ROOF LIVE LOAD.....AS INDICATED ON SHEET S100
   PHOTOVOLTAIC PANEL LOAD.....5 PSF IN AREA DESIGNATED IN SHEETS S100

4. WIND DESIGN DATA (IN ACCORDANCE WITH REQUIREMENTS OF SECTION 1603A OF CBC 2019):

   BASIC DESIGN WIND SPEED.....101 MPH
   WIND EXPOSURE.....C
   RISK CATEGORY.....III
   BUILDING ENCLOSURE.....PARTIALLY ENCLOSED
   INTERNAL PRESSURE COEFFICIENT.....+0.55
   EXTERIOR WIND PRESSURE (COMPONENT & CLADDING) BASED ON ZONE 5 AND:
   COMPONENT TRIBUTARY AREA = 10 FT2.....38 PSF
   COMPONENT TRIBUTARY AREA = 200 FT2.....29 PSF

5. EARTHQUAKE DESIGN DATA:

   SITE LATITUDE.....33.876960 N
   SITE LONGITUDE.....-118.211102 W
   RISK CATEGORY.....III
   SEISMIC IMPORTANCE FACTOR, Ie.....1.25
   SITE CLASS.....D
   SHORT-PERIOD SITE COEFFICIENT, Fa.....1.0
   LONG-PERIOD SITE COEFFICIENT, Fv.....2.5
   SITE SPECIFIC SPECTRAL RESPONSEACCELERATION, Ss.....1.882 g
   SITE SPECIFIC SPECTRAL RESPONSE ACCELERATION, S1.....0.656 g
   DESIGN SPECTRAL RESPONSE ACCELERATION, SDS.....1.255 g
   DESIGN SPECTRAL RESPONSE ACCELERATION, SD1.....1.093 g
   SEISMIC DESIGN CATEGORY.....D

6. SEISMIC FORCE-RESISTING SYSTEM (SFRS):

   EAST-WEST DIRECTION:
   LIGHT-FRAME (WOOD) WALLS SHEARED WITH WOOD STRUCTURAL PANELS
   RATED FOR SHEAR RESISTINACE OR STEEL SHEET
   RESPONSE MODIFICATION FACTOR, R.....6.5
   DEFLECTION AMPLIFICATION FACTOR,CD.....4
   OVERSTRENGTH FACTOR, Ωo.....3
   SEISMIC RESPONSE COEFFICIENT, CS 0.241
   DESIGN BASE SHEAR .....59 KIPS

FRAMING:

2" x 6" AFG601T Series
2" x 4 1/2" AFG451T Series (1)
DOORS 3000 STC Series
DOORS WS512HD Door Series
Bifold DOORS 10000 Oasis Series

FINISH:

TBD

MATERIALS:

- ALUMINUM SHALL BE 6063-T6 ALLOY (TYPICAL - UNLESS NOTED OTHERWISE)
- ALL FASTENERS SHALL BE ZINC PLATED STEEL (UNLESS NOTED OTHERWISE)
  STAINLESS STEEL FASTENERS WHERE EXPOSED TO WEATHER
- PERIMETER FASTENERS PROVIDED BY CUSTOMER

TABLE OF CONTENTS:

ALUMINUM CW & STOREFRONT DESIGN DRAWINGS

COMPTON COLLEGE - VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD ,
COMPTON, CA 90221-5393

ARCADIA, INC. ®
PRODUCT USE & WARRANTY

Product Use

Arcadia, Inc., hereby disclaims all liability for the installation of project or design, any parts, gaskets, glazing materials, components or sealant of other manufacturers used with Arcadia, Inc.,products , or lack of performance of Arcadia, Inc., products attributable to such items. Buyer agrees that under no circumstances shall Arcadia, Inc. be liable for installation defects as Arcadia, Inc. has not and will not be involved in the product selection or installation process. Buyer acknowledges that windows and doors are designed and manufactured to specific performance levels and are rated and classified for particular uses. Different product applications require different levels of product performance. Windows and doors are rated by independent certification agencies to insure they meet their specifications. Selecting the appropriate Arcadia, Inc. products and the installation and application of these products is not the responsibility of Arcadia, Inc. but of Buyer. Buyer represents and agrees that Buyer is solely responsible for the selection and application of proper systems and sizes and to ensure that when installed Arcadia, Inc.'s products will not allow water to pass beyond, around or through Arcadia, Inc.'s products. Unless Buyer has requested in writing and paid a separate and additional fee to Arcadia, Inc. for assembly and installation instructions and unless the same is reflected in this documents. Buyer agrees that any details shown are for purposes of illustrations purposes only and are not intended to show how the product should actually be installed and applied. This warranty also does not cover, and Arcadia, Inc., hereby disclaims all liability for any product which has accident, fire, war, flood, earthquakes, acts of God, or to which parts not supplied by Arcadia, Inc., have been added, or to defects caused by depreciation or normal wear. All decisions regarding the existence of defects in material and workmanship and the occurrence of any of the matters described in the preceding paragraphs or affecting this Warranty shall be made by Arcadia, Inc., and shall be final and binding upon the parties.

Warranties

Arcadia, Inc. warrants that goods sold here under are merchantable unless manufactured in conformance with Buyer's specifications, and that Arcadia, Inc. conveys good title thereto. ARCADIA, INC. MAKES NO WARRANTIES OR REPRESENTATIONS , EXPRESS OR IMPLIED, BEYOND THE DESCRIPTION ON THE FACE OF THIS CONTRACT AND PURCHASER UNDERSTANDS THAT ARCADIA, INC. HEREBY DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. FOR EXAMPLE, ARCADIA, INC. DOES NOT WARRANT THAT THE GOODS ARE FIT FOR BUYER'S PARTICULAR USE OR PURPOSE, AND EXPRESSLY DISCLAIMS ALL PRIOR, CONTEMPORANEOUS OR SUBSEQUENT ORAL REPRESENTATIONS OR WARRANTIES OF ANY KIND. IN THE EVENT GOODS ARE NOT CONFORMING, BUYER'S EXCLUSIVE REMEDY SHALL BE RETURN OF THE GOODS AND REFUND OF THE PURCHASE PRICE, OR AT ARCADIA, INC.'S OPTION, REPLACEMENT OF THE GOODS BY ARCADIA, INC., BUT IN NO EVENT SHALL ARCADIA, INC. BE LIABLE TO BUYER FOR ANY MERCHANDISE OR PART BEYOND ITS INVOICE VALUE (LESS SCRAP VALUE), NOR FOR ANY DIRECT , CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES. Arcadia, Inc. shall not have any liability to the customer for lost profits or other consequential, special, indirect or incidental damages, based upon a claim of any type or nature (including, but not limited to, contract, tort (including negligence, warranty or strict liability)), even if advised of possibility of such damages. Arcadia, Inc. specifically does not warrant the accuracy of any advice or recommendations given to Buyer in connection with the sale of goods hereunder.

FIELD TESTING

AUTHORIZED FIELD TEST PROCEDURES

1. QUALITY ASSURANCE AND DIAGNOSTIC TESTING - STOREFRONTS, CURTAIN WALLS, AND SLOPED GLAZING:
   AAMA 501.2 Quality Assurance and Diagnostic Water Leakage Field Check of Installed STOREFRONTS, Curtain Walls, and Sloped Glazing Systems.
2. QUALITY ASSURANCE - PRESSURE DIFFERENCE TESTING OF FENESTRATION PRODUCTS:
   AAMA 502 Voluntary Specification for Field Testing of Newly Installed Fenestration Products
3. QUALITY ASSURANCE - PRESSURE DIFFERENCE TESTING OF STOREFRONTS, CURTAIN WALLS, AND SLOPED GLAZING:
   AAMA 503 Voluntary Specification for Field Testing of Newly Installed Storefronts, Curtain Walls, and Sloped Glazing Systems
4. TESTING 6 MONTHS OR MORE AFTER THE PRODUCT HAS BEEN INSTALLED OR THE BUILDING OCCUPANCY PERMIT HAS BEEN ISSUED:
   AAMA 511 Voluntary Guideline for Forensic Water Penetration Testing of Fenestration

STATIC TEST PRESSURE REDUCTION FOR WATER PENETRATION RESISTANCE (FIELD) TESTING

1. Unless otherwise specified, water penetration resistance tests shall be conducted at a static test pressure equal to 2/3 of the tested and rated laboratory performance test pressure as indicated by the applicable product designation in AAMA/WDMA/CSA 101/I.S..2/A440.
   (AAMA 502-12, section 5.3.2)
2. The field water penetration resistance tests shall be conducted at a static test pressure of two-thirds of the specified project water penetration test pressure, but not less than 200Pa or 4.18 psf. (AAMA 503-14, section 6.3.1)
   Note 7: The specifier may increase the field water test pressure to the value specified for the project; however, this must be stipulated in Paragraph 2 of the á{K2½ü Form Field Testing {LŠÕÌÌÔÌ•Ù2yÊ• In the event that the project does not have a specified water penetration test pressure, the value will be equal to 20% of the positive design wind load times 0.667. (AAMA 503-14, section 6.3.1, Note 7)

IMPORTANT NOTES

1. The default pressures used for water penetration resistance tests conducted in the field are not the same as the laboratory test pressure to allow for field conditions and test methods that vary from the laboratory test conditions and test methods. These conditions are primarily related to ambient and environmental conditions and the installation. The product performance is based on laboratory testing performed under controlled laboratory conditions. The temperature, wind and barometric pressure conditions during a field test will typically vary from the standard laboratory conditions.
   The field installation conditions also influence the product performance. Products tested in the laboratory are typically installed near-perfect for plumb, level and square within a precision opening. Field test specimens, although installed within acceptable industry tolerances, are rarely perfectly plumb, level and square. Shipping, handling, acts of subsequent trades, aging and other environmental conditions all may have an adverse effect upon performance of the installed specimen. A 1/3 reduction of the test pressure for field testing is a reasonable adjustment for the differences between a laboratory test environment and a field test environment. (AAMA 502-12, section 5.3.2 Note 6 & AAMA 503-14, section 6.3.1, Note 8)

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEEMS
No. 38936
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD,
COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

SHEET TITLE

COVER PAGE

SHEET NUMBER

CW0.01

7/28/2022 8:42:32 AM

REPETITIVE NOTES:

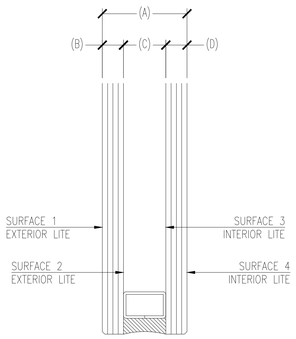
NO	DESCRIPTION
01	CONT. SILICONE SEALANT (WITH OPEN-CELL BACKER ROD AS REQ'D.)
01c	INTERIOR SILICONE SEALANT (WITH OPEN-CELL BACKER ROD AS REQ'D.)
02	SOLID SHIM / BLOCKING AS REQUIRED, NOT BY ARCADIA
04	GLASS SETTING BLOCKS - 2 PER LITE AT LOCATIONS PER CALCS (SILICONE SETTING BLOCK WHEN IN CONTACT WITH SILICONE)
05	GLASS ANTI-WALK BLOCKS - 2 PER LITE AT 1/4 PTS
06	SILICONE SEALANT AS SHOWN
07	SEAL AT FASTENER LOCATIONS
08	BEDDED IN SILICONE SEALANT
08a	1/8" thk END DAM BEDDED IN SEALANT AND SEALED THOROUGHLY
09b	WATER DIVERTER SEALED AGAINST HORIZONTAL POCKET TO DIVERT WATER INTO VERTICAL
10c	1/2" x 5/16"Ø WEEP SLOT WITH WEEP BAFFLE. 2 PER LITE.
11b	5/16" x 3/4" WEEP SLOT - 2 PER LITE
13	ACCESS / CLEARANCE HOLE AT FASTENER LOCATIONS
14	RUN CONTINUOUS BEAD OF SEALANT AT LOCATION SHOWN PRIOR TO INSTALLATION
28e	1/16" THICK ALUMINUM END CAP PLATE
26b	ISOLATION SEPARATOR BETWEEN DISSIMILAR MATERIALS (NYLON SHIM)
31g	1/4" SILICONE GASKET SPACER

FASTENERS:

TAG	DESCRIPTION	
FT.SL.X	FT = Fastener Type, SL = Size and Length, X = P for Zinc Plated or S for Stainless Steel	
DFFU.12a.P	#12 FH ELCO DRILFLEX SCREWS	ICC# ESR-3332
DF.12a.P	#12 HWH ELCO DRILFLEX SCREWS	ICC# ESR-3332
DF.1/4b.P	1/4-20 HWH ELCO DRILFLEX SCREWS	ICC# ESR-3332
DFFU.14b.P	1/4-20 FH ELCO DRILFLEX SCREWS	ICC# ESR-3332
CB.1/4k.J	1/4" DIA. HILTI KH-EZ ANCHORS	(ICC-ESR 3056)
FH.10b.S	#10 x 1 1/2" FLAT HEAD SHEET METAL SCREW 300 SERIES S/S100 ksi (TYPICAL)	

GASKET TABLE:

GASKET No.	GASKET	Shop Drawing Reference	DESCRIPTION
VTL-TG	TR-16435ES	AT SF SYSTEM	70 ±5 Duro. Dense EPDM, or 70 ±5 Duro. Silicone Face Clearance = .188 Storefront - 3/16" Top-Load
E-260	TR-5676E	AT DOOR SYSTEM	70 ±5 Duro. Dense EPDM Wedge Gasket Face Clearance = *.188
E-150	TR-11395E	AT DOOR SYSTEM	70 ±5 Duro. Dense EPDM Pre-Set Gasket Face Clearance = *.094 Dart C/L = .162



T

NOTE:
TEMPERED GLASS WILL BE USED WHERE REQUIRED BY CODE. GLASS TO BE (H.S) HEAT STRENGTHENED AS RECOMMENDED BY GLASS MANUFACTURE TO AVOID THERMAL STRESS BREAKAGE.

GLASS SCHEDULE / MATERIAL LEGEND

GLASS	DESCRIPTION
GL-1A	AT STOREFRONT GL-1A 1/4" - 1/2" - (2) 3/16" laminate (IGU 1 1/8" total) (warm edge spacer) STC 38
GL-1B	AT DOOR GL-1B 1/4" + 1/2 gap + (2) 1/8" laminated (warm edge spacer) STC 40
GL-2A	GL-2A: Low-E Tinted Insulating Glass - Light sky-blue, low-reflective clear exterior appearance: 1. Solarban 70XL (2) Solarblue + Clear glass lite by Vitro Architectural Glass. 2. Insulating Glass Unit Construction: 1/4-inch (6 mm) Solarblue glass, Solarban 70 solar control (sputtered) on second surface (2) + 1/2-inch (13 mm) air space + 1/4 inch (6 mm) clear glass. 3. Overall Unit Thickness: 1 inch. 4. Outdoor Lite: fully tempered float glass. 5. Interspace Content: Argon. 6. Indoor Lite: annealed fully tempered translucent float glass.
GL-2B	AT STOREFRONT GL-2B 1/4" - 1/2" - (2) 3/16" laminate (IGU 1 1/8" total) (warm edge spacer) STC 38
GL-2C	AT DOOR GL-2C 1/4" + 1/2 gap + (2) 1/8" laminated (warm edge spacer) STC 40

LEGEND

REFERENCE	DESCRIPTION	REFERENCE	DESCRIPTION	REFERENCE	DESCRIPTION
UNX X.X	ELEVATION # SHEET #				WIND LOAD
D# X.X	DETAIL # SHEET #				DEAD LOAD
S.# X.X	SECTION # SHEET #				= ANCHOR LOCATION INDICATOR

ABBREVIATIONS

REFERENCE	DESCRIPTION	REFERENCE	DESCRIPTION
B.O.W.	BOTTOM OF WINDOW	R. O.	ROUGH OPENING DIMENSION
℄	CENTER LINE	T .O .C.	TOP OF CONCRETE
D .L .O.	DAYLGHT OPENING DIMENSION	T .O .H.	TOP OF HORIZONTAL
D. O.	DOOR OPENING DIMENSION	T.O.W.	TOP OF WINDOW
D. P.	DIMENSION POINT REFERENCE	TYP.	TYPICAL
F. D.	FRAME DIMENSION	V.I.F.	VERIFY IN FIELD
OPP.	OPPOSITE HAND	W.O.	WINDOW OPENING
N.B.A.	NOT BY ARCADIA		

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEEMS
No. S8535
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

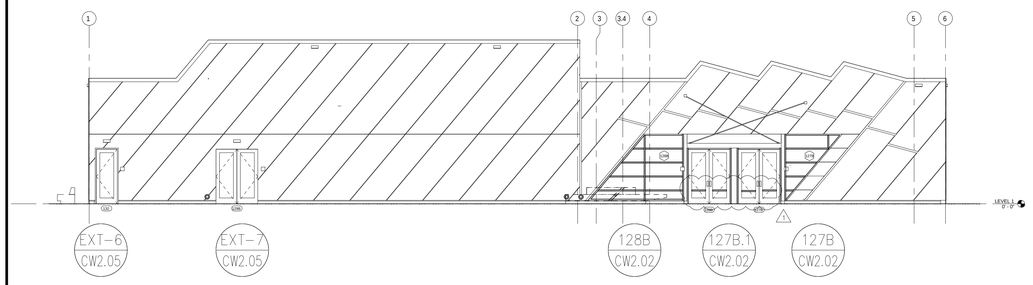
ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

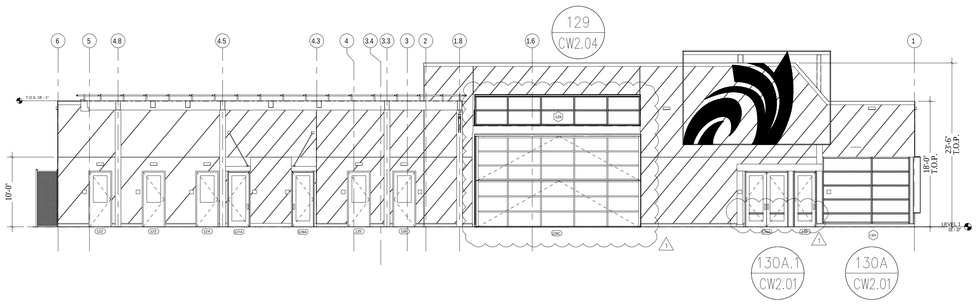
SHEET TITLE
GENERAL NOTES

SHEET NUMBER
CW0.02

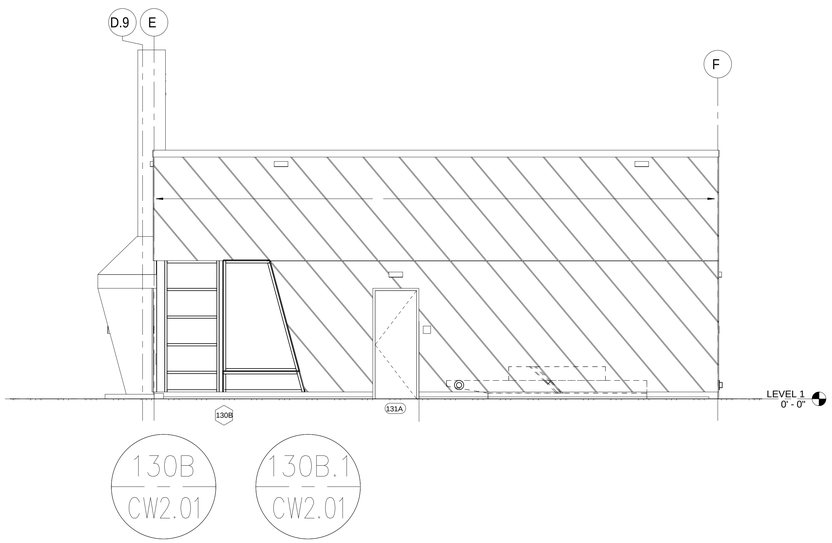
7/28/2022 8:42:32 AM



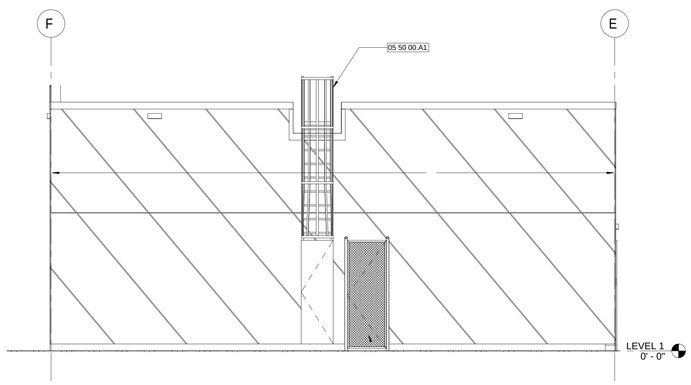
1 SOUTH ELEVATION AREA A
Arch Ref: 1/A301B



2 NORTH ELEVATION AREA A
Arch Ref: 2/A301B



3 WEST ELEVATION AREA A
Arch Ref: 3/A301B



4 EAST ELEVATION AREA A
Arch Ref: 4/A301B

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEEMS
No. 38936
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD,
COMPTON, CA 90221-5393

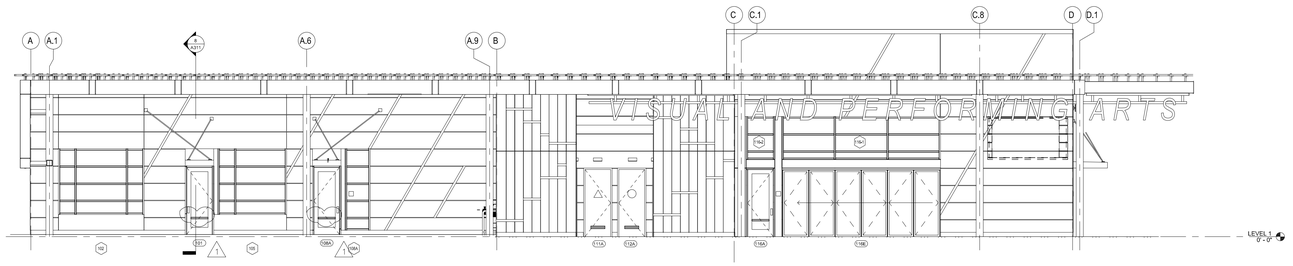
ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

SHEET TITLE
EXTERIOR ELEVATIONS

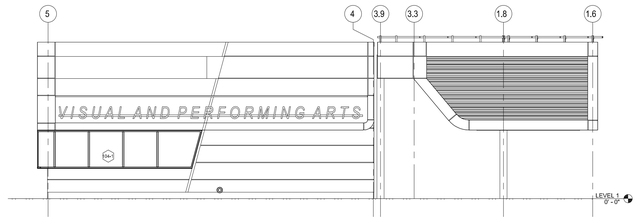
SHEET NUMBER
CW2.00A

7/28/2022 8:42:32 AM



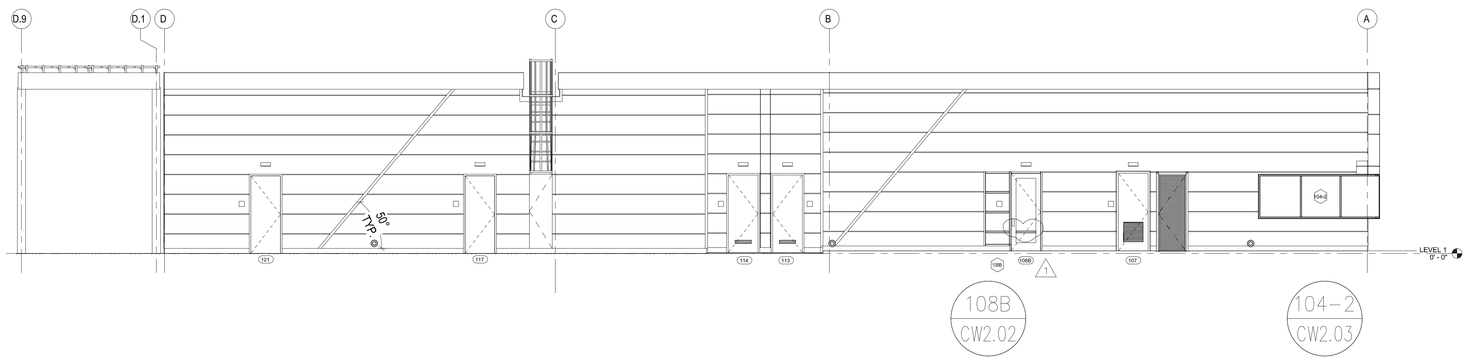
5 WEST ELEVATION AREA B

Arch Ref: 5/A302B



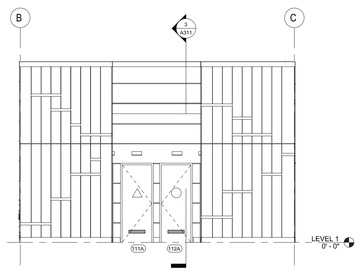
6 NORTH ELEVATION AREA B

Arch Ref: 7/A302B



7 EAST ELEVATION AREA B

Arch Ref: 1/A302B



8 WEST ELEVATION AREA B

Arch Ref: 3/A302B

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEERE
No. 885358
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION

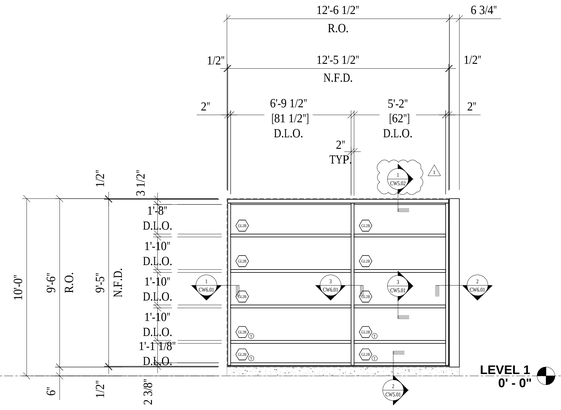
	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

SHEET TITLE

EXTERIOR ELEVATIONS

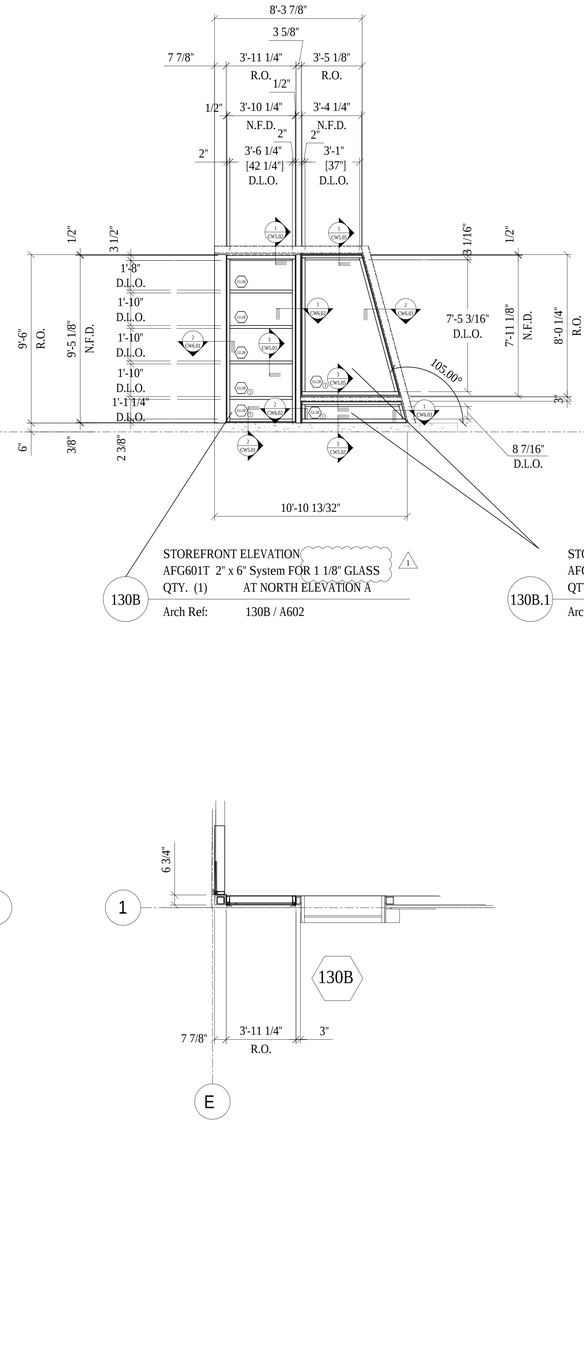
SHEET NUMBER

CW2.00B



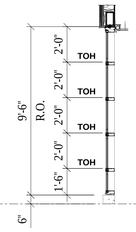
STOREFRONT ELEVATION
AFG601T 2" x 6" System FOR 1 1/8" GLASS
QTY. (1) AT NORTH ELEVATION A

130A Arch Ref: 130A / A602



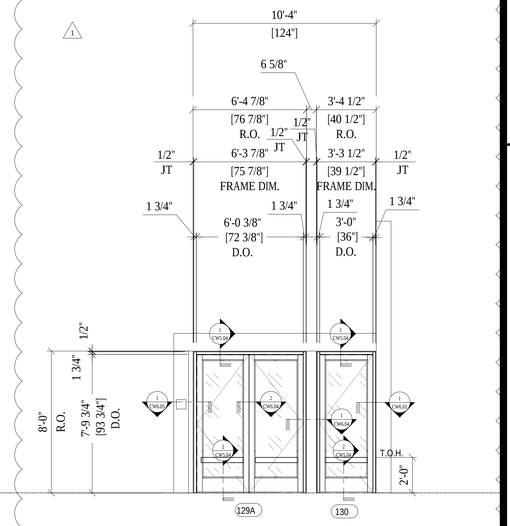
STOREFRONT ELEVATION
AFG601T 2" x 6" System FOR 1 1/8" GLASS
QTY. (1) AT NORTH ELEVATION A

130B Arch Ref: 130B / A602



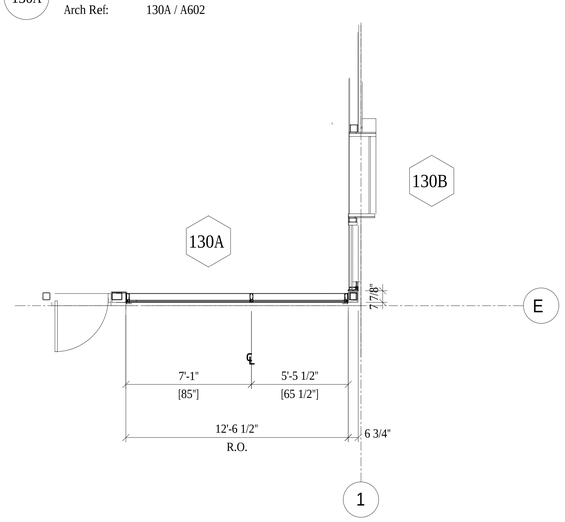
STOREFRONT ELEVATION
AFG451T 2" x 4 1/2" System FOR 1 1/8" GLASS
QTY. (1) AT NORTH ELEVATION A

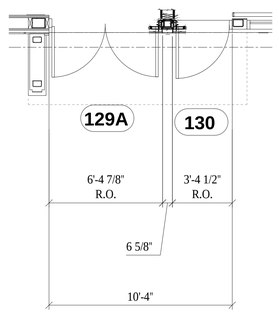
130B.1 Arch Ref: 130B / A602



STOREFRONT ELEVATION
3000 STC Series DOOR SYSTEM
QTY. (1) AT NORTH ELEVATION A

130A.1 Arch Ref: 130A / A602





struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEERE
No. 38936
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

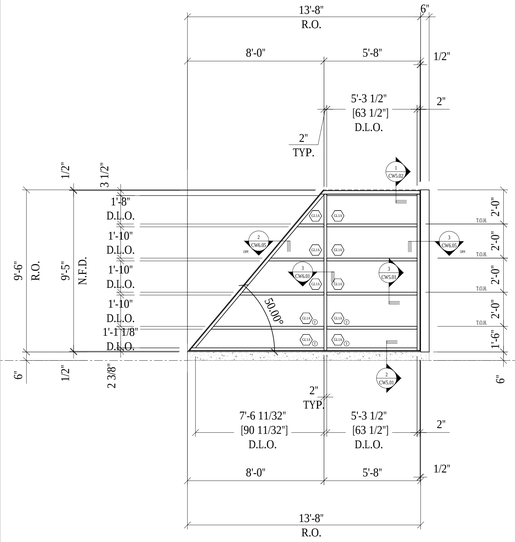
1111 EAST ARTESIA BLVD.
COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

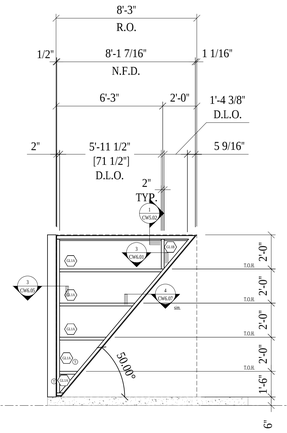
SHEET TITLE
ELEVATIONS

SHEET NUMBER
CW2.01



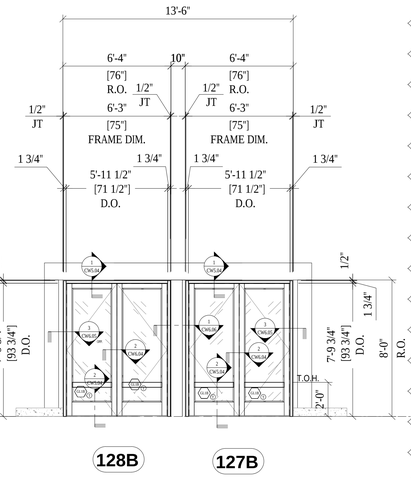
128B

STOREFRONT ELEVATION
AFG601T 2" x 6" System FOR 1 1/8" GLASS
QTY. (1) AT SOUTH
Arch Ref: 28 / A602



127B

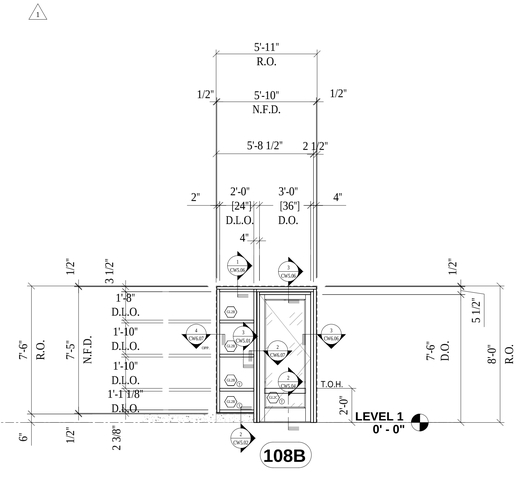
STOREFRONT ELEVATION
AFG601T 2" x 6" System FOR 1 1/8" GLASS
QTY. (1) AT SOUTH
Arch Ref: 28 / A602



128B 127B

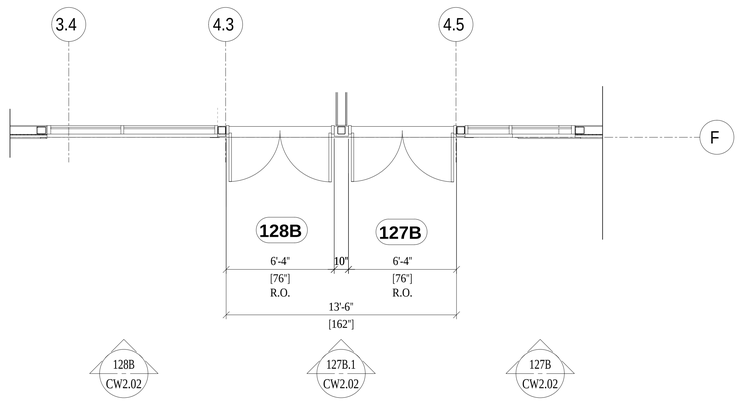
127B.1

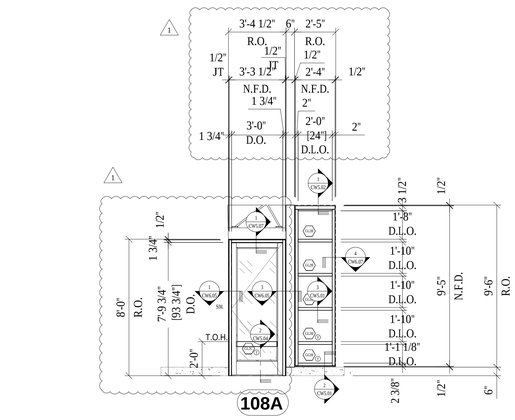
STOREFRONT ELEVATION
3000 STC Series DOOR SYSTEM
QTY. (1) AT SOUTH
Arch Ref: 28 / A602



108B

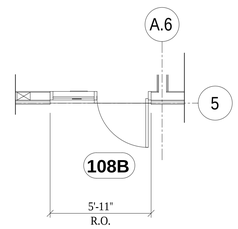
STOREFRONT ELEVATION
AFG601T 2" x 6" System FOR 1 1/8" GLASS
QTY. (1) AT NORTH
Arch Ref: 108B / A602

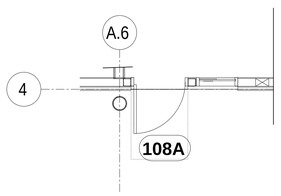




108A

STOREFRONT ELEVATION
AFG601T 2" x 6" System FOR 1 1/8" GLASS
QTY. (1) AT NORTH ELEVATION A
Arch Ref: 108A / A602





struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEERE
No. S8936
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

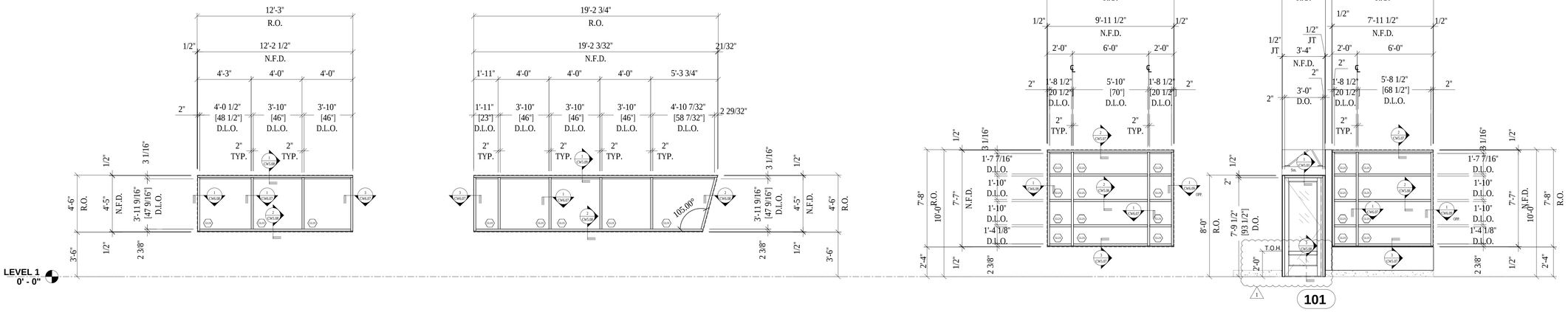
1111 EAST ARTESIA BLVD,
COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

SHEET TITLE
ELEVATIONS

SHEET NUMBER
CW2.02

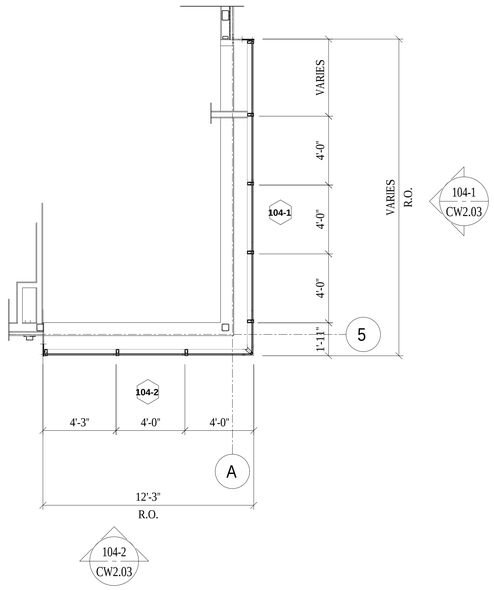


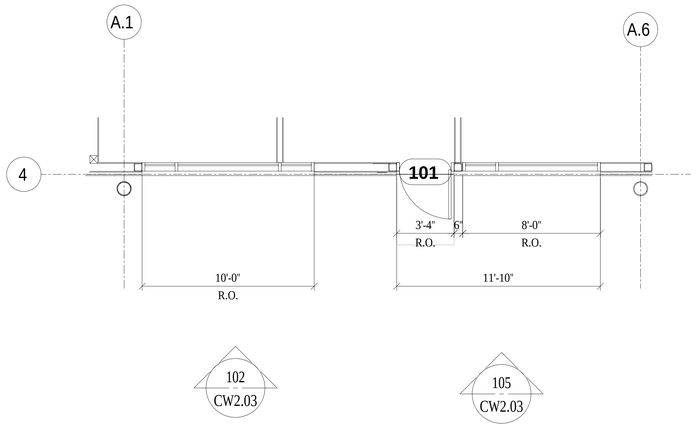
104.2 — STOREFRONT ELEVATION
AFG451T 2" x 4 1/2" System FOR 1" GLASS
QTY. (1) AT EAST
Arch Ref: 104-2 / A602

104.1 — STOREFRONT ELEVATION
AFG451T 2" x 4 1/2" System FOR 1" GLASS
QTY. (1) AT NORTH
Arch Ref: 104-1 / A602

102 — STOREFRONT ELEVATION
AFG451T 2" x 4 1/2" System FOR 1" GLASS
QTY. (1) AT WEST
Arch Ref: 102 / A602

105 — STOREFRONT ELEVATION
AFG451T 2" x 4 1/2" System FOR 1" GLASS
QTY. (1) AT WEST
Arch Ref: 105 / A602





struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEERS
No. 38936
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

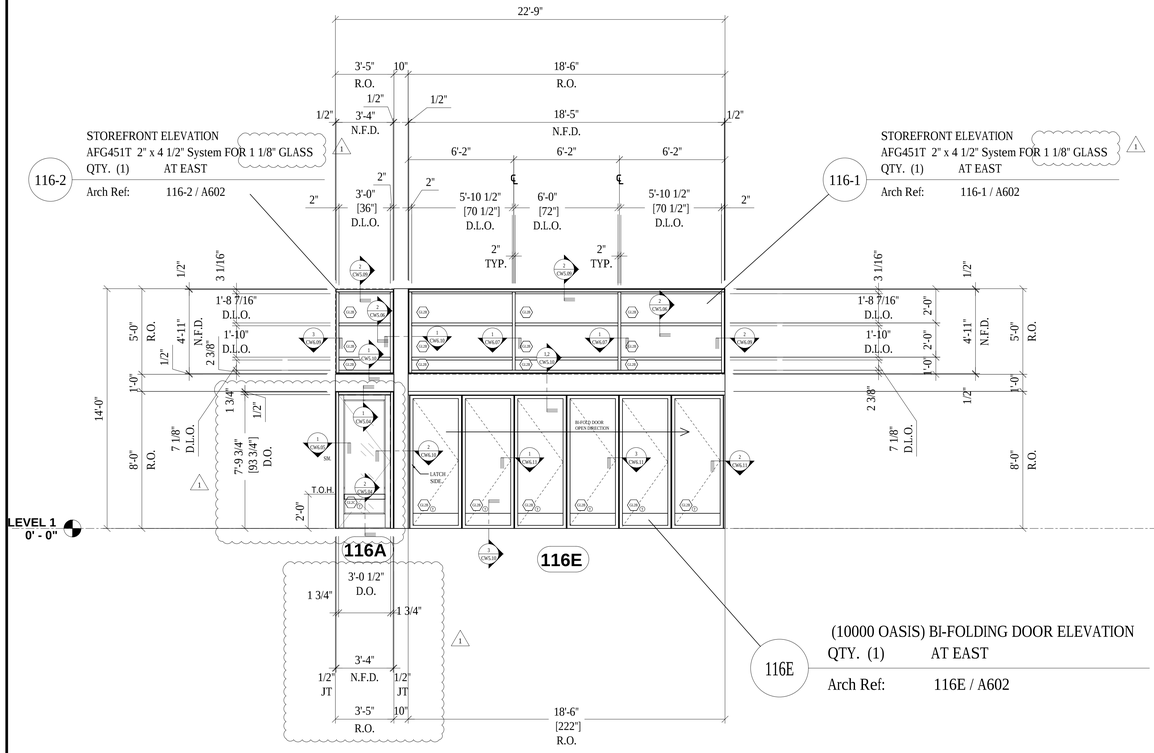
1111 EAST ARTESIA BLVD.
COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

SHEET TITLE
ELEVATIONS

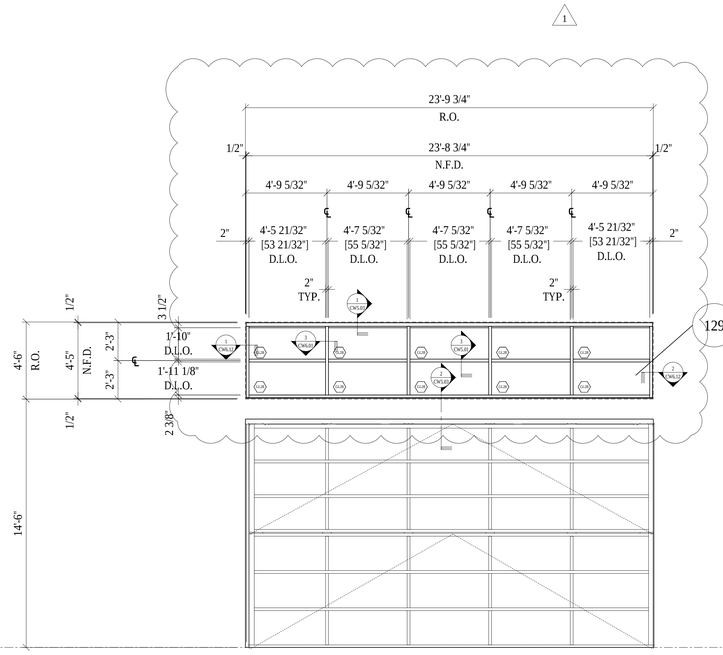
SHEET NUMBER
CW2.03



STOREFRONT ELEVATION
AFG451T 2" x 4 1/2" System FOR 1 1/8" GLASS
QTY. (1) AT EAST
116-2 Arch Ref: 116-2 / A602

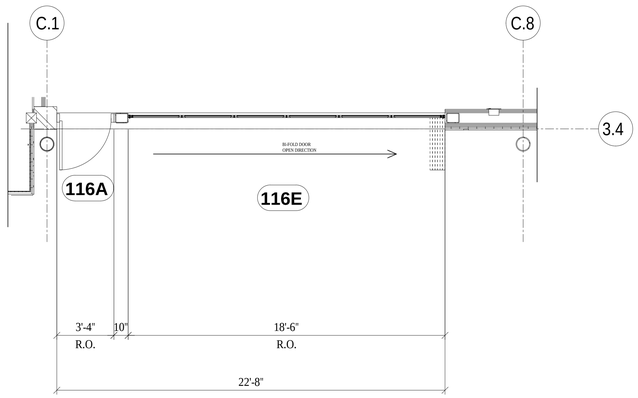
STOREFRONT ELEVATION
AFG451T 2" x 4 1/2" System FOR 1 1/8" GLASS
QTY. (1) AT EAST
116-1 Arch Ref: 116-1 / A602

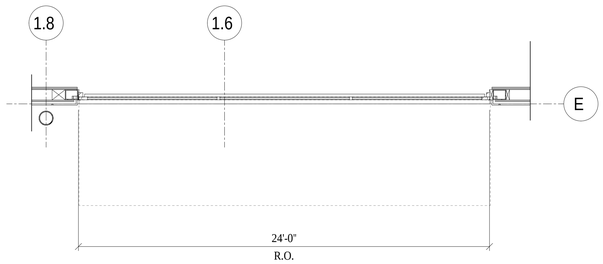
(10000 OASIS) BI-FOLDING DOOR ELEVATION
QTY. (1) AT EAST
116E Arch Ref: 116E / A602



STOREFRONT ELEVATION
AFG601T 2" x 6" System FOR 1 1/8" GLASS
QTY. (1) AT NORTH
129 Arch Ref: 129 / A602

129C





struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEERE
No. S8936
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

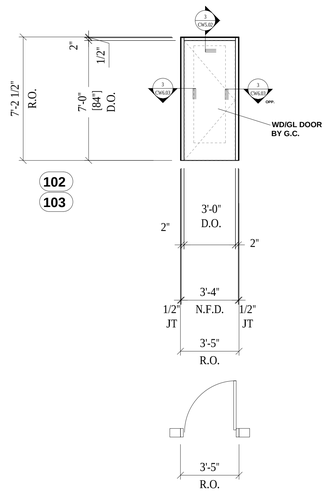
1111 EAST ARTESIA BLVD.
COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

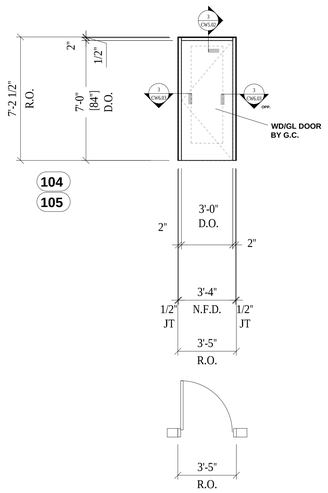
SHEET TITLE
ELEVATIONS

SHEET NUMBER
CW2.04



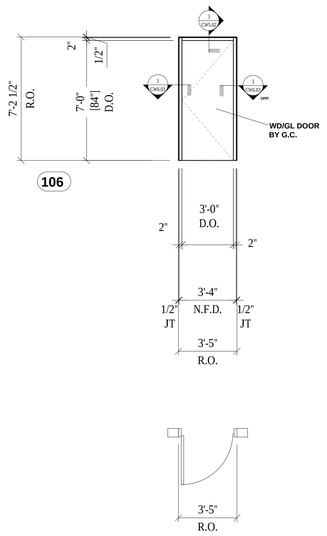
STOREFRONT ELEVATION
AFG451T 2" x 4 1/2" Frame System
QTY. (2) AT INTERIOR
Arch Ref: A601

INT-1



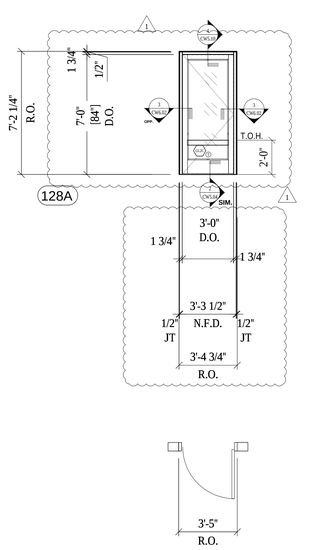
STOREFRONT ELEVATION
AFG451T 2" x 4 1/2" Frame System
QTY. (2) AT INTERIOR
Arch Ref: A601

INT-2



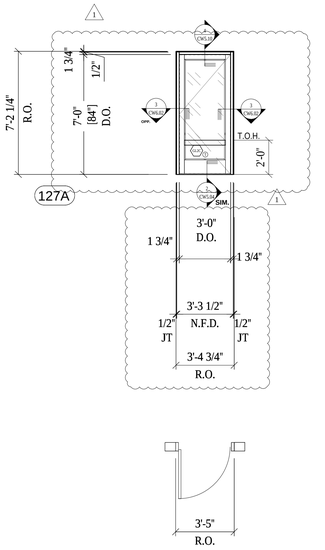
STOREFRONT ELEVATION
AFG451T 2" x 4 1/2" Frame System
QTY. (1) AT INTERIOR
Arch Ref: A601

INT-3



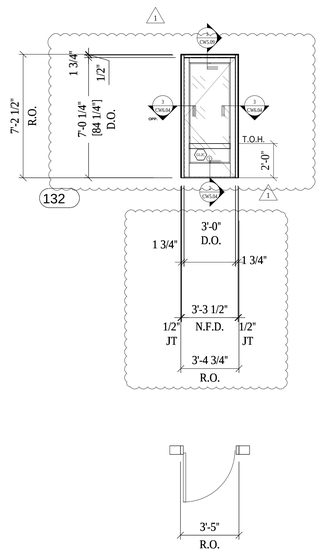
STOREFRONT ELEVATION
3000 STC Series DOOR SYSTEM
QTY. (1) AT INTERIOR
Arch Ref: A601

INT-4



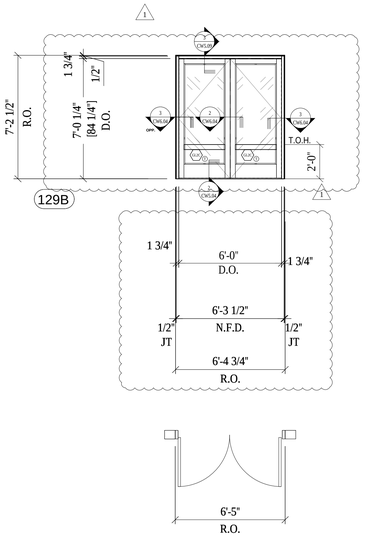
STOREFRONT ELEVATION
3000 STC Series DOOR SYSTEM
QTY. (1) AT INTERIOR
Arch Ref: A601

INT-5



STOREFRONT ELEVATION
3000 STC Series DOOR SYSTEM
QTY. (1) AT EXTERIOR
Arch Ref: A601

EXT-6



STOREFRONT ELEVATION
3000 STC Series DOOR SYSTEM
QTY. (1) AT EXTERIOR
Arch Ref: A601

EXT-7

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEEMS
No. 38936
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

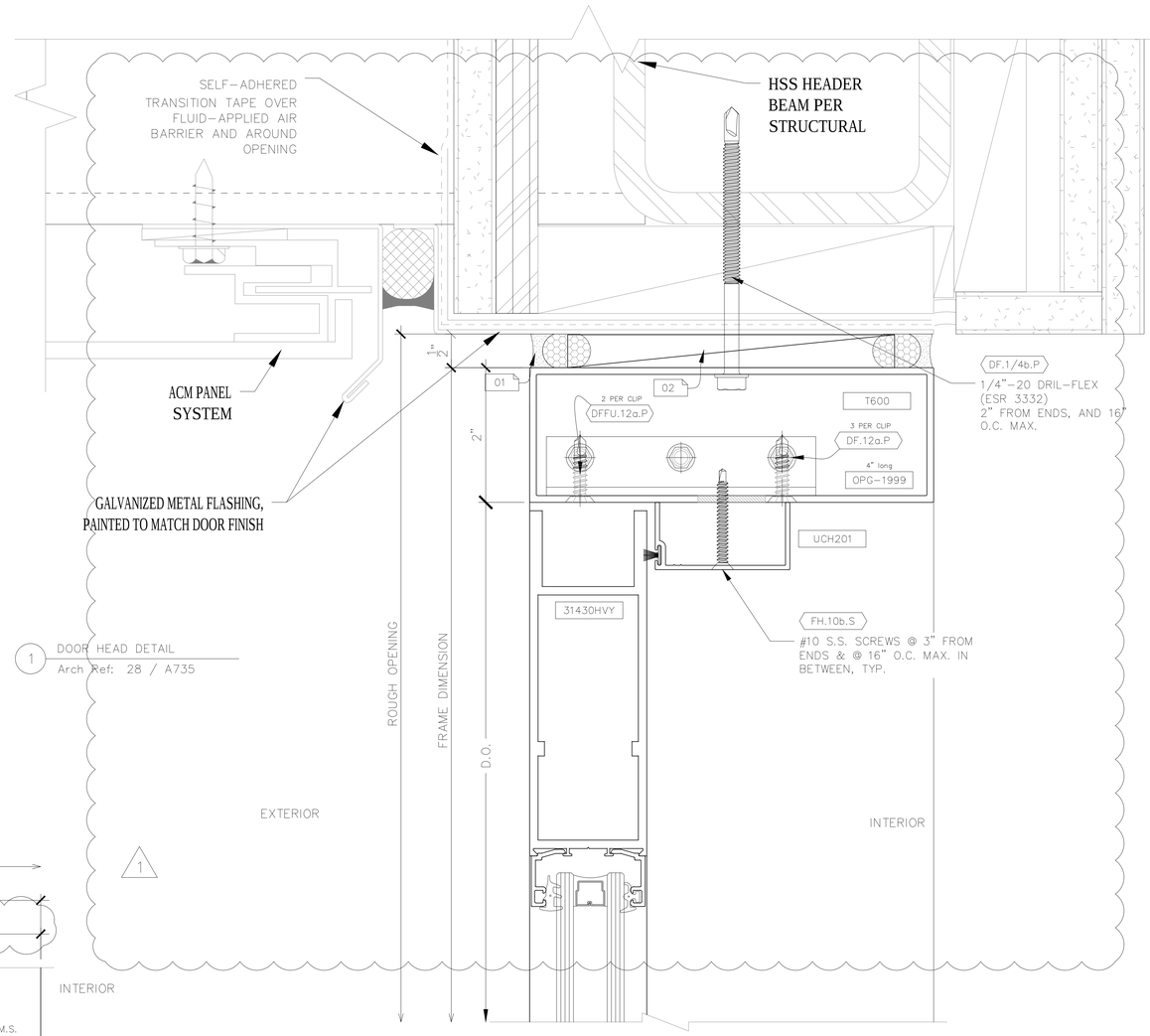
1111 EAST ARTESIA BLVD,
COMPTON, CA 90221-5393

ISSUE DESCRIPTION

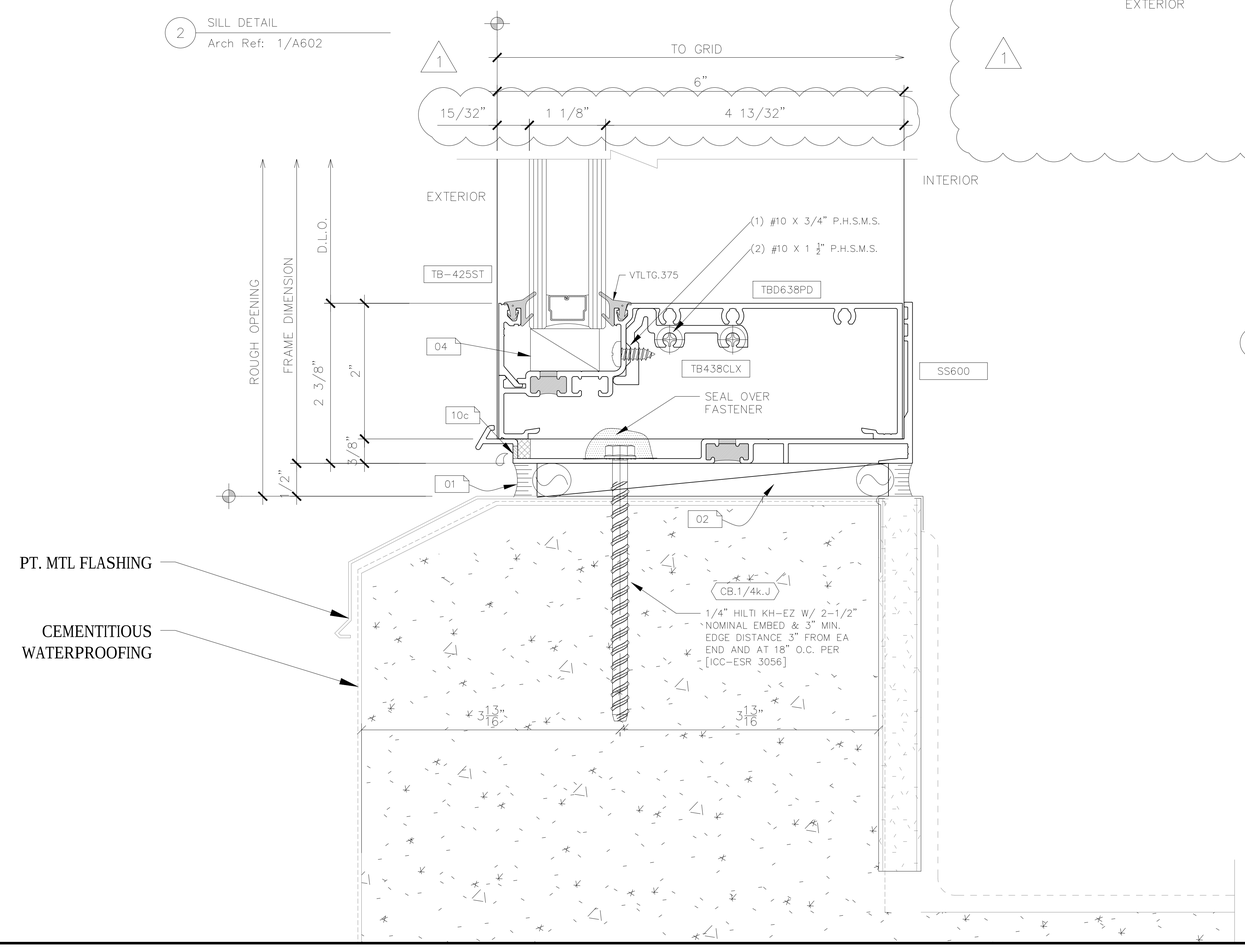
	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

SHEET TITLE
ELEVATIONS

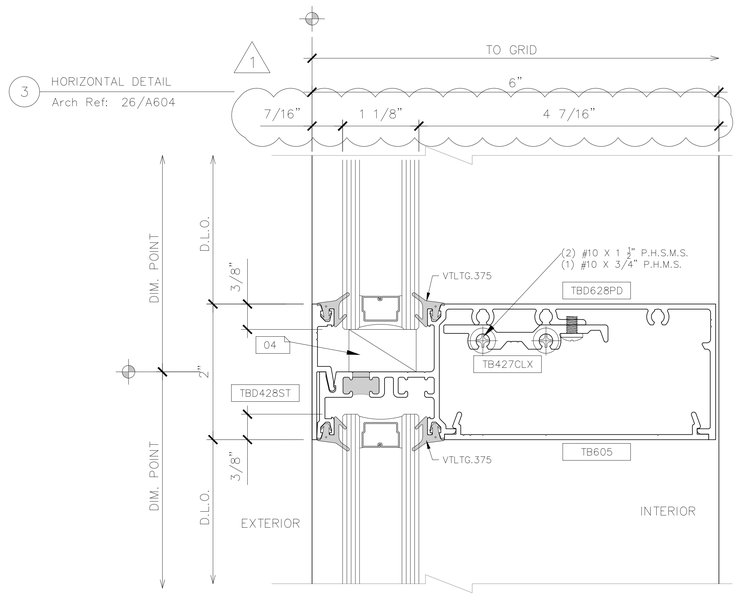
SHEET NUMBER
CW2.05



1 DOOR HEAD DETAIL
Arch Ref: 28 / A735



2 SILL DETAIL
Arch Ref: 1/A602



3 HORIZONTAL DETAIL
Arch Ref: 26/A604

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEEMS
No. 38935
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

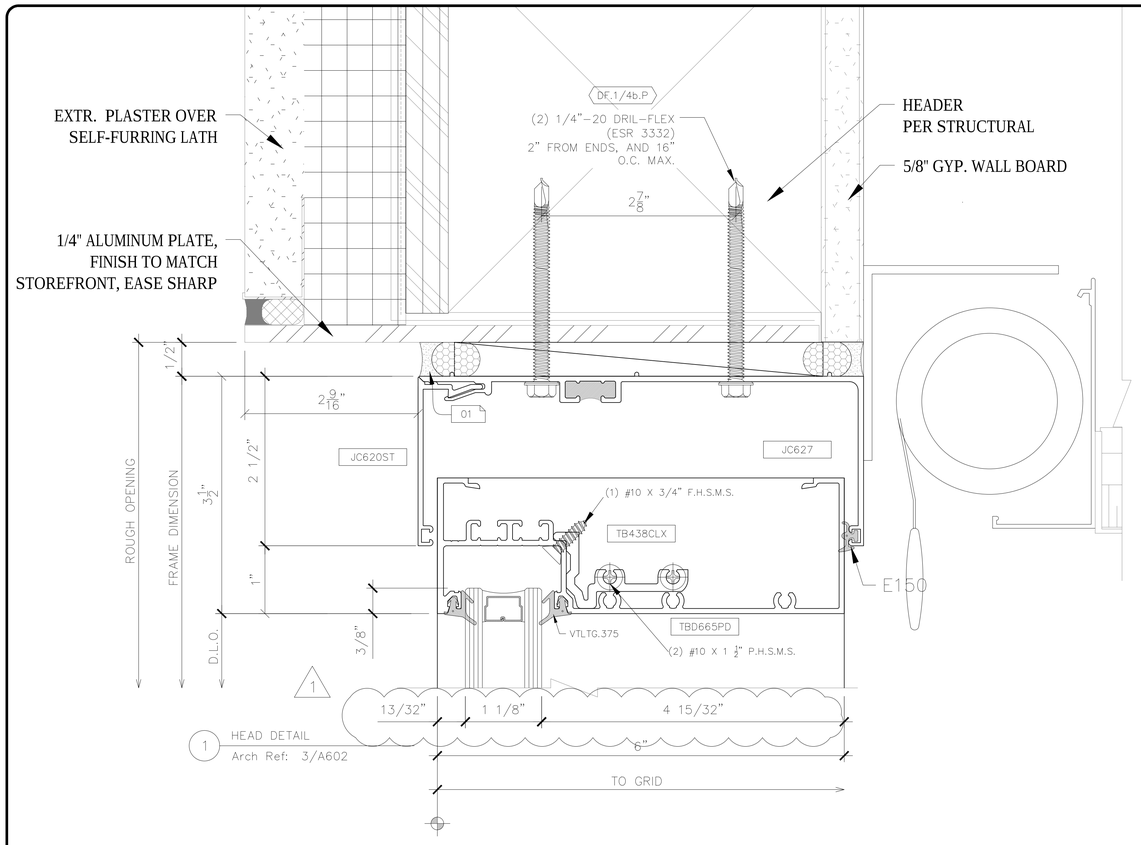
1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

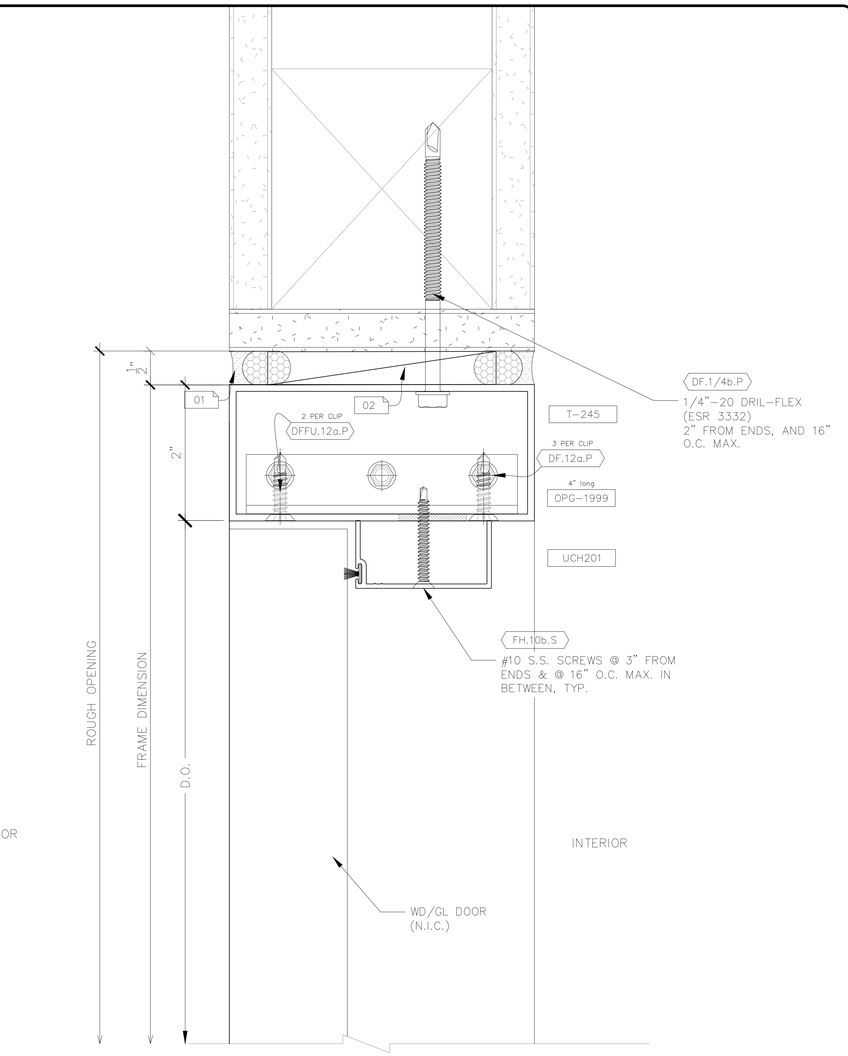
ISSUE DESCRIPTION

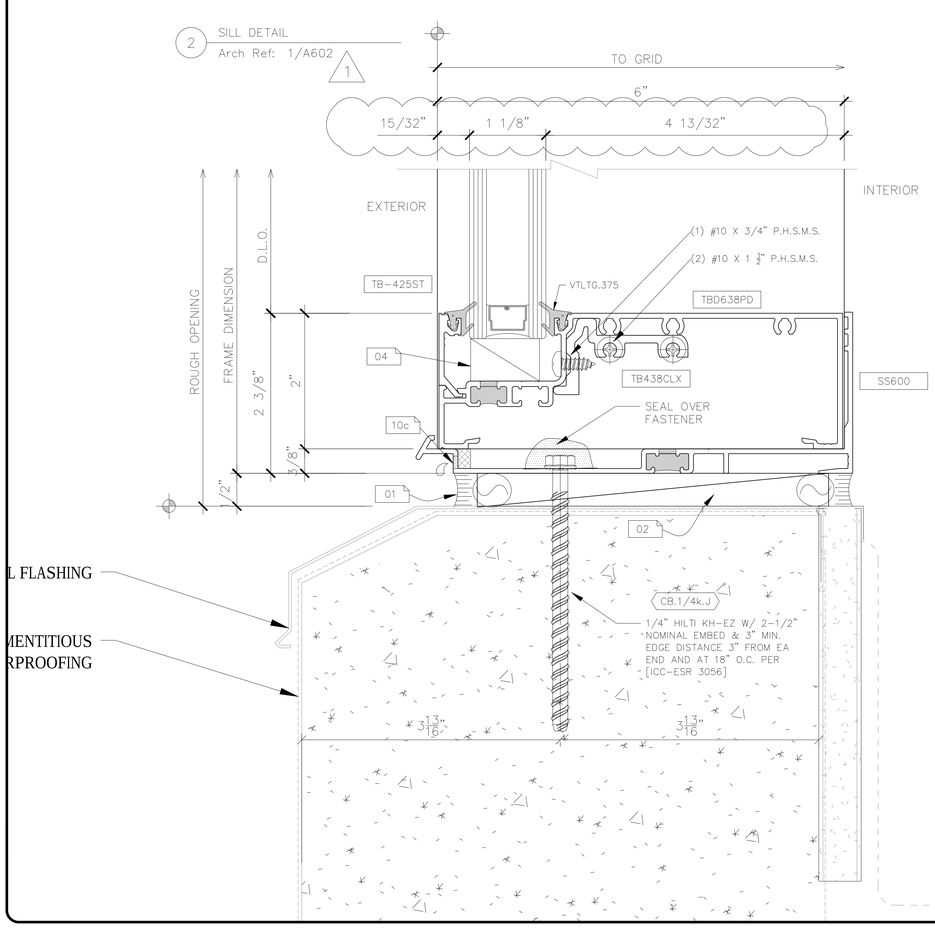
	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

SHEET TITLE
SECTION DETAILS

SHEET NUMBER
CW5.01







struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEERE
No. 38535
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

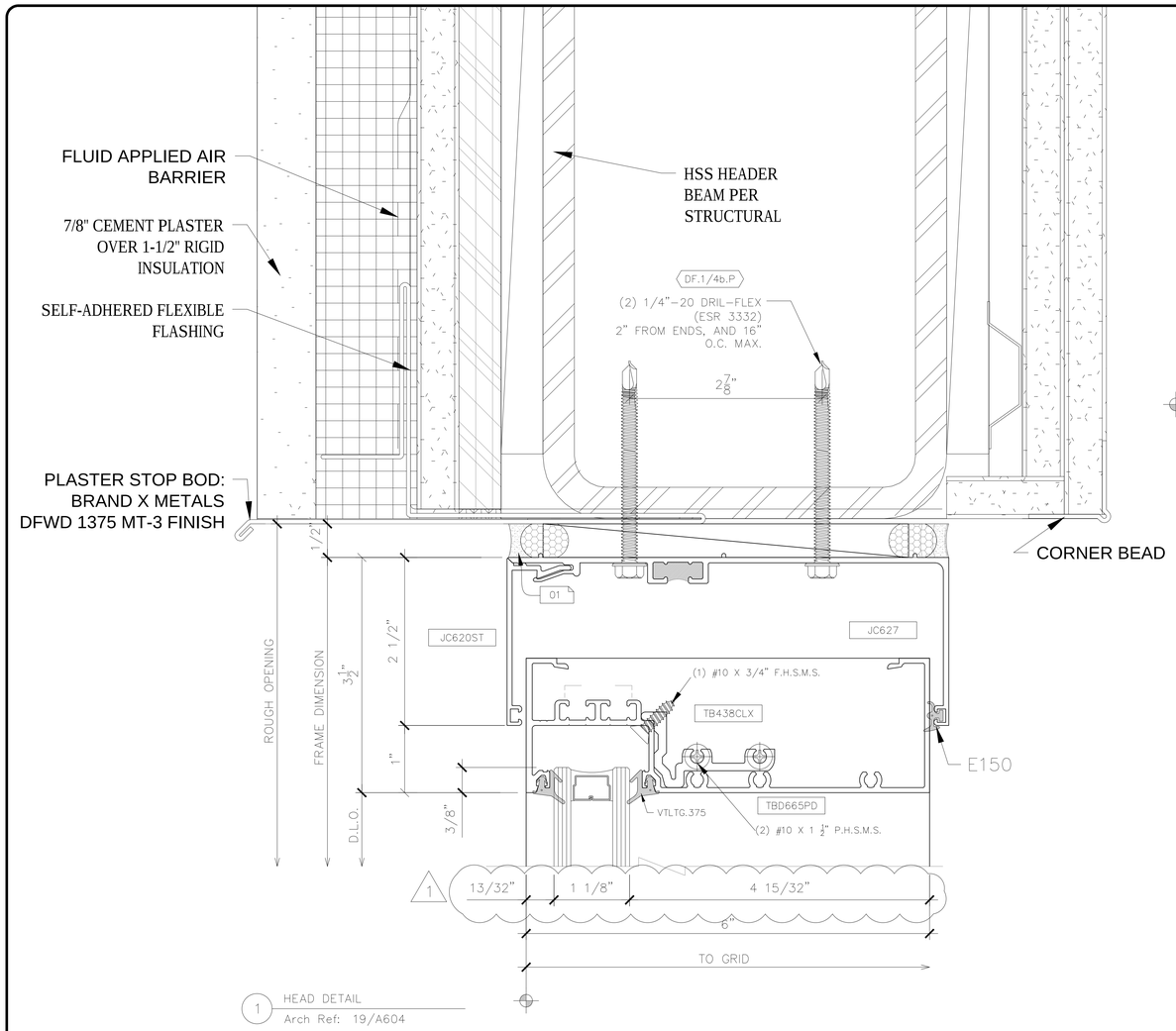
1111 EAST ARTESIA BLVD,
COMPTON, CA 90221-5393

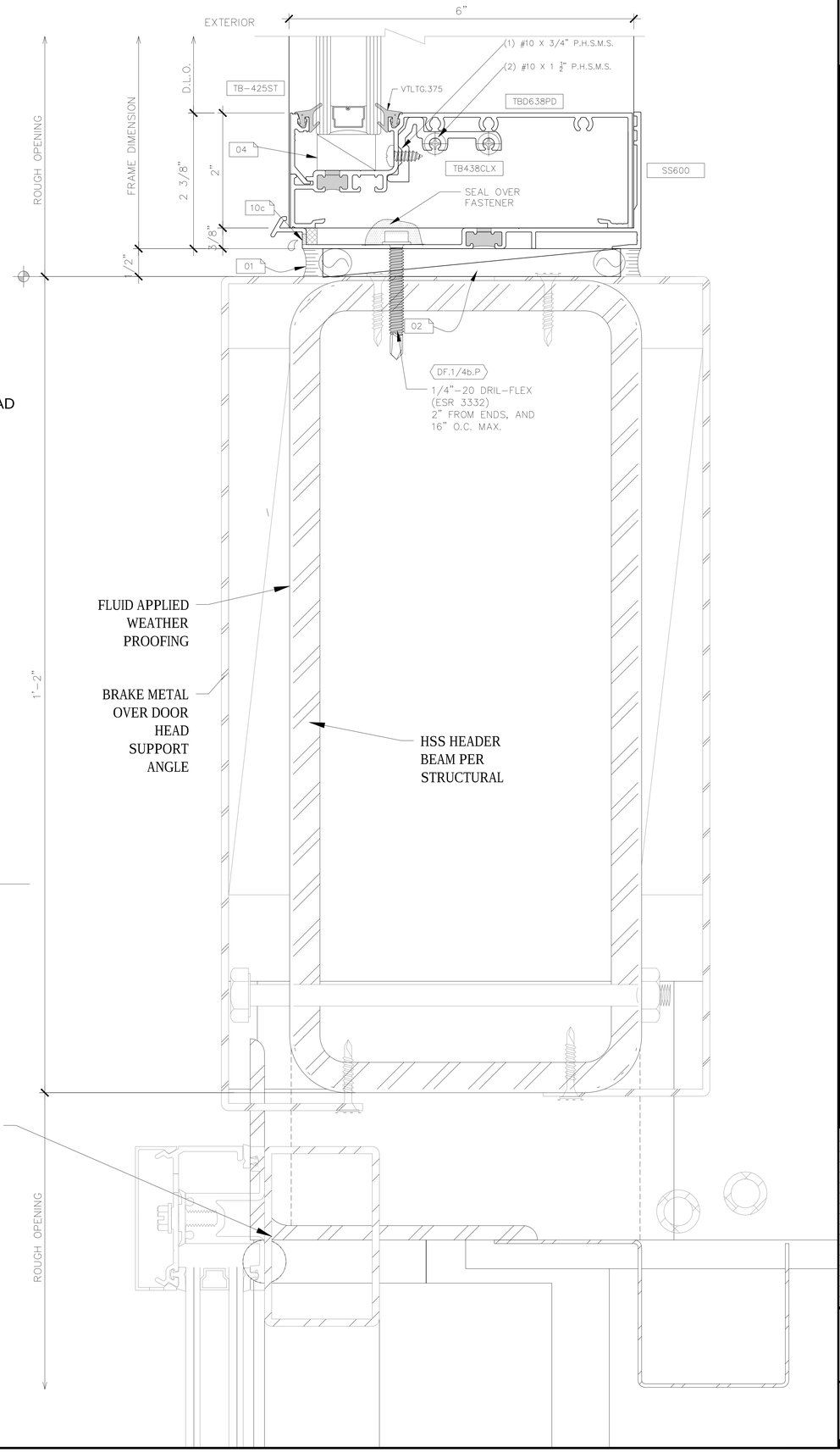
ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

SHEET TITLE
SECTION DETAILS

SHEET NUMBER
CW5.02





2 SILL\HEAD DETAIL
Arch Ref: 17/A604

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEEKS
No. S8535
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

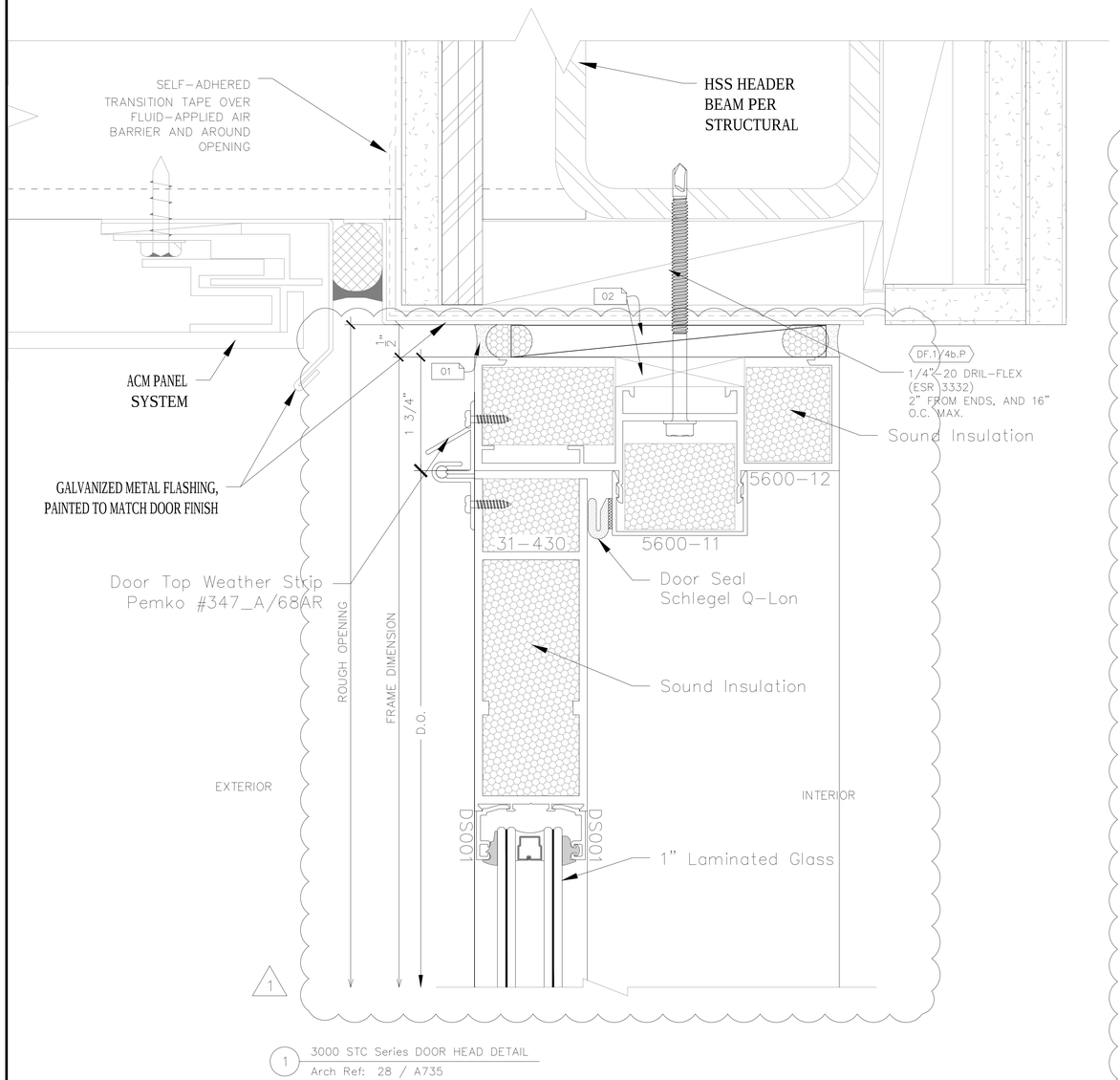
1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION

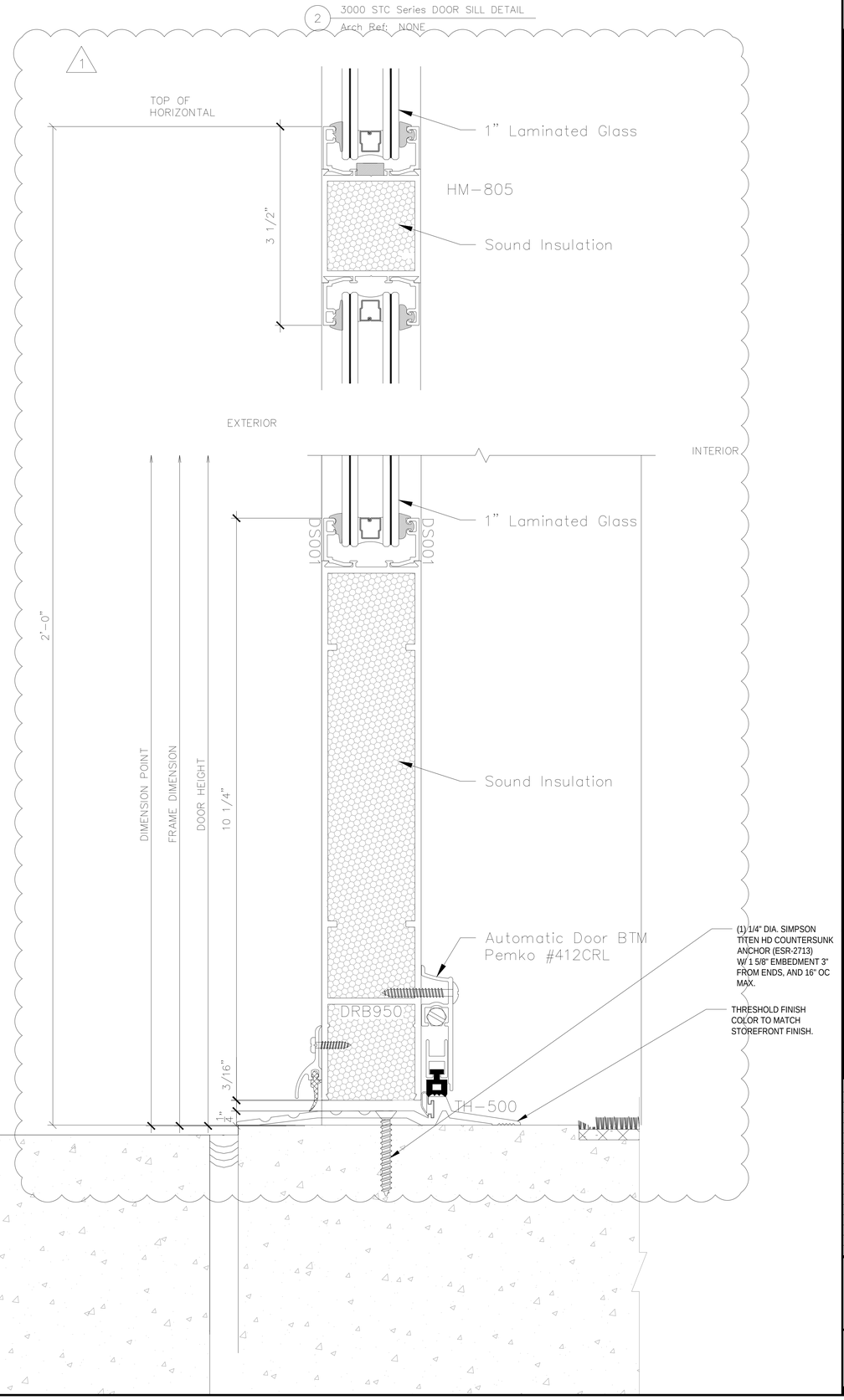
	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

SHEET TITLE
SECTION DETAILS

SHEET NUMBER
CW5.03



1 3000 STC Series DOOR HEAD DETAIL
Arch Ref: 28 / A735



struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEEKS
No. 38935
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

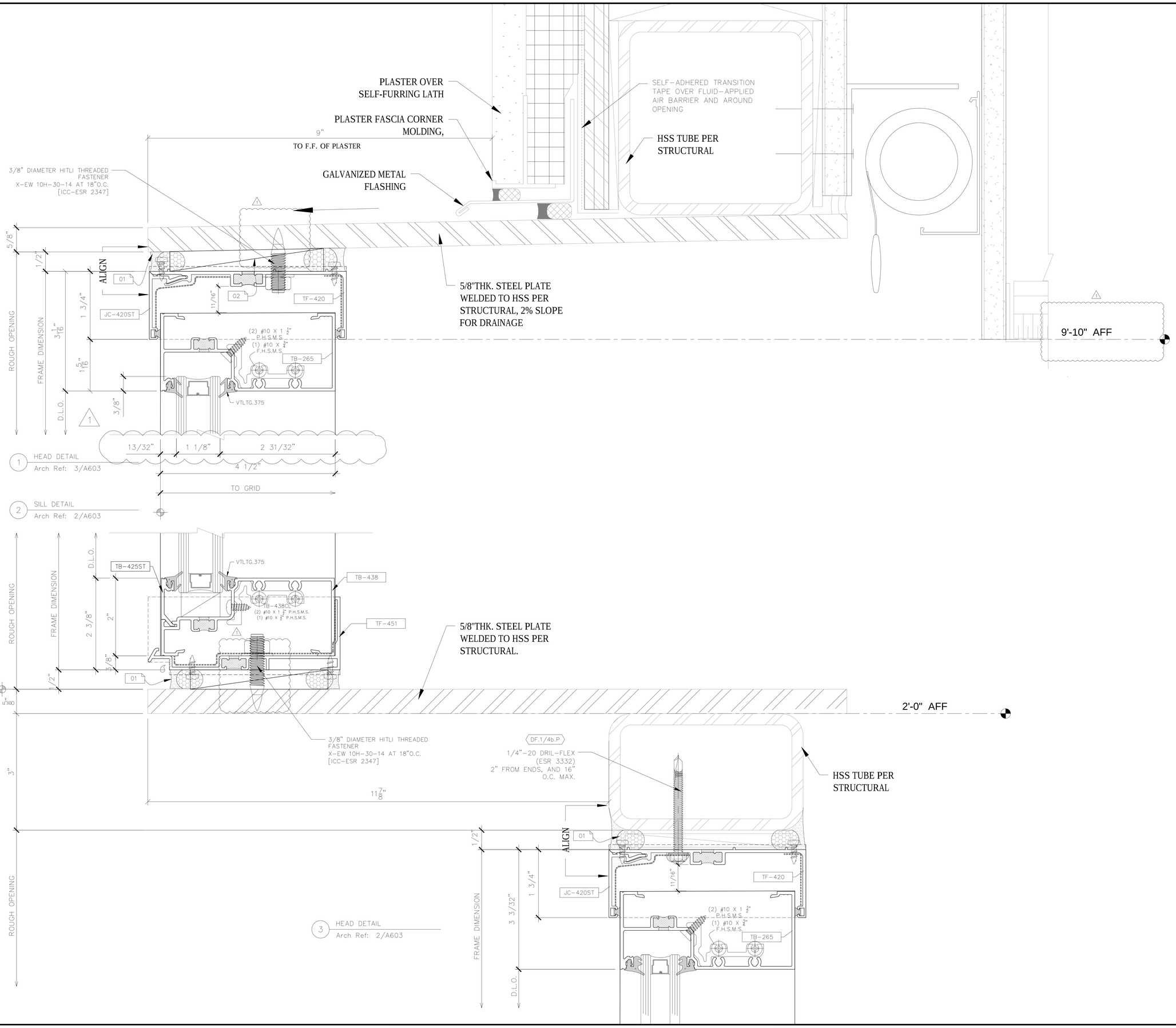
COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION		
	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

SHEET TITLE
SECTION DETAILS

SHEET NUMBER
CW5.04



struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEEMS
No. 38535
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY
COLLEGE DISTRICT

COMPTON COLLEGE
VISUAL AND PERFORMING
ARTS REPLACEMENT

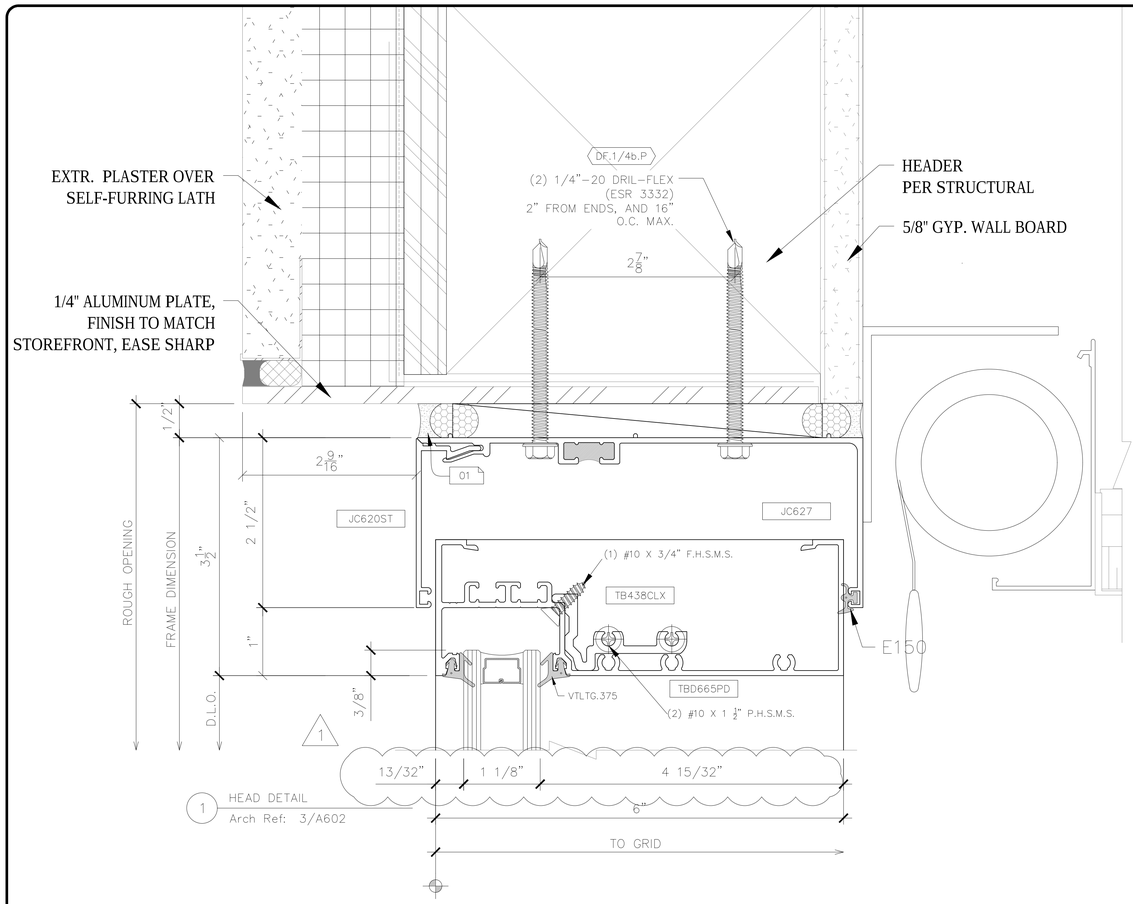
1111 EAST ARTESIA BLVD,
COMPTON, CA 90221-5393

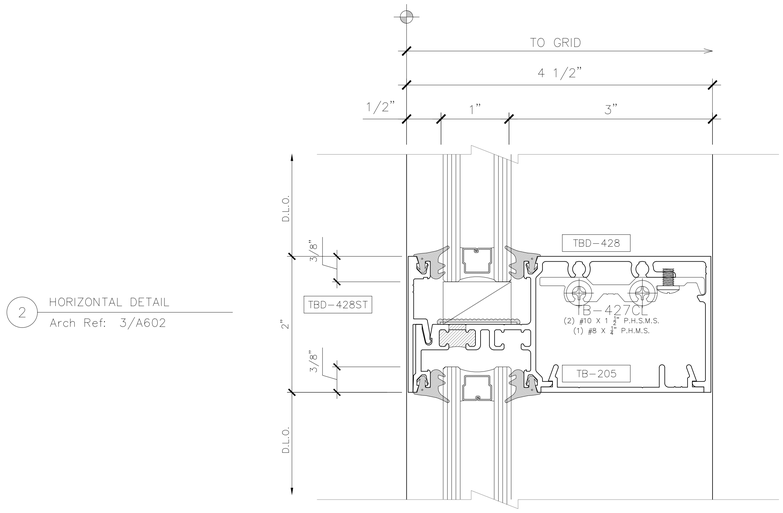
ISSUE DESCRIPTION

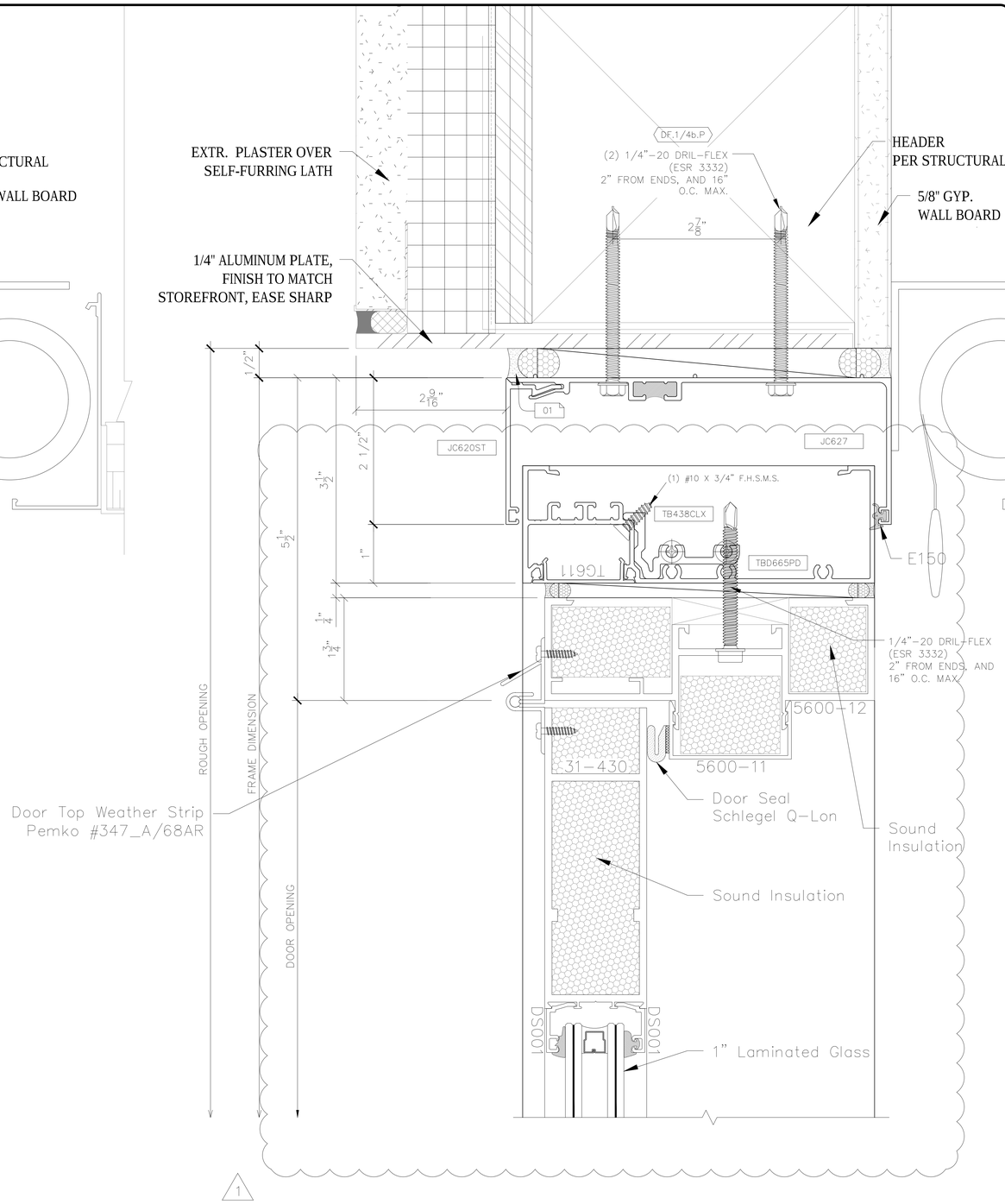
	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

SHEET TITLE
SECTION DETAILS

SHEET NUMBER
CW5.05







struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEERE
No. 38535
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION

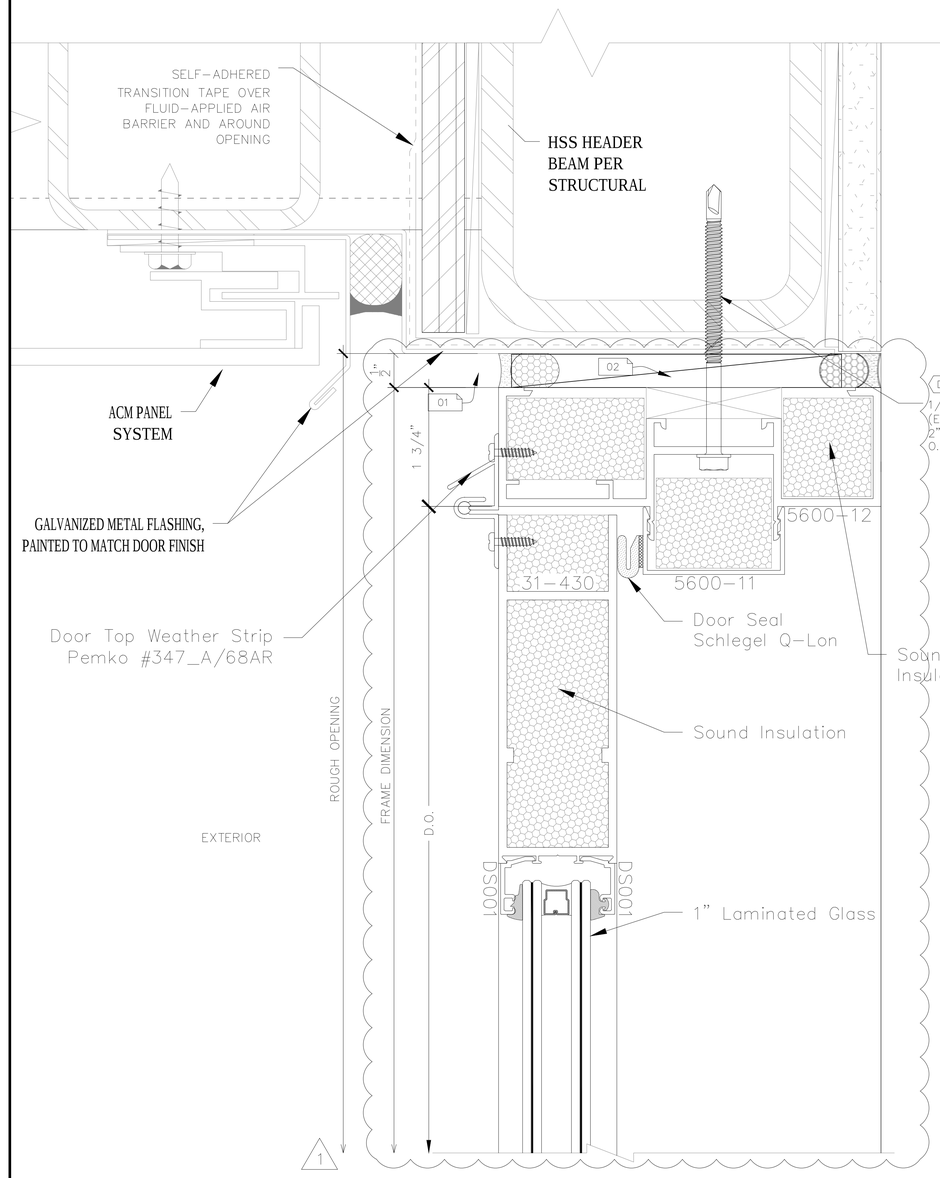
	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

SHEET TITLE

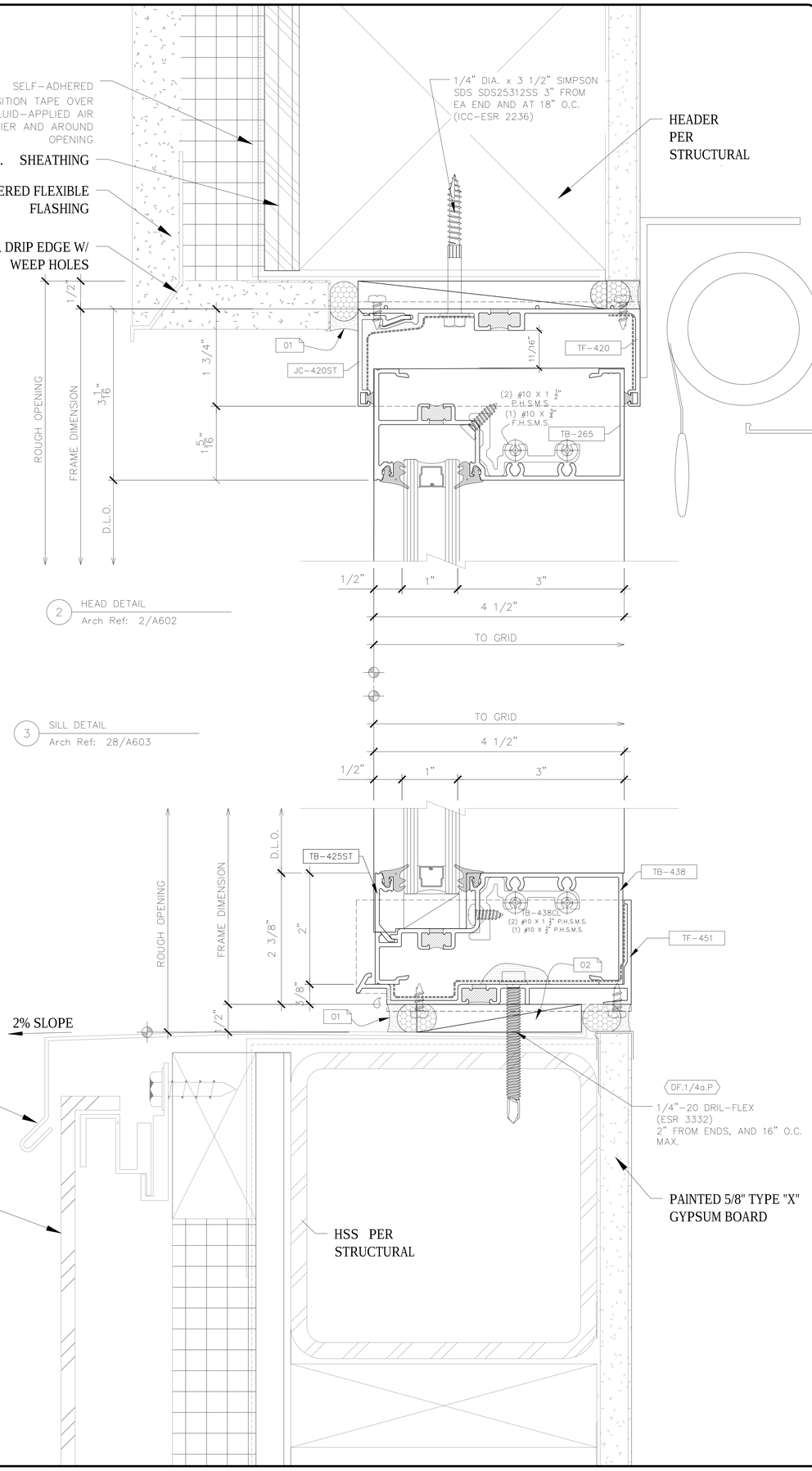
SECTION DETAILS

SHEET NUMBER

CW5.06



1 3000 STC Series DOOR SILL DETAIL
Arch Ref: 23 / A735



2 HEAD DETAIL
Arch Ref: 2/A602

3 SILL DETAIL
Arch Ref: 28/A603

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEEKS
No. 38535
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

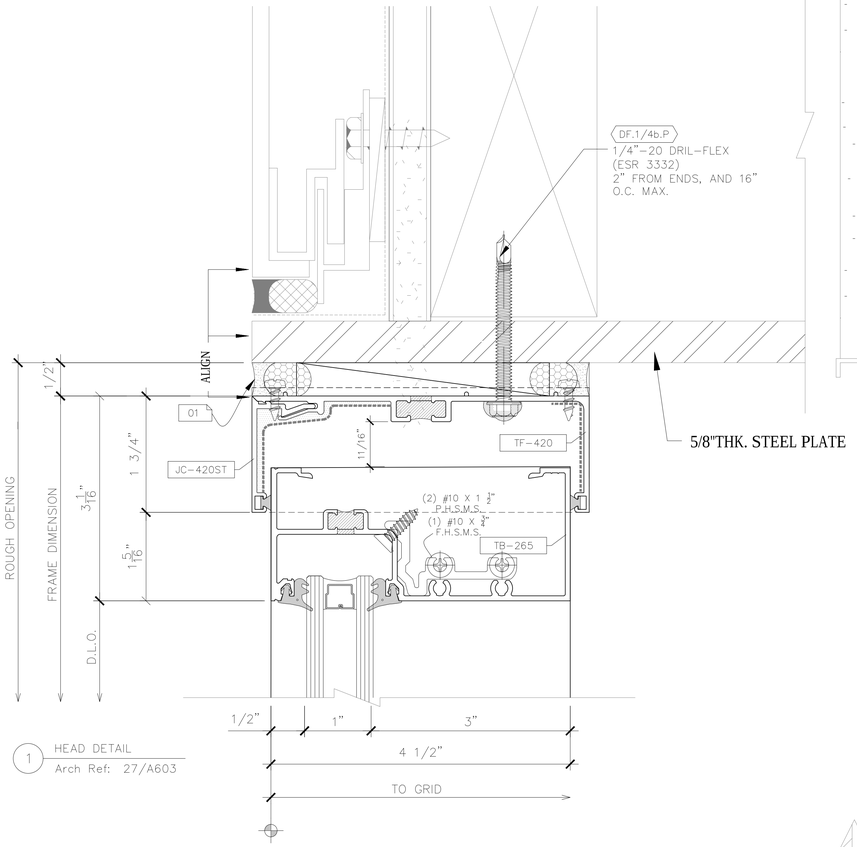
1111 EAST ARTESIA BLVD.
COMPTON, CA 90221-5393

ISSUE DESCRIPTION

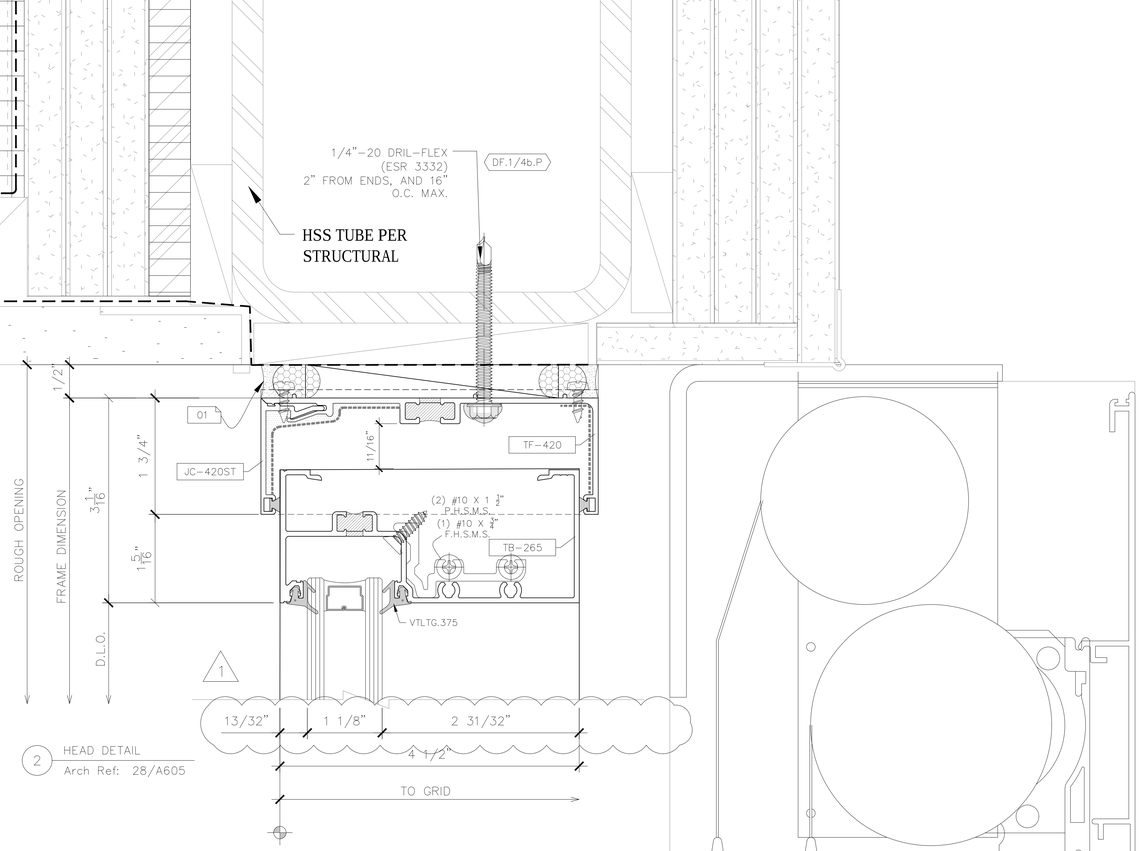
	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

SHEET TITLE
SECTION DETAILS

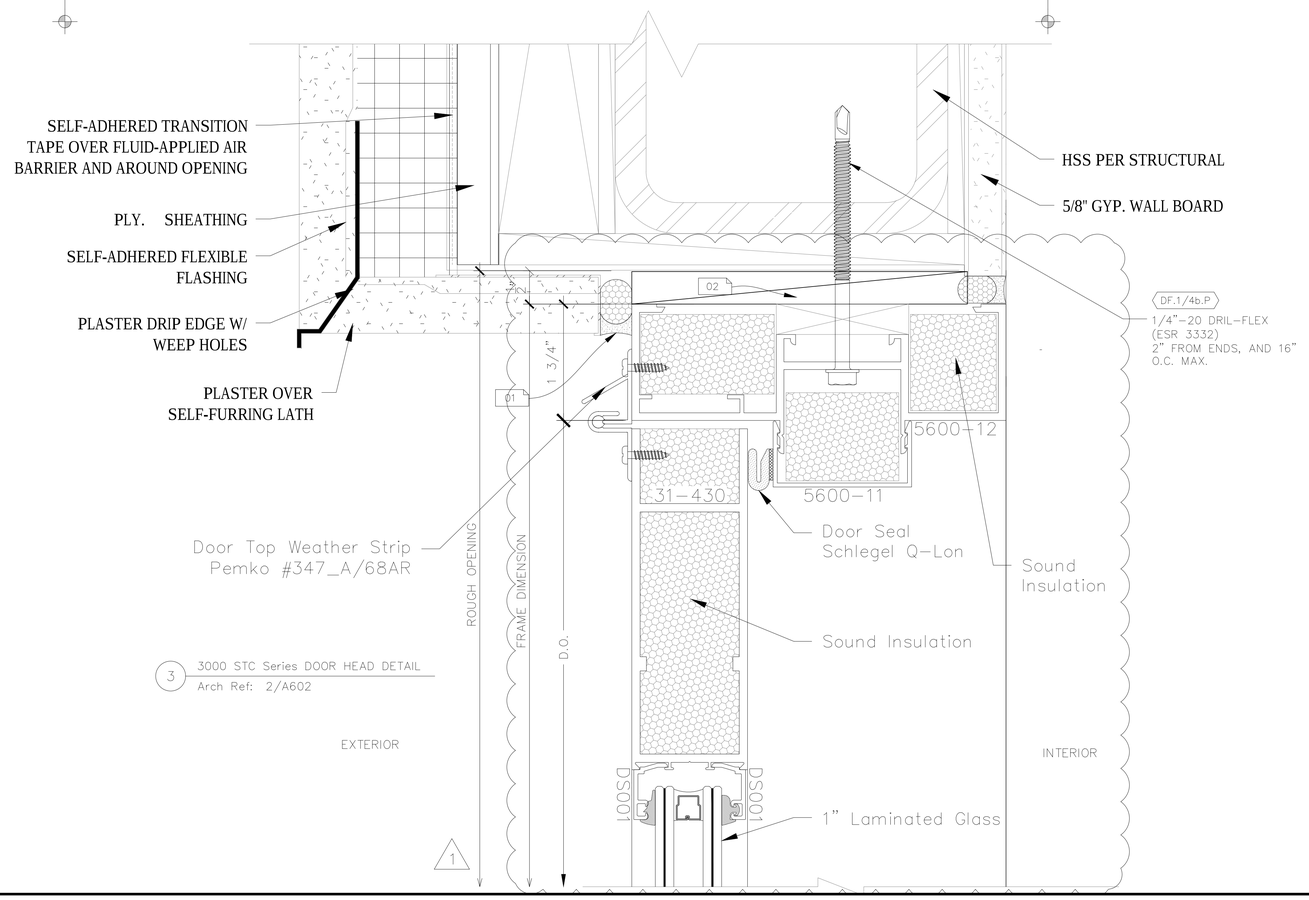
SHEET NUMBER
CW5.07



1 HEAD DETAIL
Arch Ref: 27/A603



2 HEAD DETAIL
Arch Ref: 28/A605



3 3000 STC Series DOOR HEAD DETAIL
Arch Ref: 2/A602

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEEMS
No. 38385
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

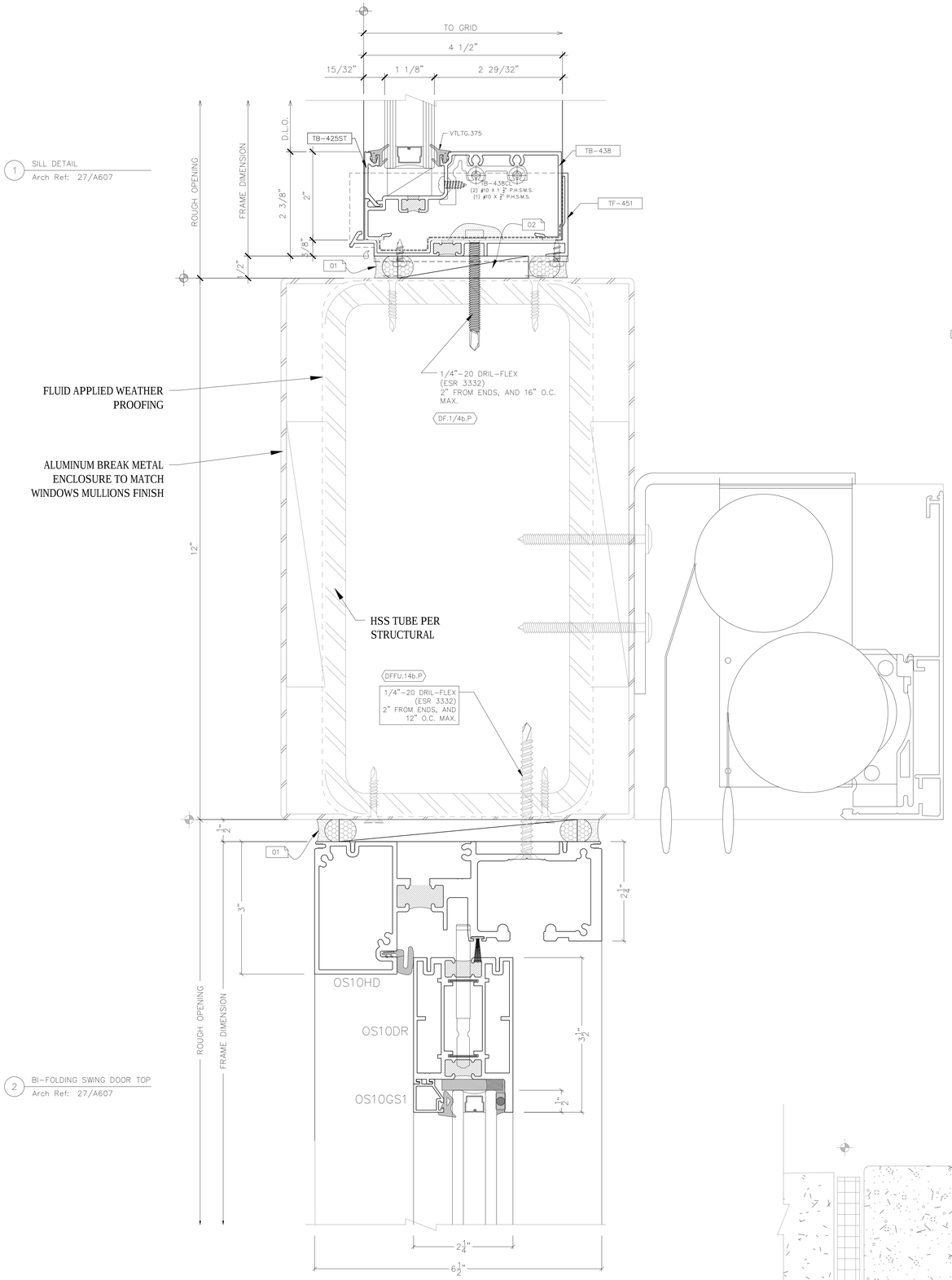
1111 EAST ARTESIA BLVD,
COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

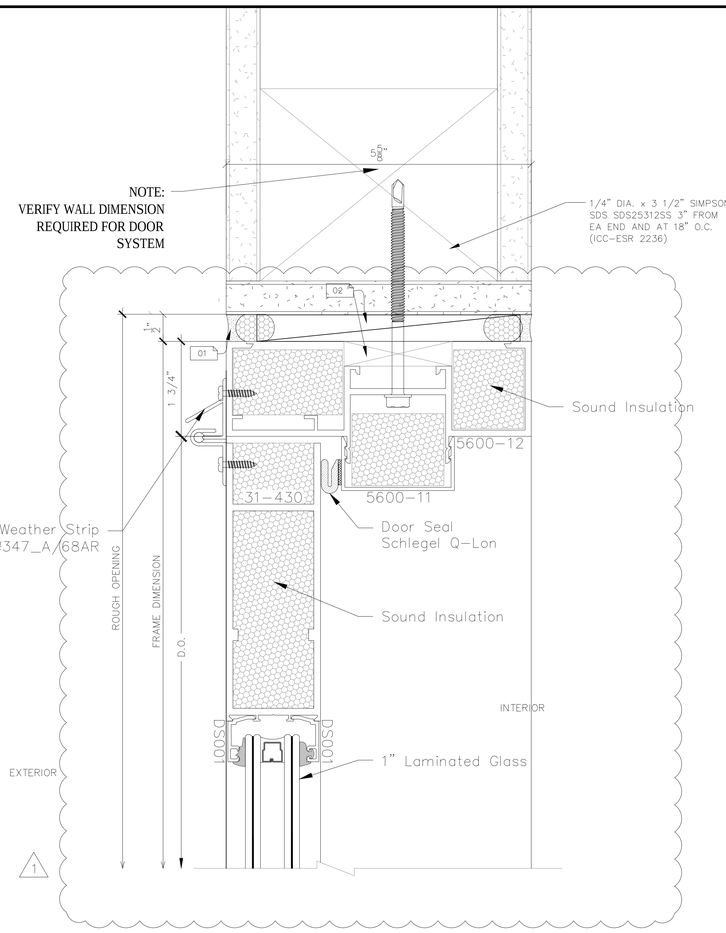
SHEET TITLE
SECTION DETAILS

SHEET NUMBER
CW5.09



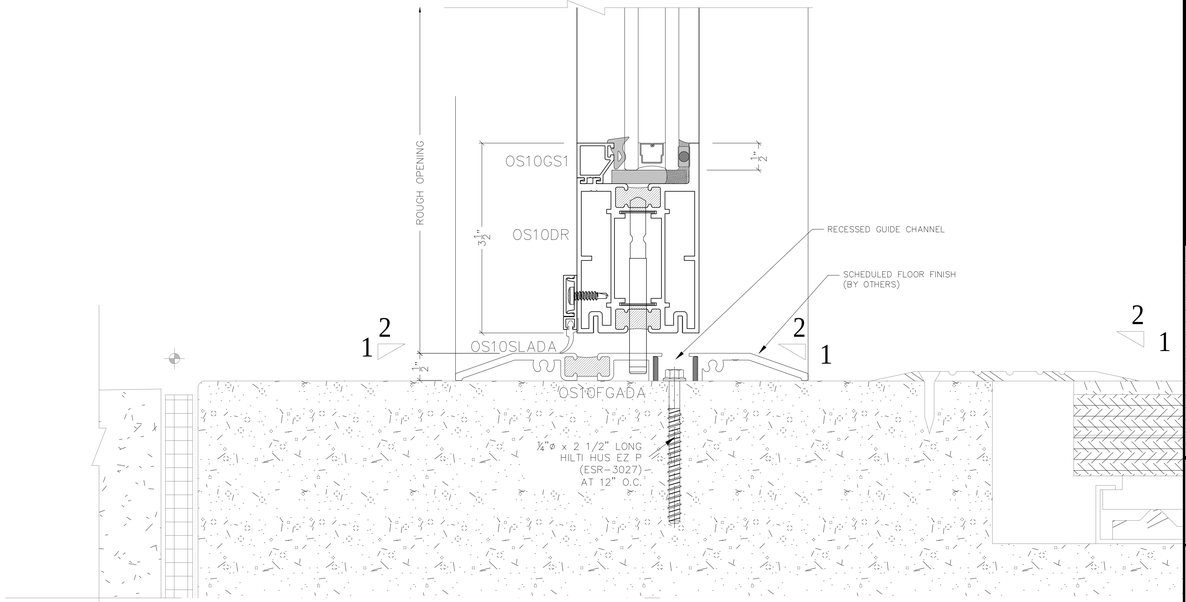
1 SILL DETAIL
Arch Ref: 27/A607

2 BI-FOLDING SWING DOOR TOP
Arch Ref: 27/A607



4 3000 STC Series DOOR HEAD DETAIL
Arch Ref: 8 / A601

3 BI-FOLDING SWING DOOR BOTTOM
Arch Ref: 26/A605



struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON T. DEEMS
No. 38935
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY
COLLEGE DISTRICT

COMPTON COLLEGE
VISUAL AND PERFORMING
ARTS REPLACEMENT

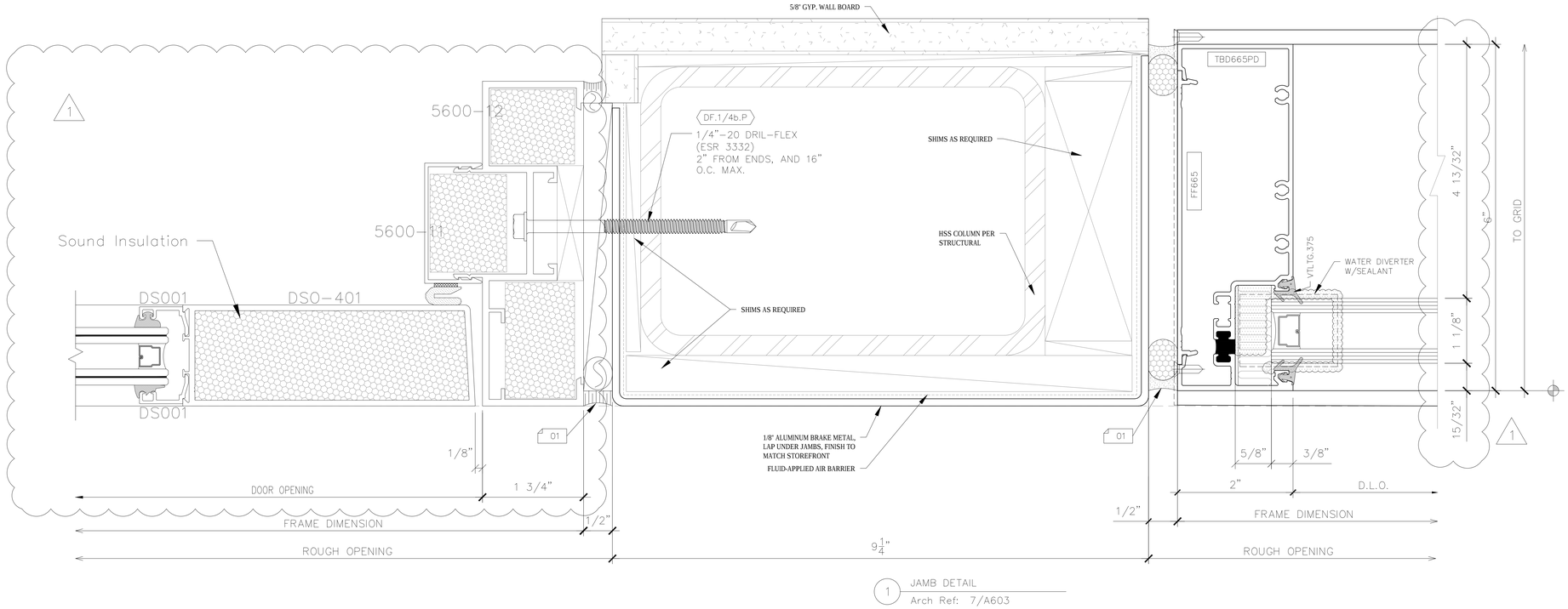
1111 EAST ARTESIA BLVD,
COMPTON, CA 90221-5393

ISSUE DESCRIPTION

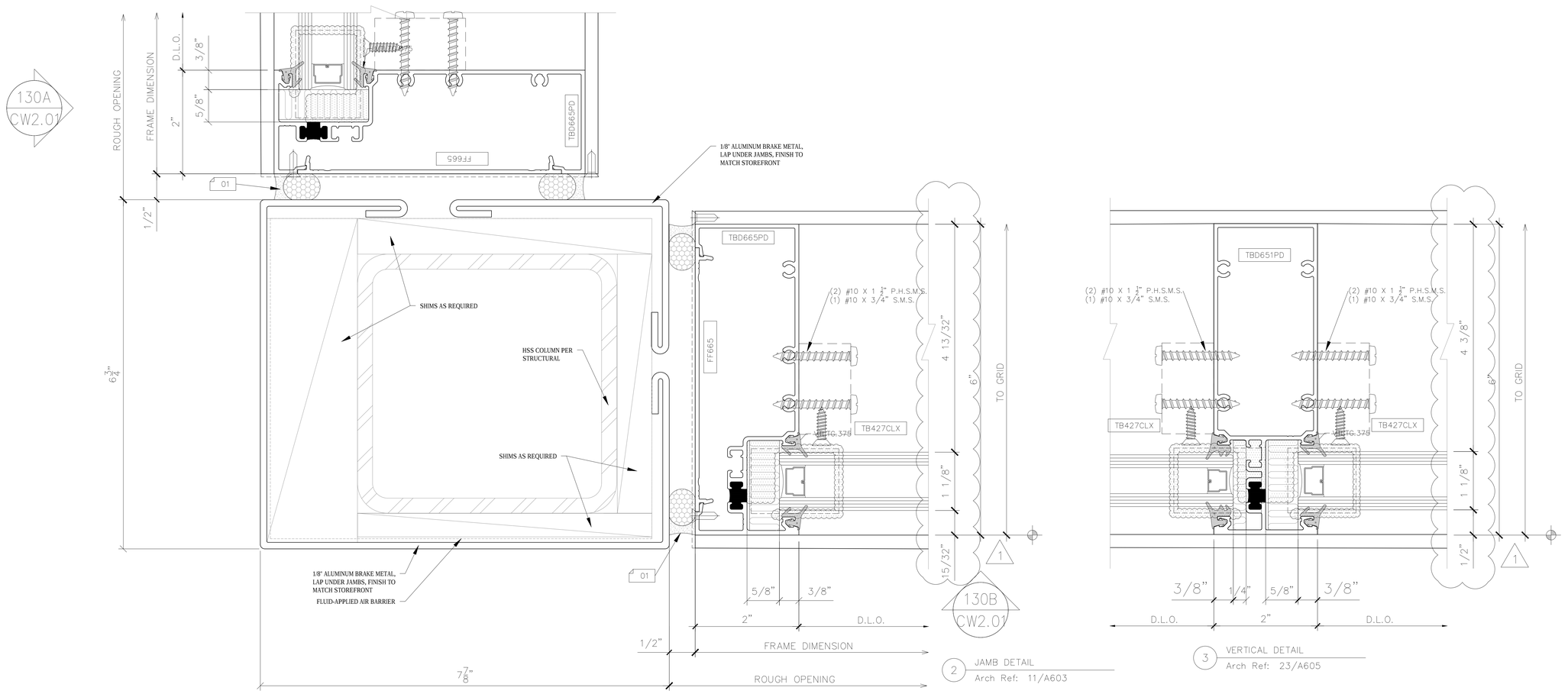
	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

SHEET TITLE
SECTION DETAILS

SHEET NUMBER
CW5.10



1 JAMB DETAIL
Arch Ref: 7/A603



2 JAMB DETAIL
Arch Ref: 11/A603

3 VERTICAL DETAIL
Arch Ref: 23/A605

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEEMS
No. 38935
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY
COLLEGE DISTRICT

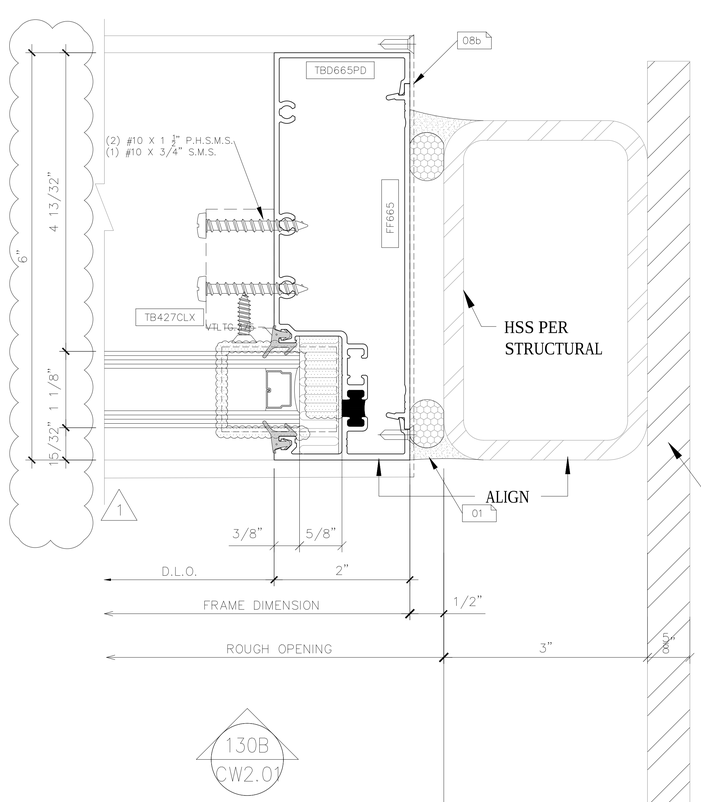
COMPTON COLLEGE
VISUAL AND PERFORMING
ARTS REPLACEMENT

1111 EAST ARTESIA BLVD,
COMPTON, CA 90221-5393

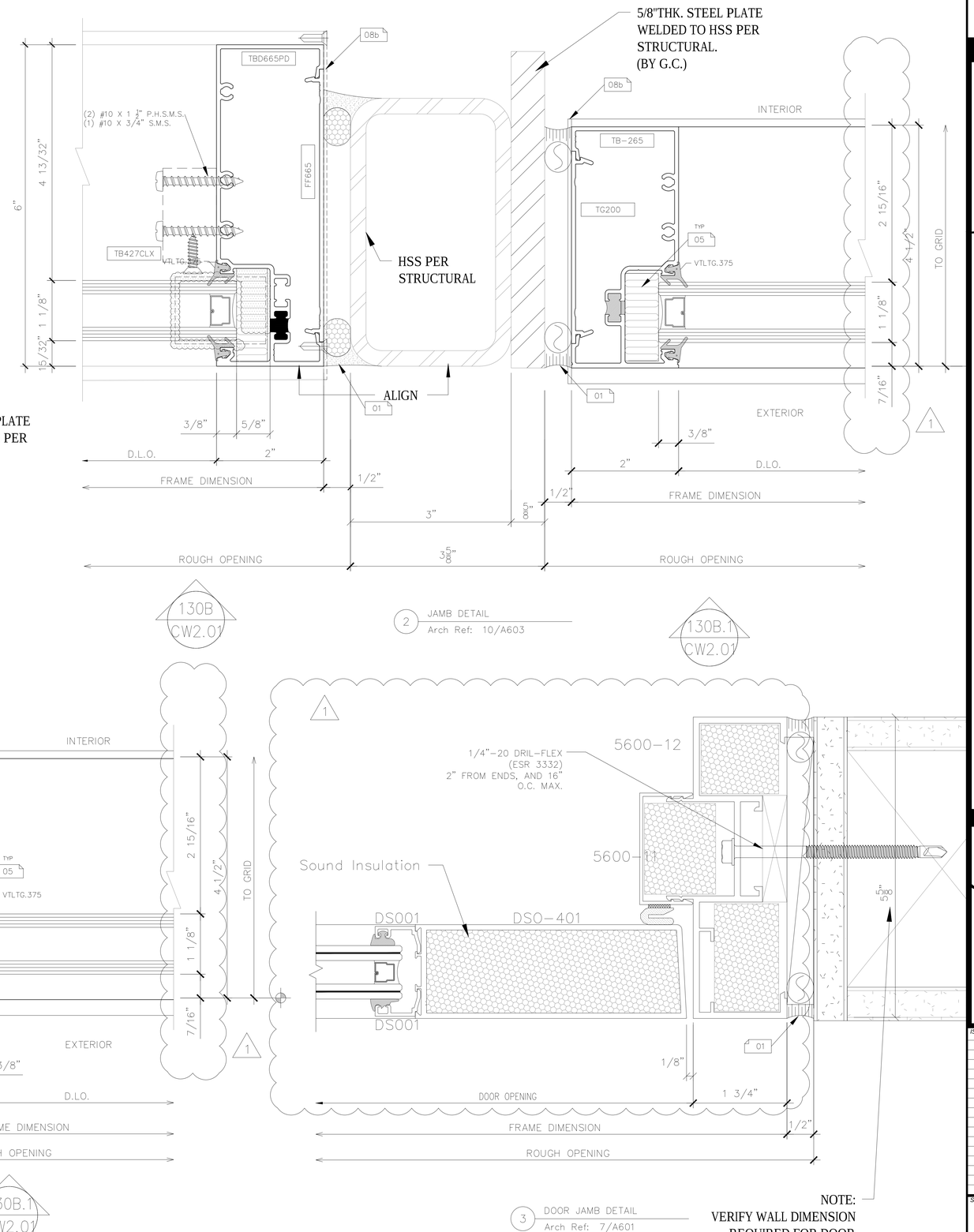
ISSUE DESCRIPTION		
	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

SHEET TITLE
PLAN DETAILS

SHEET NUMBER
CW6.01



5/8"THK. STEEL PLATE WELDED TO HSS PER STRUCTURAL. (BY G.C.)



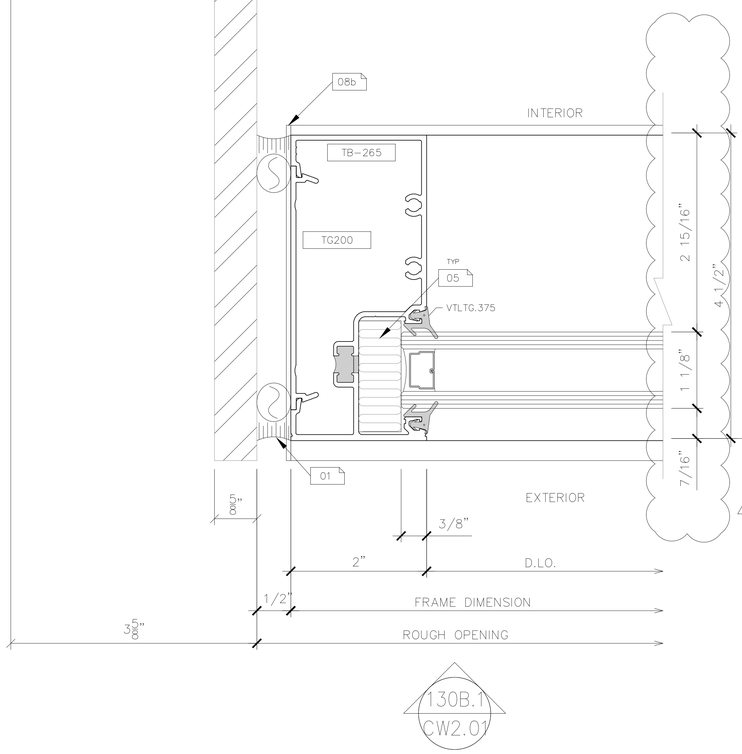
130B / CW2.01

1 JAMB DETAIL
Arch Ref: 6/A603

130B / CW2.01

2 JAMB DETAIL
Arch Ref: 10/A603

130B.1 / CW2.01



130B.1 / CW2.01

3 DOOR JAMB DETAIL
Arch Ref: 7/A601

NOTE:
VERIFY WALL DIMENSION REQUIRED FOR DOOR SYSTEM

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEEMS
No. S8585
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

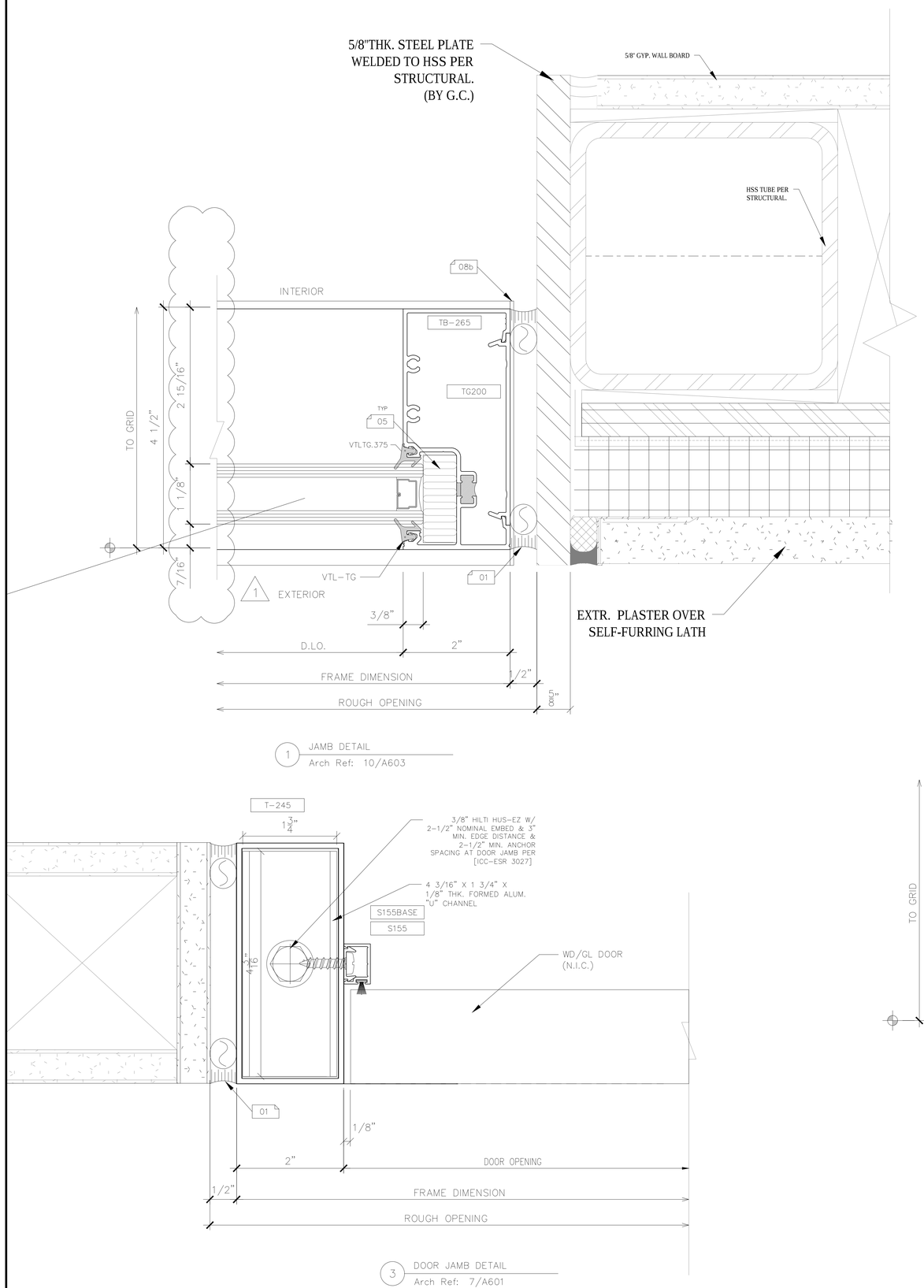
1111 EAST ARTESIA BLVD.
COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

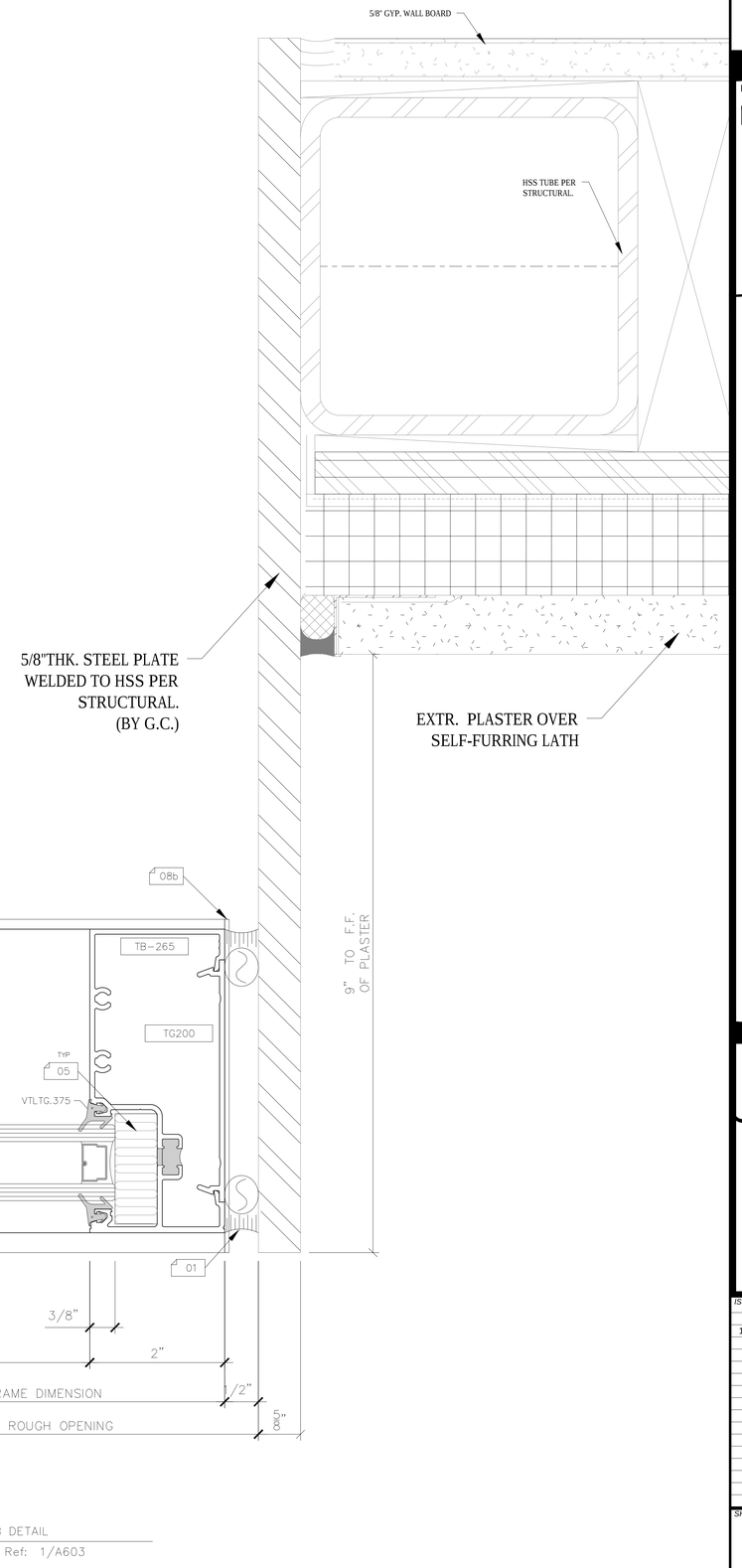
SHEET TITLE
PLAN DETAILS

SHEET NUMBER
CW6.02



1 JAMB DETAIL
Arch Ref: 10/A603

3 DOOR JAMB DETAIL
Arch Ref: 7/A601



2 JAMB DETAIL
Arch Ref: 1/A603

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEEMS
No. 38935
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

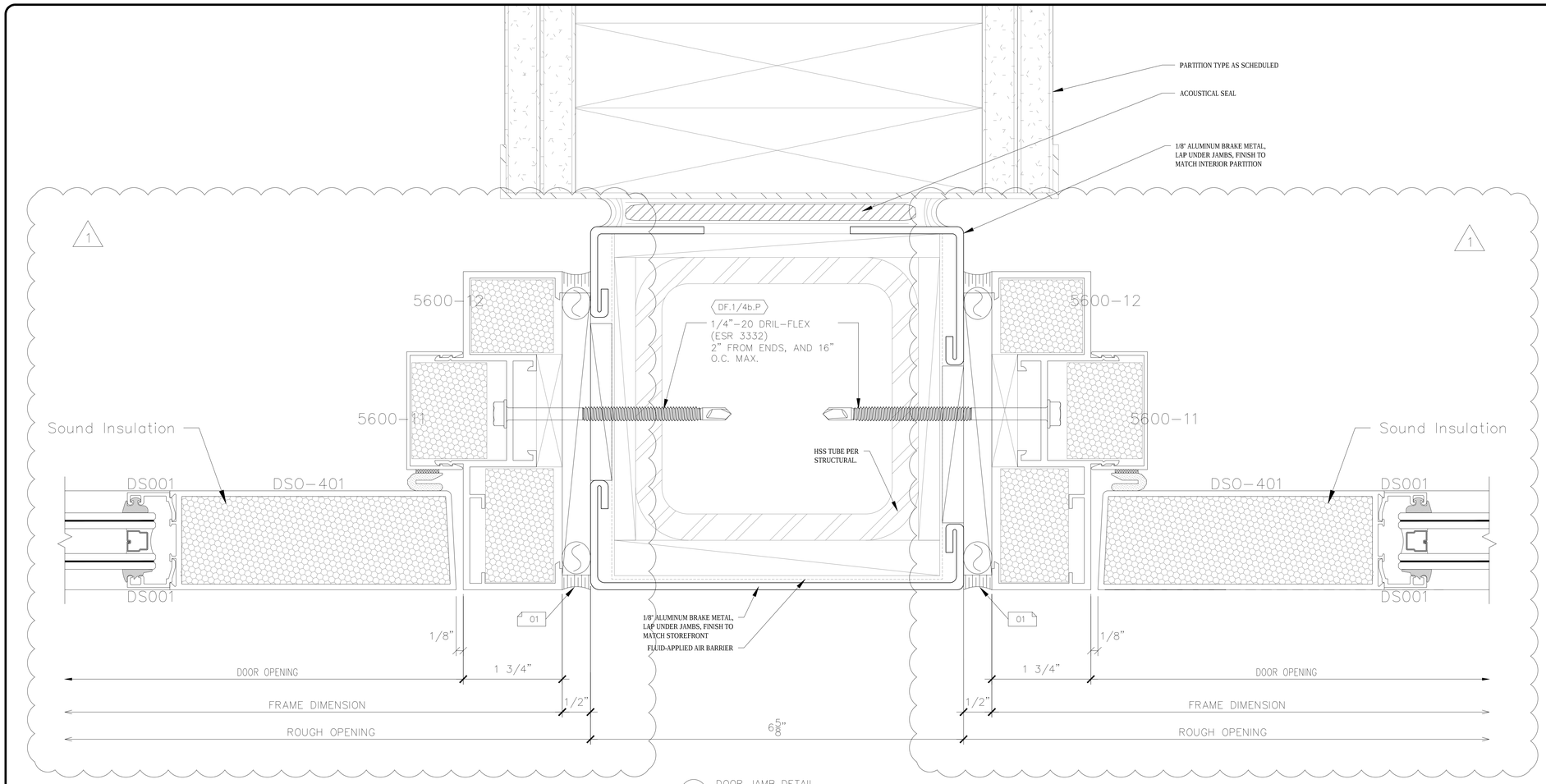
1111 EAST ARTESIA BLVD,
COMPTON, CA 90221-5393

ISSUE DESCRIPTION

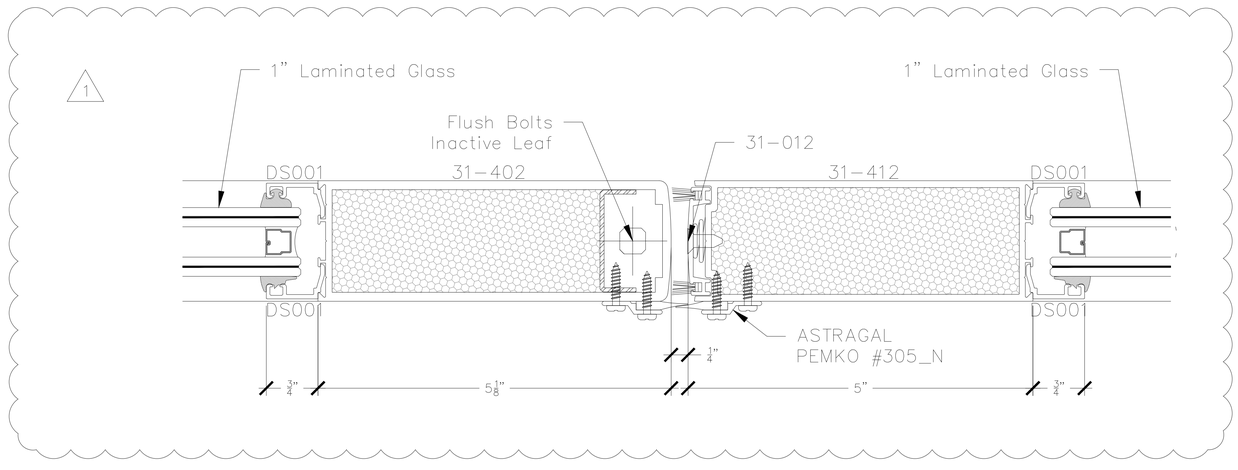
	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

SHEET TITLE
PLAN DETAILS

SHEET NUMBER
CW6.03



1 DOOR JAMB DETAIL
Arch Ref: 12/A603



2 DOOR MEETING STILE
Arch Ref: NONE

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEEMS
No. 38385
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

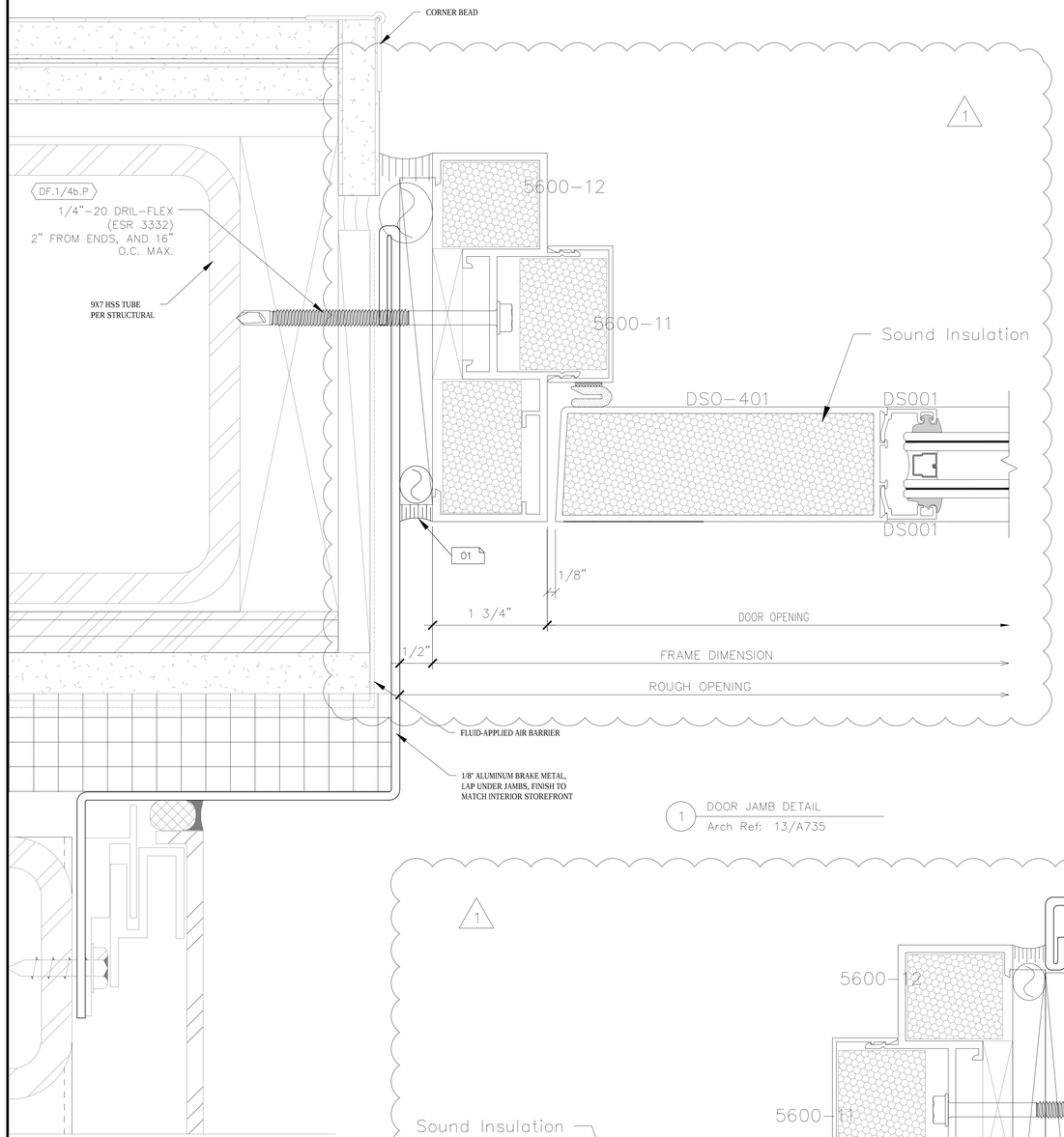
1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION

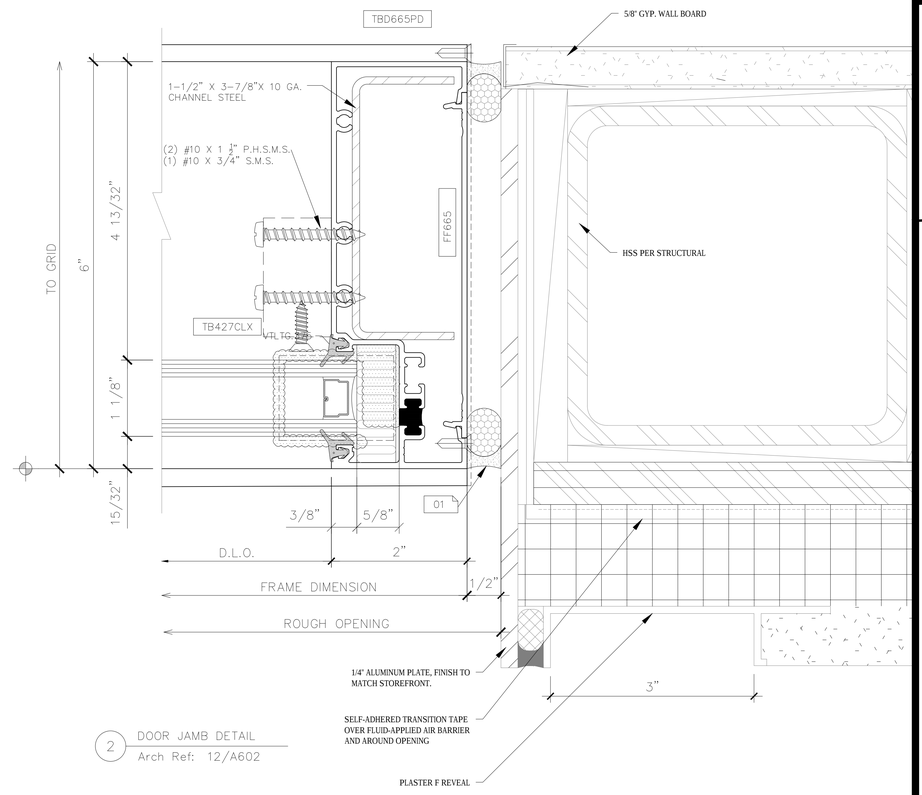
	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

SHEET TITLE
PLAN DETAILS

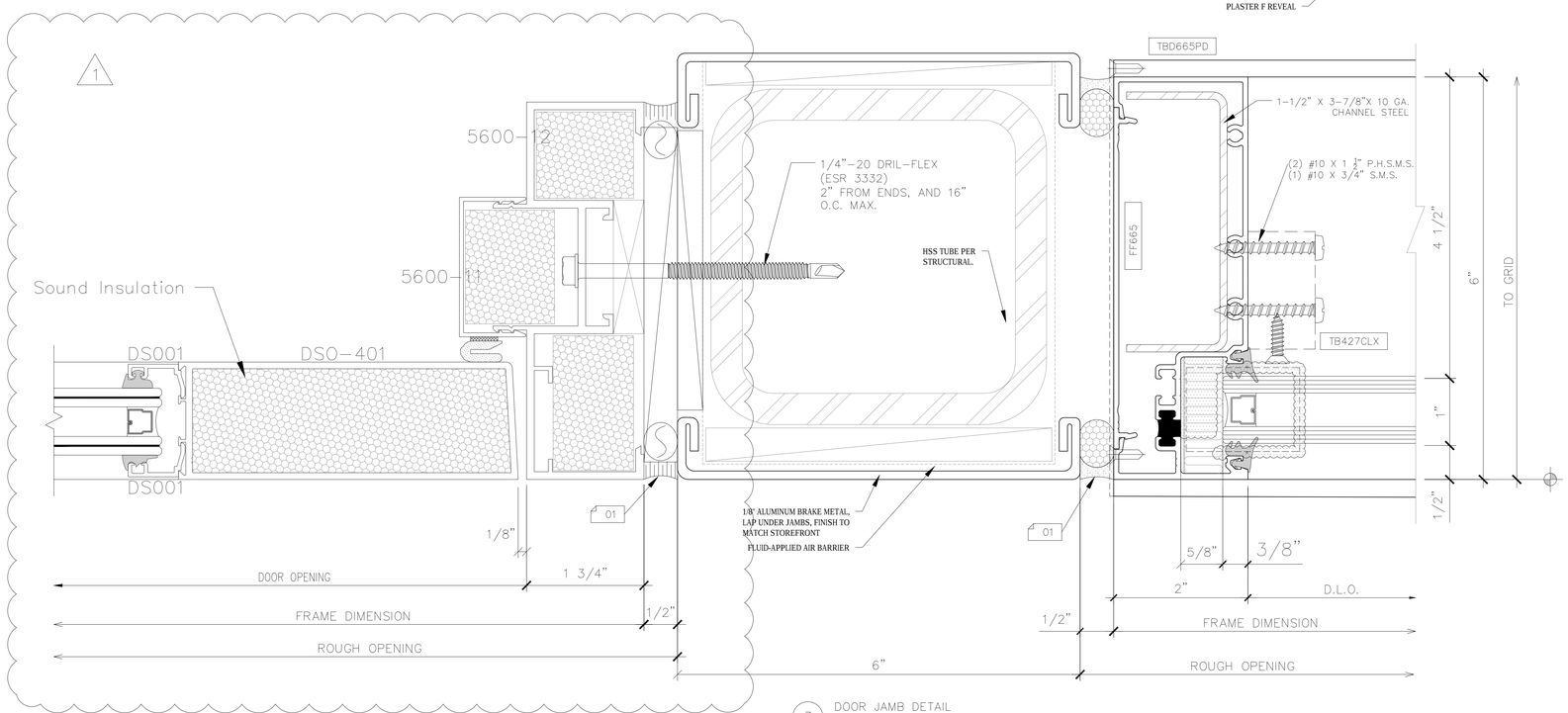
SHEET NUMBER
CW6.04



1 DOOR JAMB DETAIL
Arch Ref: 13/A735



2 DOOR JAMB DETAIL
Arch Ref: 12/A602



3 DOOR JAMB DETAIL
Arch Ref: 9/A602

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEEMS
No. 38935
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY
COLLEGE DISTRICT

COMPTON COLLEGE
VISUAL AND PERFORMING
ARTS REPLACEMENT

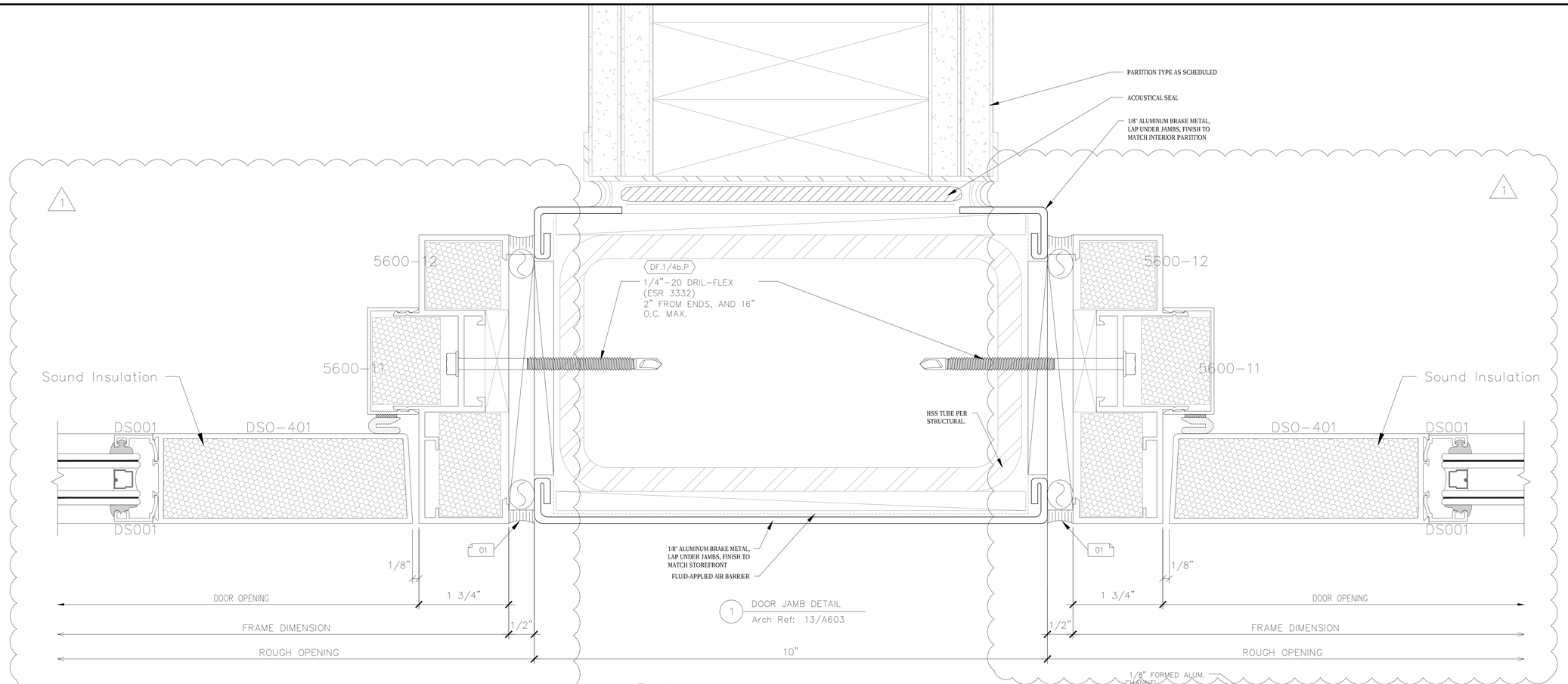
1111 EAST ARTESIA BLVD,
COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

SHEET TITLE
PLAN DETAILS

SHEET NUMBER
CW6.05



struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEEMS
No. 38935
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD.
COMPTON, CA 90221-5393

ISSUE DESCRIPTION

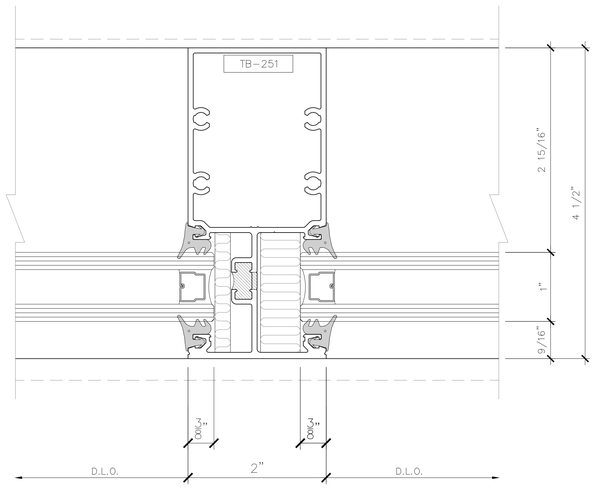
	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

SHEET TITLE

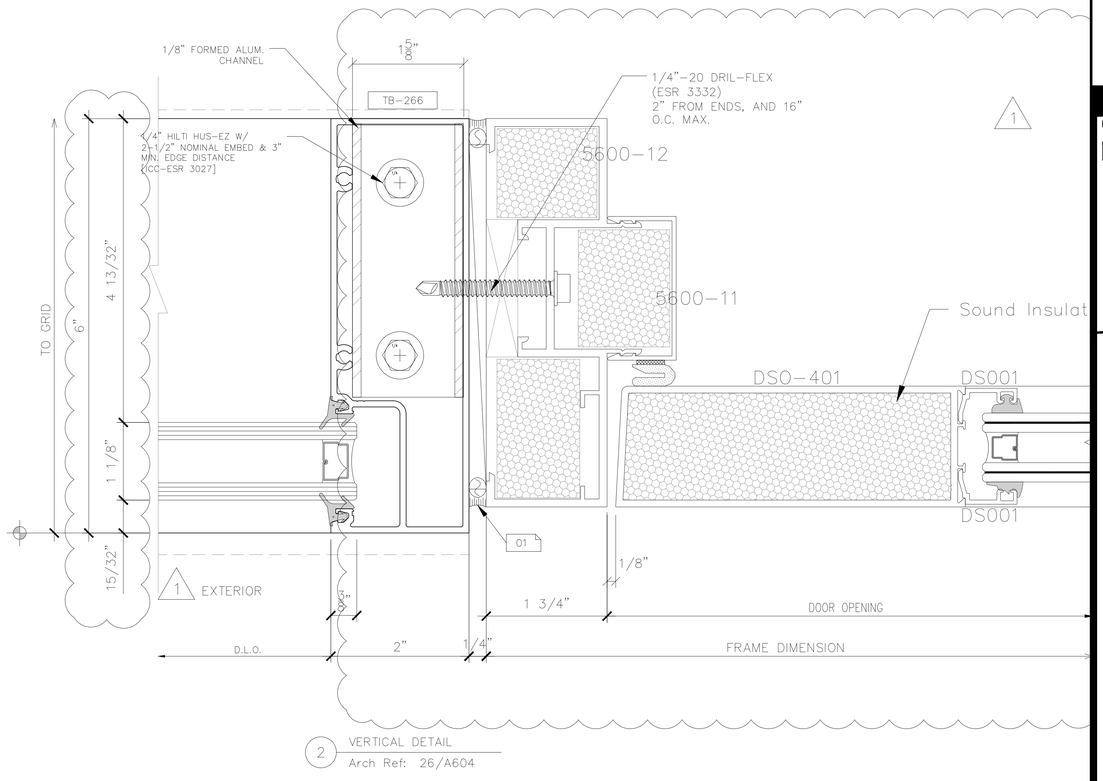
PLAN DETAILS

SHEET NUMBER

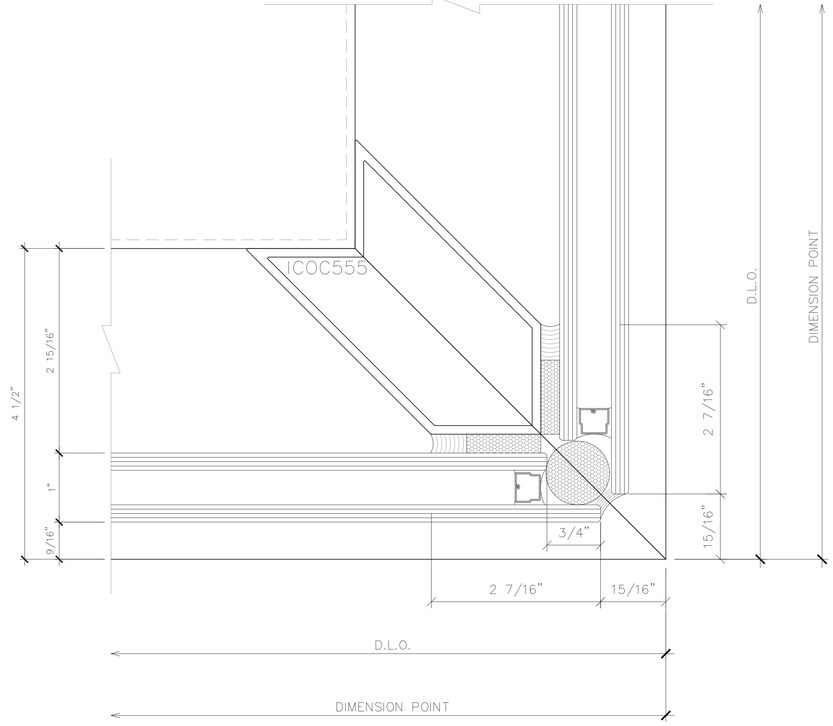
CW6.06



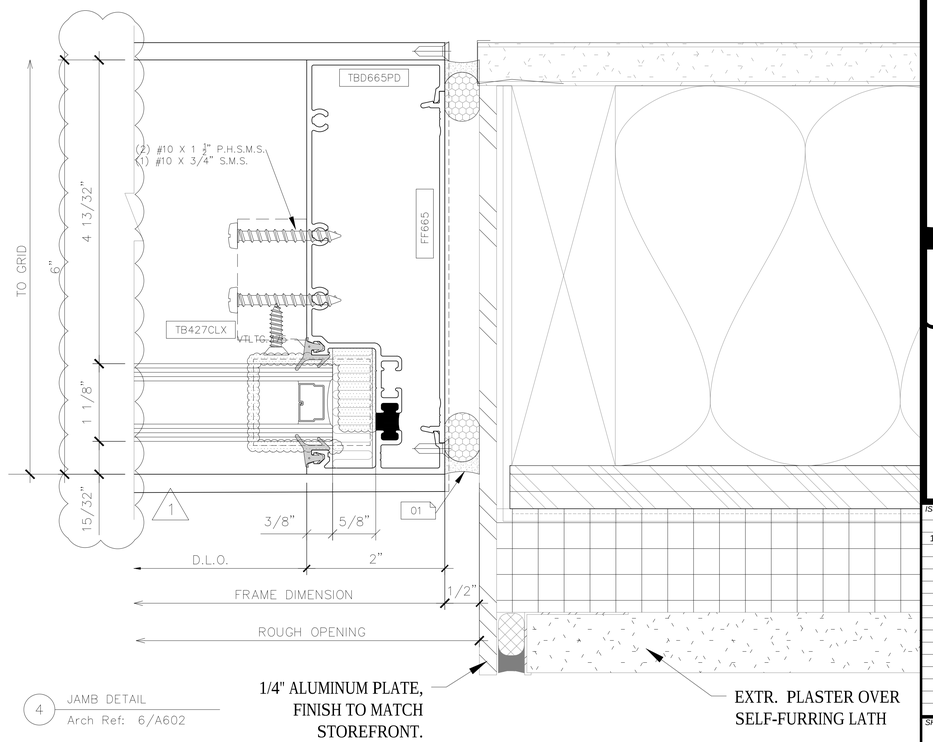
1 VERTICAL DETAIL
Arch Ref: 26/A604



2 VERTICAL DETAIL
Arch Ref: 26/A604



3 90 DEG. OUTSIDE CORNER DETAIL
Arch Ref: 21/A603



4 JAMB DETAIL
Arch Ref: 6/A602

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEEMS
No. 38535
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

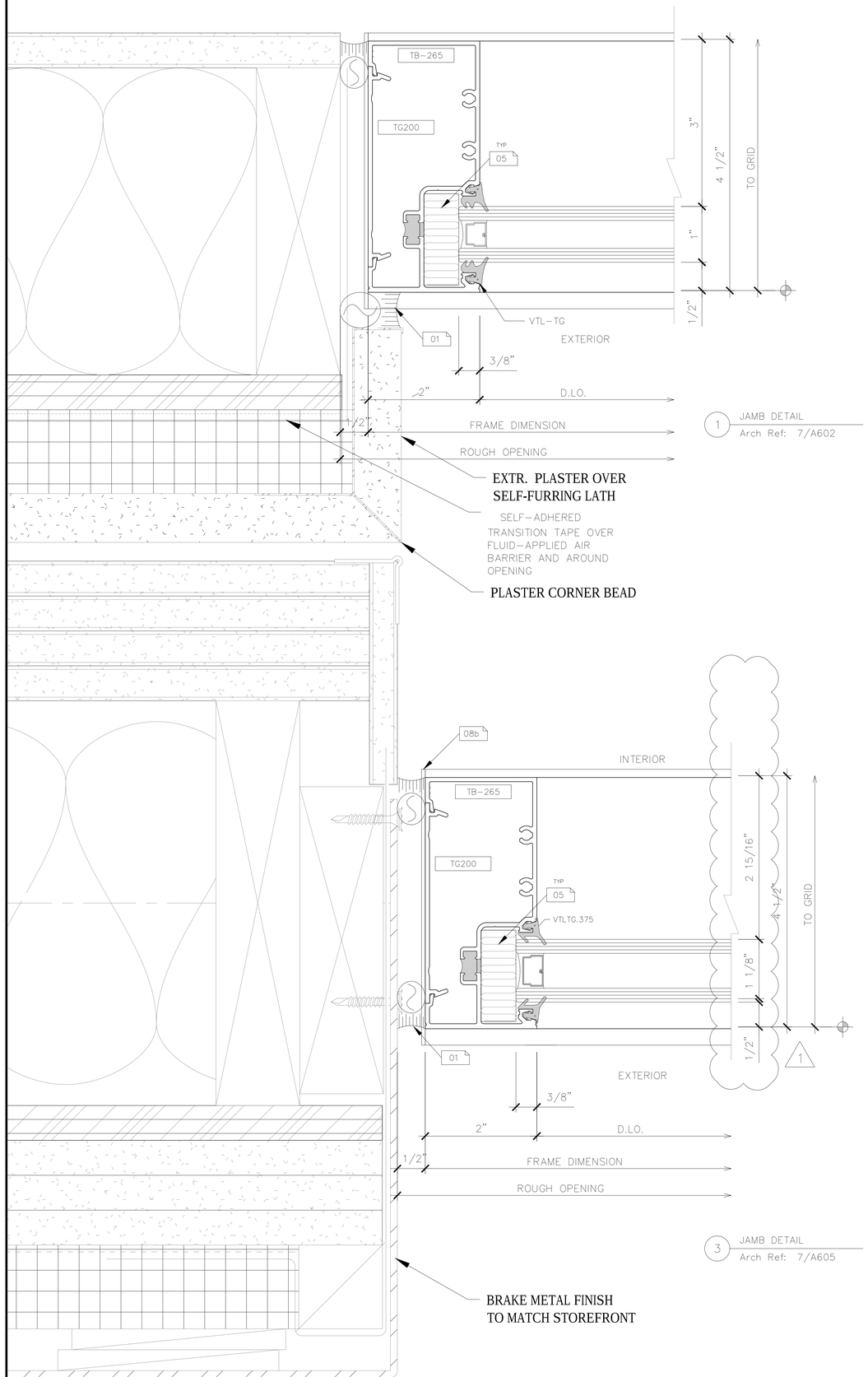
1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

SHEET TITLE
PLAN DETAILS

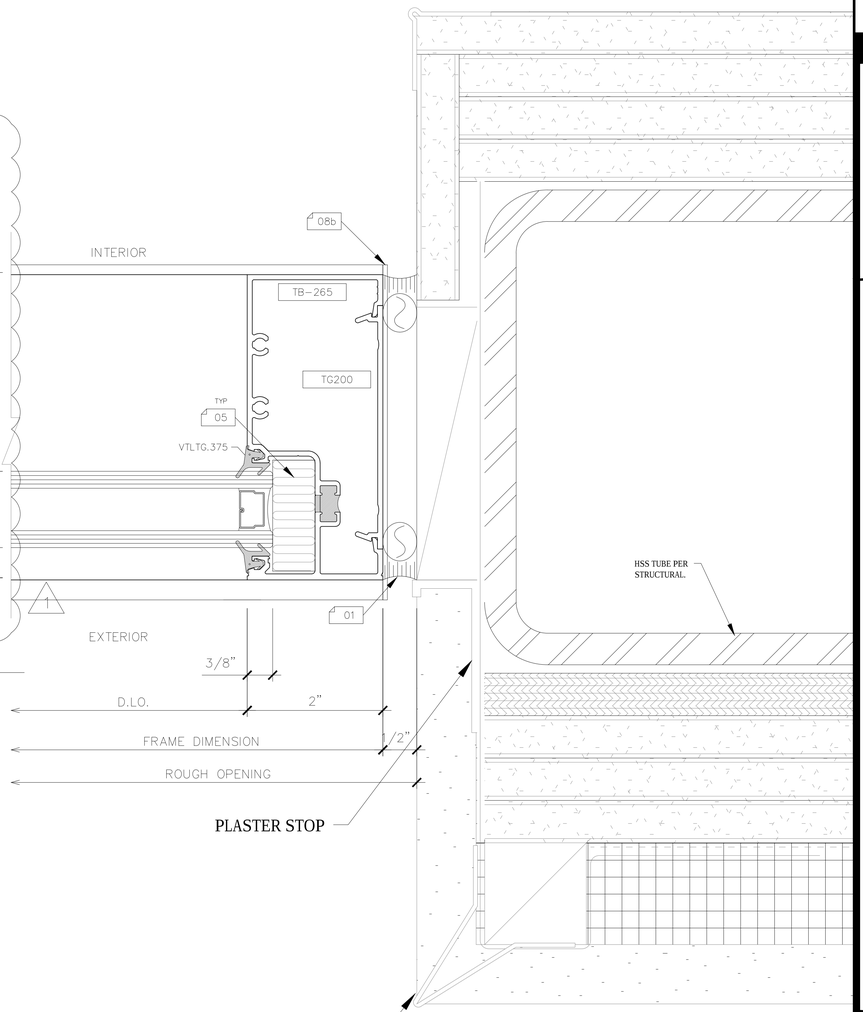
SHEET NUMBER
CW6.07



1 JAMB DETAIL
Arch Ref: 7/A602

2 JAMB DETAIL
Arch Ref: 22/A605

3 JAMB DETAIL
Arch Ref: 7/A605



struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEEMS
No. S8535
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

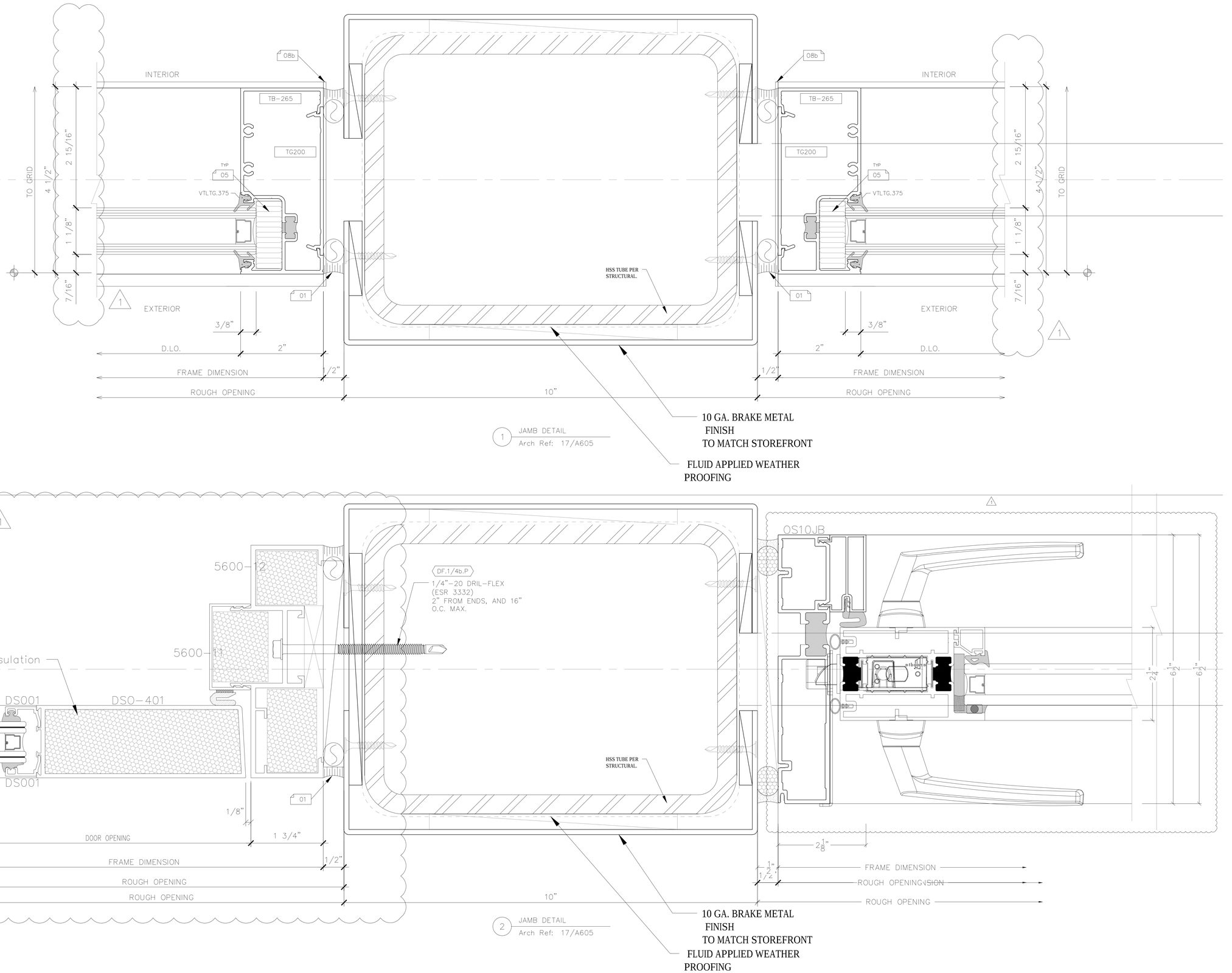
1111 EAST ARTESIA BLVD,
COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

SHEET TITLE
PLAN DETAILS

SHEET NUMBER
CW6.09



struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEEMS
No. S8936
Exp 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION

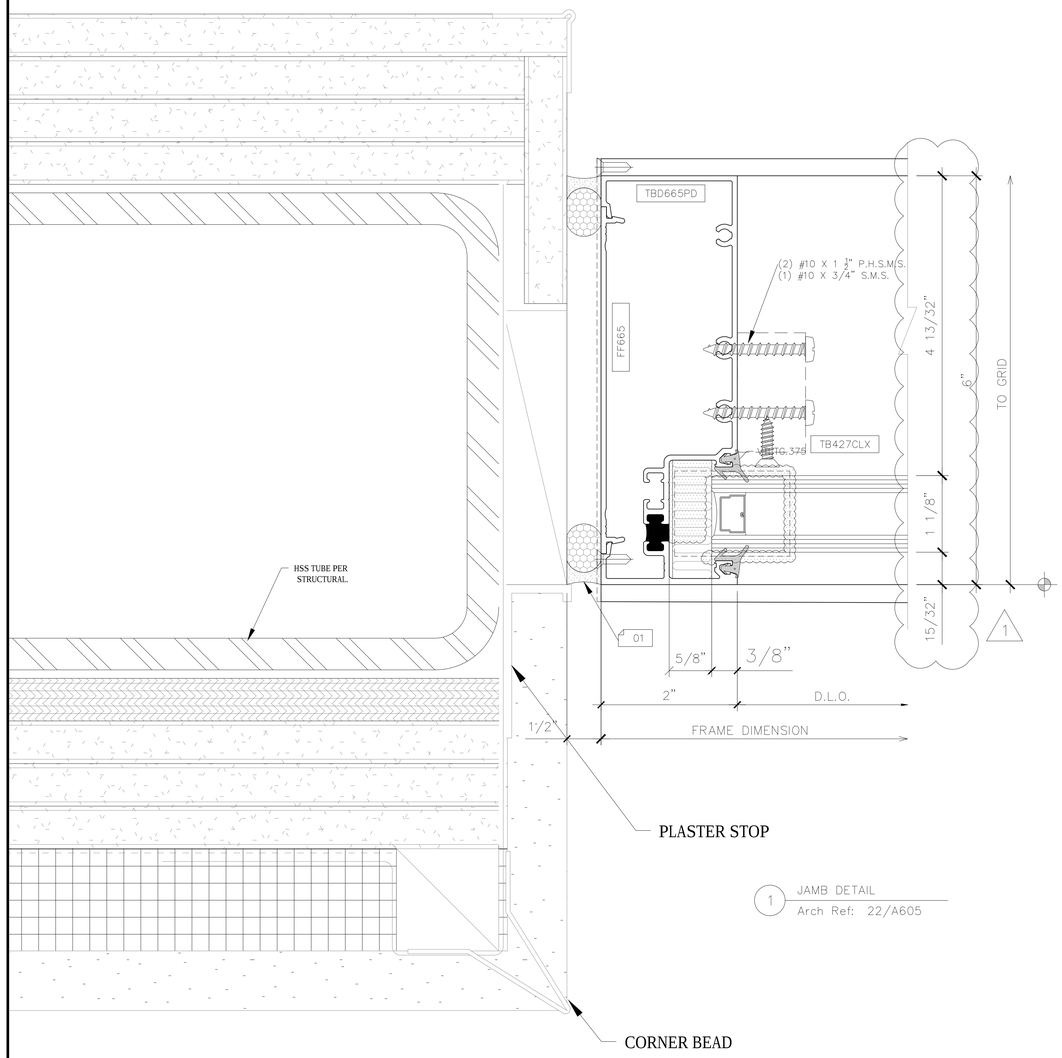
	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

SHEET TITLE

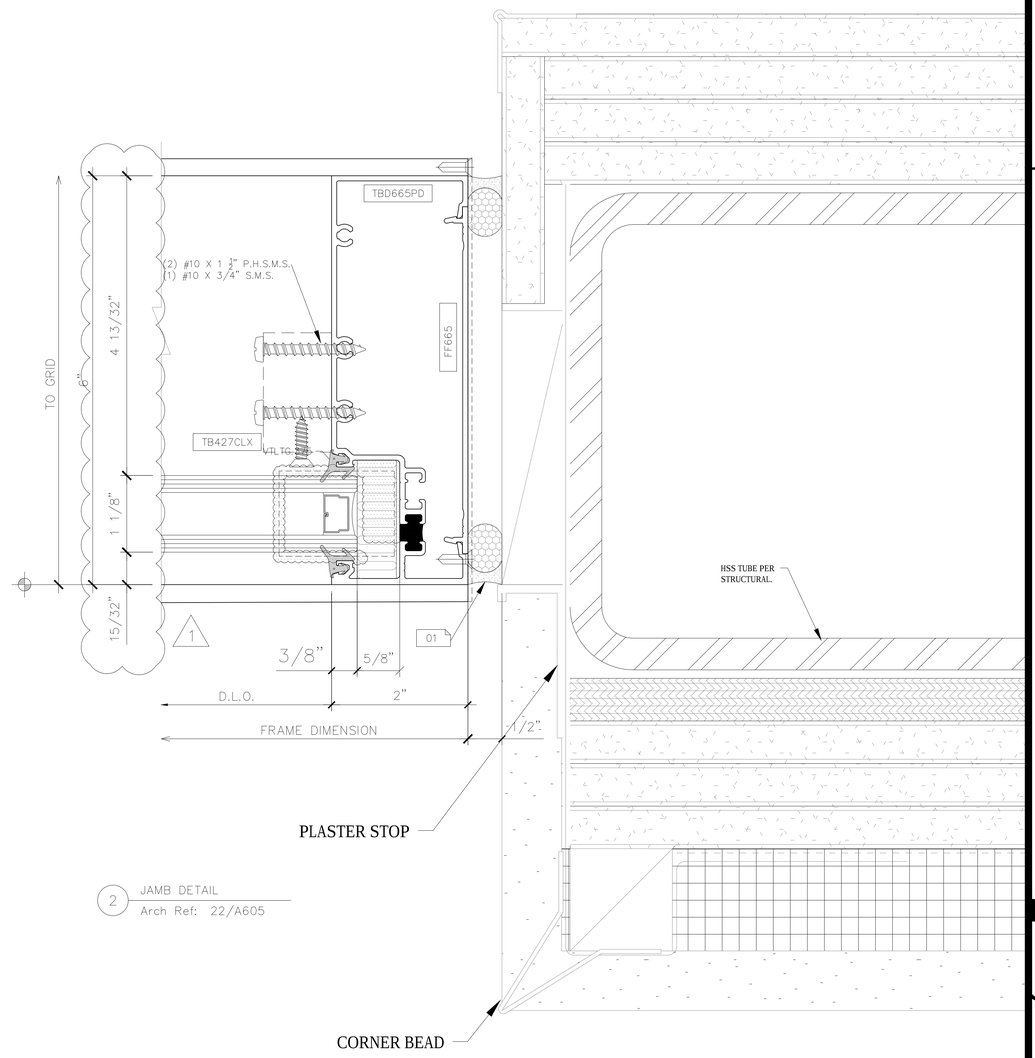
PLAN DETAILS

SHEET NUMBER

CW6.10



1 JAMB DETAIL
Arch Ref: 22/A605



2 JAMB DETAIL
Arch Ref: 22/A605

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEEMS
No. 38935
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD,
COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.25

SHEET TITLE
PLAN DETAILS

SHEET NUMBER
CW6.12

7/29/2022 12:43:51 PM

DRAWING LIST

#	NAME
SVC 101	SVC SYSTEMS SCHEDULES
SVC 102	SVC SYSTEMS PLAN
SVC 103	SVC SYSTEMS PLAN
SVC 104	SVC SYSTEMS PANELS
SVC 105	SVC SYSTEMS DEVICE DETAILS

WIRE SCHEDULE

TYPE	DESCRIPTION	MFR/CAT #	O.D. (INCHES)	NOTES
MICROPHONE & LINE LEVEL AUDIO - GROUP A				
A1	1X 24 AWG TIWSTED PAIR, COPPER STRAND SHIELD (16X37 STRANDING)	BELDEN 9451	0.135	1 CH
A2	2X 24 AWG TWISTED PAIR, COPPER STRAND SHIELD (16X37 STRANDING)	BELDEN 1509C	0.301	2 CH
A4	4X 24 AWG TWISTED PAIR, COPPER STRAND SHIELD (16X37 STRANDING)	BELDEN 1510C	0.352	4 CH
DATA, VIDEO & RF - GROUP D				
D1	75 OHM TYPE RG-6/U LOW LOSS DIGITAL COAXIAL CABLE (18 AWG SOLID CENTER & COPPER BRAID SHIELD)	BELDEN 1694A	0.275	PRODUCTION VIDEO
D2	50 OHM TYPE RG8/U B'CAST COAXIAL CABLE (10 AWG SOLID CENTER & COPPER BRAID SHIELD)	BELDEN 9914	0.405	RF ANTENNA
D3	4X 24 AWG TWISTED PAIR, FOIL SHIELD, CAT6A	WEST PENN 4246AF	0.29	DATA, DISTRIBUTED VIDEO
INTERCOM LEVEL - GROUP E				
E1	20 AWG TWISTED PAIR, MYLAR SHIELD (7X30 STRANDING)	WEST PENN 292	0.14	PROD INTERCOM - 1 CH
LOW IMPEDANCE LOUDSPEAKER LEVEL - GROUP F				
F1	2X 12 AWG STRANDED COPPER W/ PVC JACKET (16X30 STRANDING)	BELDEN 5000UP	0.34	LOW Z LOUDSPEAKER - 1 CH
F2	4X 12 AWG STRANDED COPPER W/ PVC JACKET (16X30 STRANDING)	BELDEN 5002	0.395	LOW Z LOUDSPEAKER - 2 CH
F3	2X 10 AWG STRANDED COPPER W/ PVC JACKET	BELDEN 5T00UP	0.356	LOW Z LOUDSPEAKER - 1 CH
70.7 VOLT HIGH IMPEDANCE LOUDSPEAKER LEVEL - GROUP G				
G1	2X 14 AWG STRANDED COPPER W/ PVC JACKET (16X30 STRANDING)	West Penn 226	0.34	HI Z LOUDSPEAKER - 1 CH

TIE LINES

PURPOSE	LOCATION	CONX TYPE	CONX QTY	WIRE TYPE	WIRE QTY	ROUTING
SVC RACK 1	SVC RACK	CAT6A	12	D3	12	SVC RACK 2
SVC RACK 1	SVC RACK	M/F XLR	12/12	A4	3	SVC RACK 2

POWER DEVICE

20A 125V QUAD RECEPTACLE

#	LEVEL	LOCATION	MOUNT	HEIGHT	BACKBOX SIZE	PANEL SIZE	WIRE TYPE	WIRE QTY	ADJACENCY	DIVERSITY
201	1	SPECIAL CLASS 220-1	RECESSED	18" AFF	2-GANG	2-GANG	PER EE	PER EE	C01	C07 75% 1
202	1	SPECIAL CLASS 220-2	RECESSED	18" AFF	2-GANG	2-GANG	PER EE	PER EE	C02	75%
203	1	AV 535-1	RECESSED	18" AFF	2-GANG	2-GANG	PER EE	PER EE		75%
204	1	CLASS LAB 201-1	RECESSED	18" AFF	2-GANG	2-GANG	PER EE	PER EE	C03	75%
205	1	CLASS LAB 201-1	RECESSED	18" AFF	2-GANG	2-GANG	PER EE	PER EE		75%
206	1	CLASS LAB 201-1	RECESSED	18" AFF	2-GANG	2-GANG	PER EE	PER EE		75%
207	1	CLASS LAB 201-1	RECESSED	18" AFF	2-GANG	2-GANG	PER EE	PER EE		75%
208	1	STUDY LAB 230-1	RECESSED	18" AFF	2-GANG	2-GANG	PER EE	PER EE	D2-101	75%
209	1	STUDY LAB 230-2	RECESSED	18" AFF	2-GANG	2-GANG	PER EE	PER EE	D2-102	75%
210	1	ASSEMBLY 610-1	RECESSED	18" AFF	2-GANG	2-GANG	PER EE	PER EE	C04	75%
211	1	ASSEMBLY 610-1	RECESSED	18" AFF	2-GANG	2-GANG	PER EE	PER EE	C05	75%
212	1	ASSEMBLY 610-1	RECESSED	18" AFF	2-GANG	2-GANG	PER EE	PER EE	C06	75%
213	1	UTILITY 1008	RECESSED	18" AFF	2-GANG	2-GANG	PER EE	PER EE	C07	75%
214	1	CLASSROOM 110-1	RECESSED	IN CEILING	2-GANG	2-GANG	PER EE	PER EE	C08	75%
215	1	ASSEMBLY 610-1	RECESSED	18'-0" AFF	2-GANG	2-GANG	PER EE	PER EE	C10	75%
216	1	ASSEMBLY 610-1	RECESSED	18'-0" AFF	2-GANG	2-GANG	PER EE	PER EE	C11	75%

1

20A 125V JUNCTION BOX

#	LEVEL	LOCATION	MOUNT	HEIGHT	BACKBOX SIZE	PANEL SIZE	WIRE TYPE	WIRE QTY	ADJACENCY	DIVERSITY
301	1	SVC RACK 1	SURFACE	8' AFF	N/A	N/A	PER EE	PER EE		25%
302	1	SVC RACK 1	SURFACE	8' AFF	N/A	N/A	PER EE	PER EE		25%
303	1	SVC RACK 2	SURFACE	8' AFF	N/A	N/A	PER EE	PER EE		25%
304	1	SVC RACK 2	SURFACE	8' AFF	N/A	N/A	PER EE	PER EE		25%
305	1	SVC RACK 2	SURFACE	8' AFF	N/A	N/A	PER EE	PER EE		25%
306	1	SVC RACK 2	SURFACE	8' AFF	N/A	N/A	PER EE	PER EE		25%

SVC DEVICE

DEVICE	#	LEVEL	LOCATION	MOUNT	HEIGHT	BACKBOX SIZE	PANEL SIZE	WIRE TYPE	WIRE QTY	ROUTING
D2	101	1	STUDY LAB 125	RECESSED	18" AFF	1-G DEEP	1-GANG	D3	2	SVC RACK 1
D2	102	1	STUDY LAB 126	RECESSED	18" AFF	1-G DEEP	1-GANG	D3	2	SVC RACK 1
S1	101	1	OPEN AIR LOBBY	RECESSED	96" AFF	1-G DEEP	1-GANG	F1	1	SVC RACK 2
S1	102	1	OPEN AIR LOBBY	RECESSED	96" AFF	1-G DEEP	1-GANG	F1	1	SVC RACK 2
S1	103	1	OPEN AIR LOBBY	RECESSED	96" AFF	1-G DEEP	1-GANG	F1	1	SVC RACK 2
S1	104	1	OPEN AIR LOBBY	RECESSED	96" AFF	1-G DEEP	1-GANG	F1	1	SVC RACK 2
S1	105	1	ASSEMBLY116	RECESSED	96" AFF	1-G DEEP	1-GANG	F1	1	SVC RACK 2
S1	106	1	ASSEMBLY116	RECESSED	96" AFF	1-G DEEP	1-GANG	F1	1	SVC RACK 2
S1	107	1	ASSEMBLY116	RECESSED	96" AFF	1-G DEEP	1-GANG	F1	1	SVC RACK 2
S1	108	1	ASSEMBLY116	RECESSED	96" AFF	1-G DEEP	1-GANG	F1	1	SVC RACK 2
S2	101	1	ASSEMBLY116	RECESSED	IN CEILING	1-G DEEP	1-GANG	F2	1	SVC RACK 2
S2	102	1	ASSEMBLY116	RECESSED	IN CEILING	1-G DEEP	1-GANG	F2	1	SVC RACK 2
S2	103	1	ASSEMBLY116	RECESSED	IN CEILING	1-G DEEP	1-GANG	F2	1	SVC RACK 2
S2	104	1	ASSEMBLY116	RECESSED	IN CEILING	1-G DEEP	1-GANG	F2	1	SVC RACK 2
A2	101	1	ASSEMBLY116	RECESSED	IN CEILING	1-G DEEP	1-GANG	A2	1	SVC RACK 2
VC	101	1	DRESSING 115	RECESSED	PROJECT HEIGHT	1-G DEEP	1-GANG	G1	1	SVC RACK 2
RCS	101	1	DRESSING 115	RECESSED	IN CEILING	N/A	N/A	G1	1	VC-101
S1	109	1	CLASSROOM 108	RECESSED	96" AFF	1-G DEEP	1-GANG	F1	1	SVC RACK 2
S1	110	1	CLASSROOM 108	RECESSED	96" AFF	1-G DEEP	1-GANG	F1	1	SVC RACK 2
A1	101	1	ASSEMBLY116	RECESSED	96" AFF	1-G DEEP	1-GANG	D2	1	SVC RACK 2
A1	102	1	ASSEMBLY116	RECESSED	96" AFF	1-G DEEP	1-GANG	D2	1	SVC RACK 2

COMBO PANEL

#	LEVEL	LOCATION	MOUNT	HEIGHT	BACKBOX SIZE	PANEL SIZE	CONX TYPE	CONX QTY	WIRE TYPE	WIRE QTY	ROUTING
C01	1	SPEC CLASS LAB 130	RECESSED	18" AFF	12x12x6	13x13					
							XLR M/F	8/8	A4	2	SVC RACK 1
							BNC	2	D1	2	SVC RACK 1
							E-CON	6	D3	6	SVC RACK 1
							XLR-M	2	E1	2	SVC RACK 1
							NL-4	2	F2	2	SVC RACK 1
C02	1	SPEC CLASS LAB 132	RECESSED	18" AFF	12x12x6	13x13					
							XLR M/F	8/8	A4	2	SVC RACK 1
							BNC	2	D1	2	SVC RACK 1
							E-CON	6	D3	6	SVC RACK 1
							XLR-M	2	E1	2	SVC RACK 1
							NL-4	2	F2	2	SVC RACK 1
C03	1	CLASS LAB 129	RECESSED	18" AFF	24x24x6	26x26					
							XLR M/F	24/24	A4	6	SVC RACK 1
							BNC	8	D1	8	SVC RACK 1
							E-CON	12	D3	12	SVC RACK 1
							XLR-M	2	E1	2	SVC RACK 1
							NL-4	8	F2	8	SVC RACK 1
C04	1	ASSEMBLY 116	RECESSED	18" AFF	24x24x6	25x25					
							XLR M/F	24/24	A4	6	SVC RACK 2
							BNC	8	D1	8	SVC RACK 2
							E-CON	12	D3	12	SVC RACK 2
							XLR-M	2	E1	2	SVC RACK 2
							NL-4	4	F2	4	SVC RACK 2
C05	1	ASSEMBLY 116	RECESSED	18" AFF	12x12x6	13x13					
							XLR M/F	8/8	A4	2	SVC RACK 2
							BNC	2	D1	2	SVC RACK 2
							E-CON	6	D3	6	SVC RACK 2
							XLR-M	2	E1	2	SVC RACK 2
							NL-4	2	F2	2	SVC RACK 2
C06	1	ASSEMBLY 116	RECESSED	18" AFF	12x12x6	13x13					
							XLR M/F	8/8	A4	2	SVC RACK 2
							BNC	2	D1	2	SVC RACK 2
							E-CON	6	D3	6	SVC RACK 2
							XLR-M	2	E1	2	SVC RACK 2
							NL-4	2	F2	2	SVC RACK 2
C07	1	UTILITY 120	RECESSED	18" AFF	12x12x6	13x13					
							XLR M/F	8/8	A4	2	SVC RACK 2
							BNC	4	D1	4	SVC RACK 2
							E-CON	6	D3	6	SVC RACK 2
							XLR-M	2	E1	2	SVC RACK 2
							NL-4	2	F2	2	SVC RACK 2
C08	1	CLASSROOM 108	RECESSED	IN CEILING	4x4x4	6x6					
							BNC	2	D1	2	SVC RACK 2
							E-CON	2	D3	2	SVC RACK 2
C09	1	CLASSROOM 108	RECESSED	18" AFF	4x4x4	6x6					
							BNC	2	D1	2	SVC RACK 2
							E-CON	2	D3	2	SVC RACK 2
C10	1	ASSEMBLY 116	RECESSED	18" AFF	12x12x6	13x13					
							XLR M/F	8/8	A4	2	SVC RACK 2
							BNC	2	D1	2	SVC RACK 2
							E-CON	6	D3	6	SVC RACK 2
							XLR-M	2	E1	2	SVC RACK 2
							NL-4	2	F2	2	SVC RACK 2
C11	1	ASSEMBLY 116	RECESSED	18" AFF	12x12x6	13x13					
							XLR M/F	8/8	A4	2	SVC RACK 2
							BNC	2	D1	2	SVC RACK 2
							E-CON	6	D3	6	SVC RACK 2
							XLR-M	2	E1	2	SVC RACK 2
							NL-4	2	F2	2	SVC RACK 2

1

SVC DEVICE KEY

- ANT ###: RF Antenna 50 Ohm RG-58 COAX
- D2 ###: Dual CAT6A Data
- A2 ###: 2Ch Microphone
- S1 ###: 1Ch Loudspeaker 1+/1-
- S2 ###: 2Ch Loudspeaker 1+/1-
- C##: Multiple Signal Combination Panel
- RCS ###: Recessed Ceiling Loudspeaker
- VC ###: Volume Control

NOTES:
SEE SVC DEVICE & COMBINATION PANEL SCHEDULES FOR MOUNTING, CONNECTOR & WIRE INFORMATION

WHERE CONDUIT IS NOT PROVIDED, USE PLENUM-RATED WIRE, BUNDLE ADJACENT CABLES AND PROTECT WIRE PATH.

POWER DEVICE KEY

- ###: 125v 20A Duplex Edison Receptacle
- ###: 125v 20A Quad Edison Receptacle
- J###: 125v 20A JUNCTION

1 SVC SYSTEMS SCHEDULES
NTS

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 749-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

LICENSED ARCHITECT HRAZTAN ZEITLIAN 28719 RENEWAL DATE 04/30/25 STATE OF CALIFORNIA

stages
300 Raritan Ave, 2nd Flr
Highland Park, NJ 08904
732.333.8003
www.stagesconsultants.com

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE
VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD,
COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

SHEET TITLE
SVC SYSTEMS SCHEDULES

SHEET NUMBER
SVC101

7/29/2022 12:43:51 PM

SVC DEVICE KEY

ANT ###	RF Antenna 50 Ohm RG-58 COAX
D2 ###	Dual CAT6A Data
A2 ###	2Ch Microphone
S1 ###	1Ch Loudspeaker 1+/1-
S2 ###	2Ch Loudspeaker 1+/1-
C##	Multiple Signal Combination Panel
RCS ###	Recessed Ceiling Loudspeaker
VC ###	Volume Control

NOTES:
SEE SVC DEVICE & COMBINATION PANEL SCHEDULES
FOR MOUNTING, CONNECTOR & WIRE INFORMATION

WHERE CONDUIT IS NOT PROVIDED, USE PLENUM-RATED WIRE, BUNDLE ADJACENT CABLES AND PROTECT WIRE PATH.

POWER DEVICE KEY

###	125v 20A Duplex Edison Receptacle
###	125v 20A Quad Edison Receptacle
J ###	125v 20A JUNCTION

1 SVC SYSTEMS RCP
1/8" = 1'-0"

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

LICENSED ARCHITECT HRAZTAN ZEITLIAN 28719 RENEWAL DATE 04/30/25 STATE OF CALIFORNIA

stages
300 Raritan Ave, 2nd Flr
Highland Park, NJ 08904
732.333.8003
www.stagesconsultants.com

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE
VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD,
COMPTON, CA 90221-5393

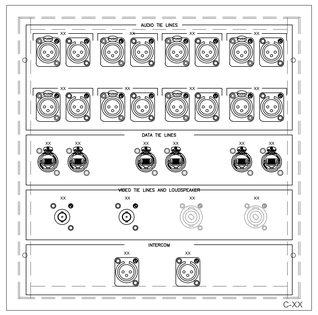
ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

SHEET TITLE
SVC SYSTEMS RCP

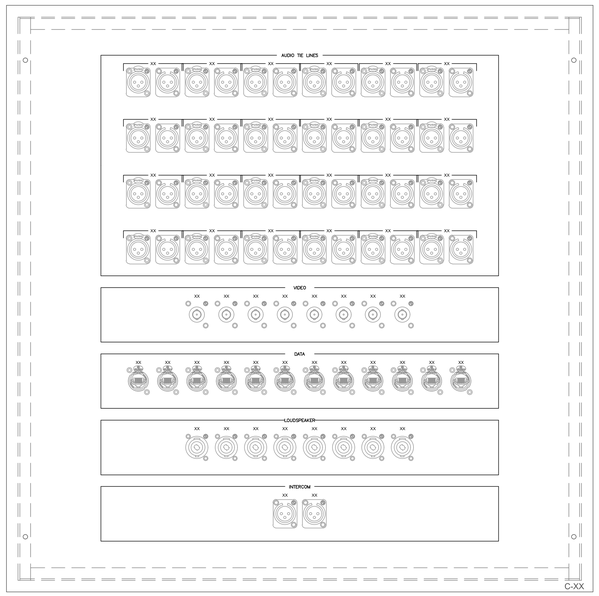
SHEET NUMBER
SVC103

7/29/2022 12:43:51 PM



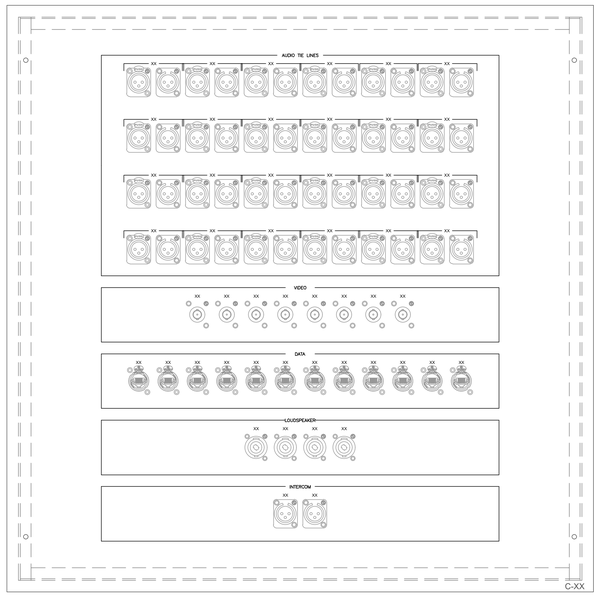
HOFFMAN A-SE12x12
with 13x13 plate

C-01
C-02



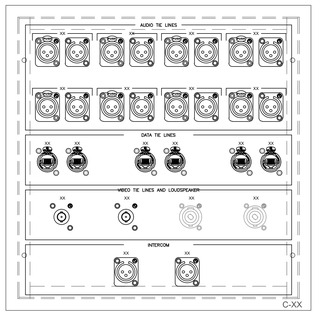
HOFFMAN A-SE24x24
with 25x25 plate

C-03



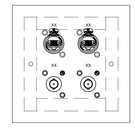
HOFFMAN A-SE24x24
with 25x25 plate

C-04



HOFFMAN A-SE12x12
with 13x13 plate

C-05
C-06
C-07
C-10
C-11



HOFFMAN A-SE4x4
with 5x5 plate

C-08
C-09

1 SVC SYSTEMS CUSTOM PANELS
1/8" = 1'-0"

struere
ADVANCED ARCHITECTURE

3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066

TELEPHONE (310) 749-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

LICENSED ARCHITECT
HRAZTAN ZEITLIAN
28719
RENEWAL DATE
04/30/25
STATE OF CALIFORNIA

stages
300 Raritan Ave, 2nd Flr
Highland Park, NJ 08904
732.333.8003
www.stagesconsultants.com

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD,
COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

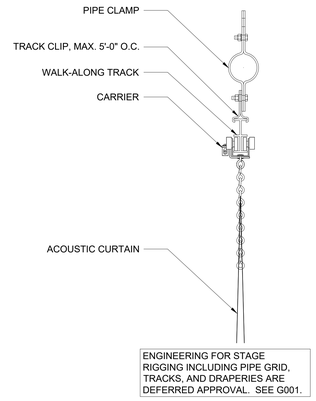
SHEET TITLE

SVC SYSTEMS CUSTOM PANELS

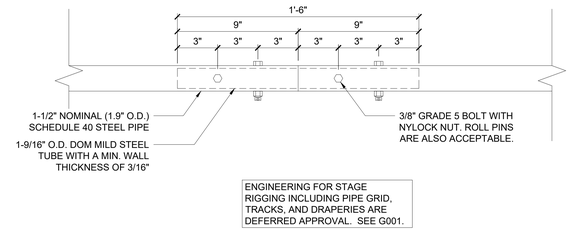
SHEET NUMBER

SVC104

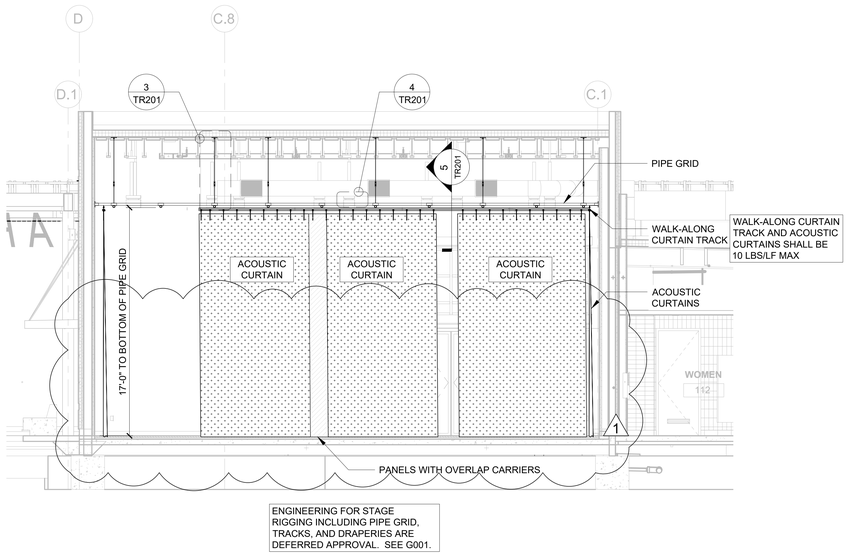
7/29/2022 12:43:51 PM



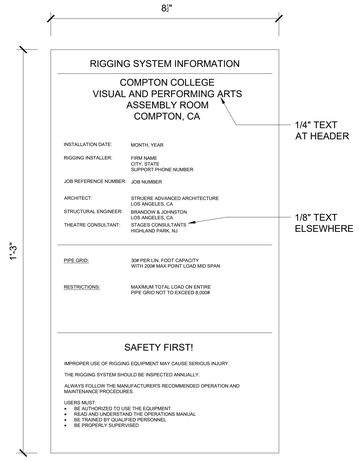
5 WALK-ALONG TRACK HANGING DETAIL
3" = 1'-0"



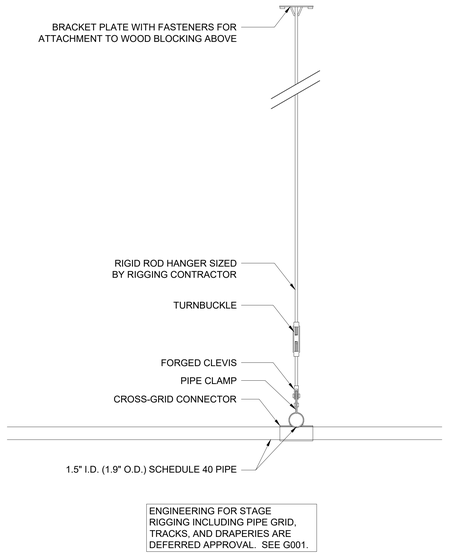
4 PIPE SPLICE DETAIL
3" = 1'-0"



1 RIGGING SECTION
1/4" = 1'-0"



2 RIGGING INFORMATION SIGNAGE
6" = 1'-0"



3 PIPE GRID HANGER DETAIL
1-1/2" = 1'-0"

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM
LICENSED ARCHITECT HRAZTAN ZEITLIAN 28719 RENEWAL DATE 04/30/25 STATE OF CALIFORNIA
stages
300 Raritan Ave, 2nd Flr
Highland Park, NJ 08904
732.333.9003
www.stagesconsultants.com

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD,
COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

SHEET TITLE
ASSEMBLY: RIGGING SECTION AND DETAILS

SHEET NUMBER
TR201

28-02-2025 18:02:17

ELECTRICAL SYMBOLS

A 5a A 5a — LIGHTING FIXTURES, "5" DENOTES CIRCUIT NUMBER, LOWER CASE "a" DENOTES CONTROLLING SWITCH AND/OR RELAY, UPPER CASE "A" DENOTES FIXTURE TYPE.

4 FT LED STRIP LIGHTS

B — RECESSED CEILING MOUNTED FIXTURE: UPPER LETTER INDICATES TYPE (U.O.N.).

F — WALL MOUNTED LIGHT FIXTURE: UPPER LETTER INDICATES TYPE.

F — EXIT SIGN WITH JUNCTION BOX APPROVED FOR THROUGH WIRING. UNIVERSAL MOUNT DIRECTIONAL ARROW AS SHOWN ON PLAN. CONNECT TO CONSTANT HOT CIRCUIT.

"E" OR "INV" / "E" OR "INV" — LIGHTING FIXTURE WITH BUILT-IN BATTERY PACK OR FEED FROM AN INVERTER

XR — DISCONNECT AND REMOVE EXISTING CONDUIT

A-1,3,5 — HOMERUN TO PANEL "A". CIRCUITS 1,3,5, CROSS LINES INDICATE NUMBER OF #12 IN ADDITION TO 1#12 GREEN GROUND. 3/4"C., U.O.N.

3/4"C, 2 #12 & 1 #12 GRND.
3/4"C, 3 #12 & 1 #12 GRND.
3/4"C, 4 #12 & 1 #12 GRND.
3/4"C, 5 #12 & 1 #12 GRND.
1"C, 6 #10 & 1 #10 GRND.
1"C, 7 #10 & 1 #10 GRND.
1"C, 8 #10 & 1 #10 GRND.

CONTACTOR SHALL PROVIDE CONDUIT AND WIRING PER CIRCUITS ON HOMERUNS FOR THE ELECTRICAL INSTALLTION WEATHER OR NOT HASH MARKS HAVE BEEN INDICATED ON PLANS.

POWER SYSTEM

J — JUNCTION BOX: SURFACE MOUNTED OR INSIDE WALL

J W.P — JUNCTION BOX WEATHER PROOF : SURFACE MOUNTED OR INSIDE WALL

DUPLEX RECEPTACLE: 125V., 20 AMP., NEMA 5-20R. +18" U.O.N.

DUPLEX RECEPTACLE: 125V., 20 AMP., NEMA 5-20R. CEILING MOUNTED.

G.F.I. DUPLEX RECEPTACLE, 20A, 125 VOLTS, NEMA 5-20R, +18" U.O.N.

SWITCH CONTROLLED SPLIT LOAD DUPLEX RECEPTACLE: 125V., 20 AMP., NEMA 5-20R. +18" U.O.N.

SWITCH CONTROLLED SPLIT LOAD QUAD RECEPTACLE: 125V., 20 AMP., NEMA 5-20R. +18" U.O.N.

GFI G.F.I. DUPLEX BLUE RECEPTACLE, 20A, 125 VOLTS, NEMA -----, +18" U.O.N.

SURGE DUPLEX RECEPTACLE: 125V., 20 AMP., NEMA 5-20R. CEILING MOUNTED.

C — SPLIT WIRED PLUG LOAD CONTROLLED DUPLEX RECEPTACLE: 125V, 15A, NEMA 5-15R. UNLESS OTHERWISE NOTED. +18" U.O.N. PROVIDE LABEL "CONTROLLED" IN WHITE LETTER WITH BLACK BACKGROUND ON THE PLUG LOAD RECEPTACLE

C — QUAD RECEPTACLES. ONE NORMAL AND ONE PLUG LOAD CONTROLLED RECEPTACLE: 125V, 15A, NEMA 5-15R UNLESS OTHERWISE NOTED. +18" U.O.N. PROVIDE LABEL "CONTROLLED" IN WHITE LETTERS WITH BLACK BACKGROUND ON THE PLUG LOAD RECEPTACLE.

G — GROUND ROD IN GROUND YARD BOX INSIDE LANDSCAPED AREA.

DISTRIBUTION PANEL

F — 480V, HEAVY DUTY DISCONNECT SWITCH. H.P. RATED, PER EQUIPMENT MFC., 3P U.O.N. "F" INDICATES FUSED, PROVIDE FUSE SIZE BASED ON NAMEPLATE RATING OF EQUIPMENT.

HEAVY DUTY COMBINATION FUSED MOTOR DISCONNECT SWITCH W/RK5 FUSE AND MAGNETIC MOTOR STARTER SIZED ACCORDING TO MOTOR MANUFACTURER RECOMMENDATIONS (STARTER SIZE 1, MIN.) WITH A SOLID STATE ADJUSTABLE OVERLOAD PROTECTION, WITH HOA SWITCH AND (2)FORM C CONTROL CONTACTS, MOUNTED. +48" TO TOP OF OPERATING HANDLE, U.O.N.

FDL — "FDL" DESIGNATES HEAVY DUTY FUSED DISCONNECT SWITCH WITH DUAL LUGS AT THE FEEDERS, FUSES SIZED PER HVAC UNIT NAMEPLATE RATING, "F" DESIGNATES A 30A/3P HEAVY DUTY DISCONNECT SWITCH CONNECTED TO THE POWER EXHAUST UNIT AND SIZED PER POWER EXHAUST MANUFACTURER RATING.

FLUSH MOUNTED 2 GANG DEEP FLOOR BOX WITH (1) DUPLEX RECEPTACLE AND (2) DATA OUTLET.

F — FAN (EXHAUST FAN OR FLY FAN), SIZE AS INDICATED.

5 — MOTOR, SIZE AS INDICATED. NUMBER INDIACTES "HP" RATINGS.

SURFACE MOUNTED PANELBOARD

FLUSH MOUNTED PANELBOARD PROVIDE (2) SPARE 3"C.O. TO THE CEILING SPACE.

DISTRIBUTION PANELBOARD

MAIN SWITCHBOARD

T — TRANSFORMER

"T" CABLE - 4 PAIR #24 UTP CATEGORY 6 CABLE.

"TW" CABLE - 4 PAIR #24 UTP CATEGORY 6 (WET LOCATION).

"D" CABLE - 4 PAIR #24 UTP CATEGORY 6 CABLE (COMPUTER DATA).

"A" CABLE - 4 PAIR #24 UTP CATEGORY 6 CABLE (CARD ACCESS SYSTEM).

"DW" CABLE - 4 PAIR #24 UTP CATEGORY 6 CABLE FLOODED TYPE AS MANUFACTURED BY COMPOSE (UNDERGROUND).

TYPICAL MOUNTING HEIGHTS ABOVE FINISHED FLOOR
(UNLESS OTHERWISE NOTED ON DRAWINGS).

+48": LIGHT SWITCHES, DIMMER SWITCHES, FIRE ALARM PULL STATION, T-STATS, BY-PASS TIMER, WALL TELEPHONE, DETECTOR TEST PANEL, INTERCOM CALL SWITCH, SPEAKER VOLUME CONTROL, OUTLET, UNLESS OTHERWISE NOTED (MEASURED TO TOP OF BACKBOX). REFER TO DETAIL#1/SHEET #E801 FOR MOUNTING HEIGHTS OF ELECTRICAL SWITCHES/CONTROLS OVER AN OBSTRUCTION.

+18": ALL DUPLEX RECEPTACLES, WALL OUTLETS FOR DESK TELEPHONE, COMPUTER OUTLETS, UNLESS OTHERWISE NOTED (MEASURED TO CENTER OF BOX).

STANDARD ABBREVIATIONS

A OR AMP	AMPERES	CLK.	CLOCK SYSTEM
AFF	ABOVE FINISH FLOOR	J.BOX	JUNCTION BOX
BKR.	BREAKER	KW	KILOWATTS
BC	BARE COPPER	MDF	MAIN DISTRIBUTION FRAME
C	CONDUIT	N.I.C.	NOT IN CONTRACT
CKT.	CIRCUIT	PA	PUBLIC ADDRESS
C.O.	CONDUIT ONLY	PABX	PHONE BOARD EXCHANGE
D	DEPTH	PH OR ∅	PHASE
F.A.	FIRE ALARM	SL	SECURITY LIGHTING.
FLA	FULL LOAD AMPERES	SLC	SIGNALING LINE CIRCUIT
FO	FIBER OPTIC	SW.	SWITCH
GRND.	GROUND	TYP.	TYPICAL
G.F.I.	GROUND FAULT INTERRUPTER	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSER
H.P.	HORSEPOWER	UG	UNDERGROUND
IDF	INTERMEDIATE DISTRIBUTION FRAME	U.O.N.	UNLESS OTHERWISE NOTED
Isc	AVAILABLE SHORT CIRCUIT CURRENT.	W.P./ WP	WEATHERPROOF
SEC.	SECURITY SYSTEM	W.R	WEATHER RESISTANT
LADWP	LOS ANGELES DEPARTMENT OF WATER AND POWER	XFMR	TRANSFORMER
LV	LOW VOLTAGE.	C	CONTROLLED RECEPTACLES

SYSTEM CABLE AND WIRING

ACCESS CONTROL SYSTEM

A — 3/4"C - (1) ACCESS SYSTEM CONDUIT RUN; 4-PAIR UTP CAT6 CABLE.
2A — 3/4"C - (2) ACCESS SYSTEM CONDUIT RUN; 4-PAIR UTP CAT6 CABLE.
3A — 1"C - (3) ACCESS SYSTEM CONDUIT RUN; 4-PAIR UTP CAT6 CABLE.
4A — 1C - (4) ACCESS SYSTEM CONDUIT RUN; 4-PAIR UTP CAT6 CABLE.
5A — 1 1/4"C - (5) ACCESS SYSTEM CONDUIT RUN; 4-PAIR UTP CAT6 CABLE.
6A — 1 1/4"C - (6) ACCESS SYSTEM CONDUIT RUN; 4-PAIR UTP CAT6 CABLE.

VOICE/DATA SYSTEM

1D — 3/4"C - (1) DATA SYSTEM CONDUIT RUN; 4-PAIR UTP CAT6 CABLE.
2D — 3/4"C - (2) DATA SYSTEM CONDUIT RUN; 4-PAIR UTP CAT6 CABLE.
3D — 1"C - (3) DATA SYSTEM CONDUIT RUN; 4-PAIR UTP CAT6 CABLE.
4D — 1"C - (4) DATA SYSTEM CONDUIT RUN; 4-PAIR UTP CAT6 CABLE.
5D — 1-1/4"C - (5) DATA SYSTEM CONDUIT RUN; 4-PAIR UTP CAT6 CABLE.

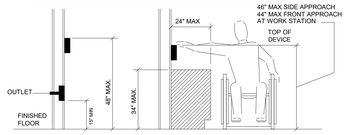
CC1 — 3/4"C - (1) CCTV SYSTEM CONDUIT RUN; 4-PAIR UTP CAT6 CABLE.
CC2 — 3/4"C - (2) CCTV SYSTEM CONDUIT RUN; 4-PAIR UTP CAT6 CABLE.
CC3 — 1"C - (3) CCTV SYSTEM CONDUIT RUN; 4-PAIR UTP CAT6 CABLE.
CC4 — 1C - (4) CCTV SYSTEM CONDUIT RUN; 4-PAIR UTP CAT6 CABLE.
CC5 — 1 1/4"C - (5) CCTV SYSTEM CONDUIT RUN; 4-PAIR UTP CAT6 CABLE.
CC6 — 1 1/4"C - (6) CCTV SYSTEM CONDUIT RUN; 4-PAIR UTP CAT6 CABLE.

1A — 1"C - (1) WEST PENN 3021
2A — 1"C - (2) WEST PENN 3021
3A — 1"C - (3) WEST PENN 3021
4A — 1"C - (4) WEST PENN 3021

C — CLOCK SYSTEM CONDUIT RUN. 3/4"C, 3#14 U.O.N.

S1 — 1"C - (1) VOICE SYSTEM CONDUIT RUN; 4-PAIR UTP CAT6 CABLE.
S2 — 1"C - (2) VOICE SYSTEM CONDUIT RUN; 4-PAIR UTP CAT6 CABLE.
S3 — 1"C - (3) VOICE SYSTEM CONDUIT RUN; 4-PAIR UTP CAT6 CABLE.

TYPICAL MOUNTING HEIGHTS ABOVE FINISHED FLOOR (U.O.N ON DRAWINGS)



MOUNTING HEIGHTS — OVER OBSTRUCTION

Applicable Code: 2019 CBC

MEP Component Anchorage Note

All mechanical, plumbing, and electrical components shall be anchored and installed per the details on the DSA-approved construction documents. The following components shall be anchored or braced to meet the force and displacement requirements prescribed in the 2019 CBC Sections 1617A.1.18 through 1617A.1.26 and ASCE 7-16 Chapters 13, 26, and 30:

1. All permanent equipment and components.
2. Temporary, movable or mobile equipment that is permanently attached (e.g., hard wired) to the building utility services such as electricity, gas or water. "Permanently attached" shall include all electrical connections except plugs for 110/220 volt receptacles having a flexible cable.
3. Temporary, movable or mobile equipment which is heavier than 400 pounds or has a center of mass located 4 feet or more above the adjacent floor or roof level that directly support the component is required to be restrained in a manner approved by DSA.

The following mechanical and electrical components shall be positively attached to the structure but need not demonstrate design compliance with the references noted above. These components shall have flexible connections provided between the component and associated ductwork, piping, and conduit. Flexible connections must allow movement in both transverse and longitudinal directions:

A. Components weighing less than 400 pounds and having a center of mass located 4 feet or less above the adjacent floor or roof level that directly support the component.

B. Components weighing less than 20 pounds, or in the case of distributed systems, less than 5 pounds per foot, which are suspended from a roof or floor or hung from a wall.

The anchorage of all mechanical, electrical and plumbing components shall be subject to the approval of the design professional in general responsible charge or structural engineer delegated responsibility and acceptance by DSA. The project inspector will verify that all components and equipment have been anchored in accordance with the above requirements.

Applicable Code: 2019 CBC

Piping, Ductwork, and Electrical Distribution System Bracing Note

Piping, ductwork, and electrical distribution systems shall be braced to comply with the forces and displacements prescribed in ASCE 7-16 Section 13.3 as defined in ASCE 7-16 Sections 13.6.5, 13.6.6, 13.6.7, 13.6.8; and 2019 CBC, Sections 1617A.1.24, 1617A.1.25 and 1617A.1.26.

The method of showing bracing and attachments to the structure for the identified distribution system are as noted below. When bracing and attachments are based on a preapproved installation guide (e.g., HCAi OPM for 2013 CBC or later), copies of the bracing system installation guide or manual shall be available on the jobsite prior to the start of and during the hanging and bracing of the distribution systems. The Structural Engineer of Record shall verify the adequacy of the structure to support the hanger and brace loads.

Mechanical Piping (MP), Mechanical Ducts (MD), Plumbing Piping (PP), Electrical Distribution Systems (E):

MP □ MD □ PP □ E ☒ Option 1: Detailed on the approved drawings with project specific notes and details.

LOW VOLTAGE SYMBOLS

INTERMEDIATE DISTRIBUTION FRAME (PROVIDE IDF RACK PER PLANS)

D1 — CEILING MOUNTED SECURITY SYSTEM PASSIVE INFRARED MOTION DETECTOR LONG RANGE.

DOOR CONTACT (SECURITY SYSTEM).

K — SECURITY SYSTEM KEYPAD PER SPECIFICATION, AND OUTLET, WALL MOUNTED, +48" AFF.

CR — COMMON AREA CARD READER PER SPECIFICATION, +48" AFF.

ACC — ACCESS CONTROL PANEL (ACC-1).

FIXED TYPE CCTV CAMERA PER SPECIFICATION AND OUTLET, HEIGHT AS INDICATED.

GPS WIRELESS BATTERY OPERATED CLOCK . +7'-6" A.F.F. SEE SPECIFICATIONS.

CTC — CLOCK TERMINAL CABINET.

AV — 4S DEEP BOX FOR AV SYSTEM WITH (3)HDMI JACKS AND TRANSMITTER. MOUNT NEAR TEACHER STATION. + AFF.

MC — MASTER CONTROLLER FOR AV SYSTEM. +48" A.F.F.MOUNT NEAR TEACHER STATION.

WALL MOUNTED (1) DATA OUTLETS. PROVIDE 3/4"C TO ACCESSIBLE CEILING SPACE AND (1) CAT 6 CABLES TO IDF ; +18"AFF

2 — WALL MOUNTED (2) DATA OUTLETS. PROVIDE 3/4"C TO ACCESSIBLE CEILING SPACE AND (2) CAT 6 CABLES TO IDF ; +18"AFF

4 — WALL MOUNTED (4) DATA OUTLETS. PROVIDE 3/4"C TO ACCESSIBLE CEILING SPACE AND (4) CAT 6 CABLES TO IDF ; +18"AFF

1 1 — WALL MOUNTED DATA/TEL OUTLETS. PROVIDE 3/4"C TO ACCESSIBLE CEILING SPACE AND (2) CAT 6 CABLES TO IDF ; +18"AFF

P — CEILING MOUNTED PROJECTOR

CEILING MOUNTED DATA OUTLET. PRIVIDE (1) CAT 6 CABLE TO IDF

WAP — CEILING MOUNTED WIRELESS ACCESS POINTS IN T-BAR CEILINGS, HARD LID CEILING OR OPEN CEILING. PROVIDE 4S J-BOX WITH 1-GANG RING WITH (2) CAT-6 CABLE FROM EACH DEVICE TO SERVER ROOM.

S A — IP PA SPEAKER, PROVIDE AND INSTALL PER SPECIFICATIONS. PROVIDE CAT-6 CABLING AND CONNECTIONS TO IP PA SYSTEM HEAD END

S — EXTERIOR PA SPEAKER, PROVIDE AND INSTALL PER SPECIFICATIONS AS REQUIRED PROVIDE CAT 6 CABLING TO IP PA SYSTEM HEADEND

WALL SWITCH OCCUPANCY SENSOR DUAL TECHNOLOGY ACUITY nWSX-PDT-LV-WH-LT,+48" AFF.

RP — ACUITY RELAY PACK nPP16-EFP.

RP1 — LMRC-111 (1) RELAY 0-10V DIMMING

RP2 — LMRC-112 (2) RELAY 0-10V DIMMING

PC — LMLS-500 MULTI ZONE DAYLIGHT SENSOR

OS — LMDC-100 CEILING OCC SENSOR

ELU — ELCU-200 EMERGENCY SHUNT RELAY

S_{Ka} — DIGITAL KEY SWITCH WITH STAINLESS STEEL PLATE WALL MOUNTED, ACUITY WALL MOUNTED nPOD-KEY-STS.+48"AFF.

S — WALL SWITCH, +48"AFF

S_D — LMDM-101 DIMMING SWITCH, WALL MOUNTED, +48" AFF.

ab S_D — LMSW-104 (4) BUTTON SWITCH, WALL MOUNTED, +48" AFF.

abc S_D — LMSW-104 (5) BUTTON SWITCH, WALL MOUNTED, +48" AFF.

S_{OD} — DW-311 WALL OCC SENSOR 0-10V DIMMING, WALL MOUNTED, +48" AFF.

PTZ TYPE CCTV CAMERA PER SPECIFICATION AND OUTLET, WALL MOUNTED. HEIGHT AS INDICATED. PROVIDE CAT 6 CABLE TO IDF LT

1 — WAP — WALL MOUNTED WIRELESS ACCESS POINTS FOR EXTERIOR APPLICATIONS. PROVIDE 4S J-BOX WITH 1-GANG RING WITH (2) CAT-6 CABLE FROM EACH DEVICE TO SERVER ROOM.

APPLICABLE CODES

PARTIAL LIST OF APPLICABLE CODES

2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR*
2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR
(2018 INTERNATIONAL BUILDING CODE, VOL. 1 & 2, AND 2022 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR
(2017 NATIONAL ELECTRICAL CODE AND 2022 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR
(2018 IAPMO UNIFORM MECHANICAL CODE AND 2022 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR
(2018 IAPMO UNIFORM PLUMBING CODE AND 2022 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 CCR
2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR
(2018 INTERNATIONAL FIRE CODE AND 2022 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR
(2018 INTERNATIONAL EXISTING BUILDING CODE AND 2022 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR
2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR
TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS
2016 ASME A17.1/CSA B44-13 SAFETY CODE FOR ELEVATORS AND ESCALATORS (PER 2022 CBC PART 2 CH. 35)
NOTE: CAL/OSHA ELEVATOR UNIT ENFORCES CCR TITLE 8 AND USES THE 2004 ASME A17.1 BY ADOPTION

PARTIAL LIST OF APPLICABLE STANDARDS

NFPA 13 STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS (CA AMENDED)	2016 EDITION
NFPA 14 STANDARD FOR THE INSTALLATION OF STANDPIPE AND HOSE SYSTEMS	2016 EDITION
NFPA 17 STANDARD FOR DRY CHEMICAL EXTINGUISHING SYSTEMS	2017 EDITION
NFPA 17ASTANDARD FOR WET CHEMICAL EXTINGUISHING SYSTEMS	2017 EDITION
NFPA 20 STANDARD FOR THE INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION	2016 EDITION
NFPA 22 STANDARD FOR WATER TANKS FOR PRIVATE FIRE PROTECTION	2013 EDITION
NFPA 24 STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES	2016 EDITION
NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE (CA AMENDED);	2016 EDITION
NFPA 80 STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES	2016 EDITION
NFPA 2001 STANDARD ON CLEAN AGENT FIRE EXTINGUISHING SYSTEMS	2015 EDITION
UL 300 STANDARD FOR FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS FOR PROTECTION OF COMMERCIAL COOKING EQUIPMENT	2005 (R2010)
UL 464 AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, INCLUDING ACCESSORIES	2003 EDITION
UL 521 STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	1999 EDITION
UL 1971STANDARD FOR SIGNALING DEVICES FOR THE HEARING IMPAIRED	2002 EDITION
ICC 300 STANDARD FOR BLEACHERS, FOLDING AND TELESCOPIC SEATING, AND GRANDSTANDS	2017 EDITION

FOR A COMPLETE LIST OF APPLICABLE NFPA STANDARDS REFER TO 2022 CBC (SFM) CHAPTER 35 AND CALIFORNIA FIRE CODE CHAPTER 80.

SEE CALIFORNIA BUILDING CODE, CHAPTER 35, FOR STATE OF CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS.

*ALL PARTS OF THE 2022 CALIFORNIA BUILDING CODE BECOME EFFECTIVE JANUARY 1, 2020 EXCEPT THE EFFECTIVE DATE FOR THE USE OF THE 2022 BUILDING ENERGY EFFICIENCY STANDARDS (TITLE 24, PART 1, CHAPTER 10) IS JANUARY 8, 2022 AND THE EFFECTIVE DATE FOR THE USE OF THE CALIFORNIA ADMINISTRATIVE CODE (TITLE 24, PART 1, CHAPTER 4) IS JANUARY 20, 2022.

GENERAL NOTES

1. CONSULT WITH THE OAR BEFORE STARTING WORK.
2. NO CONDUITS ARE TO BE INSTALLED ON ARCADES OR ROOF U.O.N. ANY CONDUITS INSTALLED ON ROOF SHALL BE LIMITED TO 5'-0" OF SOLAR EXPOSURE. CONDUIT RUNS TO ROOF MOUNTED EQUIPMENT SHALL BE ACCOMPLISHED USING RUNS BELOW ROOF UNTIL UNDER THE EQUIPMENT, THEN THE RUN SHALL PENETRATE THE ROOF AT THE EQUIPMENT.
3. COORDINATE THE ELECTRICAL WORK WITH THE WORK OF OTHER TRADES.
4. THE CONTRACTOR SHALL USE SUFFICIENT BARRICADES AND TEMPORARY PROTECTION DEVICES TO PREVENT PEDESTRIANS OR NON-AUTHORIZED PERSONNEL ACCESS TO ANY OPEN TRENCHES OR CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL ERECT A SAFETY BARRICADE AT ALL OPEN TRENCHES, DITCHES, PITS, SUMPS, ETC FOR THE PROTECTION AND SAFETY OF THE PUBLIC. ALL TRENCHES OUTSIDE OF THE BARRICADE LIMITS SHALL BE BACKFILLED AND PAVED NOT LATER THAN 72 HOURS AFTER BEING OPENED. DURING THE TIME THE TRENCHES ARE OPEN IN TRAFFIC AREAS, THE CONTRACTOR SHALL PROVIDE TRAFFIC PLATES. SAFETY BARRICADES SHALL BE PANELIZED CHAIN LINK FENCE. EACH FENCE PANEL SHALL BE 6FT TALL x 10FT WIDE WITH STAND AND TIED TOGETHER END TO END WITH A MINIMUM 8-GAUGE WIRE. NO TRENCHES SHALL BE LOCATED OUTSIDE BARRICADES.
5. ALL FEEDER AND BRANCH CIRCUIT RACEWAYS SHALL CONTAIN A GREEN, COPPER EQUIPMENT GROUNDING CONDUCTOR SIZED PER NEC ARTICLE 250.
6. ALL UNDERGROUND CONDUITS SHALL BE ENTIRELY ENCASED IN CONCRETE 3" THICK ON ALL SIDES WITH MULTIPLE CONDUITS SPACED NOT LESS THAN 3" APART. MINIMUM DEPTH OF NOT LESS THAN 24" BELOW FINISHED GRADE TO THE TOP OF CONCRETE ENVELOPE.
7. ALL RACEWAYS INSIDE CLASSROOMS AND OFFICES SHALL BE CONCEALED.
8. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND EQUIPMENT AND MATERIAL APPROVED FOR USE UNDER THIS CONTRACT.
9. PRIOR TO PULLING ANY CONDUCTORS, CLEAN AND MANDREL ALL CONDUITS.
10. CONTRACTOR SHALL INSTALL EQUIPMENT PER ADA (AMERICAN DISABILITIES ACT) REQUIREMENTS.
11. DRAWINGS DO NOT SHOW ALL THE NECESSARY PULLBOXES. PROVIDE ALL PULLBOXES TO COMPLY WITH CODES AND STANDARDS AND TO TERMINATE CONDUITS AND RACEWAYS PER MANUFACTURER'S RECOMMENDATIONS THROUGHOUT SITE.
12. EXTERIOR EQUIPMENT, JUNCTION BOXES, ENCLOSURES AND CONNECTIONS SHALL BE WEATHERPROOF TYPE SUITABLE FOR EXTERIOR INSTALLATION.
13. COORDINATION:
    A. IN THE EVENT THAT CERTAIN FEATURES OF THE CONSTRUCTION ARE NOT FULLY SHOWN ON THE CONSTRUCTION DOCUMENTS, THE FEATURES SHALL BE OF THE SAME CHARACTER AS SIMILAR CONDITIONS THAT ARE SHOWN.
    B. BEFORE STARTING ANY UNDERGROUND WORK, THE CONTRACTOR SHALL CONTACT ALL UTILITY (OFF DISTRICT PROPERTY LINE) COMPANIES IN ORDER TO LOCATE EXISTING UNDERGROUND LINES. IN THE EVENT THAT DURING THE UNDERGROUND WORK THE CONTRACTOR DAMAGES ANY EXISTING LINES, IT WILL BE HIS RESPONSIBILITY TO DO ALL NECESSARY REPAIR WORK AT HIS EXPENSE.
14. THE ENGINEER HAS PREPARED THESE DOCUMENTS ONLY FOR IMPROVEMENTS SPECIFIED, DETAILED OR SHOWN AS NEW WORK, AND ASSUMES NO RESPONSIBILITY FOR OTHER CONSTRUCTION, MATERIAL OR EQUIPMENT NOTED AS "PROVIDED BY OTHERS" .
15. ALL ELECTRICAL CONDUCTORS SHALL BE COPPER AND RATED FOR 600 VOLTS AT 90°C, WITH INSULATION TYPE THHN, THWN-2 OR XHHW. ALL CONDUCTORS #10 AND LARGER SHALL BE STRANDED, #12 AND SMALLER MAY BE EITHER STRANDED OR SOLID. PROVIDE APPROVED TERMINATIONS FOR ALL CONDUCTORS.
16. ALL CONDUIT PENETRATIONS THROUGH FIRE-RATED FLOOR SLABS, SHAFTS AND WALLS SHALL BE SEALED AGAINST THE SPREAD OF FIRE OR SMOKE WITH APPROVED CABLE & CONDUIT FIRE STOPS OR FIRE RESISTANT SEALANT TO GIVE THE EQUIVALENT FIRE RATING BEFORE AND AFTER THE PENETRATION.
17. PROVIDE NYLON PULL CORD OR STRINGS IN ALL EMPTY CONDUITS.
18. ALL JUNCTION BOX COVER PLATES FOR BRANCH CIRCUIT SYSTEM SHALL BE CLEARLY MARKED WITH PERMANENT INK FELT PEN IDENTIFYING THE BRANCH CIRCUIT (BOTH PANEL NUMBER AND CIRCUIT NUMBER) CONTAINED IN THE BOX.
19. ALL EQUIPMENT ANCHORAGE SHALL BE DETAILED ON DRAWINGS. DESIGN SHALL CONFORM TO 2019 CBC SECTION 1623A AND TABLE 16 A-O.
20. THE CONTRACTOR SHALL MAINTAIN THE UNIFORMITY AND CONTINUITY OF THE GROUNDING SYSTEM IN ALL CONDUITS/RACEWAYS.
21. TEST THE ENTIRE SYSTEM TO DEMONSTRATE TO THE OAR THAT THE ELECTRICAL COMPONENTS AND SPECIAL SYSTEMS ARE COMPLETE AND FUNCTION PROPERLY. MAKE NECESSARY CORRECTIONS AND LEAVE SYSTEMS READY FOR OPERATION.
22. EXPOSED CONDUITS SHALL BE INSTALLED ALONG MECHANICAL PIPES. INSIDE BUILDING THE EXPOSED CONDUITS UP TO 7'-0" SHALL BE RIGID STEEL AND ABOVE 7'-0" MAY BE EMT. ALL EXPOSED EXTERIOR CONDUITS SHALL BE GALVANIZED RIGID CONDUIT. THREADLESS CONNECTORS & COUPLINGS SHALL NOT BE USED. ALL EXPOSED CONDUITS, RACEWAYS, AND BOXES SHALL BE PAINTED TO MATCH THE SURFACE WHERE INSTALLED. DO NOT PAINT THE WIREMOLD.
23. DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND THE SIZE AND LOCATION OF EQUIPMENT IS INDICATED TO SCALE WHENEVER POSSIBLE. CONTRACTOR IS REQUIRED TO VERIFY CONDITIONS, DIMENSION INDICATED EQUIPMENT SIZES, MANUFACTURER'S DATA AND INFORMATION AS NECESSARY TO INSTALL THE WORK. COORDINATE LOCATION AND LAYOUT WITH OTHER WORK. CONTRACTOR SHALL PROVIDE TO THE ENGINEER A 1/4"=1'-0" SCALED DRAWING OF ELECTRICAL EQUIPMENT ROOMS SHOWING LOCATION AND CLEARANCES OF SUBMITTED EQUIPMENT FOR REVIEW AND APPROVAL PRIOR TO ORDERING OF ELECTRICAL EQUIPMENT.
24. PROJECT SYSTEMS AND CABLING INFRASTRUCTURE SHALL BE PROVIDED PER LATEST DISTRICT STANDARDS AND SPECIFICATION. PROJECT IS IP BASED SYSTEMS AS THIS IS A NEW BUILDING AND WILL NOT CONNECT TO ANY EXISTING SYSTEMS.
25. PROVIDE OWNER REQUESTED ACCESS CONTROL CARD READERS AT CLASSROOMS, OFFICE SPACES, ELECTRICAL/TELECOM ROOMS, ETC. AS SHOWN ON PLANS. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE COMPLETE ACCESS CONTROL SYSTEM INCLUDING CABLING, CONDUIT AND CONNECTIONS PER SPECIFICATIONS.

ELECTRICAL SHEET INDEX

SCOPE OF WORK

PROVIDING POWER, LIGHTING AND LOW VOLTAGE SIGNAL SYSTEMS TO THE NEW VISUAL AND PERFORMING ARTS BUILDINGS.

Structure
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER HRAZTAN H. CHELTCHI EE 22864 EXP. 12-31-25 ELECTRICAL STATE OF CA

Budlong
An MBE|SBE|DBE|LSBE Firm
Glendale|Downtown LA|Camarillo
W W W . B U D L O N G . C O M
Job No. 21-250

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

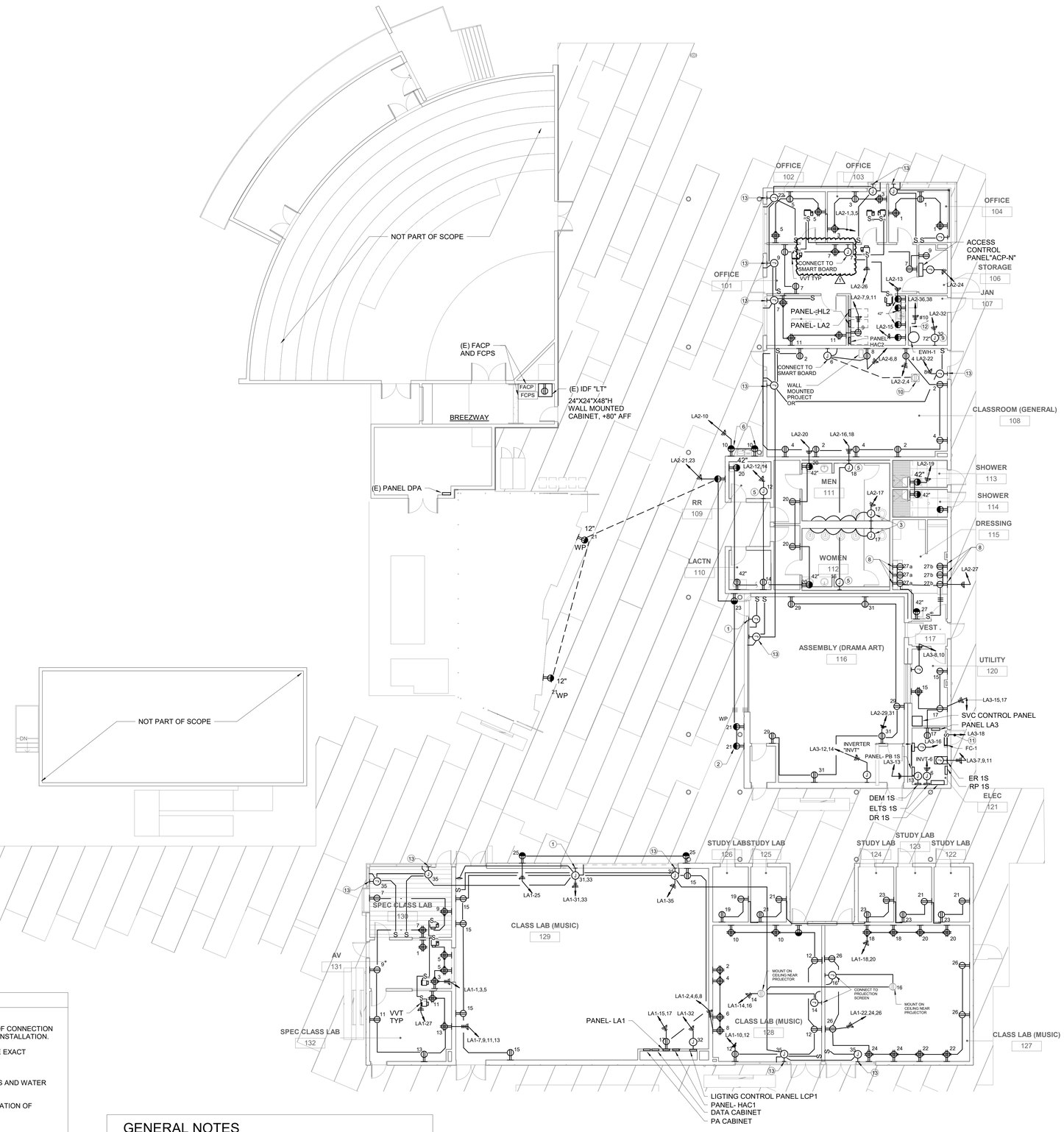
SHEET TITLE

ELECTRICAL FRONT SHEET

SHEET NUMBER

E001

07-02-2025 12:08:52



KEY NOTE

1. CONNECT TO ROLL UP DOOR. COORDINATE EXACT POINT OF CONNECTION WITH ROLL UP DOOR INSTALLER PRIOR TO ROUGH-IN AND INSTALLATION.
2. POWER OUTLET FOR OUTDOOR LED SCREEN. COORDINATE EXACT LOCATION AND MOUNTING HIEGHT WITH OWNER PRIOR TO ROUGH-IN AND INSTALLATION
3. CONNECT TO POWER SUPPLY TRANSFORMER FOR URINALS AND WATER CLOSET AND URINALS.
4. COORDINATE WITH WATER HEATER INSTALLER EXACT LOCATION OF OUTLET PRIOR TO ROUGH-IN AND INSTALLATION.
5. CONNECT TO HAND DRYER.
6. POWER FOR DRINKING FOUNTAINS.COORDINATE EXACT LOCATION OF RECEPTACLE PRIOR TO ROUGH-IN AND INSTALLATION
7. MOUNT RECEPTACLE ON FACE OF BENCH RISER AT +12" AFG
8. INSTALL RECEPTACLE ABOVE COUNTER BELOW MIRROR AT 24" ON CENTER
9. EXTEND WIRING FROM J-BOX FOR POWER TO CIRCULATING PUMP "CP-1" AND TIME CLOCK.COORDINATE WITH EQUIPMENT INSTALLER FOR EXACT LOCATION PRIOR TO ROUGH IN AND INSTALLATION.
10. MOUNT RECEPTACLE FLUSH WITH FLOOR UNDER LECTERN. COORDINATE WITH ARCHITECT PRIOR TO ROUGH-IN AND INSTALLATION.
11. PROVIDE 3/4"C,2#12 &1#12G TO CU-1 ON ROOF FOR POWER.
12. 30AS-2P, 250V DISCONNECT SWITCH WITH 30A DUAL ELEMENT FUSES.
13. EXTEND AND CONNECT WIRING TO MECHO SHADE AND CONTROLLING SWITCH. COORDINATE EXACT POINT OF CONNECTION TO MECHO SHADE INSTALLER PRIOR TO ROUGH-IN AND INSTALLATION.

GENERAL NOTES

1. PROVIDE EXTENSION RINGS AS REQUIRED TO ALL WALL MOUNTED OUTLETS MOUNTED IN WALL WITH ACOUSTIC PANELS. ALL OUTLETS SHALL BE FLUSH WITH ACOUSTIC PANELS.
2. ALL POWER WIRING INSTALLATION SHALL BE RECESS MOUNTED ON WALL OR INSIDE ATTIC. SURFACE MOUNTED CONDUITS AND J-BOXES IS NOT PERMITTED.

1 ELECTRICAL POWER FLOOR PLAN
1/8" = 1'-0"

Struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER HRAYR N. CHRISTY E 22864 07-31-25 STATE OF CALIFORNIA

Budlong
An MBE|SBE|DBE|LSBE Firm
Glendale|Downtown LA|Camarillo
W W W . B U D L O N G . C O M
Job No. 21-250

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

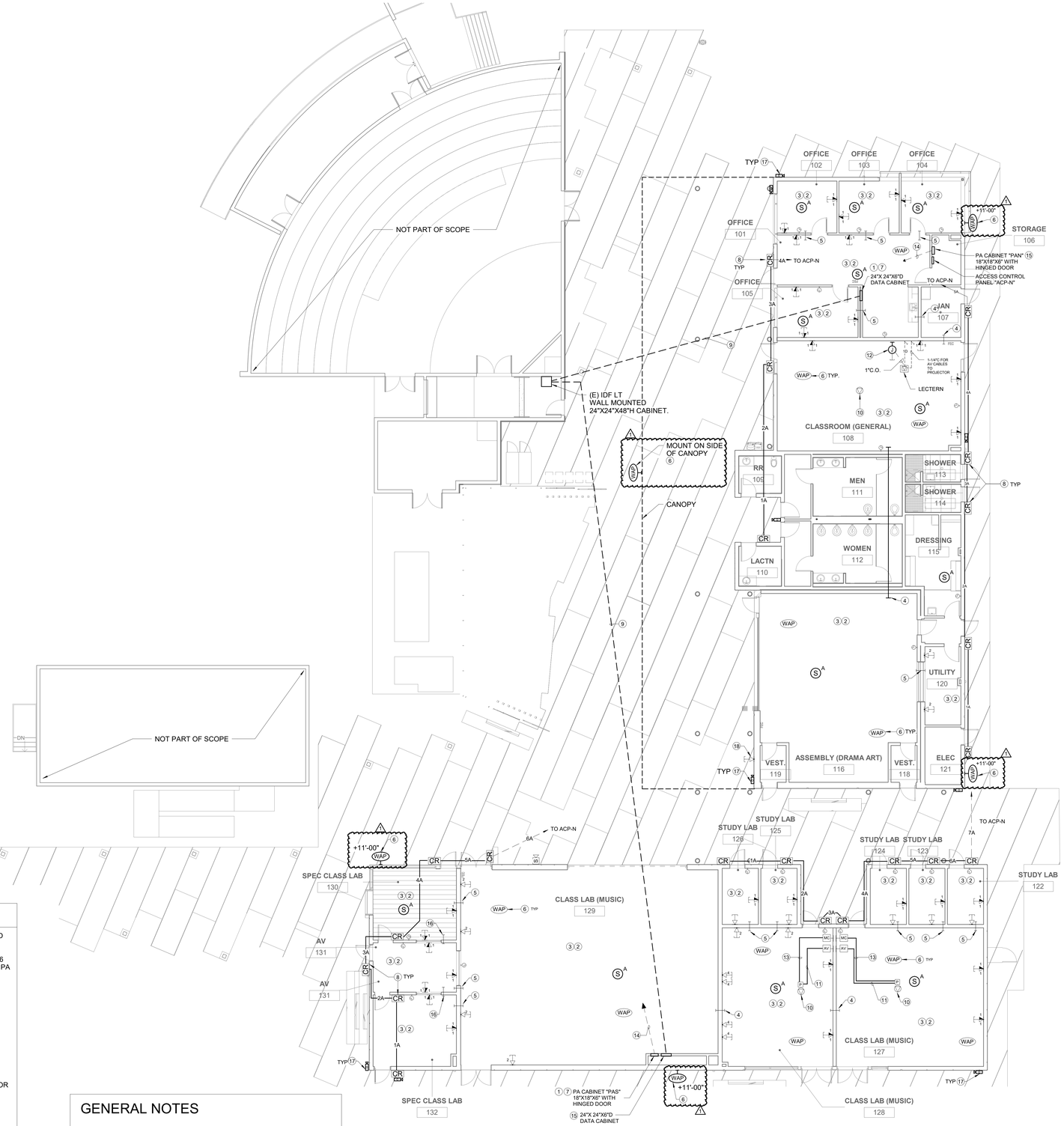
SHEET TITLE

ELECTRICAL POWER FLOOR PLAN

SHEET NUMBER

E302

28-02-2025 18:02:18



KEY NOTE

1. HOMERUN ALL DATA/TEL CABLES FOR THIS BUILDING TO THIS CABINET AND INTO THE IDF EXISTING CABINET LOCATED AT THE BREEZEWAY.
2. AT EACH DATA/TEL OUTLETS AND IP SPEAKER LOCATION PROVIDE (1) CAT 6 CABLE FROM EACH DATA/TEL OUTLET IN THIS ROOM TO DATA CABINET OR PA CABINET. SEE KEY NOTE #3.
3. RUN DATA CABLES IN CEILING WITH J-HOOKS SUPPORTS SEE DETAILS ON SHEET E007.
4. PROVIDE (3) 3" C.O. SLEEVES IN WALL ABOVE CEILING FOR DATA/TEL AND SPEAKER WIRING.
5. PROVIDE (3) 2" C.O. SLEEVES IN WALL ABOVE CEILING FOR DATA/TEL AND SPEAKER WIRING.
6. PROVIDE CAT 6 CABLE FROM WAPS TO DATA CABINET. RUN DATA AND SPEAKER CABLES WITH J-HOOKS SUPPORT IN CEILING.
7. PROVIDE (2) 4" CONDUIT FROM CABINET TO ACCESSIBLE CEILING SPACE FOR DATA/TEL CABLES.
8. PROVIDE 3/4"C- (1) CAT 6 CABLES FROM EACH CARD READER TO ACCESS CONTROL.
9. 4" CONDUIT FOR DATA/TEL WIRIN. RUN ALL DATA/TEL,CCTV CABLES FROM EACH DATA/TEL OUTLETS AND CCTV IN ALL ROOMS VIA DATA CABINET TO EXISTING IDF. ALL CABLES SHALL BE WET LOCATION TYPE.
10. MOUNT DATA OUTLET NEXT TO PROJECTOR.
11. 1 1/4"C- (2) HDMI CABLES AND (1) VGA CABLE.
12. PROVIDE 1" C.O. FROM J-BOX TO ACCESSIBLE CEILING SPACE FOR CONTROL WIRING.
13. PROVIDE 1"C.O. FROM CONTROL BOX TO PROJECTOR FOR CONTROL WIRING.
14. PROVIDE 2"CONDUIT AND RUN SPEAKERS FROM PA CABINET TO EXISTING IDF LT.
15. PROVIDE (2) CONDUIT FROM CABINET TO ACCESSIBLE CEILING CEILING SPACE FOR SPEAKER WIRING.
16. PROVIDE (2) 4"C.O. AT +12"AFF FOR CONTROL WIRING BETWEEN ROOMS.
17. PROVIDE (1) CAT 6 CABLES FROM CCTV CAMERA TO DATA CABINET IN BUILDING AND INTO THE EXISTING IDF LT AT LITTLE THEATER BUILDING.
18. PROVIDE WP DATA OUTLET FOR LED SCREEN. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN AND INSTALLATION. PROVIDE CAT 6 CABLE TO IDF. COIL EXTRA 3FT OF DATA CABLES INSIDE J-BOX.

GENERAL NOTES

1. ALL DATA/TEL OUTLETS, CCTV AND PA SPEAKERS CABLES AT THE NEW BUILDING SHALL HOMERUN TO EXISTING IDF LT AT THE LITTLE THEATER BUILDING BREEZEWAY. UTILIZE WET LOCATION CABLES.
2. ALL DATA/TEL, SECURITY CAMERA, PA, SHALL RUN INSIDE ATTIC SPACE WITH J-HOOKS SUPPORTS. PROVIDE ALL CONDUITS SLEEVES IN WALL ABOVE CEILING AS NEEDED ON PLANS FOR LOW VOLTAGE CABLES. ADD CONDUITS SLEEVES AS REQUIRED.
3. PROVIDE EXTENSION RINGS AS REQUIRED TO ALL WALL MOUNTED OUTLETS MOUNTED IN WALL WITH ACOUSTIC PANELS. ALL OUTLETS SHALL BE FLUSH WITH ACOUSTIC PANELS.
4. ALL LOW VOLTAGE WIRING INSTALLATION SHALL BE RECESS MOUNTED ON WALL OR INSIDE ATTIC. SURFACE MOUNTED CONDUITS AND J-BOXES IS NOT PERMITTED.

1 ELECTRICAL SIGNAL FLOOR PLAN

1/8" = 1'-0"

STRUERE
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER HRAZTAN N. OHRIKIAN E.E. 22864 ELECTRICAL STATE OF CA

Budlong
An MBE|SBE|DBE|LSBE Firm
Glendale|Downtown LA|Camarillo
W W W . B U D L O N G . C O M
Job No. 21-250

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	02.26.2025

SHEET TITLE

ELECTRICAL SIGNAL FLOOR PLAN

SHEET NUMBER

E303

COMPTON COLLEGE STRUCTURAL UPGRADE OF REMAINING PORTIONS OF EXISTING BUILDING Y
ADDENDUM 1 CONSOLIDATED CHANGES NARRATIVES

SHEET N0.	DESCRIPTION
ELECTRICAL	
E001 - ELECTRICAL FRONT SHEET	Wall mounted WAP added to symbols legend.
E303 - ELECTRICAL SIGNAL FLOOR PLAN	5 wall mounted WAP added.

28-02-2025 11:25:03

ELECTRICAL SYMBOLS

(NOTE: NOT ALL SYMBOLS ARE USED)

A 5a A 5a — LIGHTING FIXTURES, "5" DENOTES CIRCUIT NUMBER, LOWER CASE "a" DENOTES CONTROLLING SWITCH AND/OR RELAY, UPPER CASE "A" DENOTES FIXTURE TYPE.

4 FT LED STRIP LIGHTS

B — RECESSED CEILING MOUNTED FIXTURE: UPPER LETTER INDICATES TYPE (U.O.N.).

F — WALL MOUNTED LIGHT FIXTURE: UPPER LETTER INDICATES TYPE.

F — EXIT SIGN WITH JUNCTION BOX APPROVED FOR THROUGH WIRING. UNIVERSAL MOUNT DIRECTIONAL ARROW AS SHOWN ON PLAN. CONNECT TO CONSTANT HOT CIRCUIT.

"E" OR "INV" / "E" OR "INV" — LIGHTING FIXTURE WITH BUILT-IN BATTERY PACK OR FEED FROM AN INVERTER

XR — DISCONNECT AND REMOVE EXISTING CONDUIT

A-1,3,5 — HOMERUN TO PANEL "A", CIRCUITS 1,3,5, CROSS LINES INDICATE NUMBER OF #12 IN ADDITION TO 1#12 GREEN GROUND. 3/4"C., U.O.N.

3/4"C, 2 #12 & 1 #12 GRND.
3/4"C, 3 #12 & 1 #12 GRND.
3/4"C, 4 #12 & 1 #12 GRND.
3/4"C, 5 #12 & 1 #12 GRND.
#10 1"C, 6 #10 & 1 #10 GRND.
#10 1"C, 7 #10 & 1 #10 GRND.
#10 1"C, 8 #10 & 1 #10 GRND.

CONTACTOR SHALL PROVIDE CONDUIT AND WIRING PER CIRCUITS ON HOMERUNS FOR THE ELECTRICAL INSTALLTION WEATHER OR NOT HASH MARKS HAVE BEEN INDICATED ON PLANS.

POWER SYSTEM

J — JUNCTION BOX: SURFACE MOUNTED OR INSIDE WALL

J W.P — JUNCTION BOX WEATHER PROOF : SURFACE MOUNTED OR INSIDE WALL

DUPLEX RECEPTACLE: 125V., 20 AMP., NEMA 5-20R. +18" U.O.N.

DUPLEX RECEPTACLE: 125V., 20 AMP., NEMA 5-20R. CEILING MOUNTED.

G.F.I. DUPLEX RECEPTACLE, 20A, 125 VOLTS, NEMA 5-20R, +18" U.O.N.

SWITCH CONTROLLED SPLIT LOAD DUPLEX RECEPTACLE: 125V., 20 AMP., NEMA 5-20R. +18" U.O.N.

SWITCH CONTROLLED SPLIT LOAD QUAD RECEPTACLE: 125V., 20 AMP., NEMA 5-20R. +18" U.O.N.

GFI G.F.I. DUPLEX BLUE RECEPTACLE, 20A, 125 VOLTS, NEMA -----, +18" U.O.N.

SURGE DUPLEX RECEPTACLE: 125V., 20 AMP., NEMA 5-20R. CEILING MOUNTED.

C — SPLIT WIRED PLUG LOAD CONTROLLED DUPLEX RECEPTACLE: 125V, 15A, NEMA 5-15R. UNLESS OTHERWISE NOTED. +18" U.O.N. PROVIDE LABEL "CONTROLLED" IN WHITE LETTER WITH BLACK BACKGROUND ON THE PLUG LOAD RECEPTACLE

C — QUAD RECEPTACLES. ONE NORMAL AND ONE PLUG LOAD CONTROLLED RECEPTACLE: 125V, 15A, NEMA 5-15R.UNLESS OTHERWISE NOTED. +18" U.O.N. PROVIDE LABEL "CONTROLLED" IN WHITE LETTERS WITH BLACK BACKGROUND ON THE PLUG LOAD RECEPTACLE.

G — GROUND ROD IN GROUND YARD BOX INSIDE LANDSCAPED AREA.

DISTRIBUTION PANEL

F — 480V, HEAVY DUTY DISCONNECT SWITCH. H.P. RATED, PER EQUIPMENT MFC., 3P U.O.N. "F" INDICATES FUSED, PROVIDE FUSE SIZE BASED ON NAMEPLATE RATING OF EQUIPMENT.

HEAVY DUTY COMBINATION FUSED MOTOR DISCONNECT SWITCH W/RK5 FUSE AND MAGNETIC MOTOR STARTER SIZED ACCORDING TO MOTOR MANUFACTURER RECOMMENDATIONS (STARTER SIZE 1, MIN.) WITH A SOLID STATE ADJUSTABLE OVERLOAD PROTECTION, WITH HOA SWITCH AND (2)FORM C CONTROL CONTACTS, MOUNTED. +48" TO TOP OF OPERATING HANDLE, U.O.N.

FDL — "FDL" DESIGNATES HEAVY DUTY FUSED DISCONNECT SWITCH WITH DUAL LUGS AT THE FEEDERS, FUSES SIZED PER HVAC UNIT NAMEPLATE RATING, "F" DESIGNATES A 30A/3P HEAVY DUTY DISCONNECT SWITCH CONNECTED TO THE POWER EXHAUST UNIT AND SIZED PER POWER EXHAUST MANUFACTURER RATING.

FLUSH MOUNTED 2 GANG DEEP FLOOR BOX WITH (1) DUPLEX RECEPTACLE AND (2) DATA OUTLET.

F — FAN (EXHAUST FAN OR FLY FAN), SIZE AS INDICATED.

5 — MOTOR, SIZE AS INDICATED. NUMBER INDIACTES "HP" RATINGS.

SURFACE MOUNTED PANELBOARD

FLUSH MOUNTED PANELBOARD PROVIDE (2) SPARE 3"C.O. TO THE CEILING SPACE.

DISTRIBUTION PANELBOARD

MAIN SWITCHBOARD

T — TRANSFORMER

"T" CABLE - 4 PAIR #24 UTP CATEGORY 6 CABLE.

"TW" CABLE - 4 PAIR #24 UTP CATEGORY 6 (WET LOCATION).

"D" CABLE - 4 PAIR #24 UTP CATEGORY 6 CABLE (COMPUTER DATA).

"A" CABLE - 4 PAIR #24 UTP CATEGORY 6 CABLE (CARD ACCESS SYSTEM).

"DW" CABLE - 4 PAIR #24 UTP CATEGORY 6 CABLE FLOODED TYPE AS MANUFACTURED BY COMPOSE (UNDERGROUND).

TYPICAL MOUNTING HEIGHTS ABOVE FINISHED FLOOR
(UNLESS OTHERWISE NOTED ON DRAWINGS).

+48": LIGHT SWITCHES, DIMMER SWITCHES, FIRE ALARM PULL STATION, T-STATS, BY-PASS TIMER, WALL TELEPHONE. DETECTOR TEST PANEL, INTERCOM CALL SWITCH, SPEAKER VOLUME CONTROL, OUTLET, UNLESS OTHERWISE NOTED (MEASURED TO TOP OF BACKBOX). REFER TO DETAIL#1/SHEET #E801 FOR MOUNTING HEIGHTS OF ELECTRICAL SWITCHES/CONTROLS OVER AN OBSTRUCTION.

+18": ALL DUPLEX RECEPTACLES, WALL OUTLETS FOR DESK TELEPHONE, COMPUTER OUTLETS, UNLESS OTHERWISE NOTED (MEASURED TO CENTER OF BOX).

STANDARD ABBREVIATIONS

A OR AMP	AMPERES
AFF	ABOVE FINISH FLOOR
BKR.	BREAKER
BC	BARE COPPER
C	CONDUIT
CKT.	CIRCUIT
C.O.	CONDUIT ONLY
D	DEPTH
F.A.	FIRE ALARM
FLA	FULL LOAD AMPERES
FO	FIBER OPTIC
GRND.	GROUND
G.F.I.	GROUND FAULT INTERRUPTER
H.P.	HORSEPOWER
IDF	INTERMEDIATE DISTRIBUTION FRAME
Isc	AVAILABLE SHORT CIRCUIT CURRENT.
SEC.	SECURITY SYSTEM
LADWP	LOS ANGELES DEPARTMENT OF WATER AND POWER
LV	LOW VOLTAGE.
CLK.	CLOCK SYSTEM
J.BOX	JUNCTION BOX
KW	KILOWATTS
MDF	MAIN DISTRIBUTION FRAME
N.I.C.	NOT IN CONTRACT
PA	PUBLIC ADDRESS
PABX	PHONE BOARD EXCHANGE
PH OR ∅	PHASE
SL	SECURITY LIGHTING.
SLC	SIGNALING LINE CIRCUIT
SW.	SWITCH
TYP.	TYPICAL
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSER
UG	UNDERGROUND
U.O.N.	UNLESS OTHERWISE NOTED
W.P./ WP	WEATHERPROOF
XFMR	TRANSFORMER
XR	DISCONNECT AND REMOVE EXISTING DEVICE OR EQUIPMENT
ER	DISCONNECT AND REMOVE EXISTING CABLES IN EXISTING CONDUIT.
E	EXISTING

VOICE/DATA SYSTEM

1D — 3/4"C - (1) DATA SYSTEM CONDUIT RUN; 4-PAIR UTP CAT6 CABLE.

2D — 3/4"C - (2) DATA SYSTEM CONDUIT RUN; 4-PAIR UTP CAT6 CABLE.

WALL MOUNTED (1) DATA OUTLETS. PROVIDE 3/4"C TO ACCESSIBLE CEILING SPACE AND (1) CAT 6 CABLES TO IDF ; +18"AFF

1 — WALL MOUNTED DATA/TEL OUTLETS. PROVIDE 3/4"C TO ACCESSIBLE CEILING SPACE AND (2) CAT 6 CABLES TO IDF ; +18"AFF

P — CEILING MOUNTED PROJECTOR

CEILING MOUNTED DATA OUTLET. PRIVIDE (1) CAT 6 CABLE TO IDF

WAP — CEILING MOUNTED WIRELESS ACCESS POINTS IN T-BAR CEILINGS, HARD LID CEILING OR OPEN CEILING. PROVIDE 4S J-BOX WITH 1-GANG RING WITH (2) CAT-6 CABLE FROM EACH DEVICE TO SERVER ROOM.

WALL SWITCH OCCUPANCY SENSOR DUAL TECHNOLOGY ACUITY nWSX-PDT-LV-WH-LT,+48" AFF.

RP — ACUITY RELAY PACK nPP16-EFP.

RP1 — LMRC-111 (1) RELAY 0-10V DIMMING

RP2 — LMRC-112 (2) RELAY 0-10V DIMMING

PC — LMLS-500 MULTI ZONE DAYLIGHT SENSOR

OS — LMDC-100 CEILING OCC SENSOR

ELU — ELCU-200 EMERGENCY SHUNT RELAY

S_{Ka} — DIGITAL KEY SWITCH WITH STAINLESS STEEL PLATE WALL MOUNTED, ACUITY WALL MOUNTED nPOD-KEY-STS.+48"AFF.

S — WALL SWITCH, +48"AFF

S_D — LMDM-101 DIMMING SWITCH, WALL MOUNTED, +48" AFF.

ab S_D — LMSW-104 (4) BUTTON SWITCH, WALL MOUNTED, +48" AFF.

abc S_D — LMSW-104 (5) BUTTON SWITCH, WALL MOUNTED, +48" AFF.

S_{OD} — DW-311 WALL OCC SENSOR 0-10V DIMMING, WALL MOUNTED, +48" AFF.

WAP — WALL MOUNTED WIRELESS ACCESS POINTS FOR EXTERIOR APPLICATIONS. PROVIDE 4S J-BOX WITH 1-GANG RING WITH (2) CAT-6 CABLE FROM EACH DEVICE TO SERVER ROOM.

NOTES

THE CALIFORNIA ENERGY CODE SECTION 10-103 REQUIRES ACCEPTANCE TESTING ON ALL NEWLY INSTALLED LIGHTING CONTROLS, MECHANICAL SYSTEMS, ENVELOPES, AND PROCESS EQUIPMENT AFTER INSTALLATION AND BEFORE PROJECT COMPLETION. AN ACCEPTANCE TEST IS A FUNCTIONAL PERFORMANCE TEST TO HELP ENSURE THAT NEWLY INSTALLED EQUIPMENT IS OPERATING AND IN COMPLIANCE WITH THE ENERGY CODE.

LIGHTING CONTROLS ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED LIGHTING CONTROLS ACCEPTANCE TEST TECHNICIAN (ATT).

MECHANICAL SYSTEM ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED MECHANICAL ATT FOR PROJECTS SUBMITTED ON OR AFTER OCTOBER 1, 2021.

ENVELOPE AND PROCESS EQUIPMENT ACCEPTANCE TESTS SHALL BE PERFORMED BY THE INSTALLING CONTRACTOR, ENGINEER/ARCHITECT OF RECORD OR THE OWNER'S AGENT.

A LISTING OF CERTIFIED ATT CAN BE FOUND AT:
https://www.energy.ca.gov/programs-and-topics/programs/acceptance-test technician-certification-provider-program/acceptance.

THE ACCEPTANCE TESTING PROCEDURES MUST BE REPEATED, AND DEFICIENCIES MUST BE CORRECTED BY THE BUILDER OR INSTALLING CONTRACTOR UNTIL THE CONSTRUCTION / INSTALLATION OF THE SPECIFIED SYSTEMS CONFORM AND PASS THE REQUIRED ACCEPTANCE CRITERIA.

PROJECT INSPECTORS WILL COLLECT THE FORMS TO CONFIRM THAT THE REQUIRED ACCEPTANCE TESTS HAVE BEEN COMPLETED.

Applicable Code: 2022 CBC

MEP Component Anchorage Note

All mechanical, plumbing, and electrical components shall be anchored and installed per the details on the DSA-approved construction documents. The following components shall be anchored or braced to meet the force and displacement requirements prescribed in the 2022 CBC Sections 1617A.1.18 through 1617A.1.26 and ASCE 7-16 Chapters 13, 26, and 30:

1. All permanent equipment and components.
2. Temporary, movable or mobile equipment that is permanently attached (e.g., hard wired) to the building utility services such as electricity, gas or water. "Permanently attached" shall include all electrical connections except plugs for 110/220 volt receptacles having a flexible cable.
3. Temporary, movable or mobile equipment which is heavier than 400 pounds or has a center of mass located 4 feet or more above the adjacent floor or roof level that directly support the component is required to be restrained in a manner approved by DSA.

The following mechanical and electrical components shall be positively attached to the structure but need not demonstrate design compliance with the references noted above. These components shall have flexible connections provided between the component and associated ductwork, piping, and conduit. Flexible connections must allow movement in both transverse and longitudinal directions:

A. Components weighing less than 400 pounds and having a center of mass located 4 feet or less above the adjacent floor or roof level that directly support the component.

B. Components weighing less than 20 pounds, or in the case of distributed systems, less than 5 pounds per foot, which are suspended from a roof or floor or hung from a wall.

The anchorage of all mechanical, electrical and plumbing components shall be subject to the approval of the design professional in general responsible charge or structural engineer delegated responsibility and acceptance by DSA. The project inspector will verify that all components and equipment have been anchored in accordance with the above requirements.

Applicable Code: 2022 CBC

Piping, Ductwork, and Electrical Distribution System Bracing Note

Piping, ductwork, and electrical distribution systems shall be braced to comply with the forces and displacements prescribed in ASCE 7-16 Section 13.3 as defined in ASCE 7-16 Sections 13.6.5, 13.6.6, 13.6.7, 13.6.8; and 2022 CBC, Sections 1617A.1.24, 1617A.1.25 and 1617A.1.26.

The method of showing bracing and attachments to the structure for the identified distribution system are as noted below. When bracing and attachments are based on a preapproved installation guide (e.g., HCAI OPM for 2013 CBC or later), copies of the bracing system installation guide or manual shall be available on the jobsite prior to the start of and during the hanging and bracing of the distribution systems. The Structural Engineer of Record shall verify the adequacy of the structure to support the hanger and brace loads.

Mechanical Piping (MP), Mechanical Ducts (MD), Plumbing Piping (PP), Electrical Distribution Systems (E):

MP☐ MD☐ PP ☐ E☒ Option 1: Detailed on the approved drawings with project specific notes and details.

APPLICABLE CODES

PARTIAL LIST OF APPLICABLE CODES

2022 CALIFORNIA ADMINISTRATIVE CODE, PART 1,TITLE 24 C.C.R.
2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R.
(2021 INTERNATIONAL BUILDING CODE VOLUMES 1 & 2 AND 2016 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R.
(2020 NATIONAL ELECTRICAL CODE AND 2022 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA MECHANICAL CODE (CMC) PART 4, TITLE 24 C.C.R.
(2021 UNIFORM MECHANICAL CODE AND 2022 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.
(2021 UNIFORM PLUMBING CODE AND 2022 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 C.C.R.
2022 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R.
(2021 INTERNATIONAL FIRE CODE AND 2022 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR
(2021 INTERNATIONAL EXISTING CODE AND 2022 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 C.C.R.
2022 CALIFORNIA REFERENCED STANDARDS, PART 12,TITLE 24 C.C.R.
TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.

PARTIAL LIST OF APPLICABLE STANDARDS

NFPA 13	STANDARD FOR AUTOMATIC FIRE SPRINKLER SYSTEMS (CA AMENDED)	2022 ED.
NFPA 14	STANDARD FOR STANDPIPE AND HOSE SYSTEMS	2019 ED.
NFPA 17	STANDARD FOR DRY CHEMICAL EXTINGUISHING SYSTEMS	2021 ED.
NFPA 17A	STANDARD FOR WET CHEMICAL EXTINGUISHING SYSTEMS	2017 ED.
NFPA 20	STANDARD FOR STATIONARY PUMPS FOR FIRE PROTECTION	2022 ED.
NFPA 22	STANDARD FOR WATER TANKS FOR PRIVATE FIRE PROTECTION	2018 ED.
NFPA 24	STANDARD FOR THE INSTALLATION OF PRIVATE FIRE MAINS AND THEIR APPURTENANCES	2022 ED.
NFPA 72	NATIONAL FIRE ALARM & SIGNALING CODE (CA AMENDED)	2022 ED.
NFPA 80	STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES	2022 ED.
NFPA 2001	STANDARD ON CLEAN AGENT FIRE EXTINGUISHING SYSTEMS	2018 ED.
UL 300	STANDARD FOR FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS FOR PROTECTION OF COMMERCIAL COOKING EQUIPMENT	2005 (R2010)
UL 464	AUDIBLE SIGNAL APPLIANCES FOR FIRE ALARM AND SIGNALING SYSTEMS, INCLUDING ACCESSORIES	2003 ED.
UL 521	STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	1999 ED.
UL 1971	STANDARD FOR SIGNALING DEVICES FOR THE HEARING IMPAIRED	2002 ED.
ICC 300	STANDARD FOR BLEACHERS, FOLDING AND TELESCOPING SEATING AND GRANDSTANDS	2017 ED.

FOR A COMPLETE LIST OF APPLICABLE NFPA STANDARDS REFER TO 2022 CBC (SFM) CHAPTER 35 AND CALIFORNIA FIRE CODE CHAPTER 80.SEE CALIFORNIA BUILDING CODE, CHAPTER 35 FOR STATE OF CALIFORNIA AMENDMENTS TO NFPA STANDARDS.

SCOPE OF WORK

STRUCTURAL UPGRADES TO THE REMAINING PORTIONS OF EXISTING BUILDING Y.RELOCATING EXISTING IDF AND BLUE PHONE TO NEW LOCATION.

GENERAL NOTES

1. CONSULT WITH THE OAR BEFORE STARTING WORK.
2. NO CONDUITS ARE TO BE INSTALLED ON ARCADES OR ROOF U.O.N. ANY CONDUITS INSTALLED ON ROOF SHALL BE LIMITED TO 5'-0" OF SOLAR EXPOSURE. CONDUIT RUNS TO ROOF MOUNTED EQUIPMENT SHALL BE ACCOMPLISHED USING RUNS BELOW ROOF UNTIL UNDER THE EQUIPMENT, THEN THE RUN SHALL PENETRATE THE ROOF AT THE EQUIPMENT.
3. COORDINATE THE ELECTRICAL WORK WITH THE WORK OF OTHER TRADES.
4. THE CONTRACTOR SHALL USE SUFFICIENT BARRICADES AND TEMPORARY PROTECTION DEVICES TO PREVENT PEDESTRIANS OR NON-AUTHORIZED PERSONNEL ACCESS TO ANY OPEN TRENCHES OR CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL ERECT A SAFETY BARRICADE AT ALL OPEN TRENCHES, DITCHES, PITS, SUMPS, ETC FOR THE PROTECTION AND SAFETY OF THE PUBLIC. ALL TRENCHES OUTSIDE OF THE BARRICADE LIMITS SHALL BE BACKFILLED AND PAVED NOT LATER THAN 72 HOURS AFTER BEING OPENED. DURING THE TIME THE TRENCHES ARE OPEN IN TRAFFIC AREAS, THE CONTRACTOR SHALL PROVIDE TRAFFIC PLATES. SAFETY BARRICADES SHALL BE PANELIZED CHAIN LINK FENCE. EACH FENCE PANEL SHALL BE 6FT TALL x 10FT WIDE WITH STAND AND TIED TOGETHER END TO END WITH A MINIMUM 8-GAUGE WIRE. NO TRENCHES SHALL BE LOCATED OUTSIDE BARRICADES.
5. ALL FEEDER AND BRANCH CIRCUIT RACEWAYS SHALL CONTAIN A GREEN, COPPER EQUIPMENT GROUNDING CONDUCTOR SIZED PER NEC ARTICLE 250.
6. ALL UNDERGROUND CONDUITS SHALL BE ENTIRELY ENCASED IN CONCRETE 3" THICK ON ALL SIDES WITH MULTIPLE CONDUITS SPACED NOT LESS THAN 3" APART. MINIMUM DEPTH OF NOT LESS THAN 24" BELOW FINISHED GRADE TO THE TOP OF CONCRETE ENVELOPE.
7. ALL RACEWAYS INSIDE CLASSROOMS AND OFFICES SHALL BE CONCEALED.
8. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND EQUIPMENT AND MATERIAL APPROVED FOR USE UNDER THIS CONTRACT.
9. PRIOR TO PULLING ANY CONDUCTORS, CLEAN AND MANDREL ALL CONDUITS.
10. CONTRACTOR SHALL INSTALL EQUIPMENT PER ADA (AMERICAN DISABILITIES ACT) REQUIREMENTS.
11. DRAWINGS DO NOT SHOW ALL THE NECESSARY PULLBOXES. PROVIDE ALL PULLBOXES TO COMPLY WITH CODES AND STANDARDS AND TO TERMINATE CONDUITS AND RACEWAYS PER MANUFACTURER'S RECOMMENDATIONS THROUGHOUT SITE.
12. EXTERIOR EQUIPMENT, JUNCTION BOXES, ENCLOSURES AND CONNECTIONS SHALL BE WEATHERPROOF TYPE SUITABLE FOR EXTERIOR INSTALLATION.
13. COORDINATION:
    A. IN THE EVENT THAT CERTAIN FEATURES OF THE CONSTRUCTION ARE NOT FULLY SHOWN ON THE CONSTRUCTION DOCUMENTS, THE FEATURES SHALL BE OF THE SAME CHARACTER AS SIMILAR CONDITIONS THAT ARE SHOWN.
    B. BEFORE STARTING ANY UNDERGROUND WORK, THE CONTRACTOR SHALL CONTACT ALL UTILITY (OFF DISTRICT PROPERTY LINE) COMPANIES IN ORDER TO LOCATE EXISTING UNDERGROUND LINES. IN THE EVENT THAT DURING THE UNDERGROUND WORK THE CONTRACTOR DAMAGES ANY EXISTING LINES, IT WILL BE HIS RESPONSIBILITY TO DO ALL NECESSARY REPAIR WORK AT HIS EXPENSE.
14. THE ENGINEER HAS PREPARED THESE DOCUMENTS ONLY FOR IMPROVEMENTS SPECIFIED, DETAILED OR SHOWN AS NEW WORK, AND ASSUMES NO RESPONSIBILITY FOR OTHER CONSTRUCTION, MATERIAL OR EQUIPMENT NOTED AS "PROVIDED BY OTHERS" .
15. ALL ELECTRICAL CONDUCTORS SHALL BE COPPER AND RATED FOR 600 VOLTS AT 90°C, WITH INSULATION TYPE THHN, THWN-2 OR XHHW. ALL CONDUCTORS #10 AND LARGER SHALL BE STRANDED, #12 AND SMALLER MAY BE EITHER STRANDED OR SOLID. PROVIDE APPROVED TERMINATIONS FOR ALL CONDUCTORS.
16. ALL CONDUIT PENETRATIONS THROUGH FIRE-RATED FLOOR SLABS, SHAFTS AND WALLS SHALL BE SEALED AGAINST THE SPREAD OF FIRE OR SMOKE WITH APPROVED CABLE & CONDUIT FIRE STOPS OR FIRE RESISTANT SEALANT TO GIVE THE EQUIVALENT FIRE RATING BEFORE AND AFTER THE PENETRATION.
17. PROVIDE NYLON PULL CORD OR STRINGS IN ALL EMPTY CONDUITS.
18. ALL JUNCTION BOX COVER PLATES FOR BRANCH CIRCUIT SYSTEM SHALL BE CLEARLY MARKED WITH PERMANENT INK FELT PEN IDENTIFYING THE BRANCH CIRCUIT (BOTH PANEL NUMBER AND CIRCUIT NUMBER) CONTAINED IN THE BOX.
19. THE CONTRACTOR SHALL MAINTAIN THE UNIFORMITY AND CONTINUITY OF THE GROUNDING SYSTEM IN ALL CONDUITS/RACEWAYS.
20. TEST THE ENTIRE SYSTEM TO DEMONSTRATE TO THE OAR THAT THE ELECTRICAL COMPONENTS AND SPECIAL SYSTEMS ARE COMPLETE AND FUNCTION PROPERLY. MAKE NECESSARY CORRECTIONS AND LEAVE SYSTEMS READY FOR OPERATION.
21. EXPOSED CONDUITS SHALL BE INSTALLED ALONG MECHANICAL PIPES. INSIDE BUILDING THE EXPOSED CONDUITS UP TO 7'-0" SHALL BE RIGID STEEL AND ABOVE 7'-0" MAY BE EMT. ALL EXPOSED EXTERIOR CONDUITS SHALL BE GALVANIZED RIGID CONDUIT. THREADLESS CONNECTORS & COUPLINGS SHALL NOT BE USED. ALL EXPOSED CONDUITS, RACEWAYS, AND BOXES SHALL BE PAINTED TO MATCH THE SURFACE WHERE INSTALLED. DO NOT PAINT THE WIREMOLD.

ELECTRICAL SHEET INDEX

STRUERE
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES. CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER — WAYNE R. CHRISTIAN — No. E 22864 — EXP. 12-31-25 — ELECTRICAL — STATE OF CALIFORNIA

Budlong
An MBE|SBE|DBE|LSBE Firm
Glendale|Downtown LA|Fremont|Camarillo
WWW.BUDLONG.COM
Job No: 21-250.C1

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE
STRUCTURAL UPGRADE OF REMAINING PORTIONS OF EXISTING BUILDING Y

1111 EAST ARTESIA BLVD,
COMPTON, CA 90221-5393

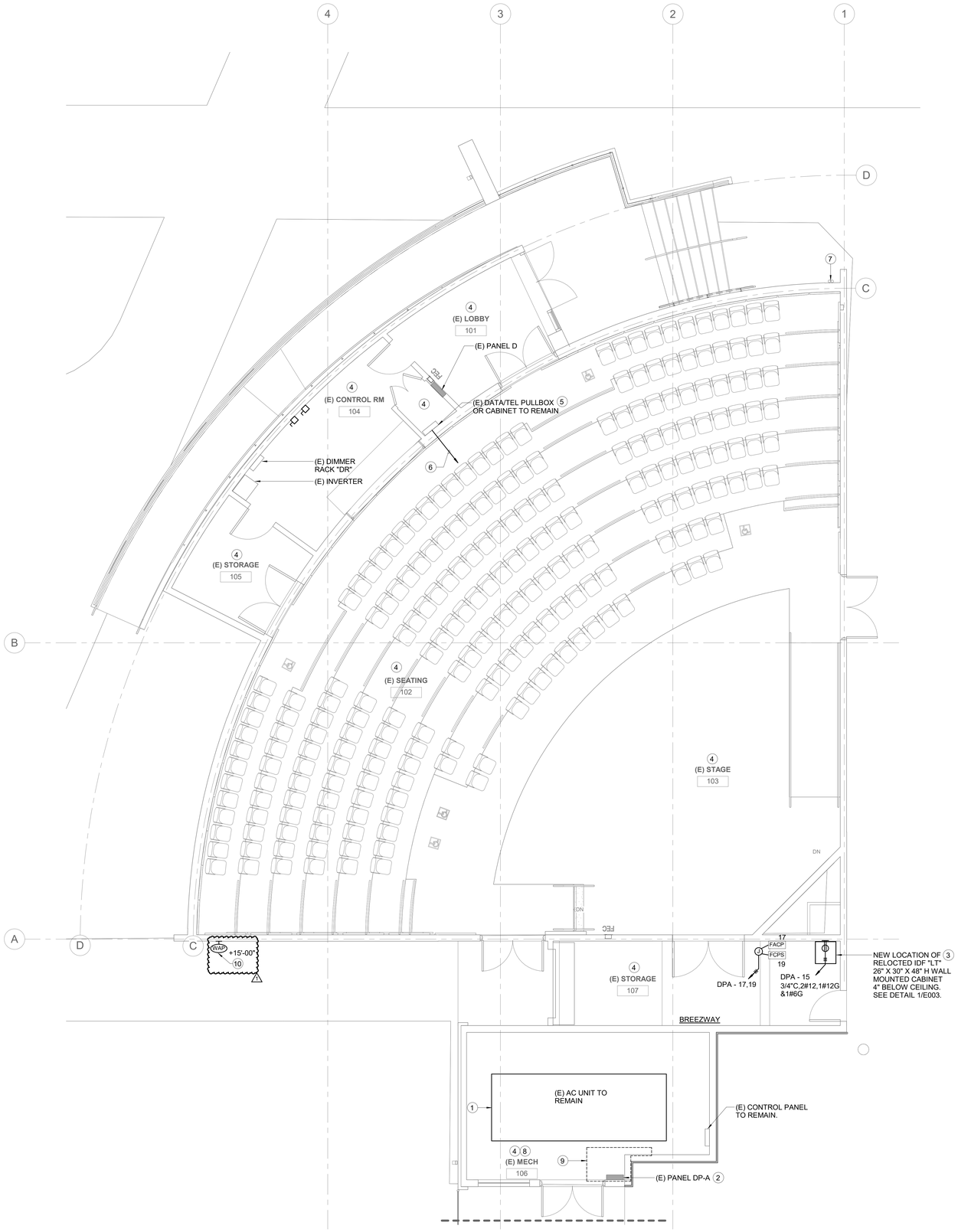
ISSUE DESCRIPTION

	DSA SUBMITTAL	01.12.2024
1	ADDENDUM #1	02.26.2025

SHEET TITLE
ELECTRICAL FRONT SHEET

SHEET NUMBER
E001

28-02-2025 11:25:04



1 ELECTRICAL POWER AND SIGNAL FLOOR PLAN
SCALE: 1/4" = 1'-0"

KEYNOTES

1. EXISTING AC UNIT TO REMAIN INCLUDING DISCONNECT SWITCH AND FEEDER CONDUIT UP TO SERVING PANEL TO REMAIN.
2. PROVIDE (3) 20A-1P CIRCUIT BREAKER AT EXISTING PANEL. NEW BREAKERS SHALL MATCH TYPE AND AIC RATING OF EXISTING BREAKERS.
3. BOND 1#6G TO IDF CABINET.
4. EXISTING POWER, LIGHTING AND LOW VOLTAGE INSTALLATION IN THIS ROOM TO REMAIN UNLESS OTHERWISE NOTED. PROTECT IN PLACE DURING THE ENTIRE PHASE OF CONSTRUCTION.
5. PULLBACK EXISTING DATA AND TEL CABLES FROM THIS CABINET TO THE EXISTING IDF CABINET TO BE RELOCATED. DELETE EXISTING CONDUITS. SEE NOTE 6.
6. PROVIDE (1) 2" & (1) 1" CONDUITS AND RE-INSTALL DATA AND TELEPHONE CABLES REMOVE FROM EXISTING IDF AND RE-ROUTE TO NEW IDF LOCATION.
7. PROTECT IN PLACE EXISTING CONDUITS DURING DEMOLITION AND CONSTRUCTION PHASE DUE TO STRUCTURAL WORK.
8. PROTECT IN PLACE ALL EXISTING CONDUITS, J-BOXES, LIGHTS, SMOKE DETECTORS, AND EQUIPMENT LOCATED AT CEILING OR WALL IN THIS ROOM DURING DEMOLITION AND CONSTRUCTION PHASE DUE TO STRUCTURAL WORK.
9. DISCONNECT AND REMOVE EXISTING CONDUITS AND BOXES ATTACHED TO EXISTING CEILING OR WALL TO BE RE-WORK IN THIS AREA DUE TO STRUCTURAL UPGRADE AND SHALL RE-INSTALL BACK AND ATTACHED TO NEW CEILING OR WALL AFTER NEW CEILING/WALL INSTALLATION.
10. PROVIDE CAT 6 CABLE FROM WAPS TO "IDF LT". RUN DATA CABLES WITH J-HOOKS SUPPORT IN CEILING.

Structure
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

REGISTERED PROFESSIONAL ENGINEER
MARK R. CHRISTIAN
No. E 22864
ELECTRICAL
STATE OF CALIFORNIA

Budlong
An MBE|SBE|DBE|LSBE Firm
Glendale|Downtown LA|Fremont|Camarillo
WWW.BUDLONG.COM
Job No: 21-250.C1

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE STRUCTURAL UPGRADE OF REMAINING PORTIONS OF EXISTING BUILDING Y

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION

	DSA SUBMITTAL	01.12.2024
1	ADDENDUM #1	02.26.2025

SHEET TITLE
ELECTRICAL POWER AND SIGNAL FLOOR PLAN

SHEET NUMBER
E102

10/11/2024 10:41:09 AM

LEGEND AND NOTES

FURNITURE PLAN NOTES:

1. FURNITURE LAYOUT SHOWN ON THIS PLAN IS A SUGGESTED LAYOUT AND IS FOR REFERENCE ONLY.

FURNITURE PLAN LEGEND:

30" X 48" CLEAR FLOOR SPACE

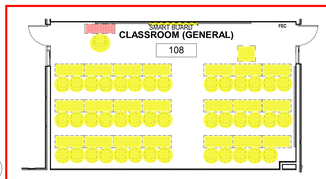
FURNITURE PLAN KEYNOTES

1. MUSIC INSTRUMENT STORAGE CABINETS, OFOI
2. MUSIC SHEET STORAGE CABINETS, OFOI
3. REFER TO ATTACHED STAGES DRAWINGS FOR PROPOSED FURNITURE LAYOUT AND CONFIGURATIONS , OFOI

1 FURNITURE PLAN
1/8" = 1'-0"

EQUIPMENT LEGEND (GROUP 2)

SYMBOL	DESCRIPTION	UTILITY HOOK-UP REQUIRED M	E	T	P	MANUFACTURER / MODEL NO.	PROVIDED BY:	INSTALLED BY:
REF	REFRIGERATOR, BOTTOM-FREEZER		X			GE / GDE21EYKFS		
UR	REFRIGERATOR-UNDERCOUNTER		X			ULINE / ADA24R		



2 CLASSROOM 108 ALTERNATIVE LAYOUT
1/8" = 1'-0"

LEGEND

- FF&E GROUP 2- FREE STANDING FURNITURE
- EXISTING KEYBOARDS (TO BE RELOCATED)

FF&E -GROUP 2 EXHIBIT

FOR REFERENCE ONLY

Structure
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 748-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM
LICENSED ARCHITECT HRAZTAN KEVLIAN 28719 RENEWAL DATE 04/30/25 STATE OF CALIFORNIA

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

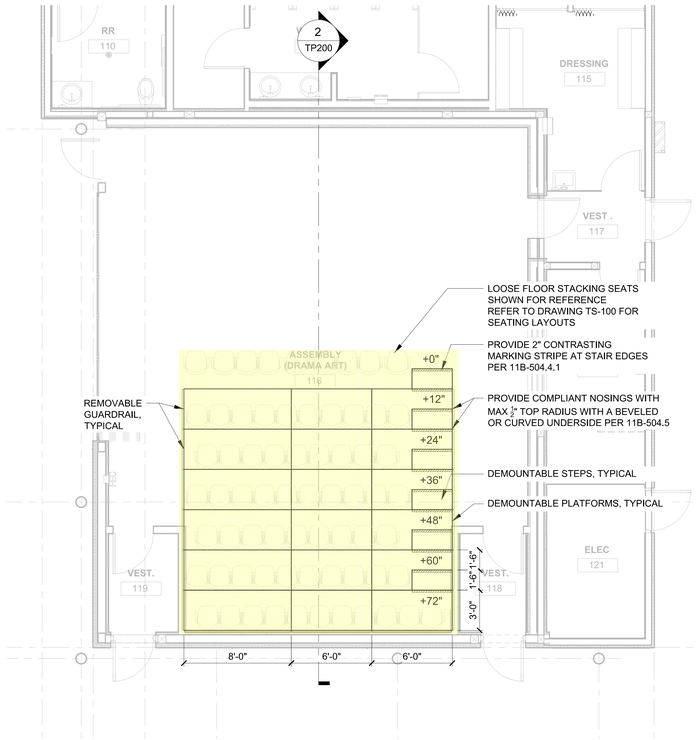
ISSUE DESCRIPTION

	DSA SUBMITTAL	01.17.2023
1	ADDENDUM 1	xx.xx.2025

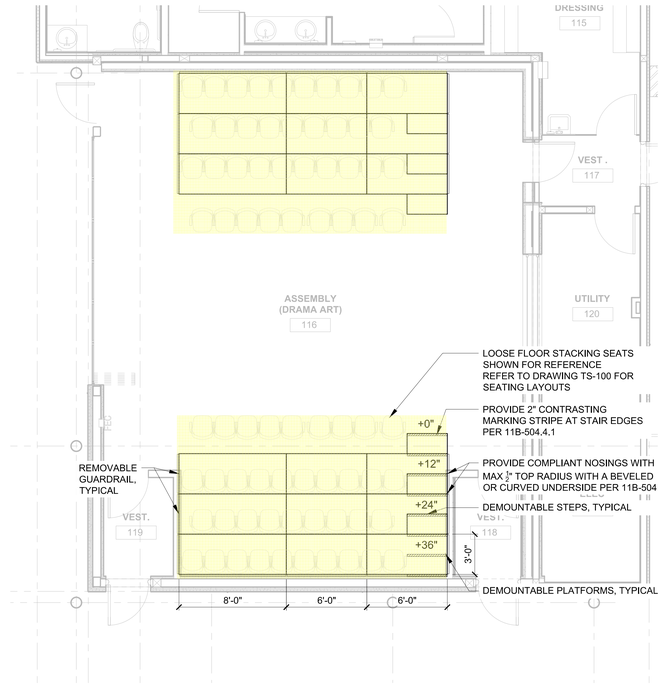
SHEET TITLE
FURNITURE PLAN

SHEET NUMBER
A141

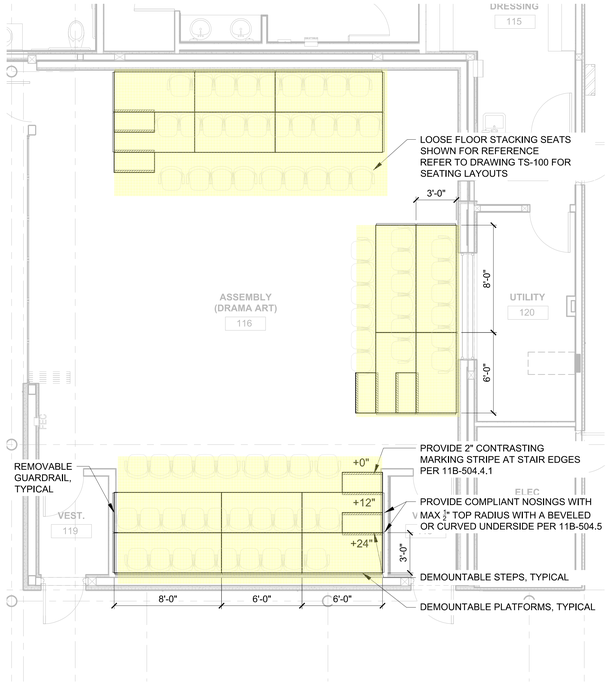
7/29/2022 12:43:51 PM



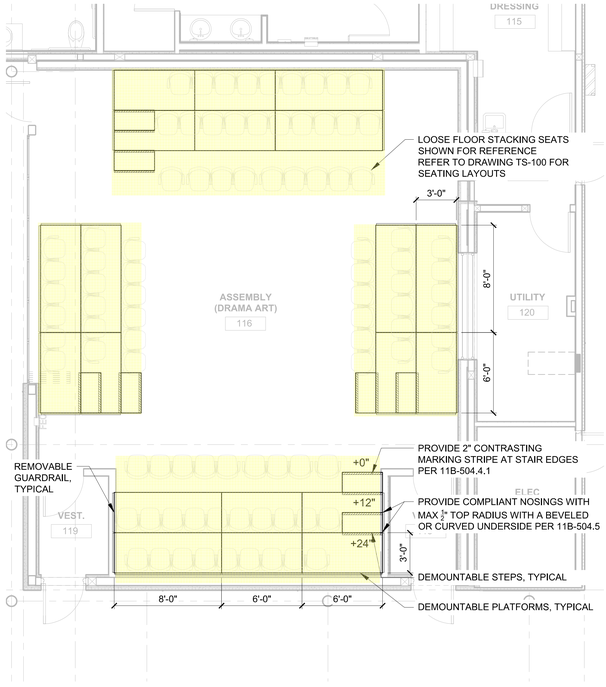
[1] CONFIGURATION - END STAGE
1/4" = 1'-0"



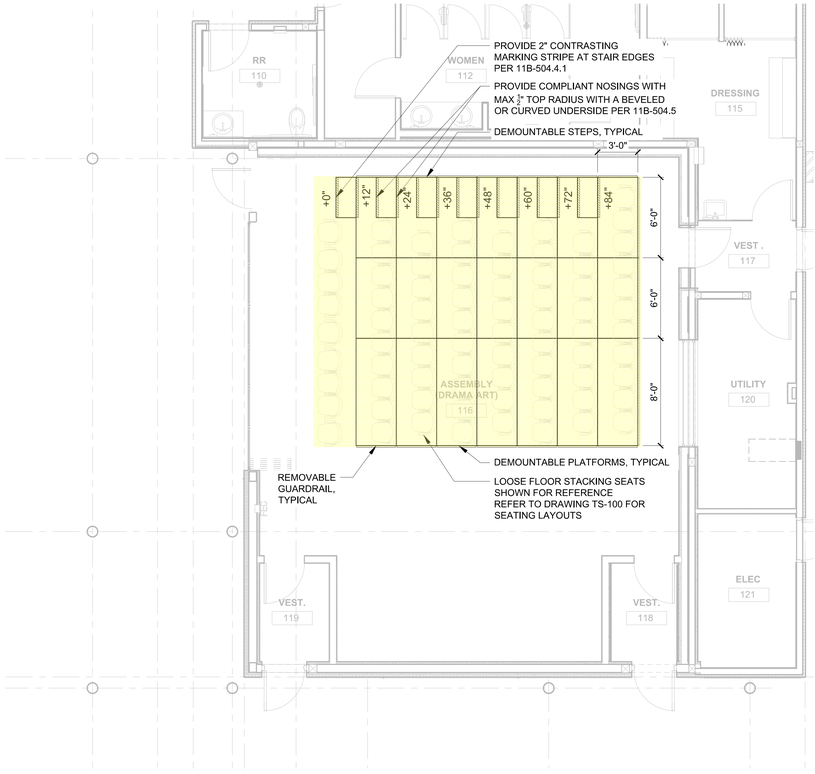
[2] CONFIGURATION - RUNWAY
1/4" = 1'-0"



[3] CONFIGURATION - 3/4 THRUST
1/4" = 1'-0"



[4] CONFIGURATION - ARENA
1/4" = 1'-0"



[5] CONFIGURATION - OUTDOOR STAGE
1/4" = 1'-0"

LEGEND

FF&E GROUP 2 - FREE STANDING FURNITURE

FF&E -GROUP 2 EXHIBIT

FOR REFERENCE ONLY

DEMOUNTABLE PLATFORMS AND LOOSE SEATING ARE OFOI. LAYOUT OPTIONS ARE SHOWN FOR REFERENCE ONLY

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 749-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM
LICENSED ARCHITECT HRAZTAN ZEITLYAN 28719 RENEWAL DATE 04/30/23 STATE OF CALIFORNIA
stages
300 Raritan Ave, 2nd Flr
Highland Park, NJ 08904
732.333.8003
www.stagesconsultants.com

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

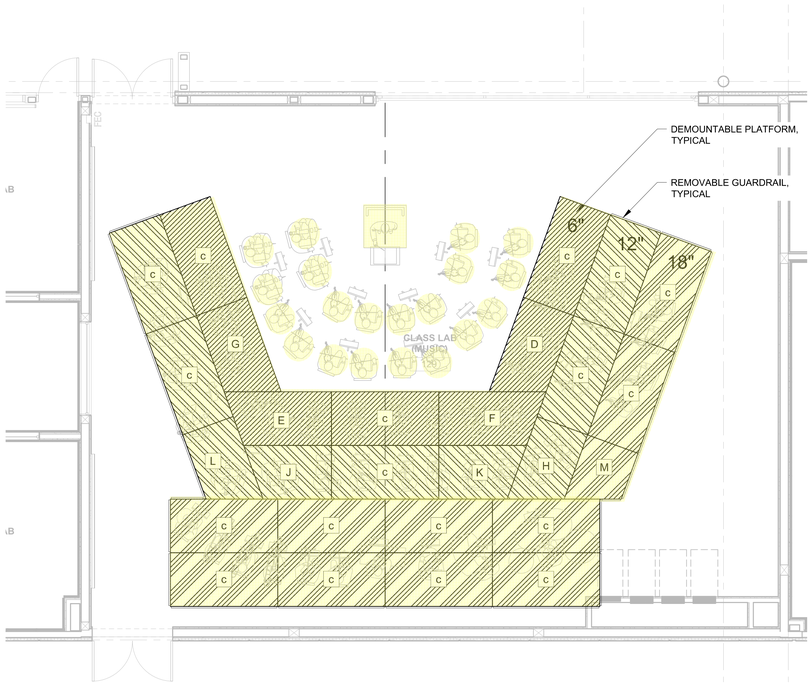
1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION	
DSA SUBMITTAL	01.17.2023

SHEET TITLE
ASSEMBLY: DEMOUNTABLE PLATFORMS

SHEET NUMBER
TP100

7/29/2022 12:43:51 PM



[1] MUSIC ROOM: PLATFORM CONFIGURATION
1/4" = 1'-0"

FF&E -GROUP 2 EXHIBIT

FOR REFERENCE ONLY

LEGEND

FF&E GROUP 2 - FREE STANDING FURNITURE

DEMOUNTABLE PLATFORMS AND LOOSE SEATING ARE OFOI. LAYOUT OPTIONS ARE SHOWN FOR REFERENCE ONLY

struere
ADVANCED ARCHITECTURE

3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066

TELEPHONE (310) 749-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

LICENSED ARCHITECT
HRAZTAN ZEITLIAN
28719
RENEWAL DATE
04/30/23
STATE OF CALIFORNIA

stages
300 Raritan Ave, 2nd Flr
Highland Park, NJ 08904
732.333.8003
www.stagesconsultants.com

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD,
COMPTON, CA 90221-5393

ISSUE DESCRIPTION

DSA SUBMITTAL	01.17.2023

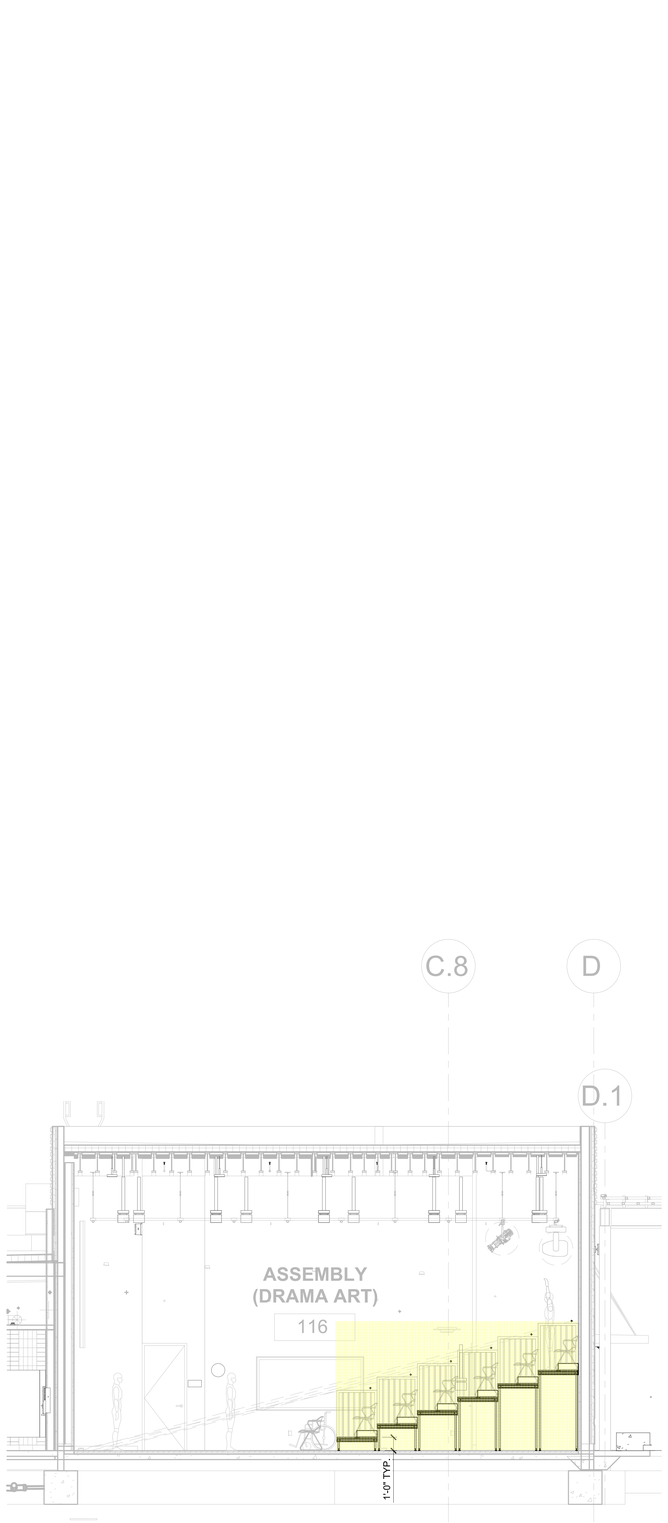
SHEET TITLE

MUSIC ROOM: RISER PLATFORMS

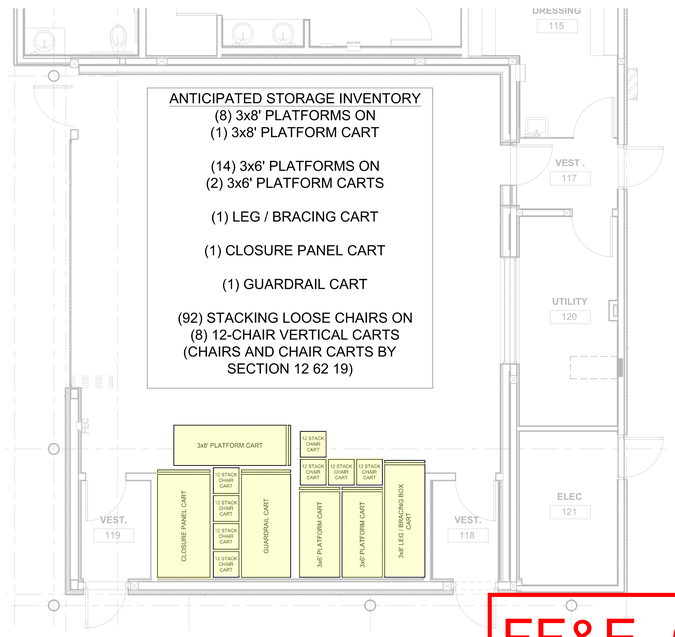
SHEET NUMBER

TP101

7/29/2022 12:43:51 PM



[1] ASSEMBLY: SECTION
1/4" = 1'-0"



[2] ASSEMBLY: SEATING AND PLATFORMS ANTICIPATED STORAGE
1/4" = 1'-0"

FF&E -GROUP 2 EXHIBIT

FOR REFERENCE ONLY

LEGEND

FF&E GROUP2 - FREE STANDING FURNITURE

DEMOUNTABLE PLATFORMS AND LOOSE SEATING ARE OFOI. LAYOUT OPTIONS ARE SHOWN FOR REFERENCE ONLY

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 749-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM
LICENSED ARCHITECT HRAZTAN ZEITLIAN 28719 RENEWAL DATE 04/30/23 STATE OF CALIFORNIA

stages
300 Raritan Ave, 2nd Flr
Highland Park, NJ 08904
732.333.8003
www.stagesconsultants.com

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION

DSA SUBMITTAL	01.17.2023

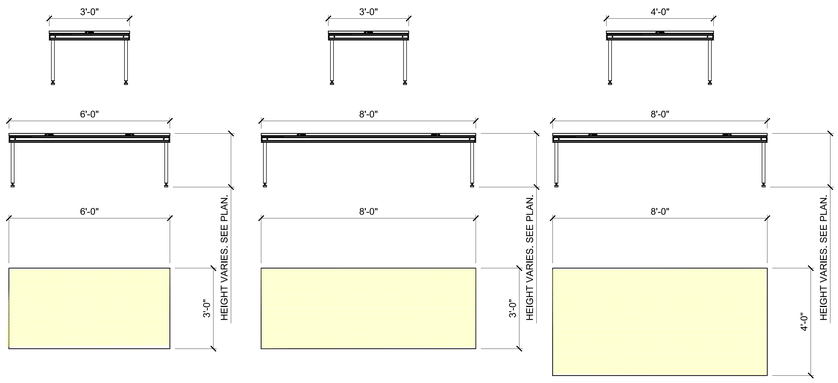
SHEET TITLE

ASSEMBLY: PLATFORM SECTION

SHEET NUMBER

TP200

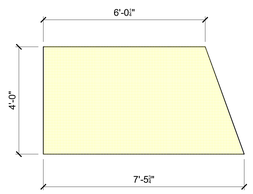
7/29/2022 12:43:51 PM



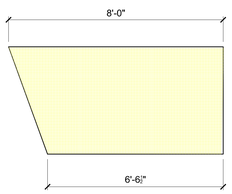
PLATFORM TYPE "A" - 14 UNITS

PLATFORM TYPE "B" - 8 UNITS

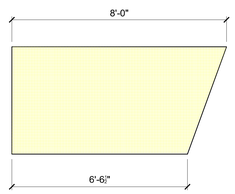
PLATFORM TYPE "C" - 18 UNITS



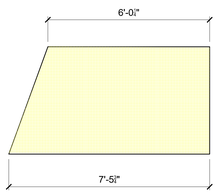
PLATFORM TYPE "D" - 1 UNIT



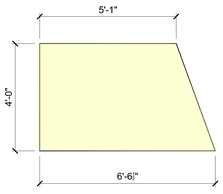
PLATFORM TYPE "E" - 1 UNIT



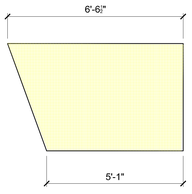
PLATFORM TYPE "F" - 1 UNIT



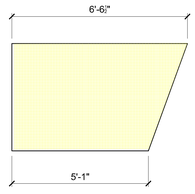
PLATFORM TYPE "G" - 1 UNIT



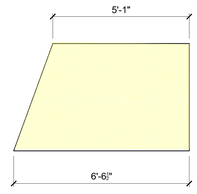
PLATFORM TYPE "H" - 1 UNIT



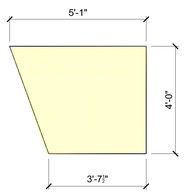
PLATFORM TYPE "J" - 1 UNIT



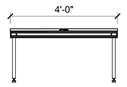
PLATFORM TYPE "K" - 1 UNIT



PLATFORM TYPE "L" - 1 UNIT



PLATFORM TYPE "M" - 1 UNIT



TYPICAL SIDE SECTION FOR PLATFORM TYPE "D" THRU"M"

LEGEND

FF&E GROUP 2- FREE STANDING FURNITURE

DEMOUNTABLE PLATFORMS AND LOOSE SEATING ARE OFOI. LAYOUT OPTIONS ARE SHOWN FOR REFERENCE ONLY

FF&E -GROUP 2 EXHIBIT

FOR REFERENCE ONLY

[1] PLATFORM DETAILS
1/4" = 1'-0"

struere
ADVANCED ARCHITECTURE
3324 GRAND VIEW
LOS ANGELES, CALIFORNIA 90066
TELEPHONE (310) 749-7649
E-MAIL HRAZTAN@STRUERE.COM
WWW.STRUERE.COM

LICENSED ARCHITECT HRAZTAN ZEITLIAN 28719 RENEWAL DATE 04/30/23 STATE OF CALIFORNIA

stages
300 Raritan Ave, 2nd Flr
Highland Park, NJ 08904
732.333.8003
www.stagesconsultants.com

Compton College

COMPTON COMMUNITY COLLEGE DISTRICT

COMPTON COLLEGE VISUAL AND PERFORMING ARTS REPLACEMENT

1111 EAST ARTESIA BLVD, COMPTON, CA 90221-5393

ISSUE DESCRIPTION	
DSA SUBMITTAL	01.17.2023

SHEET TITLE
PLATFORM DETAILS

SHEET NUMBER
TP300

SECTION 12 62 19 - STACKING AUDIENCE SEATING

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

1. Provide stackable audience seating and related items, as indicated on the drawings, specified herein, and as required to complete the installation.

B. Related sections include the following:

1. Finished stage floor
2. Demountable platforms

1.3 SUBMITTALS

A. Shop drawings shall be of uniform size, bound and include the following:

1. Title sheet listing all sheets in the submittal.
2. Scale plans and elevations.
3. All information necessary to explain fully the design features, appearance, function, fabrication, installation, and use of components in all phases of operation.
4. Country or origin for equipment not manufactured in the United States.

B. Upon completion of the installation, provide 1 reduced set of the shop drawings in a 3-ring binder for the Owner. In addition, provide electronic copies of the shop drawings for the Owner, the Architect and the Theatre Consultant. Electronic copies shall be in PDF format.

C. Provide 1 hard copy of an instruction and maintenance manual for the Owner. In addition, provide electronic copies of the manual for the Owner, the Architect and the Theatre Consultant. Electronic copies shall be in PDF format. The manual shall include:

1. System description.
2. Operation instructions, including safety measures.
3. Maintenance instructions, including recommended procedures and schedules for inspecting system components.
4. Catalog cuts for all purchased equipment

D. Instruction and maintenance manuals shall be provided at the time of Owner training.

PART 2 – PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

A. Equipment shall be by one of the following:

1. Series International
   20900 NE 30th Ave, Ste 901
   Miami, FL 33180
   Tel: 800.706.3598
2. PS Furniture
   Acton Stacker
   1339 W Mequon Rd, Ste 215

Mequon, WI 53092
Tel: 262.478.3398

3. Clarin
   4010 Uplift
   38 Dyer St Extension
   N. Berwick, ME 03906
   Tel: 207.676.2271

2.2 VENDORS

A. Equipment shall be by one of the following:

1. Polito Associates
   Los Angeles, CA
   Tel: 310.748.3725
2. Spec Seats
   Rancho Domingo, CA 90221
   Tel: 323.954.7100
3. TBD

2.3 CHAIR COMPONENTS

A. Chairs shall have padded, upholstered backs padded, upholstered seats, and plastic armrests. Fabric shall be selected by the Architect from the manufacturer's standard. Fabric shall be nylon, weighing a minimum of 21 ounces per linear yard, with 3M Scotchguard protection.

B. Chairs shall be provided in nominal 21 inch width or as shown on the drawings to achieve layout shown.

C. Chairs shall be able to be attached to adjacent chairs with an integral ganging mechanism. Ganging mechanism shall require no additional or loose hardware or tools for assembly.

D. Provide row letters and seat numbers as determined by the Owner during shop drawing review.

2.4 FABRICS

A. Seat Cushion Upholstery fabric shall be grade 3 or better. Color: Per architect from manufacturer's standard line.

B. Seat fabric material shall meet Class 1 flammability requirements of the U.S. Department of Commerce Commercial Standard 191-53 per Bulletin #117 and to applicable local codes. (Include Bulletin #133 for Boston or California)

C. Seat fabric shall meet wearability criteria – double rub – Wyzenbeek 100,000, heavy duty test.

2.5 PADDING

A. Seat and back padding shall be a minimum of 1" thick at its minimum dimension.

B. Seat and back padding material shall be of new (prime manufacture) closed cell, medium density polyurethane foam. Padding material shall comply with the flammability requirements outlined in the California Technical Information Bulletin #117, Resilient Cellular Materials, Section A & D, dated February 1975, when tested in accordance with Federal Test Method Standard 191, Method 5903.2.

2.6 FINISHES

A. Metal parts shall be free from rust, scale, dirt, and welding spatter. All weldments or other metal components shall receive a coat of corrosion resistant primer prior to finish coating and component assembly.

B. Steel shall be painted with corrosion resistant, low gloss enamel, epoxy or baked on powdercoating. Color: black.

C. Visible aluminum components, including nosings, shall have anodized or powder-coated finish. Color: black.

D. All exposed hardware, including but not limited to bolt and rivet heads shall be black or painted black.

2.7 DESIGN CRITERIA

A. Seating shall be designed to support, in addition to its own weight, and the weight of added accessories, a live load of not less than 250 lbs.

B. American Institute of Steel Construction (AISC), American Iron and Steel Institute (AISI) and Aluminum Association (AA) design criteria shall be the basis for calculation of member sizes and connections.

2.8 FABRICATION

A. Steel supports shall be tubular or channel constructed of formed steel shapes of the size and shape necessary to support the design loads.

B. Wheels shall not be less than 6 inch non-marring soft rubber face to protect wood or synthetic floor surfaces. Each operating row shall have a minimum of 6 wheels.

2.9 ACCESSORIES

A. Transport and storage dollies shall be provided to accommodate the entire inventory of seats.

1. Individual dollies shall have a minimum capacity of 10 and maximum capacity of 20 seats.
2. Dollies shall include casters.

PART 3 – EXECUTION

3.1 COORDINATION

A. The Contractor is responsible for reviewing all drawings, specifications, and field conditions which affect the work in this contract. Notify the Owner whenever field measurements, analysis of the drawings and specifications, or progress of other trades indicates that the work in this contract cannot be completed as specified or as scheduled.

3.2 PROTECTION OF EQUIPMENT

A. Protect the materials in this Section from soiling and damage during all phases of the work, from the time of manufacture to installation.

B. Cover the seats to protect them from dust, paint, and debris as required.

END OF SECTION

SECTION 11 61 23 - DEMOUNTABLE PLATFORMS

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. The work in this Section includes all labor, materials and equipment to furnish and install the following:

1. Assembly Room seating risers
2. Music Room rehearsal risers

B. Related sections include the following:

1. Finished stage floor
2. Stacking audience seating

1.3 SUBMITTALS

A. Submit shop drawings for fabrication and installation. Include plans, detail sections, and related conditions. Indicate materials, methods, finishes, attachments, and accessory items.

B. Shop drawings shall reflect field survey information.

C. Submit load data for the platform system, including safe working loads, proof loads, and any special conditions relating to the use of the platform system.

D. Upon completion of the installation, provide 1 reduced set of the shop drawings in a 3-ring binder for the Owner. In addition, provide electronic copies of the shop drawings for the Owner, the Architect and the Theatre Consultant. Electronic copies shall be in PDF format.

E. Provide 1 hard copy of an instruction and maintenance manual for the Owner. In addition, provide electronic copies of the manual for the Owner, the Architect and the Theatre Consultant. Electronic copies shall be in PDF format. The manual shall include:

1. System description.
2. Operation instructions, including safety measures.
3. Maintenance instructions, including recommended procedures and schedules for inspecting system components.
4. Catalog cuts for all purchased equipment

F. Instruction and maintenance manuals shall be provided at the time of Owner training.

1.4 WARRANTY

A. Warrant the equipment in this contract to be free of defects in materials and workmanship for a period of 2 years after acceptance of the completed installation by the Owner. Defective work shall be repaired and replaced at no cost to the Owner. The Warranty shall not cover the results of normal use, nor shall it cover damage due to neglect or improper use of the equipment.

1.5 APPLICABLE STANDARDS

A. Aluminum Association:

1. AA Standard AA-M12C22A41.
2. AA Standard AA-M12C22A42/44.

B. American Institute of Steel Construction: AISC Manual of Steel Construction

C. American Plywood Association: US. Product Standard PS 1-83

D. American Society for Testing and Materials

1. ASTM A36: Standard Specification for Structural Steel.
2. ASTM A283: Standard Specification for Low and Intermediate Tensile Strength Carbon Steel Plates.
3. ASTM A307: Standard Specification for Carbon Steel Bolts and Studs, 60,000 psi Tensile Strength.
4. ASTM A325: Standard Specification for High-Strength Bolts for Structural Steel Joints.
5. ASTM A500: Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.
6. ASTM A501: Standard Specifications for Hot-Formed Welded and Seamless Carbon Steel Structural Tubing.
7. ASTM A570: Standard Specification for Steel, Sheet and Strip, Carbon, Hot-Rolled, Structural Quality.
8. ASTM B209: Standard Specification for Aluminum-Alloy Sheet and Plate.

E. American Welding Society (AWS):

1. AWS D1.1 Structural Welding Code-Steel.
2. AWS D1.3 Structural Welding Code-Sheet Steel, Second Edition.

F. National Fire Protection Association (NFPA): NFPA 102: Standard for Assembly Seating, Tents, and Membrane Structures.

PART 2 – PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

A. Equipment shall be by one of the following:

1. Staging Concepts
   7008 Northland Dr. North Suite 150
   Brooklyn Park, Minnesota 55428
   (763)533-2094
2. StageRight Corporation
   495 Pioneer Parkway
   Clare, Michigan 48617
   (989) 386-7393
3. Wenger Corporation
   555 Park Drive
   Owatonna Minnesota 55060
   (507) 455-4100

2.2 FINISHES

A. Metal parts shall be free from rust, scale, dirt, and welding spatter. All weldments or other metal components shall receive a coat of corrosion resistant primer prior to finish coating and component assembly.

B. Steel finish coat shall be flat black alkyd enamel, except where noted otherwise in the Contract Documents.

C. Aluminum finish coat shall be black anodized except where noted otherwise in the Contract Documents.

2.3 PLATFORM DETAILS

A. Platforms shall support a minimum live load of 150 pounds per square foot.

B. Platforms shall have integral locks for attaching adjacent sections.

C. Platform edging shall be extruded aluminum designed to accept accessory components.

1. Edging finish for Assembly platforms shall be black anodized.
2. Edging finish for Music Room platforms shall be mill finish.

D. Support legs shall permit 2 inch fine-leveling adjustment with a non-marring screw foot.

E. Bridge supports are acceptable, if applicable to a manufacturers' system.

F. Floor surface shall be:

1. Plyron painted black for Assembly platforms.
2. Commercial grade carpet for Music Room. Color to be selected by Architect.

2.4 SEATING RISERS

A. Provide decks, supports, steps, closure panels, chair stops, guardrails, aisle lights, and related components as required to achieve the riser configurations shown on the drawings.

B. Design guardrails, posts, and their anchorage to withstand the following horizontal forces applied separately:

1. 200 pounds applied at any point and in any direction along the top rail.
2. 50 pounds per foot acting outward and/or inward at top rail.
3. Intermediate rails, panel fillers and their connections shall be capable of withstanding a load of 25 pounds per square foot applied horizontally at right angles over the entire tributary area, including openings and spaces between rails.

C. Hand rails and guardrails shall be the manufacturer's standard.

D. In addition to the riser dead loads, the riser structure shall of support a minimum live load of 125 pounds per square foot. Lateral bracing shall be provided to support 3 percent of the total superimposed live load. Risers shall have lateral sway bracing loads of 24 pounds per foot parallel and 10 pounds per foot perpendicular to the seat.

E. Provide UL approved, low voltage aisle lights, with associated transformers and wiring. Aisle lights shall plug in a standard convenience outlet. Aisle lights shall be movable along the platform, to permit different aisle configurations. Where there are intermediate steps, provide lights on both the platforms and the steps.

2.5 STORAGE DOLLIES

A. Provide castered dollies capable of storing the entire Assembly seating riser system including decks, railings, steps, closure panels, and all associated accessories and hardware. Deck storage dollies shall accommodate 15 deck sections, secured with ratchet straps.

B. Deck storage dollies shall also include heavy duty push/pull bars, welded to the dolly frame.

PART 3 – EXECUTION

3.1 COORDINATION

A. The Contractor is responsible for reviewing all drawings, specifications, and field conditions which affect the work in this contract. Notify the Owner whenever field measurements, analysis of the drawings and specifications, or progress of other trades indicates that the work in this contract cannot be completed as specified or as scheduled.

3.2 JOB CONDITIONS

A. The Contractor shall visit the site and verify all dimensions and existing conditions. The Contractor shall also be familiar with the work of adjoining trades and coordinate with their work.

B. The Contractor is ultimately responsible for the equipment fitting the intended spaces without interference.

3.3 PROTECTION OF EQUIPMENT

A. Protect the equipment in this Section from damage and deterioration, including rust, during all phases of the work, from the time of manufacture to installation.

3.4 CLEANING AND REPAIR

A. Repair any work or finishes that are damaged during installation by the Contractor for the work in this Section. This includes the work in this contract and the work of others. Where the work of others is damaged, reimburse the appropriate con tractor for the repair.

3.5 COMMISSIONING AND PUNCHLISTING

A. The Contractor shall work with the General Contractor or Construction Manager to arrange for a punchlisting period for the work in this Section. Punchlisting shall consist of a minimum of one 8-hour day. The building schedule shall be such that no other conflicting or obstructing activity is taking place.

B. During the punchlisting period, seating risers shall be deployed in each unique configuration. The Contractor shall provide labor as required.

C. Prior to punchlisting, the Contractor shall commission the system and certify that the installation is complete and ready for punchlisting by the Theatre Consultant. If substantial portions of the installation are not complete, requiring the Consultant to make another punchlist trip, the Contractor shall compensate the Consultant for time spent and travel expenses. Compensation shall be at the Consultant’s prevailing hourly and per diem rates.

3.6 TRAINING

A. Deployment of the seating risers described above for punchlisting shall also serve as the Owner training session.

END OF SECTION

SECTION 11 61 63 - LOOSE PERFORMANCE LIGHTING FIXTURES

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This section specifies loose performance lighting equipment, including the following:

1. Performance Lighting Fixtures
2. Fixture Accessories
3. Lamps
4. Cable Assemblies
5. Stage Hardware
6. Tools, Storage & Supplies

B. Work not included

1. Hang and focus; installation of fixtures shall be by owner.

C. Related sections include the following:

1. Performance Lighting Systems
2. Performance Lighting Systems Installation
3. Common Work Results for Electrical
4. Interior Lighting Fixtures
5. Rigging Systems and Draperies
6. Commissioning of Electrical Systems

1.3 ACCEPTABLE VENDORS

A. The equipment shall be supplied by only one of the following:

1. 4Wall Los Angeles
   5435 W. San Fernando Road
   Los Angeles, CA 90039
   818.252.7481
2. BCT Entertainment
   1281 N La Loma Circle
   Anaheim, CA 92806
   714.237.9270
3. Polaris Lighting
   624 Irving Ave
   Glendale, CA 91201
   818.265.0330
4. PRG Los Angeles
   1245 Aviation Place
   San Fernando, CA 91340
   818.252.2600b
5. Pro Sound & Video
   11060 Randall Street
   Sun Valley, CA 91352
   818.765.3800

1.4 SUBMITTALS

A. Submit a complete bill of materials for each product listed herein.

B. Submit product data sheets for all items for approval prior to shipment.

1.5 QUALITY ASSURANCE AND STANDARDS

A. Instruments shall be fabricated according to the standards of Underwriters' Laboratories, Inc. and shall be labeled to attest UL listing.

B. Warrant the equipment to be free to defects in materials and workmanship for a period of one year from the date of acceptance by the Owner. The warranty shall specifically include, but not be limited to, lamp sockets, lenses, shutters, and clamps. If any item proves defective within the warranty period it shall be replaced at no cost to the Owner.

PART 2 – PRODUCTS

2.1 GENERAL FABRICATION REQUIREMENTS

A. Instruments shall be free of light leaks and spurious reflections adjacent to their fields.

B. Instrument fields shall be visually uniform and without hot spots, holes, stripes, or rings.

C. Instruments shall be ventilated and/or conductively cooled to maintain temperature ratings set by lamp manufacturers.

D. Exterior finishes shall be matte black high temperature enamel.

E. Pigtails shall be 36 inches long unless otherwise noted.

F. Pipe clamps shall be C-Clamp type for 1.9" (48mm) O.D. pipe unless otherwise noted. Pipe clamps shall be fitted with a spacer between clamp and yoke to permit 360° rotation.

G. Color frames, safety cables, top hats, donuts, barn doors and other similar accessories shall be finished in matte black high temperature paint.

H. Instruments that require DMX data shall be self-terminating. For instruments that are not self-terminating, DMX terminators shall be provided for 10% of the instrument quantity.

2.2 PERFORMANCE LIGHTING FIXTURES

A. Furnish the following stage lighting fixtures:

1. Description: TBD° LED Spot Light
   Manufacturer: Electronic Theatre Controls #CSSPOTS
   Accessories: Matte Black Color Frame, Pipe Clamp, Safety Cable, TBD LED EDLT Lens Tube
   Connector: 15A Edison NEMA 5-15
   Quantity: 36

2. Description: LED Wash Light
   Manufacturer: Electronic Theatre Controls #CSPAR-DB
   Accessories: Matte Black Color Frame, Pipe Clamp, Safety Cable
   Connector: 15A Edison NEMA 5-15
   Quantity: 12

2.3 FIXTURE ACCESSORIES

A. Furnish the following fixture accessories:

1. Description: A-Size Template Holder for ERS
   Manufacturer: City Theatrical #2150
   Quantity: 6

2. Description: Drop-In Iris for ERS
   Manufacturer: City Theatrical #2180
   Quantity: 2

3. Description: Stackable Top Hat for 19°-50° ERS
   Manufacturer: City Theatrical #2840
   Quantity: 36 Cable Assemblies

4. Description: Wireless DMX Transmitter w/ 10’ DMX cable
   Manufacturer: City Theatrical Multiverse SHoW Baby CT-5900
   Quantity: 1

5. Description: Pipe Mount Relay/Wireless DMX Receiver
   Manufacturer: ETC #CSR-M, CSR-PMT, 400CC, 400SC
   Quantity: 3

B. All cable assemblies shall be tested after fabrication to assure wire continuity and correct polarity of connections.

C. All cable assemblies shall include shrink wrapped identification label with text “VAPA” beneath shrink wrap.

D. All cable assemblies shall include shrink wrapped length label with length text beneath shrink wrap at each end.

E. DMX512 (5-pin XLR) data cable assemblies shall consist of ruggedized cable, terminating at each end to Neutrik XX-Series XLR5 connectors with black shell. Assemblies shall be terminated in accordance with USITT (United States Institute for Theatre Technology) DMX512 specification.

1. Furnish (20) cable assemblies of 5’-0” length.
2. Furnish (10) cable assemblies of 10’-0” length.
3. Furnish (10) cable assemblies of 25’-0” length.
4. Furnish (5) cable assemblies of 50’-0” length.
5. Furnish (1) cable assemblies of 100’-0” length.

F. Edison Extension assemblies shall consist of 12/3 SOOW cables, terminating at each end with a NEMA 5-20 receptacle.

1. Furnish (10) cable assemblies of 5’-0” length.
2. Furnish (10) cable assemblies of 10’-0” length.
3. Furnish (5) cable assemblies of 25’-0” length.
4. Furnish (2) cable assemblies of 50’-0” length.

G. Adapter assemblies shall consist of 12/3 SJOW cables, terminating at one end with a 20A stage pin receptacle and the other end with a connector as indicated below.

1. Furnish (5) Male 15A Edison to Female 20A stage pin Adapter assemblies of 5’-0” length.

2.4 TOOLS, STORAGE, & SUPPLIES

A. Furnish the following additional items:

1. Description: Heavy Duty 30” x 30” Cable Trunk w/ 4” Casters
   Quantity: 1

2. Description: 2”x180’ Black Pro Gaff Gaffers Tape
   Quantity: 24 rolls (1 case)

3. Description: 2”x75’ Blacktak Masking Foil
   Quantity: 1 roll

4. Description: 3000’ 1/8” Black Cotton Unglazed Tie-Line
   Quantity: 1 Spool

PART 3 – EXECUTION

3.1 SHOP PREPARATION

A. Install connectors for all fixtures prior to delivery.

B. Test all fixtures prior to packing for delivery.

3.2 DELIVERY

A. Bidder is responsible for coordinating delivery times per the Owner’s schedule; delivery FOB to Compton, CA.

3.3 PROTECTION OF EQUIPMENT

A. Protect the equipment in this Section from damage and deterioration during all phases of the work, from the time of manufacture to the acceptance of the completed installation.

END OF SECTION

GEOTECHNICAL AND GEOHAZARD INVESTIGATION REPORT

VISUAL AND PERFORMING ARTS BUILDING
COMPTON COMMUNITY COLLEGE DISTRICT

PREPARED FOR:

Compton Community College District
1111 East Artesia Boulevard
Compton, CA 90221

PREPARED BY:
Atlas Technical Consultants LLC
14457 Meridian Parkway
Riverside, CA 92518

April 27, 2022

14457 Meridian Parkway
Riverside, CA 92518
(951) 697-4777. | oneatlas.com

April 27, 2022

Atlas No. 10-61187PW
Report No. 1

MS. LINDA OWENS, CHIEF FACILITIES OFFICER
COMPTON COMMUNITY COLLEGE DISTRICT
1111 EAST ARTESIA BOULEVARD
COMPTON, CALIFORNIA 90221

Subject: Geotechnical and Geohazard Investigation
Compton College Visual and Performing Arts Building
Compton College Campus
1111 East Artesia Boulevard, Compton, CA 90221

Dear Ms. Owens:

Atlas Technical Consultants is pleased to present this geotechnical and geohazard investigation report for the proposed Visual and Performing Arts Building, Compton College, located at 1111 East Artesia Boulevard in Compton, California.

The purpose of our investigation was to explore the subsurface conditions with respect to the planned improvements, to evaluate the general soil characteristics, and to provide geotechnical recommendations for design and construction. This investigation is based on the plans provided by Struere Advanced Architecture, Inc. and our correspondence with the District and the project construction and design team.

Based upon our study and investigation, the proposed development is feasible from a geotechnical viewpoint, provided our recommendations are incorporated in the design and construction of the project. The most significant design considerations for this project are compressible soil at the near surface, liquefaction and seismic settlement, and seismic shaking. We have evaluated the appropriate foundation systems to support the proposed building and other improvements. This report presents our findings, conclusions, and geotechnical recommendations for the project.

If you have any questions, please call us at (951) 697-4777.

Respectfully submitted,
Atlas Technical Consultants LLC

REGISTERED PROFESSIONAL ENGINEER
MEHRAB JESMANI
GE 3175
EXP. 09/30/23
GEOTECHNICAL
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL GEOLOGIST
DOUGLAS A. SKINNER
No. 2472
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

Mehrab Jesmani, PhD, PE, GE 3175
Senior Engineer

Douglas A. Skinner, PG, CEG 2472
Senior Geologist

MJ:DS:ER:ds
Distribution: sphillips@pcm3.com and hraztan@struere.com

CONTENTS

TABLES

FIGURES

APPENDICES

1. INTRODUCTION

1.1 Site Location and Description

The project site is located within the half-south portion of the Compton College Campus in the city of Compton, California. The project site is surrounded by landscaped areas to the north, buildings and a landscaped areas to the south, east and west. Figure I-1 presents the site vicinity map. The project location, measured on a Google Earth map, has a latitude reading of North 33.87727° and longitude reading of West -118.21036°. These coordinate readings should be considered accurate only to within an approximately 50-foot radius as implied by the method used.

1.2 Proposed Development

We understand this project will consist of the design and construction of a new Visual and Performing Arts (VAPA) building that will likely consists of three separate single-story buildings joined by covered breezeways with associated hardscape and utility improvements. The Project Structural Engineer provided the below information for the structural loads:

- **New Buildings**
  - Bearing wall load gravity loads. The bearing wall on Grid C is the peak case (1,900 PLF, Dead + Roof Live Load)
  - Shear wall overturning load. Peak case is 75 kip-ft at allowable level.
  - Typical column gravity and seismic loads at building front (on Grid 3, between A & B):
    - P_{Dead} = 3 kips, $P_{Roof\ Live}$ = 2 kips, P_E = 8 kips (seismic at allowable level)
- **New Exterior Canopy Structure**
  - Typical column gravity and seismic loads:
    - P_{Dead} = 5 kips, $P_{Roof\ Live}$ = 6 kips, P_E = 5 kips (seismic at allowable level)
- **Existing Building**
  - New shear wall. Vertical load is 400 PLF (Dead + Roof Live) and seismic overturning is 30 kip-ft (at allowable level). Note the shear wall to the south includes widening an existing footing.
  - New retaining wall. Vertical load is 1,700 PLF (Dead + Roof Live).
  - New built-up seating area.

We anticipate that the new buildings will be designed and constructed under the 2019 California Building Code (CBC).

1.3 Purpose and Scope

The purpose of our investigation has been to evaluate general engineering characteristics of the earth materials with respect to the planned improvements for the proposed VAPA buildings and associated improvements and to provide geotechnical recommendations for design and construction of the proposed project. Our scope of work included the following tasks:

- **Background Review** - A background review of readily available, relevant, local and regional geology maps, geohazard maps, geotechnical reports, and literature pertinent to the proposed improvements was performed.

- **Pre-Field Investigation Activities** - Prior to our drilling activities, we conducted a site reconnaissance to locate proposed boring locations for access and for coordination with Underground Service Alert (USA).

- **Field Investigation** - Our field investigation consisted of excavation, logging and sampling of three borings to the depths ranging from about 21 feet to 51 feet below the ground surface and three CPT tests to the maximum depth of about 75 feet within the project improvements. The borings were drilled using either a hand auger or a truck mounted hollow-stem auger drill rig. Each boring was logged by a qualified member of our technical staff. Relatively undisturbed soil samples were obtained at selected intervals within the borings using a California Ring Sampler. Standard Penetration Tests (SPTs) were also conducted at selected depths within the borings, and soil samples were obtained. Bulk samples of representative soil types were also obtained from the borings. The borings were backfilled in accordance with regulatory requirements. Logs of the borings are presented in Appendix II. Boring locations are shown on Figure I-2 (Subsurface Exploration Map).

- **Laboratory Tests** - Laboratory tests were performed on selected soil samples obtained during our field investigation. The laboratory testing program was designed to evaluate the physical and engineering characteristics of the on-site soils. Tests performed during this investigation include:
  - In situ moisture content and dry density of existing soils.
  - Atterberg limit tests to classify and characterize of the engineering properties of soils.
  - Direct shear to evaluate the strength characteristics of the on-site materials.
  - Expansion Index test to evaluate the expansion potential of the on-site material.
  - R-Value.
  - Hydrometer Test.
  - #200 Wash.
  - Compaction Test.
  - Soil Corrosivity.
  - Collapse/Swell potential of soil.

All laboratory tests were performed in general conformance with ASTM Standard Methods. The results of the in-situ moisture and density tests are shown on the boring logs (Appendix I). Results of the other laboratory tests are provided in Appendix III.

- **Engineering Analysis** - The data obtained from our background review, field exploration, and laboratory testing program were evaluated and analyzed in order to develop the conclusions and recommendations for the site.

- **Report Preparation** - The results of this investigation have been summarized in this report, presenting our findings, conclusions and recommendations for the proposed project.

2. GEOLOGIC AND GEOTECHNICAL FINDINGS

2.1 Regional Geology

The site is mapped on the South Gate Quadrangle and is situated on the Downey Plain within the Los Angeles metropolitan region. The Downey Plain is located at the convergence of two major physiographic/geomorphic provinces, the Transverse Ranges and the Peninsular Ranges, and includes rugged mountains, hills, valleys, and alluvial plains. The east-west trending Transverse Ranges are irregular to the main northwest structural grain of California. The Transverse Ranges were uplifted along east to west trending thrust faults and folds (Crowell, 1976; Wright, 1991; and Ingersoll and Rumelhart, 1999). The central Los Angeles basin is divided by a mountain range, the Santa Monica Mountains. The leading structure in the area is the north-dipping Santa Monica–Hollywood–Raymond fault system, located at the southern boundary of the Transverse Ranges. The Los Angeles basin itself is part of the northern Peninsular Ranges Geomorphic Province, which extends southeastward into Baja California, Mexico. The Transverse Ranges are formed by mildly metamorphosed sedimentary and volcanic rocks of Jurassic age that have been infringed by mid-Cretaceous plutonic rocks of the southern California batholith and rimmed by Cenozoic sedimentary rocks (Gastil et al., 1981; Schoellhamer et al., 1981). The Los Angeles greater basin is also part of the onshore portion of the California continental borderland, characterized by northwest-trending offshore ridges and basins, formed primarily during early and middle Miocene time (Legg, 1991; Wright, 1991; and Crouch and Suppe, 1993). The thickness of the predominantly Neogene-age sedimentary fill in the central depression of the Los Angeles basin, a structural low between the Whittier and Newport–Inglewood faults, is estimated to be about 30,000 feet (Yerkes et al., 1965).

Major northwest-trending strike-slip faults such as the Whittier, Verdugo, Northridge, Sierra Madre, Newport–Inglewood, and Palos Verdes faults dominate the great basin. In addition to these surface faults, significant buried thrust faults in the general site vicinity in the Los Angeles basin include the lower and upper Elysian Park thrust faults, the Compton thrust, and the Puente Hills thrust (Shaw, et al., 2002; Bilodeau, et. al., 2007).

The youngest surficial deposits are Holocene sediments of modern alluvial fans, stream channels (i.e., Los Angeles and San Gabriel Rivers), and their flood plains. These debris-flow, sheet flood, and fluvial deposits consist of boulder, cobble, and pebble gravel lenses and sheets, interbedded with sand, silt, and clay derived from the surrounding highlands. Although the thickness of these sediments is usually less than 100 feet (30 m), they are locally as thick as 200 feet (60 m), and the fluvial sediments are roughly graded, with the lower parts containing coarser material. A narrow zone of well-sorted, fine to medium-grained dune sand, as thick as 70 feet (21 m), is located near the coast between Santa Monica and the Palos Verdes Hills (DWR, 1961; Yerkes et al., 1965). Since about 6 thousand years ago, when postglacial sea level had risen to near its present level, coastal estuaries and tidal marshes formed and became filled with organic-rich, fine-grained sediment that extended as far as 4 miles (6.4 km) inland from the mouths of the streams (Yerkes et al., 1965). Real estate development has now transformed most of these estuaries and marshes into marinas and residential areas (Bilodeau, et al., 2007).

Based on a review of the California Geologic Survey geologic maps of the Long Beach 30' x 60' Quadrangle (CGS, 2010; 2016), the site area is mapped as being underlain by younger alluvial deposits (or Young Alluvium, Unit 2), as shown on Figure I-3 (Regional Geology Map). As shown on this geologic map, the project site and much of the project vicinity are underlain by Holocene to Late Pleistocene age Younger Alluvial Fan Deposits (Qyf), described by the California Geological Survey (2010) as "unconsolidated to slightly consolidated, unvisited to slightly dissected boulder, cobble, gravel, sand, and silt deposits issued from a confined valley or canyon" as "Young alluvium, Unit 2" by the California Geological Survey (2016).

2.2 Subsurface Conditions

The subsurface soils encountered in the borings generally consist of approximately 4 to 5 feet of undocumented fill underlain by young alluvial deposits of Holocene to late Pleistocene age (Qya_2) as shown on the geologic cross section (Figure I-4). The fill generally consists of loose and slightly moist silty sand. The young alluvial deposits encountered at the site are predominantly comprised of inter-layered sand, silt and clay.

Logs of borings is presented in Appendix I. Important geotechnical characteristics of the subsurface soils that are relevant for the proposed developments are discussed briefly in the following subsections.

2.2.1 Expansion Potential

Samples of the sub-surface soils within the project site that were tested had expansion indexes of 0 and 4, generally indicating very low expansion potential for onsite sandy and silty soils. To the best of our knowledge and experience with the similar soils some of the clay (CH) and silty (MH) layers on the site may have medium to high expansion potential.

2.2.2 Atterberg Limits Tests Results

The samples of the sub-surface soils collected during our investigation were tested for Atterberg Limits. Based on the lab testing results and our experience with similar type of materials, generally the on-site sand and silt are non-plastic, however, some of the tests results indicate some low plasticity silt and clay and some fat and elastic silt layers in the subsurface soil.

2.2.3 Corrosivity Potential

In general, soil environments that are detrimental to concrete have high concentrations of soluble sulfates and/or pH values of less than 5.5. Section 19.3.2 of ACI 318 (ACI, 2014), as referred in the 2019 CBC, provides specific guidelines for the concrete mix-design when the soluble sulfate content of the soil exceeds 0.1% by weight or 1,000 parts per million (ppm). The County of Los Angeles (2013) recommends implementing mitigation measures to protect concrete structures when soluble sulfate concentrations are equal to or greater than 2,000 ppm in soil and 1,000 ppm in groundwater.

Samples of the subsurface soil within the proposed improvements were tested for water-soluble sulfate during the investigation and had a soluble sulfate content of 50 and 660 ppm that are less than 0.1% by weight (1,000 ppm), indicating negligible sulfate exposure. Therefore, no cement type restriction/concrete class restriction is necessary per ACI Table 19.3.2.1 for the consideration of soluble sulfate exposure, as well as no soil mitigation necessary for the site.

The minimum amount of chloride ions in the soil environment that are corrosive to steel, either in the form of reinforcement protected by concrete cover or plain steel substructures (such as steel pipes or piles) is 500 ppm per California Test 532. Soil corrosivity to ferrous metals can be estimated by the soil's pH level, electrical resistivity, and chloride content (County of Los Angeles, 2013). In general, soils are considered corrosive when the minimum resistivity is less than 1,000 ohm-centimeters. Soil with a chloride content of 500 ppm or more is considered corrosive.

As a screening for potentially corrosive soil, samples of the subsurface soil within the buildings sites were tested to evaluate minimum resistivity, chloride content, and pH level. The chloride content of the samples was 60 ppm and 250 ppm. The measured resistivity of tested samples was 2,360 and 506 ohm-cm. The pH values of the samples were 8.19 and 8.02.

Based on these results, the on-site soil is generally considered to be extremely corrosive towards buried ferrous metals. This information should be provided to the underground utility subcontractors. Consideration should be given to retaining a corrosion consultant to obtain recommendations for the protection of metal components embedded in the site soil. Further interpretation of the corrosivity test results (resistivity value, pH and other test results and data), and providing corrosion design and construction recommendations for foundation and ferrous metals, are the purview of corrosion specialists/consultants.

2.2.4 Excavatability

Based on our investigation findings, subsurface soils within the anticipated maximum depth of excavation are expected to be readily excavatable by conventional heavy earthmoving equipment in good condition.

2.3 Groundwater

Groundwater was not encountered in our soil borings (B-1, B-2 and B-3). According to the California Geological Survey (CGS, 1998) seismic hazard zone report for the South Gate quadrangle, the depth of the historically shallowest groundwater level is estimated to be on the order of 8 feet. According to the California Department of Water Resources (DWR), available groundwater level data for Well 338872N1182432W001, the nearest well located approximately 2 miles northwest of the project site, a single measurement made on September 14, 1995 indicated the groundwater on that date to be at 122.45 feet below the existing local ground surface, corresponding to El. -32.5 feet (mean sea level datum).

Groundwater levels generally fluctuate between different locations, years, and seasons. Therefore, variations from our observations may occur in the future; historically, these variations appear to be on the order of a few feet.

3. FAULTING, SEISMICITY AND SEISMIC HAZARDS

3.1 Faulting and Primary Seismic Hazards

Our review of available in-house literature indicates that there are no known active or potentially active faults that traverse the site, and the site is not located within an Alquist-Priolo Earthquake Fault Zone, although such faults are in general proximity to the subject site (Hart and Bryant, 1999). The nearest mapped Alquist-Priolo Earthquake Fault Zone is the Newport- Inglewood Fault Zone, approximately 1.65 miles southwest of the site. In addition to this surface fault zone, two buried thrust faults, the Lower Elysian Park and Compton, are inferred to be located about 2.5 miles north and 8 miles south, respectively, from the site (Shaw, et al., 2002; Bilodeau, et. al., 2007).

The principal seismic hazard that could affect the site is ground shaking resulting from an earthquake occurring along nearby several major active or potentially active faults in southern California as shown in Figure I-8 (Regional Fault Map). The known regional active and potentially active faults that could produce the most significant ground shaking and closer to the site include those faults listed (in order of increasing distance from the site) in Table 1.

Table 1 – Characteristics and Estimated Earthquakes for Regional Faults

Fault Name	Approximate Distance to Site (miles)[1]	Maximum Credible Earthquake (MCE) Magnitude[2]
Newport-Inglewood	2	7.1
Lower Elysian Park Thrust	2.5[3]	6.7
Compton Thrust	8[3]	6.8
Puente Hills Blind Thrust	7[3]	7.1
Palos Verdes	9	7.3
Upper Elysian Park Thrust	10[3]	6.4
Whittier	13	6.8
Hollywood	16	6.4
Raymond	17	6.5
Verdugo	17	6.9
Santa Monica	18	6.6
Malibu Coast	21	6.7
Sierra Madre	22	7.2
Newport-Inglewood (offshore)	26	7.1
San Fernando	28	6.7
Anacapa-Dume	29	7.5
Chino-Central Avenue	29	6.7
Northridge	29	7.0
San Gabriel	31	7.2
Santa Susana	34	6.7
Elsinore (Glen Ivey)	36	6.8
Simi-Santa Rosa	40	7.0
San Andreas (Mojave)	44	7.4
Oak Ridge	48	7.1
San Clemente	50	7.25[4]
San Cayetano	50	7.0
North Frontal Thrust (Western)	63	7.2
Pinto Mountain	86	7.2

[1] Fault distances estimated from measurements using the Fault Activity Map of California by C.W. Jennings and W.A. Bryant, California Geological Survey, Geologic Data Map No. 6, 2010.

[2] Maximum moment magnitude calculated from relationships (rupture area) derived from Wells and Coppersmith (1994; values listed in Appendix A of Cao, T., Bryant, W.A., Rowshandel, B., Branum, D., and Wills, C.J., 2003, The revised 2002 California probabilistic seismic hazard maps, June 2003: California Geological Survey, 12 p., Appendix A.

[3] Fault distances estimated from measurements using Puente Hills Blind-Thrust System, Los Angeles, California by Shaw and others (2002): Bulletin of the Seismological Society of America, vol. 92, no. 8, pp. 2946-2960 and Bilodeau, W.L., Bilodeau, S.W., Gath, E.M. Oborne, M., and Proctor, R.J., 2007, Geology of Los Angeles, California, United States of America: Environmental & Engineering Geoscience, Vol. XIII, No. 2, May 2007, pp. 99–160.

[4] Legg, M.R., Luyendyk, B.P., Mammerickx, J., and Tyce, R.C., 1989, Sea Beam Survey of an Active Strike-Slip Fault: The San Clemente Fault in the California Continental Borderland: Journal of Geophysical Research, v. 94, pp. 1727-1744.

3.1.1 Regional Seismicity

Evaluation of the historic seismicity related to the site was performed to show the significant past earthquakes. Figure I-5 (Regional Seismicity Map) and the associated table show the recent regional seismicity with respect to the site. Significant past earthquakes from 1900 to 2018 with magnitudes 5 or greater were estimated using the USGS Earthquake database. This historical seismicity evaluation was performed within the 100-kilometer radius search from the project site, and the seismic events are listed in Appendix V.

The chance of earthquake damage in Compton is near the California average and is much higher than the national average due to active earthquake faults in the region. According to the Ground Shaking Intensity (Isoseismal) Maps for the Magnitude 6.4, 1933 Long Beach Earthquake (from Trifunac, 2003; CGS website), the Compton College site is mapped within an area that reportedly sustained damage that ranged from Modified Mercalli Scale Intensity 7 (people run outdoors, damage to poorly build structures) to Intensity 9 (buildings shifted off foundation). In Compton, almost every building in a three-block radius on unconsolidated material and landfill was damaged; and water, electricity, gas, and phones were all turned off within minutes of the main shock (CDMG, California Geology, March 1973, p. 56). The worst of all building failures included Compton Union High School and Compton Junior College (CDMG, California Geology, March 1973, p. 57). Other buildings in Compton with reported major damage included the Young Hotel and Aranbe Hotel (Daily News with photos from Orange County Register).

Extensive damage consisted of fracturing and dislocation of streets and curbs in water-saturated, lowland sediments of the Compton basin, especially at Compton Junior College (CDMG, California Geology, March 1973, p. 58). Based on our review, it appears that most of the reported damages were due to seismic shaking/ground motion. There was no conclusive evidence of surface manifestation of liquefaction such as sand boils and/or ground cracking that was reported near El Camino College Compton Center Campus (called Compton Junior College in 1933). However, as stated in our project geotechnical report (Reference 2) the potential for liquefaction susceptibility of the site is very high, there is a potential for surface manifestations of liquefaction at the site, and the potential for seismically induced settlement is high. A summary of the major earthquakes and reported damages at the epicenter are presented below:

- On 7/21/1952 at 11:52:14, a magnitude 7.7 (7.7 UK, Class: Major, Intensity: VIII - XII) earthquake occurred 88.2 miles away from the city center, causing $50,000,000 total damage on 6/28/1992 at 11:57:34, a magnitude 7.6 (6.2 MB, 7.6 MS, 7.3 MW, Depth: 0.7 mi) earthquake occurred 99.1 miles away from Compton center, causing 3 deaths (1 shaking death, 2 other deaths) and 400 injuries, causing $100,000,000 total damage and $40,000,000 insured losses.
- On 10/16/1999 at 09:46:44, a magnitude 7.4 (6.3 MB, 7.4 MS, 7.2 MW, 7.3 ML) earthquake occurred 111.0 miles away from the city center.

- On 11/4/1927 at 13:51:53, a magnitude 7.5 (7.5 UK) earthquake occurred 174.9 miles away from the city center.
- On 1/17/1994 at 12:30:55, a magnitude 6.8 (6.4 MB, 6.8 MS, 6.7 MW, Depth: 11.4 mi, Class: Strong, Intensity: VII - IX) earthquake occurred 26.9 miles away from Compton center, causing 60 deaths (60 shaking deaths) and 7,000 injuries.
- On 4/21/1918 at 22:32:30, a magnitude 6.8 (6.8 UK) earthquake occurred 45.5 miles away from the city center.

** Magnitude types: body-wave magnitude (MB), local magnitude (ML), surface-wave magnitude (MS), moment magnitude (MW).

3.2 Secondary Seismic Hazards

Secondary seismic hazards for this site, generally associated with severe ground shaking, include liquefaction, seismic settlement, landslide, tsunamis, and seiches.

3.2.1 Liquefaction

Liquefaction is the loss of soil strength or stiffness due to a buildup of pore-water pressure during severe ground shaking. Liquefaction is associated primarily with loose (low density), saturated, fine to medium-grained cohesionless soil. As the shaking action of an earthquake progresses, the soil grains are rearranged, and the soil densifies within a short period of time. Rapid densification of the soil results in a buildup of pore-water pressure. When the pore-water pressure approaches the total overburden pressure, the soil reduces greatly in strength and temporarily behaves similarly to a fluid.

The site is mapped within an area shown as potentially susceptible to liquefaction on the California Geological Survey (CGS, 2016) seismic hazard zones for the South Gate Quadrangle as shown on Figure I-6.

A site-specific liquefaction and seismic settlement analyses were performed using LiqSVs 2.0.2.1 and CLiq v.2.3.1.15 computer programs. Seismically induced settlement analyses were performed based on the sub-surface conditions encountered in the deep boring B-3 and the three CPTs. For this analysis, we considered a historic highest groundwater level at 8 feet below ground surface as indicated on the CGS Seismic Hazards Report. The predominant earthquake magnitude was obtained from the USGS Interactive Deaggregation website for a 2% probability of exceedence in 50 years (2475 return period) hazard. The seismic parameters, peak ground acceleration of 0.801g and magnitude of 7.3, were used for the liquefaction analysis.

Based on our calculations, potential for liquefaction at the site to occur within various soil layers specifically for sandy silt and silty sand occurring below 8 feet (historic highest groundwater table); therefore, the liquefaction susceptibility of the site is very high. Calculations are provided in Appendix III.

3.2.2 Seismically Induced Settlement

Seismically induced settlement consists of dry dynamic settlement (above groundwater) and liquefaction induced settlement (below groundwater). Generally, these settlements occur within silty sand and sandy silt soils due to reduction in volume during and shortly after an earthquake event.

Due to the presence of loose and soft layers of silty sand and sandy silt, high seismic settlement was anticipated. For the on-site soil, the maximum potential of total seismic settlement at the site: seismic dry settlement and liquefaction settlement, has been estimated generally to be on the order of about 5½ to 6 inches (considering the historically highest groundwater table at the depth of about 8 feet, Mw=7.3, peak ground acceleration of 0.801g and using depth reduction factor). The corresponding differential seismic settlement is estimated to be on the order of about 3 to 3½ inches over a horizontal distance of 40 feet. This potential settlement is generally due to liquefaction settlement. Using compacted fill for the upper 5 feet of the subgrade soil the total seismic settlement at the site can be estimated generally to be on the order of about 5 inches with the differential seismic settlement on the order of about 2½ inches over a horizontal distance of 40 feet (seismic dry settlement and liquefaction settlement).

3.2.3 Earthquake-Induced Lateral Displacement

In general, relatively severe and shallow liquefaction could cause lateral ground displacements. Since no vertical free face or sloping ground is close to the site, the potential for lateral displacement is considered low.

3.2.4 Surface Manifestations of Liquefaction

Due to the high seismic settlement, there is a potential for surface manifestation of the on-site soil that can be reduced by following the recommendations provided in this report.

3.2.5 Seismically Induced Landslide

There are no significant slopes that exist near the site. As the site is relatively flat and no slopes are proposed, the possibility for earthquake-induced landslides is considered negligible.

3.2.6 Hydro-Collapsible Soils

Collapsible soils are fine sandy and silty soils that have been laid down by the action of flowing water, usually in alluvial fan deposits. Terrace deposits and fluvial deposits can also contain collapsible soil deposits. The soil particles are usually bound together with a mineral precipitate. The loose structure is maintained in the soil until a load is imposed on the soil and water is introduced. The water breaks down the inter-particle bonds, and the newly imposed loading densifies the soil.

To evaluate the potential of hydro-collapse of the soil layers versus depth laboratory collapse tests performed on the on-site soil samples. For the tested samples, the potential for collapse was found to be on the order of about 0.5%.

3.2.7 Other Hazards

Flood hazards generally consist of shallow sheet flooding caused by surface water runoff during large rain storms. According to the Federal Emergency Management Agency Flood Insurance Map (FEMA, 2008), the site is within a zone designated as “Other Flood Areas-Zone X: Areas of Reduced Flood Risk due to Levee.”

Subsidence of the land surface, as a result of the activities of man, has been occurring in California for many years. Subsidence can be divided, on the basis of causative mechanisms, into four types: groundwater withdrawal subsidence, hydrocompaction subsidence, oil and gas withdrawal subsidence, and peat oxidation subsidence (CDMG, 1973). According to CDMG (1973), the site lies either within, or near, an area potential land subsidence due to withdrawal of oil and gas from nearby oil and gas fields. As a supplementary explanation and based on the information provided in “https://www.usgs.gov/centers/land-subsidence-in-california” the site is located within the zone of subsidence due to groundwater pumping.

Tsunamis, often incorrectly called tidal waves, are long period waves of water usually caused by underwater seismic disturbances, volcanic eruptions, or submerged landslides. The site is not within a potential tsunamis hazard zone according to the Tsunami Inundation Maps for the Long Beach and Venice Quadrangles (CEMA, 2009). Tsunamis are not a potential hazard at the site.

A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin that varies in period. Seiches are often caused by tidal currents, landslides, earthquakes, and wind. There are no bodies of water adjacent or near to the site. A seiche is not a potential inundation hazard.

Earthquake-induced flooding is flooding caused by failure of dams or other water-retaining structures as a result of earthquakes. The site is mapped within an area shown as Potential Dam Inundation Areas on the Los Angeles County General Plan Dam and Reservoir Inundation Routes Map (General Plan 2035 Figure 9.4). Since the site is located in the inundation area of the Whittier Narrows Dam (11 miles upstream from Compton), the Hansen Dam (30 miles upstream from Compton), and the Sepulveda Dam (29 miles upstream from Compton), the potential of earthquake-induced flooding exists at the site, if one of these dams fails during a strong earthquake.

4. CONCLUSIONS AND RECOMMENDATIONS

Based on our geotechnical investigation findings, it is our opinion that the site is suitable for the proposed buildings and associated improvements provided the recommendations in this report are taken into account during design and construction of the project. We did not encounter geotechnical constraints, geological hazards within the subject site that cannot be mitigated by proper planning, design, and sound construction practices.

The most significant design considerations for this project are liquefaction, seismic settlement, and seismic shaking. Presented herein are our recommendations for site grading, seismic

parameters, foundation design parameters, lateral earth pressures, and construction considerations for the project.

4.1 Earthwork

Earthworks should be performed in accordance with the latest edition of the Standard Specifications for Public Works Construction (Greenbook), unless specifically revised or amended below or by future review of project plans.

Site grading operations should conform to the local building and safety codes and rules and regulations of the governing governmental agencies having jurisdiction over the subject construction.

Earthwork is expected to consist of excavation/overexcavation of loose, soft and/or disturbed soils and placement of compacted fill soils for the proposed site improvements. Recommendations for site earthwork are provided in the following paragraphs.

4.1.1 Site Preparation

The site should be cleared of debris and unsuitable materials. Prior to construction, it will be necessary to demolish the existing buildings, utilities (if needed), remove existing concrete slabs within the limits of planned grading. Structure removal should include foundations and flatwork. Concrete fragments and debris from the demolition operation should be disposed off site. The existing near surface soils that are disturbed during demolition of the existing improvements should be recompacted or removed as needed to make firm and stable subgrade soils. The need for and extent of removal of soils disturbed by site demolition should be evaluated by the Geotechnical Engineer at the time of grading.

Existing vegetation and organic contaminated soil should be stripped and disposed off site. Removal of trees and shrubs should also include root balls and attendant root system.

Existing utility lines should be removed and/or rerouted if they interfere with the proposed construction. The cavities resulting from removal of utility lines and buried obstructions should be properly backfilled and compacted as recommended in Sections 4.1.3, 4.12 and other pertinent sections of this report. In addition, if any uncontrolled artificial fill is encountered, it should be removed.

Excavations located along property lines and/or adjacent to existing structures (e.g., buildings, walls, fences, etc.) should not be permitted within 2 feet of existing foundations.

4.1.2 Excavation/Overexcavation in Buildings Pads Area and the Exterior Flatwork Area for Slab-On-Grade

Existing fill soils within the proposed buildings pads should be over-excavated to a minimum depth of about 5 feet below existing grade or to a sufficient depth to remove the undocumented fill materials within the proposed buildings pads areas. Deeper undocumented fill layers are

anticipated to be present at the site and the depth and extent of the fill should be verified during the grading operation.

In order to remove the upper compressible soil and undocumented fill and to reduce the potential for adverse differential settlement of the proposed structures, the underlying subgrade soil must be prepared in such a manner that a uniform response to the applied loads is achieved. For the proposed buildings, we recommend that a minimum of about 5 feet of compacted fill be provided under the buildings pads at a minimum overexcavation depth of 5 feet from existing grade, whichever provides the deeper overexcavation. The fill shall be placed in loose lifts of 6 to 8 inches in thickness, moisture-conditioned to above the optimum moisture content as needed (generally about 2% above optimum) and compacted to a minimum of 92% relative compaction (per ASTM D1557).

The excavated removal bottoms shall be evaluated by a geotechnical engineer to confirm competent native soil materials are encountered. In general, native soils with at least 85% relative compaction of maximum dry density (ASTM D1557) is considered suitable. If unsuitable soil conditions are encountered deeper excavation may be recommended. The overexcavation should extend below underground obstructions to be removed. Where feasible, the overexcavation and recompaction should extend a minimum of 5 feet laterally from the edges of the footings and/or buildings footprints whichever is greater. The soil below exterior flat work and slabs-on-grade (non-vehicular) should be overexcavated and recompacted a minimum of 24 inches below the bottom of the proposed slab or 24 inches below the existing ground surface, whichever is deeper.

Areas planned for asphalt or concrete pavement should be overexcavated and recompacted to a minimum depth of 24 inches below the existing ground surface or 24 inches below the proposed finish grade, whichever is deeper.

Local conditions may require that deeper overexcavation be performed. If encountered, such areas should be evaluated by the geotechnical consultant of record during grading.

In addition to the above recommendations, uncontrolled fill, if encountered, should be removed from structural areas prior to fill placement.

After completion of the overexcavation, and prior to fill placement, the exposed surfaces should be scarified to a minimum depth of 8 inches, moisture conditioned to about 2% above optimum, and recompacted to a minimum 90% relative compaction.

4.1.3 Fill Placement and Compaction

Following subgrade approval by the Geotechnical Engineer, the bottom of the removal excavation should be scarified to a depth of 8 inches, moisture conditioned as needed and recompacted to 90% relative compaction as evaluated by ASTM D1557.

Fill should be placed in loose lifts of 6 to 8 inches in thickness, moisture-conditioned to above the optimum moisture content as needed (generally about 2% above optimum) and compacted to a minimum of 92% relative compaction (per ASTM D1557).

4.1.4 Fill Materials

On-site soils that are free of organics, debris, contaminant and oversize particles (e.g., cobbles, rubble, etc. that are greater than 3 inches in the largest dimension) and an expansion index less than 50 can be reused as fill as approved by the Geotechnical Engineer.

Import materials, if needed, should contain sufficient fines (binder material) so as to be resulted in a stable subgrade when compacted. The imported materials should have an expansion index less than 20 and should be free of organic materials, corrosion impacts, debris, contaminant and cobbles larger than 2 inches with no more than 35% passing the #200 sieve. A bulk sample of potential import material, weighing at least 35 pounds, should be submitted to the Geotechnical Consultant at least 72 hours before fill operations. Proposed import materials should be tested for corrosivity, should be environmentally cleared from contamination and should be approved by the Geotechnical Consultant prior to being imported on site (some more tests such as R-Value, may be recommended).

If base materials are imported to be used, these may be either crushed aggregate base or crushed miscellaneous base in conformance with the Sections 200-2.2 and 200-2.4 of the Standard Specifications for Public Works Construction (Green Book), 2018 Edition, respectively.

The Geotechnical Engineer should be notified at least 72 hours prior to borrow materials in order to sample and test materials from proposed borrow sites.

4.2 CBC Seismic Design Parameters

In order to provide the preliminary seismic design parameters, based on the field data, the subsurface conditions, geology of the site and to the best of our knowledge and understanding, we have assumed that site's soil profile may be characterized within the category of 'Stiff Soil Profile' with Site Class D according to Section 1613A.2.2 of the 2019 CBC accordance with Chapter 20 of ASCE7-16.

Corresponding CBC seismic design parameters for this soil profile and the site location (Latitude: 33.87727 °N; Longitude: -118.21036 °W) are evaluated based on general ground motion analysis in accordance with Section 1613A.2 of the 2019 CBC. These parameters are summarized in Table 2.

Table 2 – California Building Code Seismic Design Parameters

Categorization/Coefficient	Design Value
Site Class	D
Risk Category	III
Spectral Response Acceleration at Short Period, S_S	1.693
Spectral Response Acceleration at 1-Second Period, S_1	0.606
Site Amplification Factor at 0.2 Second, F_a	1.0
Site Amplification Factor at 1.0 Second, F_v	1.7
Spectral Response Acceleration at Short Period, Adjusted for Site Class, S_{MS}	1.693
Spectral Response Acceleration at 1-Second Period, Adjusted for Site Class, S_{M1}	1.031
Design Spectral Acceleration at Short Period, S_{DS}	1.129
Design Spectral Acceleration at 1-Second Period, S_{D1}	0.687
Peak Ground Acceleration Value, PGA_M	0.801
Seismic Design Category	D

A site-specific ground motion analysis was performed as part of our investigation for the Compton College, PE Complex Replacement (Atlas Geotechnical Investigation Report, Project No. 10-57575PW dated July 7, 2021) and we presented the results of that study for this project as well (due to the close proximity of the two projects sites). As part of the site-specific analysis, base ground motions were evaluated in conjunction with both a Probabilistic Seismic Hazard Analysis (PSHA) and a Deterministic Seismic Hazard Analysis (DSHA) to characterize earthquake ground shaking that may occur at the site during future seismic events.

The PSHA is based on an assessment of the recurrence of earthquakes on potential seismic sources in the region and on ground motion prediction models of different seismic sources in the region. The United States Geological Survey (USGS) Unified Hazard Tool (USGS, 2021a) was used to develop seismic hazard curves for various periods and the USGS Risk-Targeted Ground Motion Calculator (USGS, 2021b) was used to analyze ground motions for each corresponding period. Maximum directional scale factors were applied to the results to develop the probabilistic ground motion response spectrum specific to this site.

The DSHA is represented by the 84th percentile of the spectral accelerations for different periods. The logarithmic means and standard deviations of various periods were calculated using the USGS Response Spectra Tool (USGS, 2021c) with ground motion model(s) “Combined: WUS 2018 (5.0, deep basins).” This combined model utilizes attenuation relationships of Abrahamson-et al (2014) NGA West 2, Boore et al (2014) NGA West 2, Campbell & Bozorgnia (2014) NGA West 2, and Chiou & Youngs (2014) NGA West 2.

ASCE 7-16 indicates that the deterministic ground motions shall be calculated for the characteristic earthquakes on all known active faults within the region. The largest such acceleration for each period shall be used to create the deterministic (84th percentile) spectrum. The input parameters for DSHA were obtained from the USGS Shakemap Scenarios.

The site-specific Risk-Targeted Maximum Considered Earthquake (MCE_R) was taken as the lesser of the spectral response accelerations determined from the PSHA and DSHA for each period. The site-specific design response spectral accelerations were compared to the design response spectrum from ASCE 7-16, Section 11.4.6 (SEAOC, 2021) to verify that the values obtained from the site-specific analysis are not less than 80% of the accelerations obtained from Section 11.4.6. The site coefficients and maximum considered earthquake spectral response acceleration parameters are presented in Table 3.

Table 3 – 2019 California Building Code / ASCE 7-16 Site-Specific Parameters

Site Coordinates	
Latitude: 33.876960	Longitude: -118.211102
Site Coefficients and Spectral Response Acceleration Parameters	**Value**
Site Class	D
Risk Category	III
Site Amplification Factor at 0.2 Second, F_a	1.000
Site Amplification Factor at 1.0 Second, F_v	2.500
Spectral Response Acceleration at Short Period, S_S	1.882g
Spectral Response Acceleration at 1-Second Period, S_1	0.656g
Spectral Response Acceleration at Short Period, Adjusted for Site Class, S_{MS}	1.882g
Spectral Response Acceleration at 1-Second Period, Adjusted for Site Class, S_{M1}	1.639g
Design Spectral Acceleration at Short Period, S_{DS}	1.255g
Design Spectral Acceleration at 1-Second Period, S_{D1}	1.093g
Site Specific Peak Ground Acceleration	0.774g

The proposed development shall be designed based on the seismic parameters provided in Tables 2 and 3, whichever is more conservative.

4.3 Shallow Foundation System

The following sections provide information and recommendation for shallow foundation system.

4.3.1 Mat Foundation System for: Building Structures

Due to the relatively high seismic settlements (liquefaction and seismic dry settlements), a mat foundation system on a layer of compacted fill (Section 4.1.3) is recommended for the building structures. A mat foundation can be used to distribute foundation loads to span local irregularities in the supporting capacity of the foundation soil, and to mitigate the predicted magnitude of differential settlement. The mat foundation may be designed for allowable bearing pressure up to

a maximum of 1,000 pounds per square foot (psf). The total static settlement is anticipated to be on the order of about 2 inches with a differential settlement of about 1¼ inch over a horizontal distance of 40 feet.

For the design of structural mat foundation, an average modulus of subgrade reaction, Ks between 20 and 30 pounds per cubic inch (pci) may be used (including a reduction for the size of the mat). In addition, we recommend that the mat foundation be designed to tolerate static and seismically induced total and differential settlements (ASCE 7-16, Section 12.13.9).

The structural mat foundation recommended here in for building support, should be at least 2 to 2½ feet thick and the bottom of the mat foundation should be constructed at a level about 2 feet below the existing grade and should be supported on at least 3 feet of compacted fill (Section 4.1.3: undocumented fill below the foundation is not allowed). Subgrade soil should be prepared as described in the earthwork section of this report (Section 4.1).

4.3.2 Shallow Foundation System with Grade Beams/Tie Beams for Building Structures, Canopy and New Built-Up Seating Area (Platform)

Another alternative for the foundation system is using a continuous foundation system with grade/tie beams supported on a layer of compacted fill (Section 4.1.3). We assumed that the continuous foundation system would be at least 2 to 2½ feet thick and the bottom of the foundation system would be constructed at a level about 2 feet below the existing grade and should be supported on at least 3 feet of compacted fill (Section 4.1.3: undocumented fill below the foundation is not allowed). A net allowable bearing pressure of 2,000 psf may be used for these foundation systems. The total static settlement is anticipated to be on the order of 1¾ inch with a differential settlement of about 1 inch over a horizontal distance of 40 feet. This foundation system shall be designed to tolerate static and seismically induced total and differential settlements (ASCE 7-16, Section 12.13.9). The width of the footing is recommended to be at least 2 feet.

4.3.3 Continuous Foundation System (Building Wall Footing)

The bottom of continuous footing system (e.g., under building perimeter wall) should be constructed at a level about 2 feet below the existing grade and should be supported on at least 3 feet of compacted fill (Section 4.1.3: undocumented fill below the foundation is not allowed). Subgrade soil should be prepared as described in the earthwork section of this report (Section 4.1). The continuous footing may be designed for allowable bearing pressure up to a maximum of 2,000 psf. The total static settlement is anticipated to be on the order of about 1¾ inch with a differential settlement of about 1 inch over a horizontal distance of 40 feet. We recommend that this foundation system be designed to tolerate static and seismically induced total and differential settlements (ASCE 7-16, Section 12.13.9). The width of the footing is recommended to be at least 2 feet.

4.3.4 Minor Footings

Minor footings may be required for low height exterior landscape walls (4 feet or less in height), or other small ancillary structures. These footings should be supported on at least 3 feet of new compacted fill and should be embedded at least 24 inches below the existing grade. A vertical allowable bearing pressure of 2,000 psf may be used for these footings. No undocumented fill is allowed under the footings. The total static settlement is anticipated to be on the order of 1¾ inch with a differential settlement of about 1 inch over a horizontal distance of 40 feet. This foundation system shall be designed to tolerate static and seismically induced total and differential settlements. The width of the footing is recommended to be at least 18 inches.

4.4 Resistance to Lateral Loads

Resistance to lateral loads can be provided by friction acting at the base of the concrete and by passive earth pressure. An allowable coefficient of friction of 0.25 may be assumed for base friction. An allowable passive lateral earth pressure of 220 psf per foot of depth up to a maximum of 2,200 psf may be used for sides of the foundation poured against properly compacted fill. This allowable passive pressure is applicable for level ground conditions only (slope equal to or flatter than 5H:1V). The friction resistance and passive resistance of the soils may be combined provided that the passive resistance is reduced by one third.

4.5 Important Notes for Shallow Foundation Systems

The recommendations and information provided in this section can be applied to the foundation systems indicated in Sections 4.3 and 4.10.

The subgrade soil and the fill shall be prepared as described in the earthwork section of this report (Section 4.1 and the pertinent subsections). The allowable bearing values of the foundation systems indicated in the above sections are for total dead-load and frequently applied live-loads. Adjacent utilities or foundations should be avoided within the zone of an imaginary plane extending downward at a 1½H:1V (horizontal: vertical) inclination from the bottom edge of the foundation. The foundation system shall be designed to tolerate the total and differential: static and seismic settlements as presented in this report.

In some particular cases for the foundations, 4 feet of embedment depth (depth of the bottom of the foundation) and 1 foot of compacted fill below the bottom of the foundation, the information and recommendations provided in this report (for foundation system) still are applicable. We also, generally recommend using Grade Beams/Tie Beams in two directions (perpendicular).

Footings enlarging should be based on the earthwork and the other pertinent recommendations and information provided in this report. Depends to the required depth of the excavation, underpinning to the existing footings and shoring to support the excavation wall adjacent to the existing footings may need to be designed and performed. Atlas can provide the preliminary recommendations for shoring parameters if required by the design team. The allowable bearing

values (vertical and lateral) may be increased by 33% for short duration of loading, including the effects of wind or seismic forces.

In this project the total differential settlement: static and seismic (liquefaction and dry) are below the total differential settlement threshold (static and seismic: dry and liquefaction) provided by the project Structural Engineer: referenced by Table 12.13-3, ASCE 7-16 that is considered to be 0.010 L (4.8 inches).

4.6 Slab-On-Grade

Slabs-on-grade should be placed on properly prepared subgrade soil as described in the earthwork section of this report (Section 4.1 and the pertinent subsections). Prior to concrete placement, the exposed subgrade should be scarified to at least 8 inches, moisture-conditioned to moisture content of about 2% above optimum and compacted to a minimum of 90% relative compaction (per ASTM D1557). The subgrade should not be allowed to dry prior to concrete placement.

The structural engineer should design the actual slab thickness and reinforcement based on structural load requirements. We recommend a minimum slab thickness of 5 inches. Frequent continuous joints should be provided to help control slab cracking.

Care should be taken to avoid slab curling if slabs are poured in hot weather. Slabs should be designed and constructed as promulgated by the Portland Cement Association. Prior to the slab pour, all utility trenches should be properly backfilled and compacted.

In areas where a moisture-sensitive floor covering (such as vinyl, tile, or carpet) is used, a moisture/vapor barrier should be placed per our recommendation in Section 4.8.

4.6.1 Exterior Concrete

To reduce the potential for excessive cracking of concrete flatwork (such as walkways, etc.), concrete should be a minimum of 5 inches thick and provided with construction or weakened plane joints at frequent intervals. Concrete should be placed on properly prepared subgrade soil.

4.7 Pole (Concrete Shaft) Foundation

The poles (concrete shaft) foundations are considered to have side friction resistance of the bearing soil as well as by lateral resistance for overturning. The allowable side friction can be assumed to be on the order of about 200 psf. The uplift capacity is considered to be half of the downward capacity, based on the side friction resistance (200 psf). The allowable passive resistance when the ground surface is level, may be assumed to be equal to the pressure developed by a fluid with a density of 200 pounds per cubic foot (pcf), to a maximum allowable value of 2,000 psf. The upper 2 feet of the soil can be neglected for side friction and passive resistance. These resistance parameters are based on the geotechnical capacity. The structural engineer of the project should evaluate the structural capacity of the poles (concrete shafts).

The preliminary recommended diameter is 3 feet and the preliminary recommended length is 8 feet. (Assumption: center to center, at least three diameters of the shaft.)

Proper construction techniques should be used to limit disturbance of the soils during shaft installation. Disturbance of the soils at the bottom of the shaft excavation may result in shaft settlement, disturbance at the top of the shaft may result in greater lateral deflection than anticipated. The disturbance of the soil should be corrected by overexcavation and/or recompaction.

Due to the type of the soil in the project site, caving, sloughing and heaving are anticipated and may happen during the shaft excavation. Precautions should be taken during the drilling operation to reduce the potential of caving, sloughing and heaving by using the proper means and methods such as using casing or specially formulated drilling fluid that may be employed by the contractor. Where excessive caving occurs during excavation in the upper 6 feet, the hole may be backfilled with sand-cement slurry and redrilled through the slurry. Experienced contractors should be retained to install drilled the shafts. We recommend that a representative of the Geotechnical Engineer perform continuous observation during drilling of holes.

After completion of drilling, the bottom of the holes should be cleaned of loose or disturbed materials. Before casting concrete, the drilled holes should be observed, and suitable condition at the bottom of the holes should be confirmed. Shafts closer than three diameters to each other should be drilled and filled with concrete alternately, and concrete should be permitted to set at least 8 hours before drilling an adjacent pile. The drilled hole should be filled with concrete as soon as possible and should not be left open overnight.

4.8 Moisture/Vapor Mitigation for Concrete Floor Slab-on-Grade

In order to reduce the potential for moisture/water vapor migration up through the slab and possibly affecting floor coverings, a moisture/vapor retarder is recommended under concrete floor slab-on-grade. The moisture barrier should be properly installed, lapped and sealed in accordance with the manufacturer’s specifications. Punctures and rips should be repaired.

Atlas recommends a qualified waterproofing consultant be retained in order to recommend a product or method which would provide protection for the concrete slabs-on-grade for your project based on the project needs. Please refer to the latest version of the “ACI Guide for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials” for your design.

The moisture/water vapor protection for concrete slab-on-grade should be selected based on cost and construction considerations, and considering potential future problems resulting from improper and uncontrolled landscape irrigation practices. Regardless of the moisture/water vapor retarder option selected, it should be emphasized that proper control of irrigation and landscape water adjacent to the structure is of paramount importance.

4.9 Temporary Excavations

All temporary excavations, including utility trenches, pool and retaining wall excavations and other excavations should be performed in accordance with project plans, specifications and all Occupational Safety and Health Administration (OSHA) requirements.

No surcharge loads should be permitted within a horizontal distance equal to the height of cut or 5 feet, whichever is greater from the top of the slope, unless the cut is shored appropriately. Excavations that extend below an imaginary plane inclined at 45 degrees below the edge of adjacent existing site foundation should be properly shored to maintain support of the adjacent structures.

Excavations located along property lines and adjacent to existing structures (i.e., buildings, walls, fences, etc.) should not be permitted within 2 feet from existing foundations.

4.10 Retaining Wall

Minor retaining walls in the range of about 1½ to 4 feet in height may be associated with the improvements. The pressure behind retaining walls depends primarily on the allowable wall movement, wall inclination, type of backfill materials, backfill slopes, surcharge, and drainage. Determination of whether the active or at-rest condition is appropriate for design will depend on the flexibility of the walls. Walls that are free to rotate at least 0.002 radians at the top (deflection at the top of the wall of at least 0.002 x H, where H is the unbalanced wall height) can be designed for active conditions. The recommended active and at-rest pressures for the site soil backfill are presented in Table 4.

Table 4 – Earth Pressures for Retaining Walls

Wall Movement	Backfill Condition	Equivalent Fluid Pressure (on-site soil) (pcf)
Free to Deflect (Cantilever)	Level	40
Restrained	Level	62

The above lateral earth pressures do not include the effects of surcharge (e.g., traffic, footings), hydrostatic pressure or compaction. Surcharges (live, including traffic, or dead load) located within a 1:1 plane drawn upward from the base of the excavation should be added to the lateral earth pressures. The lateral pressure addition of a surcharge load located immediately behind walls may be calculated by multiplying the surcharge by 0.33 for cantilevered walls and 0.5 for restrained walls. For vehicular surcharge adjacent to driveways or parking areas a uniform lateral pressure of 100 pounds per square foot, acting as a result of an assumed 300 pounds per square foot traffic surcharge, should be used.

The equivalent fluid pressures provided in Table 5 are based on a full drainage system behind the wall. A drainage system should be provided behind the walls to reduce the potential for development of hydrostatic pressure.

Walls should be properly drained and waterproofed. Except for the upper 2 feet, the backfill immediately behind retaining walls (minimum horizontal distance of 12 inches) should consist of free-draining, ¾-inch crushed rock wrapped with filter fabric. A 4-inch diameter perforated PVC pipe with perforations placed downward at the bottom of the crushed rock backfill, leading to a suitable gravity outlet, should be installed. If a drainage system is not installed, the walls should be designed to resist the hydrostatic pressure in addition to the earth pressure.

The wall footings should be underlain by 3 feet of compacted fill. The footing embedment should be at least 2 feet below the lowest adjacent grade. The maximum allowable bearing pressure recommended is 2,000 psf. The allowable bearing value may be increased by 33% for short duration of loading, including the effects of wind or seismic forces. The width of the footing is recommended to be at least 2 feet.

The total static settlement is anticipated to be on the order of 1¾ inch with a differential settlement of about 1 inch over a horizontal distance of 40 feet. This foundation system shall be designed to tolerate static and seismically induced total and differential settlements.

In the event of a large earthquake, the lateral earth pressure on a cantilever wall may be higher. We suggest using a dynamic earth pressure increment of 25 psf per foot for cantilever yielding walls with level backfill, assuming the wall will not exceed 6 feet in height. The pressure should be taken as an inverted triangular distribution with the zero-pressure point at the toe of the wall and 25H (psf where H in feet) at the top of the wall, where H is the wall height in feet. The point of application of the dynamic thrust may be taken at 0.6H above the toe of the wall. When combining both static and seismic lateral earth pressures, a decreased factor of safety may be used in design of retaining walls when checking for sliding and overturning stability. The Structural Engineer should determine if a seismic increment of lateral earth pressure is applicable based on wall heights and allowable wall movements.

4.11 Surface Drainage

All pad and roof drainage should be collected and transferred to an approved area in non-erosive drainage devices. Drainage should not be allowed to descend slope in a concentrated manner, pond on the pad or against foundations.

The CBC recommends a minimum 5% slope away from the perpendicular face of the building wall for a minimum horizontal distance of 10 feet (where space permits). We recommend a minimum 5% slope away from the building foundations for a horizontal distance of 3 feet be established for landscape areas immediately adjacent to the building foundations. In addition, we recommend a minimum 2% slope away from the building foundations be established for impervious surfaces immediately adjacent to the building foundations for a minimum horizontal

distance of 10 feet (where space permits). Lastly, we recommend the installation of roof gutters and downspouts which deposit water into a buried drain system be installed instead of discharging surface water into planter areas adjacent to structures.

It is the responsibility of the contractor and ultimately the developer and/or property owner to ensure that drainage devices are installed and maintained in accordance with the approved plans, our recommendations, and the requirements of all applicable municipal agencies. This includes installation and maintenance of all subdrain outlets and surface drainage devices. It is recommended that watering be limited or stopped altogether during the rainy season when little irrigation is required. Over-saturation of the ground can cause major subsurface damage. Maintaining a proper drainage system will minimize the hydro-collapse potential of sub-soils.

Drainage swales should not be constructed within 5 feet of building structure. Irrigation adjacent to buildings should be avoided wherever possible.

As an option, sealed-bottom planter boxes and/or drought resistant vegetation may be used within 5 feet of buildings.

4.12 Trench Backfill

Utility trenches should be backfilled with compacted fill in accordance with Sections 306-12 of the Standard Specifications for Public Works Construction, ("Greenbook"), 2018 Edition.

Utility trenches can be backfilled with on-site soils free of debris, organic and oversized material (maximum size not exceeding 3 inches). However, prior to backfilling utility trenches, pipes should be bedded in and covered with import granular material that has a Sand Equivalent (SE) value greater than 30. Bedding sands may be placed by mechanical compaction (rolling sheepsfoot wheel attached to backhoe) or by jetting. Native soil backfill over the pipe bedding zone should be placed in thin lifts – loose lift thickness not exceeding 8 inches – moisture conditioned as necessary, and mechanically compacted to a minimum of 90% relative compaction (per ASTM D1557) in paved and structural areas. For the vehicular area, the upper 12 inches of the backfill material shall be compacted to 95% based on the recommendations provided in this report.

4.13 Preliminary Pavement Section

Below sections provide preliminary design for pavements based on the results of our R-Value tests and our understanding of the anticipated subgrade materials. The design can be verified during construction with R-Value tests.

4.13.1 Asphalt Concrete Pavement

The pavement structural sections depend on the expected wheel loads, volume of traffic, and subgrade soils. The characteristics of subgrade soils are evaluated by R-value testing. Based on soil classification and the results of the R-value tests, we assumed an R-value on the order of about 35 for silty sand. The R-values should be verified and confirmed with additional tests, if

necessary, at the time of construction. The following pavement sections were calculated based on assumed traffic indices. The project Civil Engineer should determine the traffic index to be used for different areas of the site.

Table 5 – Asphalt Pavement Sections

Traffic Index	Assumed R-Value for Silty Sand = 35	
	Asphalt Thickness (in)	Base Course (CAB) Thickness (in)
4	3.0	4.5
5	3.5	4.5
6	4.5	5.0
7	5.0	6.5

Base course material should consist of Crushed Aggregate Base (CAB) as defined by Section 200-2.2 of the Standard Specifications for Public Works Construction ("Greenbook"). Base course should be compacted to at least 95% of the maximum dry density of that material. Crushed Miscellaneous Base (CMB) may be used only if the supplier can demonstrate that the aggregate does not contain contaminated material.

The subgrade underlying the pavement areas should be overexcavated minimum 18 inches below the proposed base course layer. Prior to fill placement, the subgrade should be scarified to a minimum depth of 8 inches, moisture conditioned about 2% above optimum and compacted to at least 90% of the maximum dry density obtained per ASTM D1557. The upper 12 inches of subgrade should be compacted to 95% relative compaction. The subgrade should be in a "non-pumping" condition at the time of compaction based on proof rolling techniques.

On-site surficial organic soils within landscaped/turf areas should not be used as subgrade materials. Where feasible, the overexcavation should be laterally extended a minimum of 2 feet beyond the perimeters and edges of parking areas, roadways and curbs. Abandoned footings and/or underground concrete structure within the work limit should be removed and the excavation should be backfilled to grade.

4.13.2 Portland Cement Concrete Pavement

Based on soil classification and the results of the R-value tests, we assumed an R-value on the order of about 35 for silty sand. The R-values should be verified and confirmed with additional tests, if necessary, at the time of construction. The following pavement sections were calculated based on assumed traffic load. The project Civil Engineer should determine the traffic index to be used for different areas of the site.

The grading recommendations for vehicular Portland Cement Concrete (PCC) pavement are generally provided in Section 4.1 (and the pertinent subsections) of this report. Base course

material, used in the vehicular pavement sections, should consist of Crushed Aggregate Base (CAB) as defined by Section 200-2.2 of the Standard Specifications for Public Works Construction (Greenbook 2018). The aggregate base course should be compacted to at least 95% of the maximum dry density of that material. Crushed Miscellaneous Base (CMB) may be used only if the supplier can demonstrate that the aggregate does not contain contaminated material.

The recommendations presented herein should be used for design and construction of the slabs and pertaining grading work underlying the vehicular pavement area. A minimum modulus of rupture of 550 pounds per square inch (psi) for concrete has been assumed in designing of the PCC pavement sections; this corresponds to a concrete compressive strength of approximately 4,000 psi at 28 days. A qualified design professional should specify where heavy duty and standard duty slabs are used based on the anticipated type and frequency of traffic. Fire access roads are normally considered heavy duty pavement. The preliminary recommended vehicular PCC pavement sections are provided in Table 6.

Table 6 – Vehicular PCC Pavement Sections

Pavement Type	Portland Cement Concrete Thickness (inches)	Base Course (CAB) Thickness (inches)
Light Duty	6.5	6
Heavy Duty	7.0	6

The above pavement sections can be verified during construction of the projects. These vehicular concrete pavement sections should be increased for bus and very heavy traffic where applicable. The following recommendations should also be incorporated into the design and construction of PCC pavement.

- The pavement sections should be reinforced with No. 3 rebars spaced at 18 inches on centers each way to reduce the potential for shrinkage cracking.
- Joint spacing in feet should not exceed twice the slab thickness in inches, e.g., 12 feet for a 6-inch thick slab. Regardless of slab thickness, joint spacing should not exceed 15 feet.
- Layout joints should form square panels. When this is not practical, rectangular panels can be used if the long dimension is no more than 1.5 times the short one.
- Control joints should have a depth of at least 1/4 the slab thickness, e.g., 1 inch for a 4-inch thick slab.
- Pavement section design assumes that proper maintenance such as sealing and repair of localized distress will be performed on a periodic basis.
- The recommendations for PCC provided in this section should be verified and confirmed if necessary, at the time of construction.
- The upper 12 inches of subgrade should be compacted to at least 95% relative compaction (ASTM D1557).

4.14 General Note for Concrete and Rebar Recommendation

The requirements for concrete and rebar for slabs, concrete flat works, concrete pavements,… presented in this report are preliminary recommendations. The Project Design/Civil/Structural Engineer should provide the final recommendations for structural design of concrete and rebar for foundation system, floor slab, exterior concrete, slab on grade, concrete pavements and, … in accordance with the latest version of the applicable codes and standards.

4.15 Construction Observation and Testing

Excavation and grading during construction should be performed under the observation and testing of the geotechnical consultant at the following stages:

- During evaluation of the reuse of site soils or import soils.
- Upon removal of the upper soils to the proposed excavation/overexcavation bottoms.
- During preparation of the removal bottoms, fill placement, and grading for the proposed improvements.
- During preparation of the footing subgrades.
- When unusual or unexpected geotechnical conditions are encountered.

4.16 Limitations

Atlas should be advised of changes in the project scope so that the recommendations contained in this report can be evaluated with respect to the revised plans. Changes in recommendations will be verified in writing. The findings in this report are valid as of the date of this report. Changes in the condition of the site can occur with the passage of time, whether they are due to natural processes or work on this or adjacent areas. In addition, changes in the standards of practice and government regulations can occur. Thus, the findings in this report may be invalidated wholly or in part by changes beyond our control. This report should not be relied upon after a period of two years without a review by us verifying the suitability of the conclusions and recommendations to site conditions at that time.

In the performance of our professional services, we comply with that level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions and in the same locality. The client recognizes that subsurface conditions may vary from those encountered at the boring locations and that our data, interpretations, and recommendations are based solely on the information obtained by us. We will be responsible for those data, interpretations, and recommendations, but shall not be responsible for interpretations by others of the information developed. Our services consist of professional consultation and observation only, and no warranty of any kind whatsoever, express or implied, is made or intended in connection with the work performed or to be performed by us, or by our proposal for consulting or other services, or by our furnishing of oral or written reports or findings.

5. REFERENCES

American Concrete Institute (ACI), 2019, ACI 318-19, Building Code Requirements for Structural Concrete and Commentary, published June 2019.

Atlas Technical Consultants, 2021, Geotechnical Investigation Report, Physical Education Complex Replacement, Compton Community College District, Compton, CA. Project No. 10-57575PW, Report No. 1, dated July 7, 2021.

Bedrossian, T.L., Roffers, P.D., Hayhurst, C.A. Lancaster, J.T., and Short, W.R., 2012, Geologic Compilation of Quaternary Surficial Deposits in Southern California: California Geological Survey, Special Report 217 (Revised), Plate 8-Long Beach 30' x 60' Quadrangle, scale 1:100,000, dated July 2010.

Bilodeau, W.L., Bilodeau, S.W., Gath, E.M., Oborne, M., and Proctor, R.J., 2007, Geology of Los Angeles, California, United States of America: Environmental & Engineering Geoscience, Vol. XIII, No. 2, May 2007, pp. 99-160.

Boulanger, R.W., and Idriss, I.M., 2006, "Liquefaction susceptibility criteria for silts and clays." Journal of Geotechnical and Geoenvironmental Engineering, ASCE, 132(11), 1413-1426.

California Department of Water Resources (DWR), 1961, Ground water geology, Appendix A of Planned utilization of the ground water basins of the coastal plain of Los Angeles County: California Department of Water Resources Bull. 104, 181 p.

California Division of Mines and Geology (CDMG), 1973, Urban Geology Master Plan for California, Bulletin 198, p. 43-48.

California Emergency Management Agency (CEMA), California Geological Survey and University of Southern California, 2009, Tsunami Inundation Map for Emergency Planning, Long Beach Quadrangle: from Tsunami Inundation Maps website; http://www.conservation.ca.gov/cgs/geologic_hazards/Tsunami/Inundation_Maps/LosAngeles/Documents/Tsunami_Inundation_LongBeach_Quad_LosAngeles.pdf.

California Emergency Management Agency (CEMA), California Geological Survey and University of Southern California, 2009, Tsunami Inundation Map for Emergency Planning, Venice Quadrangle: from Tsunami Inundation Maps website; http://www.conservation.ca.gov/cgs/geologic_hazards/Tsunami/Inundation_Maps/LosAngeles/Documents/Tsunami_Inundation_Venice_Quad_LosAngeles.pdf.

California Geological Survey (CGS), 1998, Seismic Hazard Zone Report for the South Gate 7.5-Minute Quadrangle, Los Angeles County, California: Department of Conservation (formerly Division of Mines and Geology), Seismic Hazard Zone Report 034.

California Geological Survey (CGS), 2005, Earthquake Zones of Required Investigation South Gate 7.5-Minute Quadrangle, Los Angeles County, California, March 25, 1999.

California Geologic Survey (CGS), 2007, Fault-Rupture Hazard Zones in California: Special Publication 42.

California Geologic Survey (CGS), 2010, Geologic Compilation of Quaternary Surficial Deposits In Southern California Onshore Portion of the Long Beach 30' X 60' Quadrangle; CGS Special Report 217, Plate 8 (July 2010).

California Geologic Survey (CGS), 2013, Checklist for the Review of Engineering Geology and Seismology Reports for California Public Schools, Hospitals, and Essential Services Buildings, October 2013: CGS Note 48.

California Geological Survey (CGS), 2016, Earthquake Zones of Required Investigation, Inglewood 7.5-Minute Quadrangle, Los Angeles County, California, March 25, 1999.

California Geological Survey (CGS), 2016, Earthquake Zones of Required Investigation, South Gate 7.5-Minute Quadrangle, Los Angeles County, California, March 25, 1999.

California Geological Survey (CGS), 2016, Geologic Map of the Long Beach 30’ x 60’ quadrangle, California: A digital database: California Geological Survey Preliminary Geologic Map, scale 1:100,000.

Cao, T., Bryant, W.A., Rowshandel, B., Branum, D., and Wills, C.J., 2003, The revised 2002 California probabilistic seismic hazard maps, June 2003: California Geologic Survey, 12 p., Appendix A.

County of Los Angeles, 2013, Manual for Preparation Geotechnical Reports, July 1, 2013.

Crouch, J.K. and Suppe, J., 1993, Late Cenozoic tectonic evolution of the Los Angeles basin and inner California borderland: A model for core complex-like crustal extension: Geological Society America Bulletin, Vol. 105, pp. 1415–1434.

Crowell, J.C., 1976, Implications of crustal stretching and shortening of coastal Ventura Basin, California. In Howell, D.G. (Editor), Aspects of the Geologic History of the California Continental Borderland: American Association of Petroleum Geologists, Pacific Section, Miscellaneous Publication 24, pp. 365–382.

Das, Braja M., 1983, Advanced Soil Mechanics, John Benjamins Publishing Co., January 1983.

Das, Braja M., 2000, Principles of Foundation Engineering.

Federal Emergency Management Agency (FEMA), 2008, Flood Insurance Rate Map (FIRM), Panel 1815 of 2350, Map Number 06037C1815F, Effective September 26, 2008.

Gastil, G., Morgan, G. and Krummenacher, D., 1981, “The tectonic history of peninsular California and adjacent Mexico”, In Ernst, W.G. (Editor), “The Geotectonic Development of California”, Rubey Vol. I: Prentice-Hall, Inc., Englewood Cliffs, NJ, pp. 285–306.

Hart, E.W. and Bryant, W.A., 1999, Fault Rupture Hazard Zones in California, Alquist- Priolo Earthquake Fault Zoning Act with Index to Earthquake Maps, California Division of Mines and Geology, Special Publication 42.

Heider Inspection Group, 2015, Geotechnical Engineering and Geologic Hazards Study Report, Proposed Instructional Building 1, El Camino College Compton Center, 1111 E. Artesia Boulevard, Compton, California 90221, Heider Inspection Group Project # HE15281-2, dated December 21, 2015.

Hsai-Yang Fang, 1997, Foundation Engineering Handbook, Second Edition.

Ingersoll, R.V. and Rumelhart, P.E., 1999, Three-stage evolution of the Los Angeles basin, Southern California: Geology, Vol. 27, pp. 593–596.

International Code Council (ICC), 2019, California Building Code, California Code of Regulations, Title 24, Part 2, Volume 2 of 2, 2019 Edition.

Jennings, C.W. and Bryant, W.A., 2010, Fault Activity Map of California, Scale 1:750,000, California Geological Survey, Geologic Data Map No. 6.

Legg, M.R., 1991, Developments in Understanding the Tectonic Evolution of the California Continental Borderland. In Osborne, R.H. (Editor), From Shoreline to Abyss: Contributions in Marine Geology in Honor of Francis Parker Shepard: SEPM (Society for Sedimentary Geology) Special Publication 46, pp. 291–312.

Legg, M.R., Luyendyk, B.P., Mammerickx, J. and Tyce, R.C., 1989, Sea Beam Survey of an Active Strike-Slip Fault: The San Clemente Fault in the California Continental Borderland: Journal of Geophysical Research, v. 94, pp. 1727-1744.

Martin, G.R. and Lew, M., ed., 1999, “Recommended Procedures for Implementation of DMG Special Publication 117, Guidelines for Analyzing and Mitigating Liquefaction Hazards in California,” Southern California Earthquake Center, dated March 1999.

Naval Facilities Engineering Command (NAVFAC), 1986, Foundation and Earth Structures, Design Manual 7.02.

NCEER and 1998 NCEER/NSF Workshops on Evaluation of Liquefaction Resistance of Soils,” Journal of Geotechnical and Geoenvironmental Engineering, Vol. 127(10), pp. 817-833.

Office of State Wide Health Planning and Development (OSHPD) Seismic Design Maps, U.S. Seismic Design Maps (seismicmaps.org).

Schoellhamer, J.E., Woodford, A.O., Vedder, J.G., Yerkes, R.F. and Kinney, D.M., 1981, Geology of the Northern Santa Ana Mountains, California: U.S. Geological Survey Professional Paper 420-D, U.S. Geological Survey, Denver, CO, 109 p.

Seed, H.B. and Whitman, R.V., 1970, Design of earth retaining structures for dynamic loads, Proc. ASCE Specialty Conference on Lateral Stresses in the Ground and Design of Earth Retaining Structures, pp. 103-147.

Shaw, J.H., Plesch, A., Dolan, J.F., Pratt, T.L. and Fiore, P., 2002, Puente Hills Blind-Thrust System, Los Angeles, California: Bulletin of the Seismological Society of America, vol. 92, no. 8, pp. 2946-2960.

Soils and Foundations, U.S. Department of Transportation, Federal Highway Administration, Publication No. FHWA HI-88-009, Revised July 1993.

Tokimatsu, K. and Seed, H.B., 1987, “Evaluation of Settlements in Sands Due to Earthquake Shaking,” Journal of the Geotechnical Engineering, American Society of Civil Engineers, Vol. 113, No. 8, pp. 861-878.

USGC, Unified Hazard Tool, Unified Hazard Tool (usgs.gov).

Wright, T.L., 1991, Structural geology and tectonic evolution of the Los Angeles basin, California; In Biddle, K.T. (Editor), Active Margin Basins: American Association of Petroleum Geologists Memoir 52, American Association of Petroleum Geologists, Tulsa, OK, pp. 35-134.

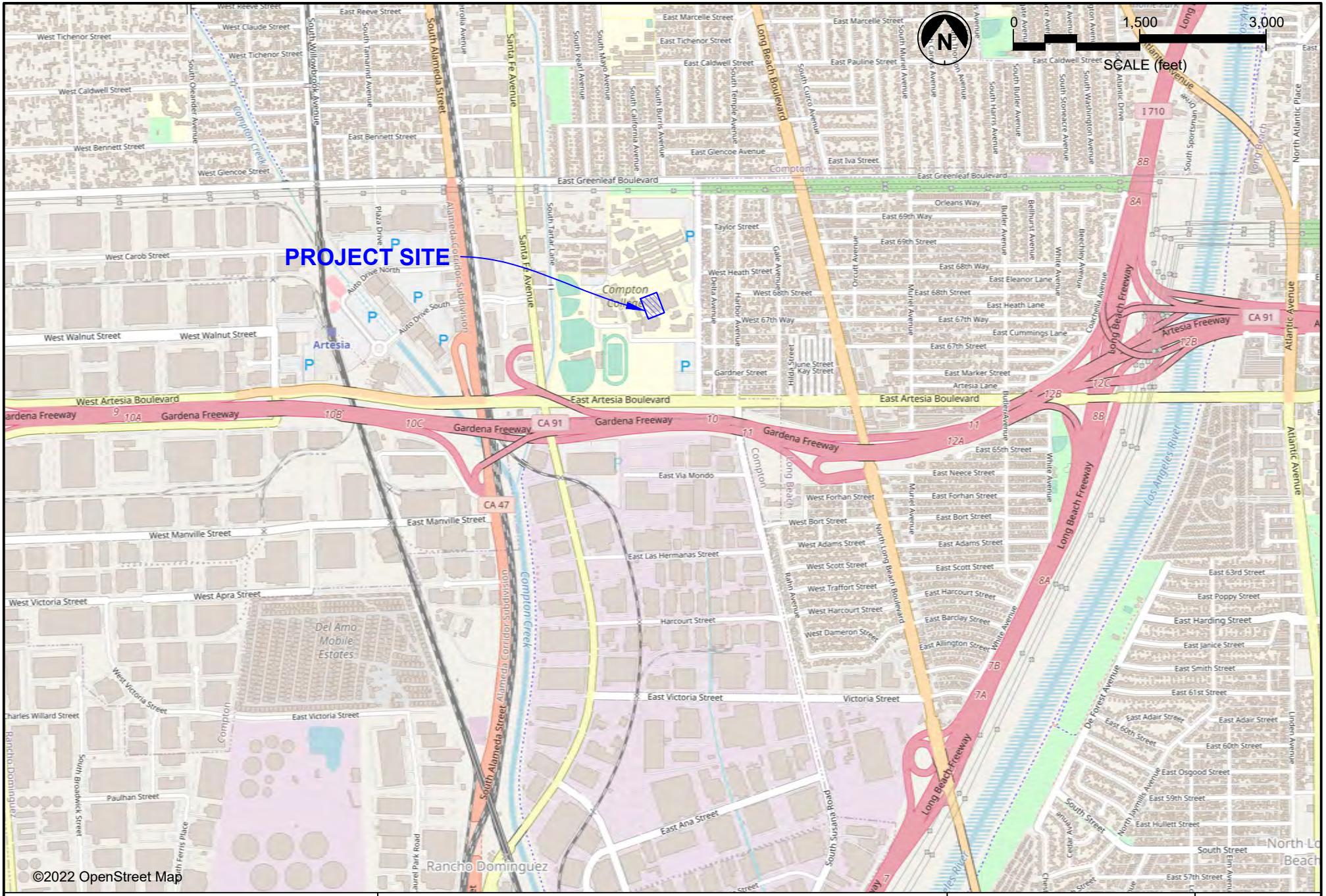
Yoshimi, Y., Tokimatsu, K. and Hosaka, Y., 1989, “Evaluation of Liquefaction Resistance of Clean Sands Based on High-Quality Undisturbed Samples”, Soils and Foundation, 29(1), 3-104. Tokyo, Japan.

Youd, T.L., and Idriss, I.M. (Editors), 1997, Proceedings of the NCEER Workshop on Evaluation of Liquefaction Resistance of Soils, National Center for Earthquake Engineering Research, State University of New York at Buffalo, New York.

Youd, T.L. et al., 2001, “Liquefaction Resistance of Soils: Summary Report from the 1996.

Yerkes, R.F., McCulloch, T.H., Schoellhamer, J.E. and Vedder, J.G., 1965, Geology of the Los Angeles Basin, California—An introduction: U.S. Geological Survey Professional Paper 420-A, U.S. Geological Survey, Denver, CO, 57 p.

APPENDIX I
FIGURES



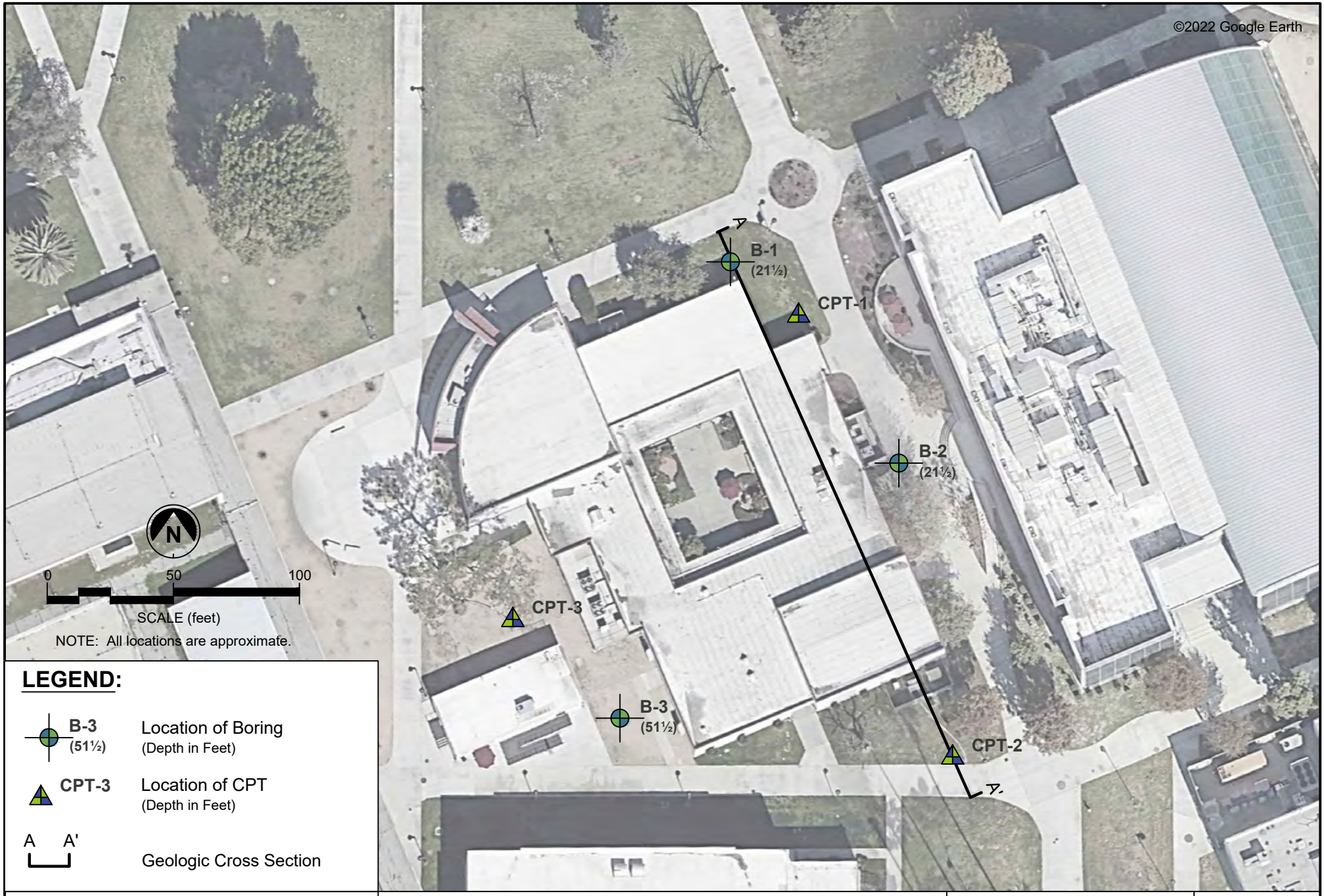
ATLAS

SITE VICINITY MAP

Compton Community College Visual and Performing Arts
Compton , California

Date: March, 2022
By: CGI
Job No.: 10-61187PW

Figure:
I-1



LEGEND:

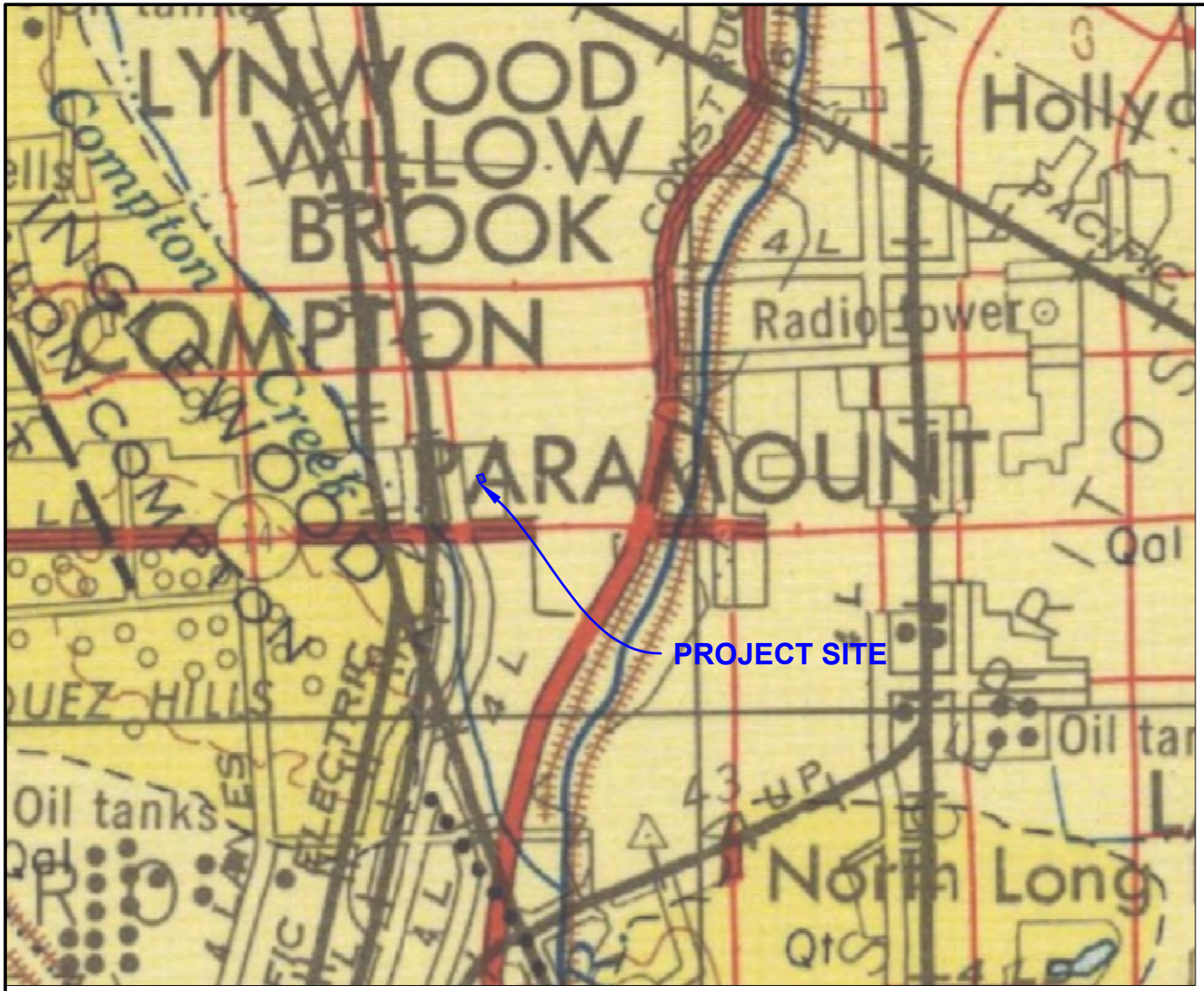
- B-3 (51½) — Location of Boring (Depth in Feet)
- CPT-3 — Location of CPT (Depth in Feet)
- A A' — Geologic Cross Section

ATLAS

SUBSURFACE EXPLORATION MAP
Compton Community College Visual and Performing Arts
Compton , California

Date: March, 2022
By: CGI
Job No.: 10-61187PW

Figure:
I-2



EXPLANATION:

Qal	Alluvium
Qt	Quaternary nonmarine terrace deposits

N

0 1 2

SCALE (Miles)

NOTE: All locations are approximate.

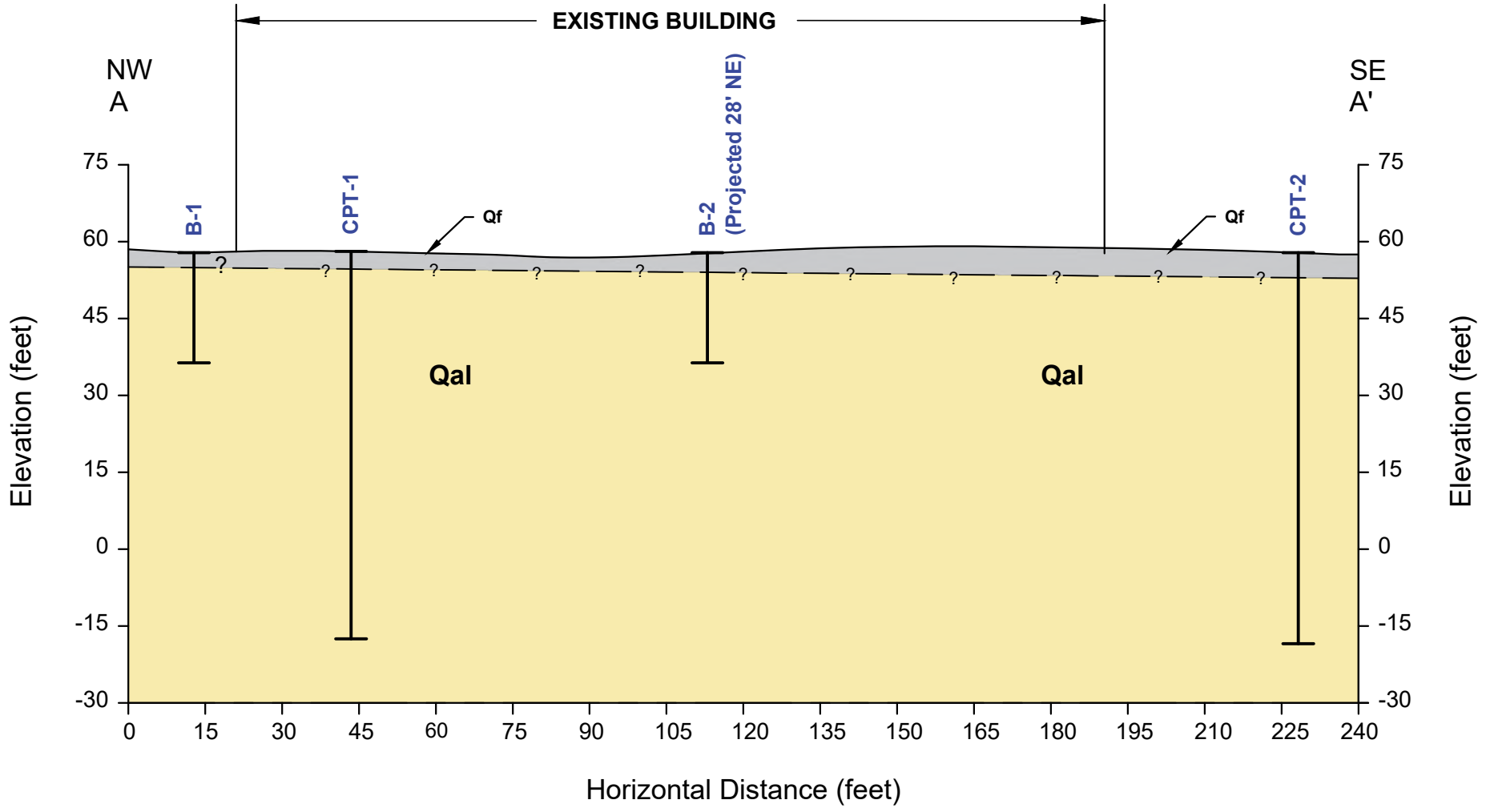
Reference:
Jennings, C.W., 1962, Geologic map of California : Long Beach sheet, California Division of Mines and Geology, series unknown, 1:250,000.

ATLAS

REGIONAL GEOLOGY MAP
Compton Community College Visual and Performing Arts
Compton , California

Date: March, 2022
By: CGI
Job No.: 10-61187PW

Figure:
I-3



LEGEND:

B-2 — Location of Boring

—?— Geologic Contact, Queried Where Uncertain

Qf — Fill

Qal — Alluvium

0 30 60

SCALE (feet)

SCALE
1" = 30'

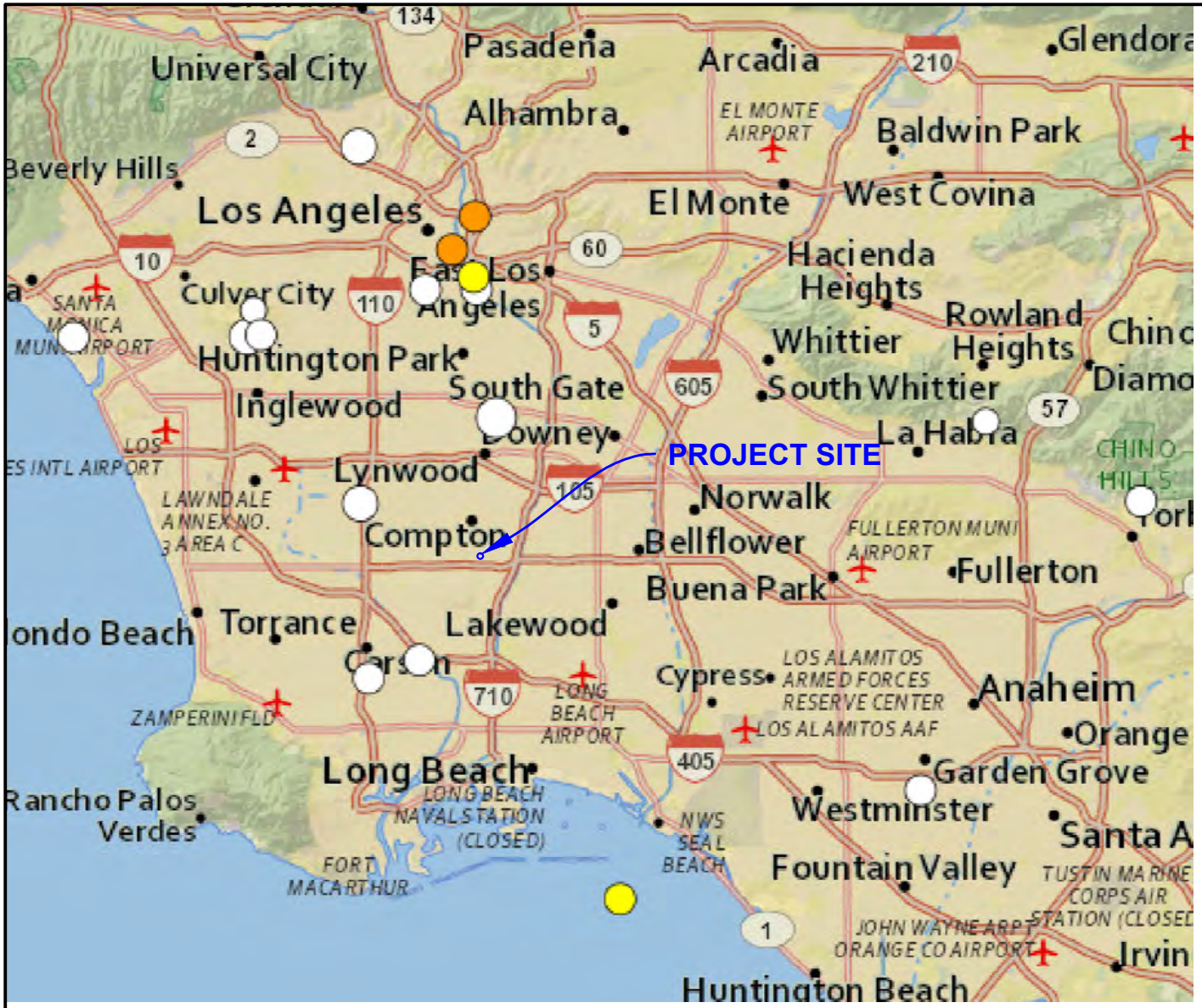
NOTE: All locations and depths are approximate.

ATLAS

GEOLOGIC CROSS-SECTION A-A'
Compton Community College Visual and Performing Arts
Compton , California

Date: March, 2022
By: CGI
Job No.: 10-61187PW

Figure:
I-4



EXPLANATION:

Magnitude

0 — 7+

Age (past)

Hour | Day | Week | Month | Older

Seismic Event

Earthquake | Non-Earthquake

N

0 6 12

SCALE (Miles)

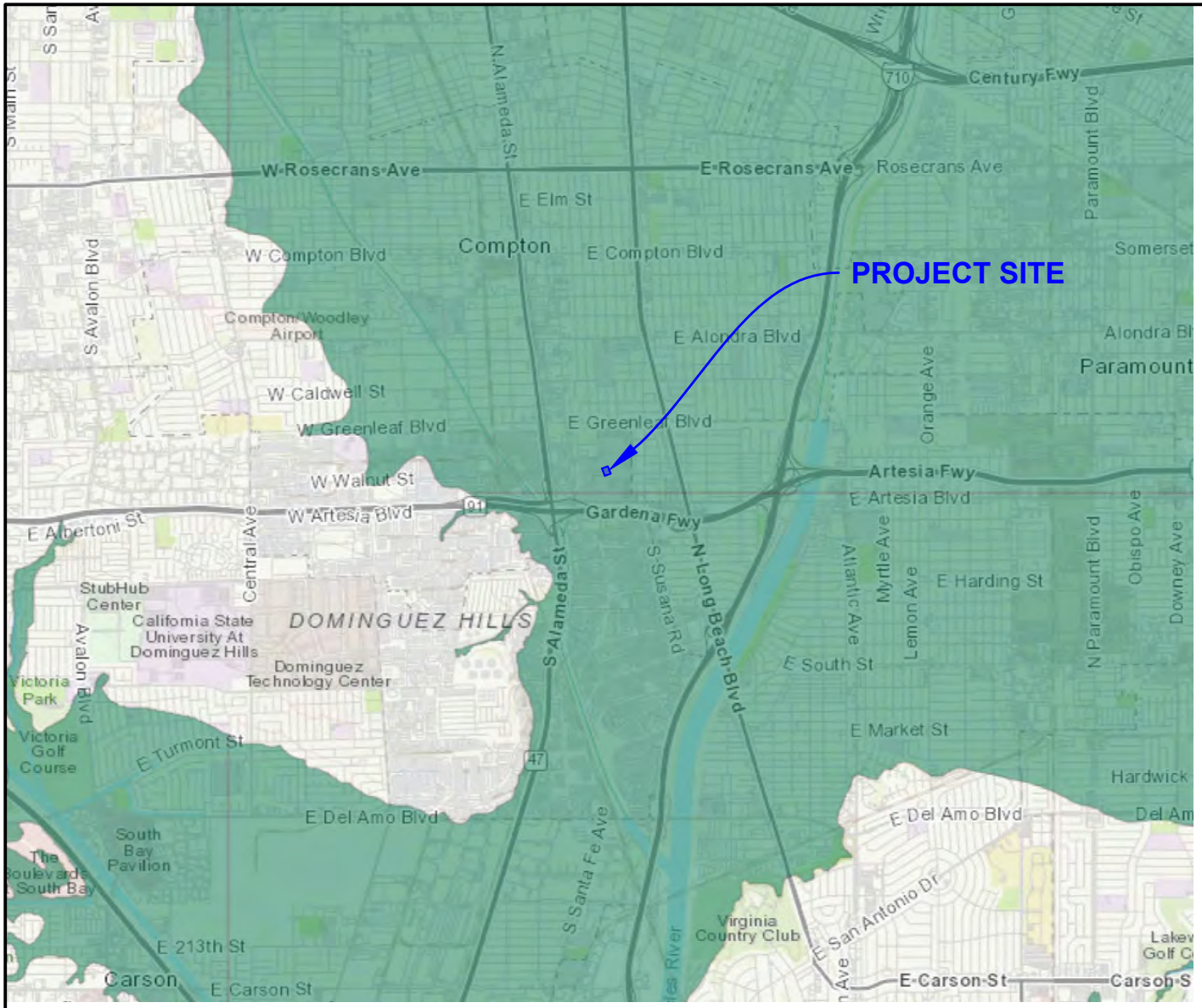
Reference:
USGS, Latest Earthquakes
https://earthquake.usgs.gov/earthquakes/map/

ATLAS

REGIONAL SEISMICITY MAP
Compton Community College Visual and Performing Arts
Compton , California

Date: March, 2022
By: CGI
Job No.: 10-61187PW

Figure:
I-5



EXPLANATION:

Liquefaction Zone

N

0 1 2

SCALE (Miles)

Reference:
CGS Library, Earthquake Zones of Required Investigation,
https://maps.conservation.ca.gov/cgs/EQZApp/App; Accessed December, 2021

ATLAS

LIQUEFACTION SUSCEPTIBILITY MAP
Compton Community College Visual and Performing Arts
Compton , California

Date: March, 2022
By: CGI
Job No.: 10-61187PW

Figure:
I-6

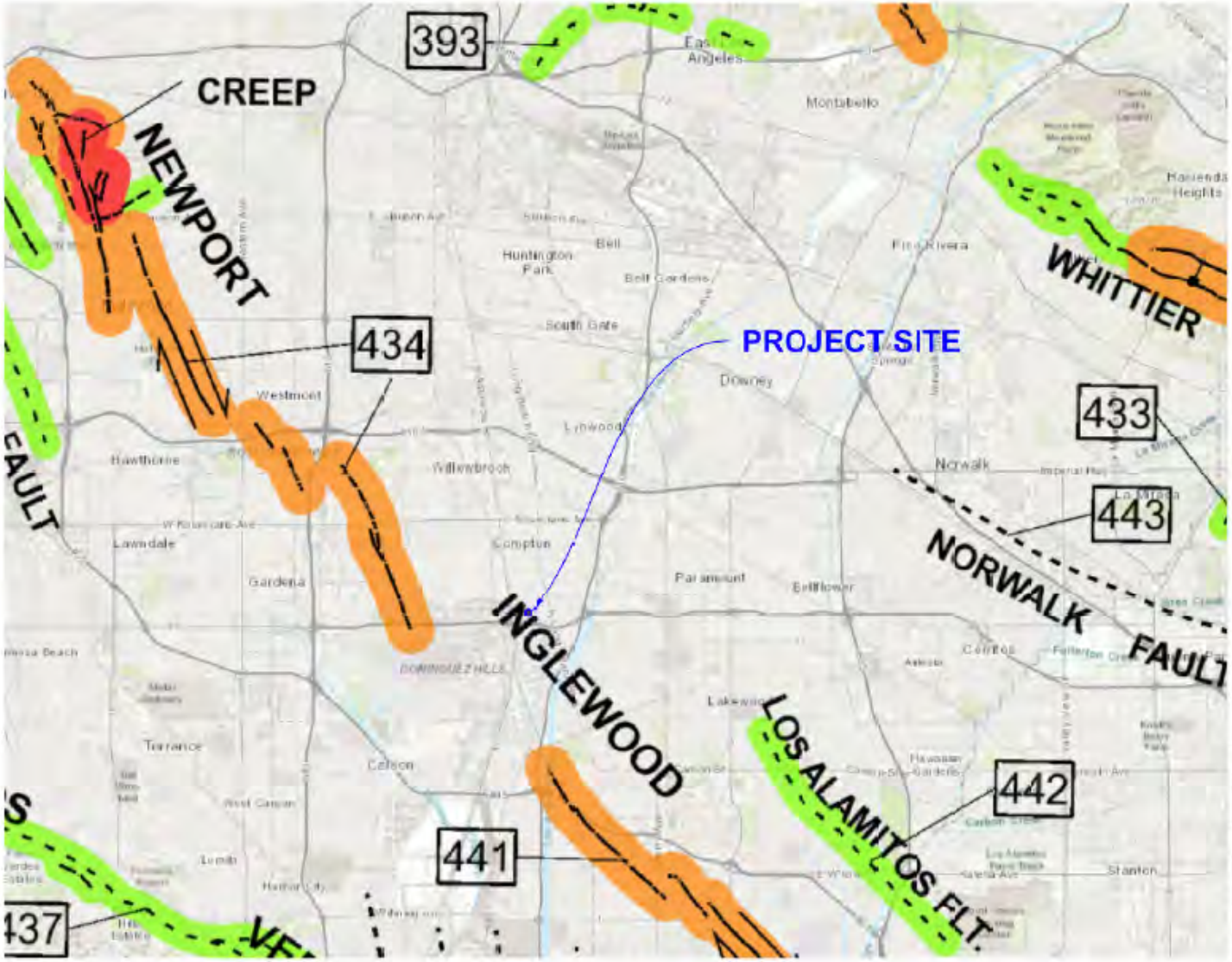
Plate 1.2 Historically Highest Ground Water Contours and Borehole Log Data Locations, South Gate Quadrangle,

● Borehole Site — 30 — Depth to ground water in feet

X Site of historical earthquake-generated liquefaction. See "Areas of Past Liquefaction" discussion in text.

ONE MILE

ATLAS	**Ground Water Contours** Compton Community College Visual and Performing Arts Compton, California	Date: March 2022 By: LM Job No: 10-61187PW	Figure : I-7



EXPLANATION:

Fault along which historic (last 200 years) displacement has occurred

Holocene fault displacement (during past 11,700 years) without historic record.

Late Quaternary fault displacement (during past 700,000 years).

Quaternary fault (age undifferentiated).

Pre-Quaternary fault (older than 1.6 million years) or fault without recognized Quaternary displacement.

Low angle fault (barbs on upper plate).

393	Unnamed fault - Unnamed fault west of Monterey Park (concealed)
433	Faults in W. Coyote Hills - Faults in W. Coyote Hills (certain)
434	Avalon-Compton Fault - Newport-Inglewooc-Rose Canyon fault zone
441	Cherry-Hill Fault - Newport-Inglewooc-Rose Canyon fault zone (concealed)
442	Los Alamitos Fault - Los Alamitos Fault fault zone (concealed)

N

0 15,000 30,000

SCALE (feet)

Reference:
Jennings, C.W., Bryant W.A., Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, Fault Activity Map of California (2010), maps.conservation.ca.gov/cgs/fam; Accessed January, 2021

ATLAS

REGIONAL FAULT MAP
Compton Community College Visual and Performing Arts
Compton , California

Date: March ,2022
By: LM
Job No.: 10-61187PW

Figure:
I-8

APPENDIX II
FIELD EXPLORATION

The field investigation was performed on January 5, 2022 (B-1, B-2 and B-3) and January 13, 2022 (CPT-1, CPT-2 and CPT-3) under the supervision of an Atlas representative. A staff engineer performed a site reconnaissance to identify exploratory locations. The exploratory boring locations for the project were marked in the field by our staff engineer from existing site features. Atlas notified Underground Service Alert (USA) to identify the locations of subsurface utilities that may potentially conflict with boring locations. Geophysics test were performed on site to find the approximate location of the underground utilities.

Subsurface exploration included drilling and sampling of three (3) borings to depths ranging from about 20 feet to 50 feet and three (3) CPT borings to depth of about 75 feet below ground surface within the project improvements. All the soil investigation borings and percolation borings were drilled with the diameter of 8 inches. The borings were drilled using a CME - 85 drilling rig (hollow stem auger) or hand auger. Relatively undisturbed soils samples and standard penetration tests samples were collected at regular intervals. The relatively undisturbed samples were obtained using California samplers. Standard penetration tests were also performed in general accordance with ASTM D1586. The sampler was driven 18 inches into the subsurface soils using a 140 pound hammer with a 30 inch drop. The number of blows (blow count) to drive the sampler into the subsurface soils were recorded at 6-inch intervals, and the blow counts required to drive the sampler the final 12 inches are recorded on the boring logs. The borings were backfilled with appropriate soils and materials. The boring records are presented in this Appendix.

LOG OF TEST BORING

ATLAS PROJECT NAME	ATLAS PROJECT NUMBER	B-1
Compton College - Visual and Perfoming Arts	10-61187PW	

SITE	START	END	SHEET NO.
Compton, California	1/5/22	1/5/22	1 of 1

DRILLING COMPANY	DRILL METHOD	LOGGED BY	REVIEWED BY
Baja Exploration	Hollow Stem Auger	LM	MJ

DRILLING EQUIPMENT	BORING DIA. (in.)	TOTAL DEPTH (ft)	GROUND ELEV. (ft)
CME-85	8	21.5	58

DEPTH/ELEV. GROUND WATER (ft)
- ▽ AT TIME OF DRILLING ---
- ▼ AT END OF DRILLING ---
- ▼ AFTER DRILLING ---

SAMPLING METHOD: 140-lb Hammer, 30-in Drop

NOTES:

ELEVATION (ft)	DEPTH (ft)	BULK SAMPLE	DRIVE SAMPLE	BLOWS PER FOOT	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION	LAB TESTS
									5.5 inches of concrete over no base	MAX
									FILL (Qf):**SILTY SAND (SM), loose, light brown, slightly moist, fine to medium grained**	
55										
	5		CAL	18		5.5	94.6		**YOUNG ALLUVIAL FAN DEPOSITS (Qyf):** SANDY SILT (ML) to SILTY SAND (SM), medium dense, light brown to tan, slightly moist, fine to medium grained	MD, DS
50									thin layer of Clay (CL)	
	10		SPT	12					SILTY SAND (SM) to SANDY SILT (ML), medium dense, light brown, slightly moist, fine to medium grained, micaceous	EI, COR
45									thin layer of clayey silt	
	15		CAL	27					SILTY SAND (ML), loose, light gray, slightly moist, fine tomedium garined.	CON, DS
40									thin layer of Clay (CL)	
	20		SPT	7		47.4			SANDY SILT (SM), medium dense, brown, slightly moist, fine grained, high plastic silt layers of Silt of high plasticity, elastic Silt (MH)	WA (89.7%) AL MOISTURE
									BORING TERMINATED AT 21.5 FEET	

ATLAS

THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED.

Figure

II-1

LOG OF TEST BORING

ATLAS PROJECT NAME	ATLAS PROJECT NUMBER	B-2
Compton College - Visual and Perfoming Arts	10-61187PW	

SITE	START	END	SHEET NO.
Compton, California	1/5/22	1/5/22	1 of 1

DRILLING COMPANY	DRILL METHOD	LOGGED BY	REVIEWED BY
Baja Exploration	Hollow Stem Auger	LM	MJ

DRILLING EQUIPMENT	BORING DIA. (in.)	TOTAL DEPTH (ft)	GROUND ELEV. (ft)
CME-85	8	21.5	58

DEPTH/ELEV. GROUND WATER (ft)
- ▽ AT TIME OF DRILLING ---
- ▼ AT END OF DRILLING ---
- ▼ AFTER DRILLING ---

SAMPLING METHOD: 140-lb Hammer, 30-in Drop

NOTES:

ELEVATION (ft)	DEPTH (ft)	BULK SAMPLE	DRIVE SAMPLE	BLOWS PER FOOT	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION	LAB TESTS
									5" of Concrete over 5" of Base	
55									FILL (Qf):**SILTY SAND (SM) to SANDY SILT (ML), loose, dark brown, slightly moist, fine to medium garined, micaceous**	MAX
	5		SPT	8					**YOUNG ALLUVIAL FAN DEPOSITS (Qyf):**SANDY SILT (ML), loose, dark brown, slightly moist, fine tomedium grained, micaceous	EI
50									layer of silty clay	
	10		CAL	32					medium dense	CON WA (65.0%)
45										
	15		SPT	11					medium dense	
40										
	20		CAL	24		23.8	104.4		FAT CLAY (CH), very stiff, gray, moist, fine grained, trace of sand.	MD AL WA (94.7%)

BORING TERMINATED AT 21.5 FEET

ATLAS

THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED.

Figure

II-2

LOG OF TEST BORING

ATLAS PROJECT NAME	ATLAS PROJECT NUMBER	B-3
Compton College - Visual and Perfoming Arts	10-61187PW	

SITE	START	END	SHEET NO.
Compton, California	1/5/22	1/5/22	1 of 3

DRILLING COMPANY	DRILL METHOD	LOGGED BY	REVIEWED BY
Baja Exploration	Hollow Stem Auger	LM	MJ

DRILLING EQUIPMENT	BORING DIA. (in.)	TOTAL DEPTH (ft)	GROUND ELEV. (ft)
CME-85	8	51.5	58

DEPTH/ELEV. GROUND WATER (ft)
- ▽ AT TIME OF DRILLING ---
- ▼ AT END OF DRILLING ---
- ▼ AFTER DRILLING ---

SAMPLING METHOD: 140-lb Hammer, 30-in Drop

NOTES:

ELEVATION (ft)	DEPTH (ft)	BULK SAMPLE	DRIVE SAMPLE	BLOWS PER FOOT	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION	LAB TESTS
									2 to 3" of Decompose Granite	
									FILL (Qf): **SILTY SAND (SM), loose, dark brown, moist, fine to medium grained**	R-VALUE
55										
	5		SPT	7					**YOUNG ALLUVIAL FAN DEPOSITS (Qyf):** :SANDY SILT (ML), loose, brown, moist, fine to medium grained	COR
50									thin layer of silty clay	
	10		CAL	24		20.3	119.5		medium dense	MD, DS
45									silt lessen	
	15		SPT	11					FINE SAND with trace of SILT (SP-SM), medium dense, light brown, slightly moist, fine to medium grained	
40									thin layer of silty clay	

ATLAS

THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED.

Figure

II-3a

LOG OF TEST BORING

ATLAS PROJECT NAME	ATLAS PROJECT NUMBER	B-3
Compton College - Visual and Perfoming Arts	10-61187PW	

SITE	START	END	SHEET NO.
Compton, California	1/5/22	1/5/22	2 of 3

DRILLING COMPANY	DRILL METHOD	LOGGED BY	REVIEWED BY
Baja Exploration	Hollow Stem Auger	LM	MJ

DRILLING EQUIPMENT	BORING DIA. (in.)	TOTAL DEPTH (ft)	GROUND ELEV. (ft)	DEPTH/ELEV. GROUND WATER (ft)
CME-85	8	51.5	58	▽ AT TIME OF DRILLING ---
				▼ AT END OF DRILLING ---
				▼ AFTER DRILLING ---

SAMPLING METHOD	NOTES
140-lb Hammer, 30-in Drop	

ELEVATION (ft)	DEPTH (ft)	BULK SAMPLE	DRIVE SAMPLE	BLOWS PER FOOT	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION	LAB TESTS
			CAL	28		37.9	80.9		CLAYEY SILT (ML), very stiff, dark brown, moist, fine grained, micaceous	AL, MD WA (95.3%)
35										
	25		SPT	12		21.5			SANDY SILT (ML), medium dense, grey, moist, fine grained, trace of clay, micaceous	AL, MOISTURE WA (65.4%)
									thin layer of silty clay	
30										
	30		CAL	16		18.6	110.5		SILTY CLAY (CL) / CLAYEY SILT (ML), stiff, gray, moist, fine grained, some fine sand	AL, MD WA (87.3%)
25									thin layer of sandy silt	
	35		SPT	20					SANDY SILT (ML), medium dense, gray, moist, fine grained,	AL, MD WA (72.6%)
20									with layers of Silty SAND (SM)	

ATLAS

THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED.

Figure

II-3b

LOG OF TEST BORING

ATLAS PROJECT NAME	ATLAS PROJECT NUMBER	B-3
Compton College - Visual and Perfoming Arts	10-61187PW	

SITE	START	END	SHEET NO.
Compton, California	1/5/22	1/5/22	3 of 3

DRILLING COMPANY	DRILL METHOD	LOGGED BY	REVIEWED BY
Baja Exploration	Hollow Stem Auger	LM	MJ

DRILLING EQUIPMENT	BORING DIA. (in.)	TOTAL DEPTH (ft)	GROUND ELEV. (ft)
CME-85	8	51.5	58

DEPTH/ELEV. GROUND WATER (ft)
- ▽ AT TIME OF DRILLING ---
- ▼ AT END OF DRILLING ---
- ▼ AFTER DRILLING ---

SAMPLING METHOD: 140-lb Hammer, 30-in Drop

NOTES:

ELEVATION (ft)	DEPTH (ft)	BULK SAMPLE	DRIVE SAMPLE	BLOWS PER FOOT	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION	LAB TESTS
			CAL	51		12.7	112.4		SANDY SILT (ML), medium dense, gray, moist, fine grained, *(continued)* dense, some clay	AL, MD WA (45.2%)
15									with layers of Silty SAND (SM) thin layer of silty clay	
	45								thin layer of Sand (SP)	
			SPT	31		16.5			dense, trace of clay	MOISTURE
10									thin layer of hard silty clay	
	50								dense	
			CAL	50		31.3	91.9			AL, MD WA (89.4%)
									BORING TERMINATED AT 51.5 FEET	
5										
	55									
0										

ATLAS

THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED.

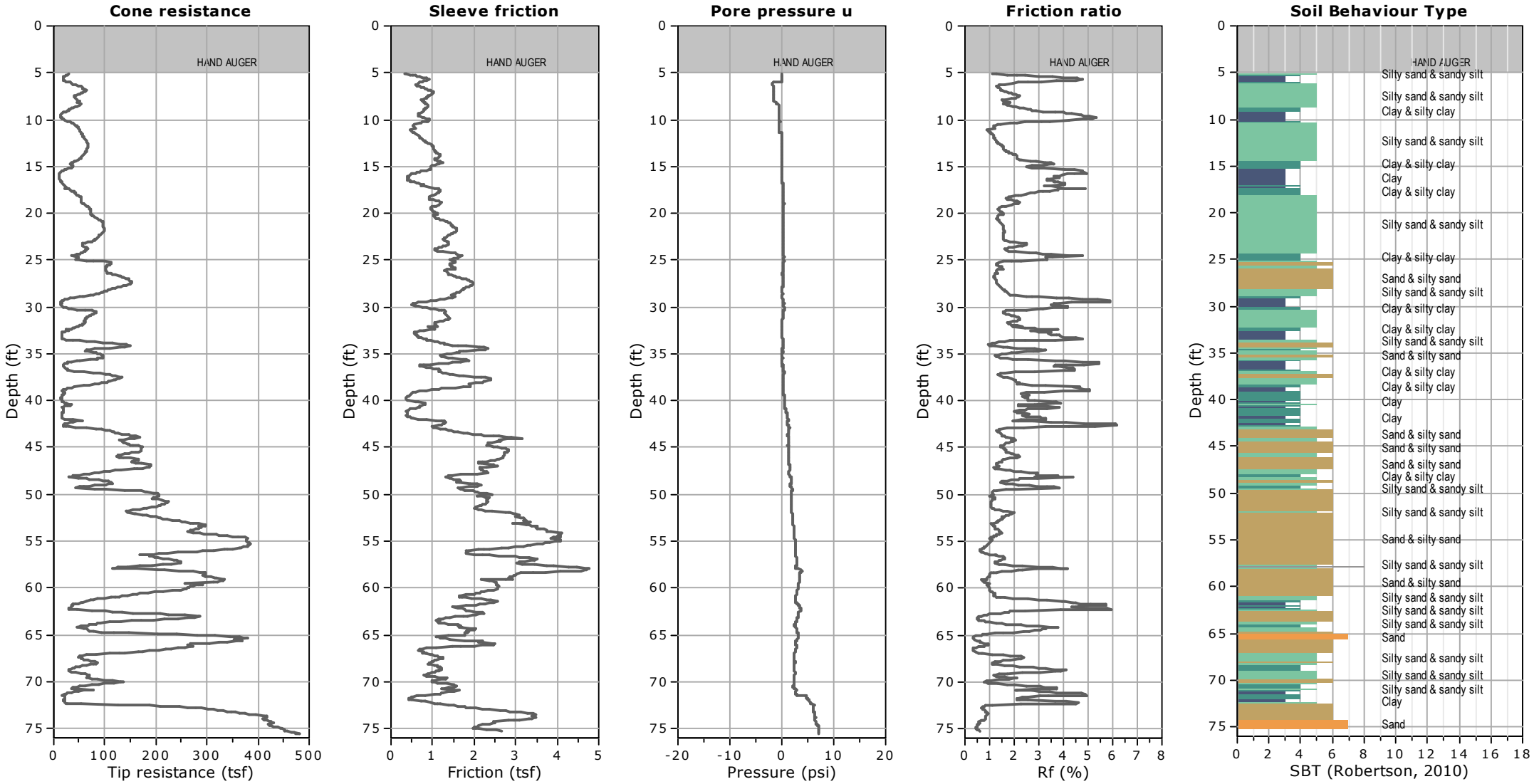
Figure

II-3c

Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

Project: **ATLAS / Compton Community District College**
Location: **Compton, CA**

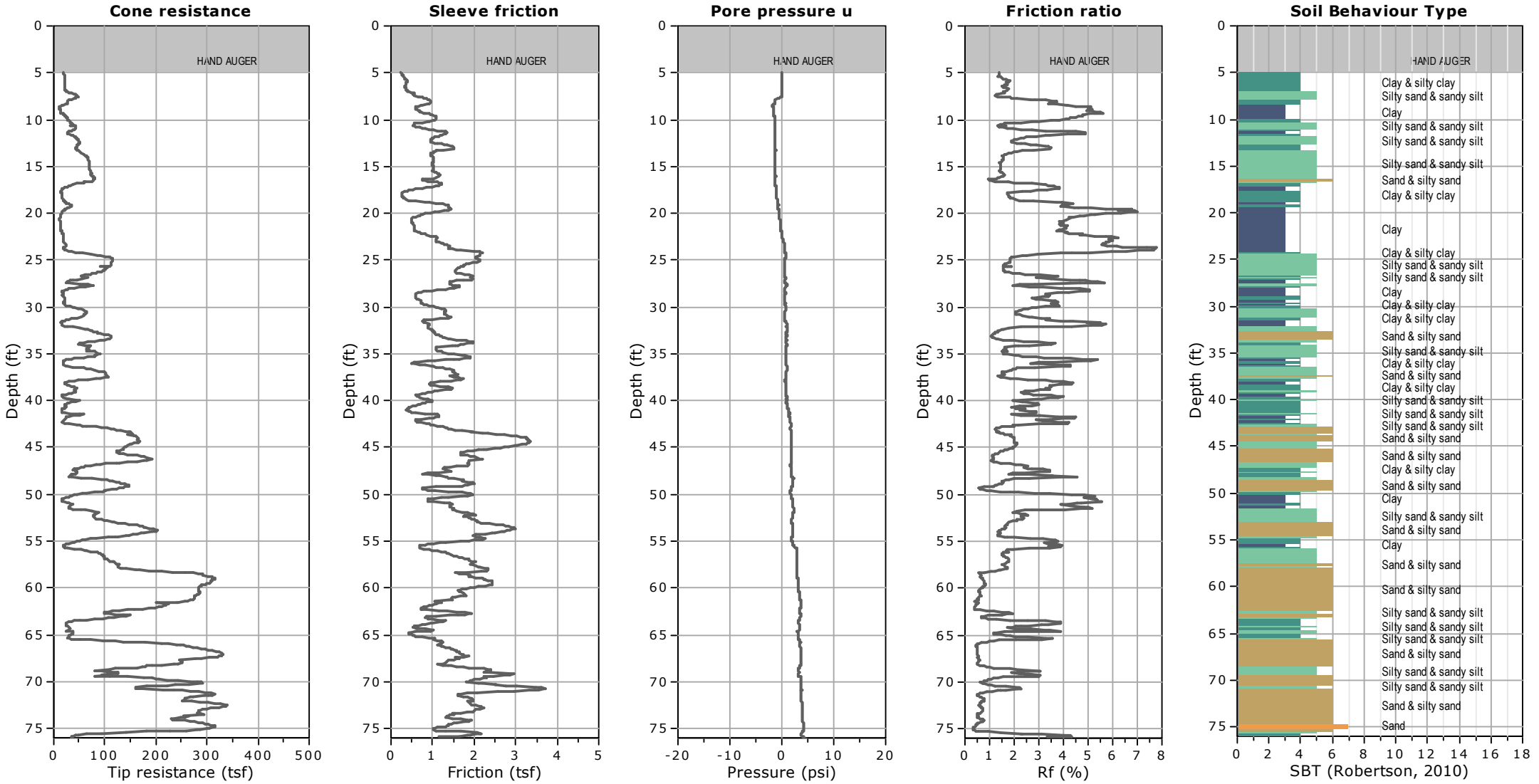
CPT-1
Total depth: 75.61 ft, Date: 1/13/2022



Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

Project: **ATLAS / Compton Community District College**
Location: **Compton, CA**

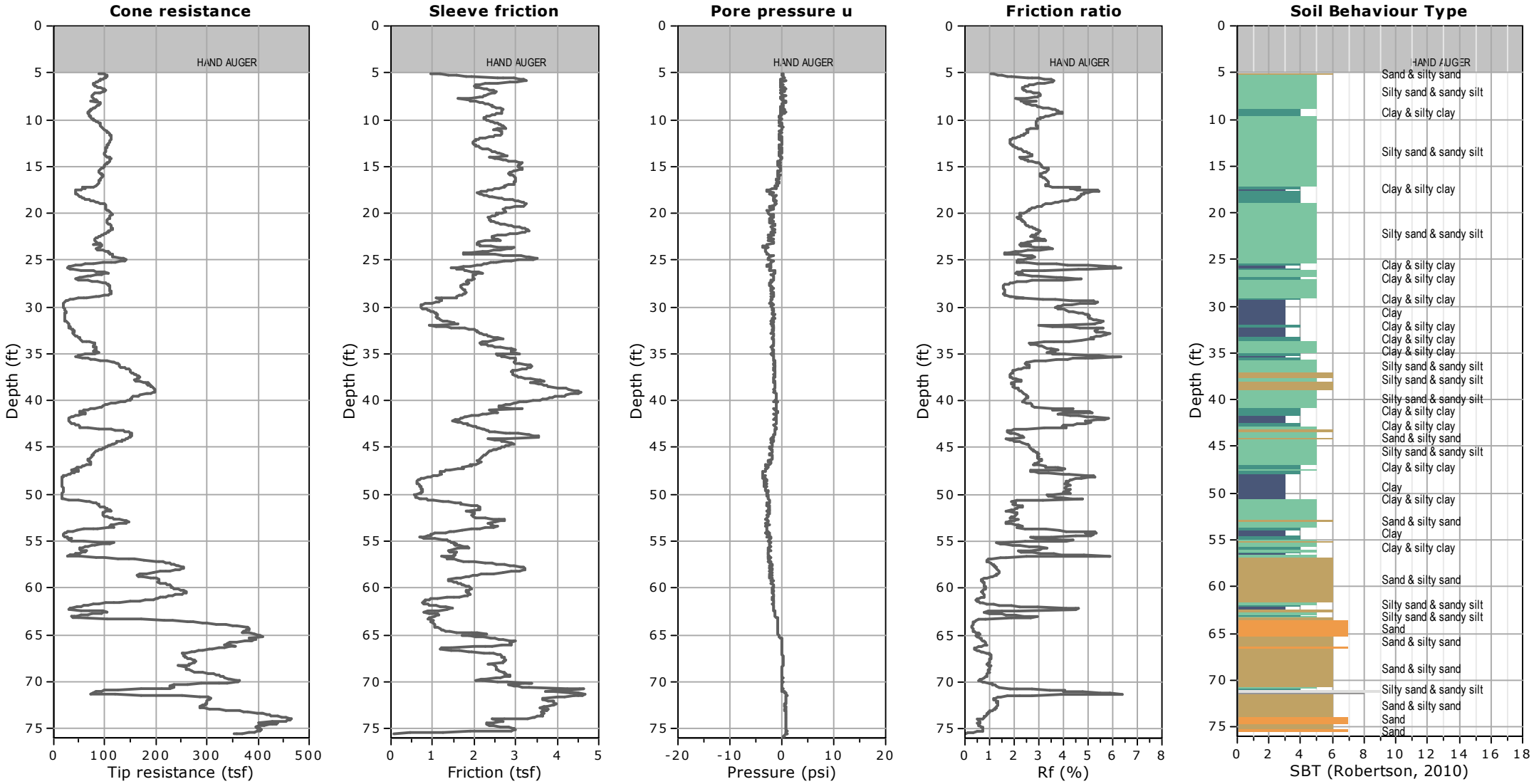
CPT-2
Total depth: 76.33 ft, Date: 1/13/2022



Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

Project: **ATLAS / Compton Community District College**
Location: **Compton, CA**

CPT-3
Total depth: 75.89 ft, Date: 1/13/2022



APPENDIX III
LABORATORY TEST PROCEDURES AND TEST RESULTS

The laboratory testing was performed in general accordance with applicable procedures and standards of the American Society for Testing and Materials (ASTM) and California Test Methods. Unless otherwise noted, the tests were performed at Atlas laboratories in Riverside and San Diego, California. Based on our review of the laboratory data, the undersigned engineers concur with and accept the laboratory testing results. Brief descriptions of the testing are below.

MOISTURE CONTENT AND DRY DENSITY: The moisture content and dry unit weight were determined for selected soil samples in general accordance with ASTM D2216 and ASTM D2937, respectively. The moisture content and dry unit weight are presented on the boring logs at the corresponding sample depths.

WASH SIEVE ANALYSIS: Selected soil samples were tested to determine the percent fines (the percentage of soil passing the Standard No. 200 sieve) in general accordance with ASTM D1140. The results of the wash sieve analyses are presented at the appropriate depths on the boring logs.

DIRECT SHEAR: Direct shear tests were performed on ring and remolded samples in general accordance with ASTM D3080 to evaluate the shear strength of the soils. Samples were tested in a saturated state. Both peak and ultimate shear strengths were measured and reported in the test plots. Test results are attached in this appendix.

CORROSIVITY TESTS: Corrosivity tests were performed on a selected bulk sample to evaluate minimum resistivity, pH, water-soluble sulfates and chlorides (CTMs 643, 417 and 422 respectively). Test results are attached in this appendix.

EXPANSION INDEX TEST: Expansion Index tests were performed on selected bulk samples in general accordance with ASTM D4829 to evaluate the expansion potential of the on-site soils. Test results are attached in this appendix.

MAXIMUM DENSITY TESTS: The maximum dry density and optimum moisture content of a representative bulk soil sample were determined in accordance with ASTM D1557. Test results and a graphical plot of maximum density vs. optimum moisture content are attached in this appendix.

ATTERBERG LIMITS: Liquid Limit, Plastic Limit and Plasticity Index of the tested samples were determined in accordance with ASTM D4318. Test results and a graphical plot are attached in this appendix.

R-VALUE: R-Value of the tested samples were determined in accordance with ASTM D2844. Test results are presented in this appendix.

HYDROMETER TESTS: Hydrometer tests have been performed on the obtained samples based on ASTM D422. Test results are presented in this appendix.

Moisture-Density

ASTM D2937

SAMPLE LOCATION	Moisture Content (%)	Dry Density (pcf)
B-1 at 5 Feet	5.5	94.6
B-2 at 20 Feet	23.8	104.4
B-3 at 10 Feet	20.3	119.5
B-3 at 20 Feet	37.9	80.9
B-3 at 30 Feet	18.6	110.5
B-3 at 40 Feet	12.7	112.4
B-3 at 50 Feet	31.3	91.9

Atterberg Limits

ASTM D4318

SAMPLE LOCATION	LIQUID LIMIT	PLASTIC LIMIT	PLASTIC INDEX
B-1 at 20 Feet	53	33	20
B-2 at 20 Feet	57	28	29
B-3 at 20 Feet	NP	NP	NP
B-3 at 25 Feet	35	26	9
B-3 at 30 Feet	40	25	15
B-3 at 35 Feet	NP	NP	NP
B-3 at 40 Feet	NP	NP	NP
B-3 at 50 Feet	NP	NP	NP

Percent Finer than No. 200 Sieve

ASTM D1140

SAMPLE LOCATION	FINES CONTENT (%)
B-1 at 20 Feet	89.7
B-2 at 10 Feet	65.0
B-2 at 20 Feet	94.7
B-3 at 20 Feet	95.3
B-3 at 25 Feet	65.4
B-3 at 30 Feet	87.3
B-3 at 35 Feet	72.6
B-3 at 40 Feet	45.2
B-3 at 50 Feet	89.4

Modified Proctor

ASTM D1557

SAMPLE LOCATION	Optimum Content (%)	Maximum Dry Density (pcf)
B-2 at 0-5 Feet	12.3	122.3

R-VALUE

ASTM D2844

SAMPLE LOCATION	R-Value
B-1 at 5 Feet	64
B-3 at 5 Feet	67

EXPANSION INDEX

ASTM D4829

SAMPLE LOCATION	DESCRIPTION	EXPANSION INDEX
B-1 at 10 Feet	Silty SAND (SM)	0
B-2 at 5 Feet	Sandy SILT (ML)	4

Classification of Expansive Soil[1]

EXPANSIVE INDEX	POTENTIAL EXPANSION
1-20	Very Low
21-50	Low
51-90	Medium
91-130	High
Above 130	Very High

1. ASTM - D4829

RESISTIVITY, pH, SOLUBLE CHLORIDE and SOLUBLE SULFATE

pH & Resistivity (Cal 643, ASTM G51)
Soluble Chlorides (Cal 422)
Soluble Sulfate (Cal 417)

SAMPLE LOCATION	RESISTIVITY (Ω-cm)	pH	CHLORIDE (%)	SULFATE (%)
B- 1 at 10 Feet	2360	8.19	0.006	0.005
B-3 at 5 Feet	506	8.02	0.025	0.066

Water-Soluble Sulfate Exposure[2]

Water-Soluble Sulfate (SO_4) in soil (percent by weight)	Exposure Severity	Exposure Class	Cement Type (ASTM C150)	Max. W/C	Min. f_c' (psi)
$SO_4 < 0.10$	N/A	S0	No type restriction	N/A	2,500
$0.10 \le SO_4 < 0.20$	Moderate	S1	II	0.50	4,000
$0.20 \le SO_4 \le 2.00$	Severe	S2	V	0.45	4,500
$SO_4 > 2.00$	Very Severe	S3	V plus pozzolan or slag cement	0.45	4,500

2. Modified from ACI 318-14 Table 19.3.1.1 and Table 19.3.2.1

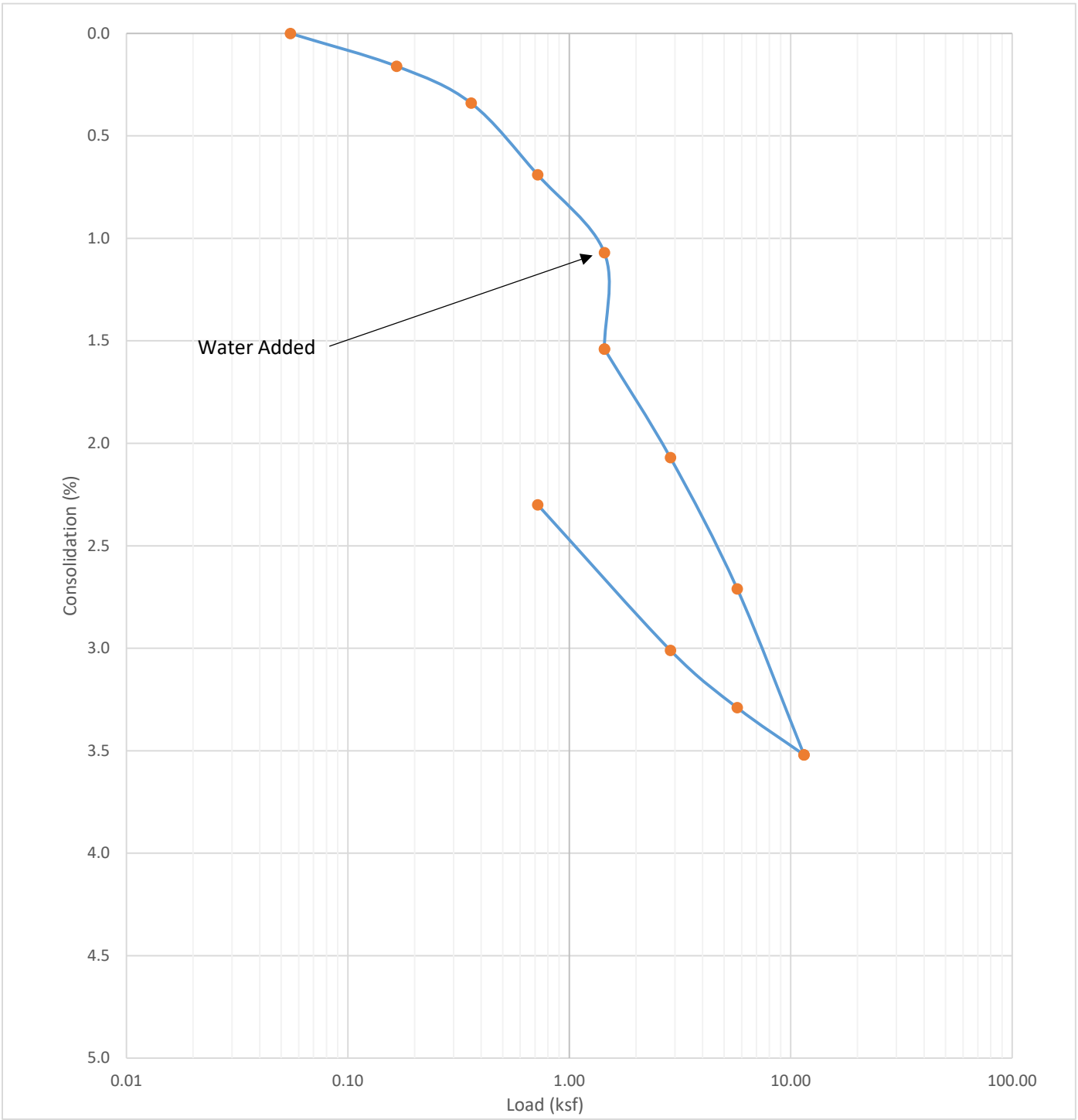
Corrosivity Ratings Based on Soil Resistivity[3]

Soil Resistivity (Ω cm)	Corrosivity Rating
> 20,000	Essentially noncorrosive
10,000 to 20,000	Mildly corrosive
5,000 to 10,000	Moderately corrosive
3,000 to 5,000	Corrosive
1,000 to 3,000	Highly corrosive
<1,000	Extremely corrosive

3. Roberge (2008), Corrosion Engineering, Principles and Practice

Consolidation Test Results

ASTM D2435



Sample ID: B-1 at 15 Feet

Sample Description: **Grayish Brown Silty SAND**

γ_d	100.4 pcf
Pre-consolidation w_c	10.8 %
Post-consolidation w_c	27.2 %

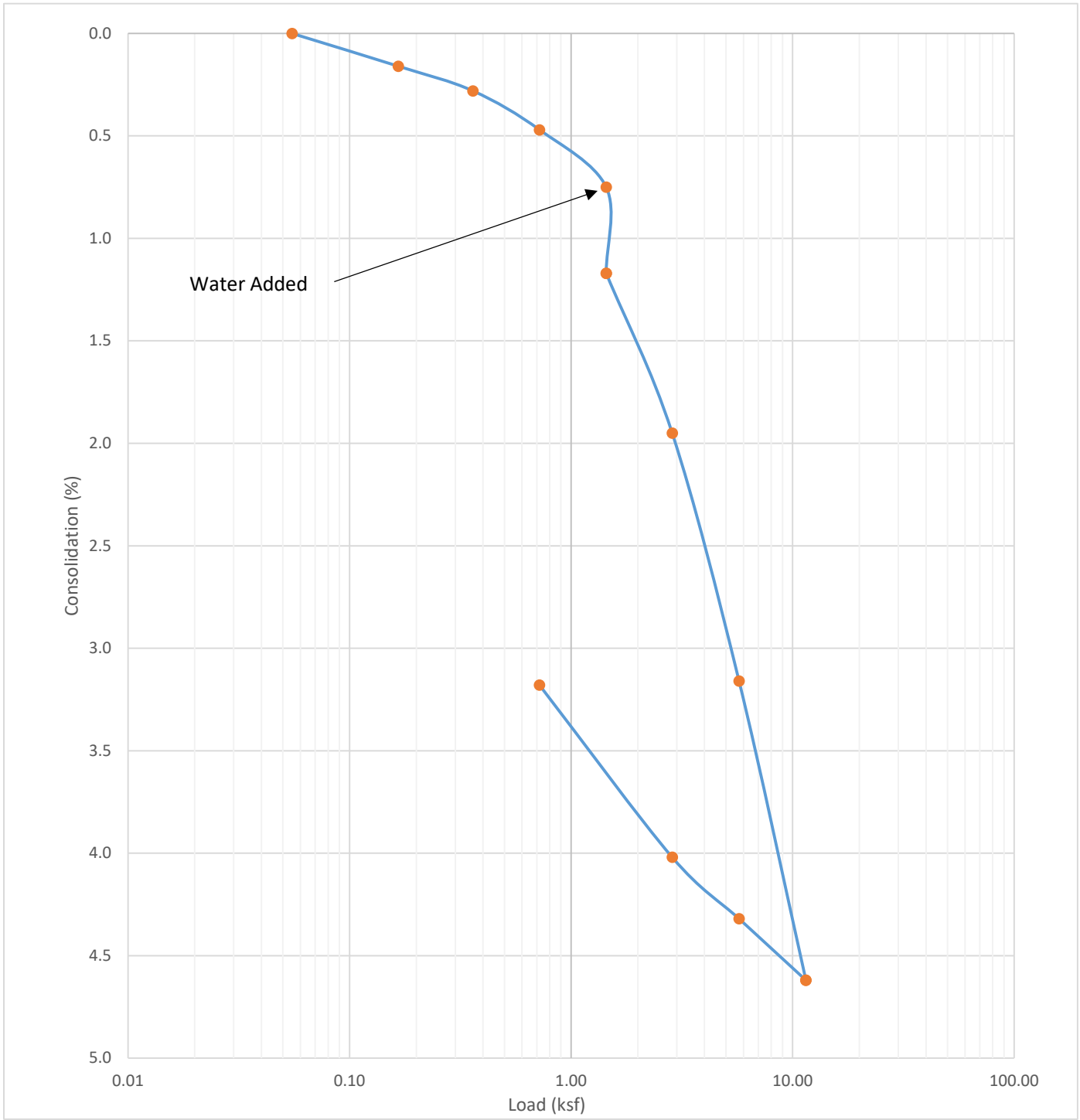
ATLAS

Compton Community College - Visual and Perfroming Arts
Compton , California

By:	DRB	Date:	March, 2022
Job No:	10-61187PW	Figure:	III-4

Consolidation Test Results

ASTM D2435

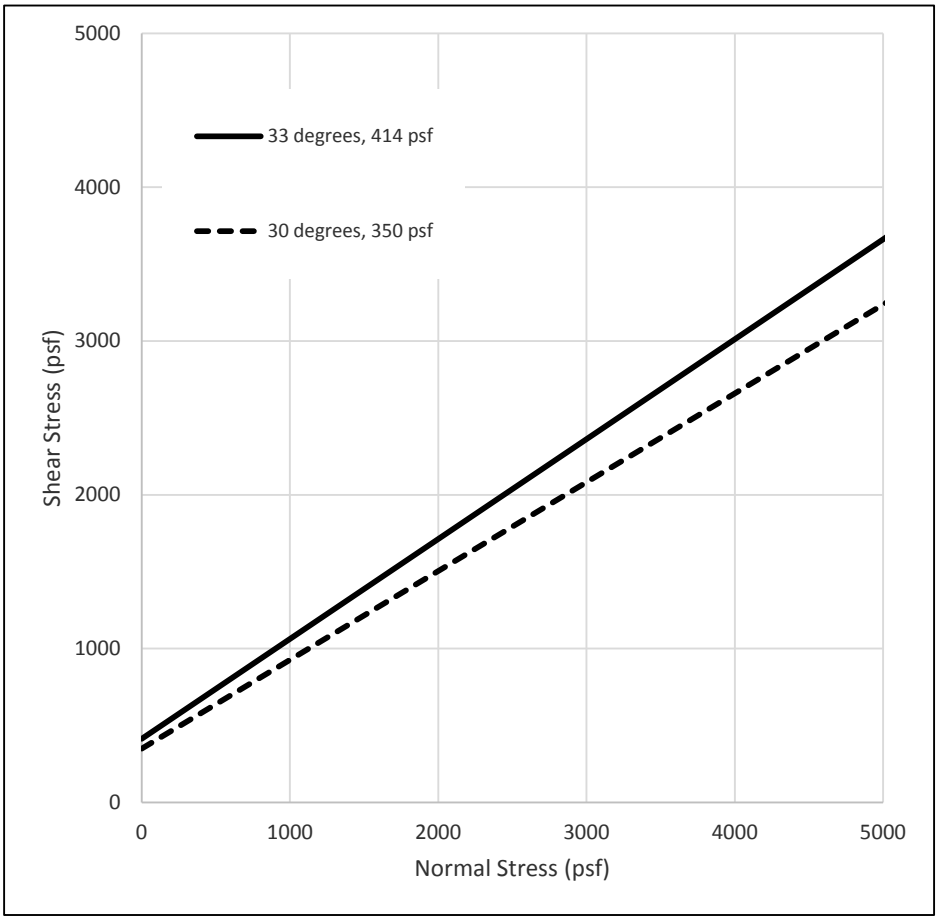


Sample ID: B-2 at 10 Feet

Sample Description: **Brown Silty SAND**

γ_d	102.9 pcf
Pre-consolidation w_c	13.3 %
Post-consolidation w_c	21.2 %

ATLAS	Compton Community College - Visual and Perfroming Arts Compton , California		
By:	DRB	Date:	March, 2022
Job No:	10-61187PW	Figure:	III-5



SAMPLE ID: B-1 at 5 Feet

Light Brown Fine Silty Sand

NOTES: Insitu

Strain Rate: 0.003 in/min

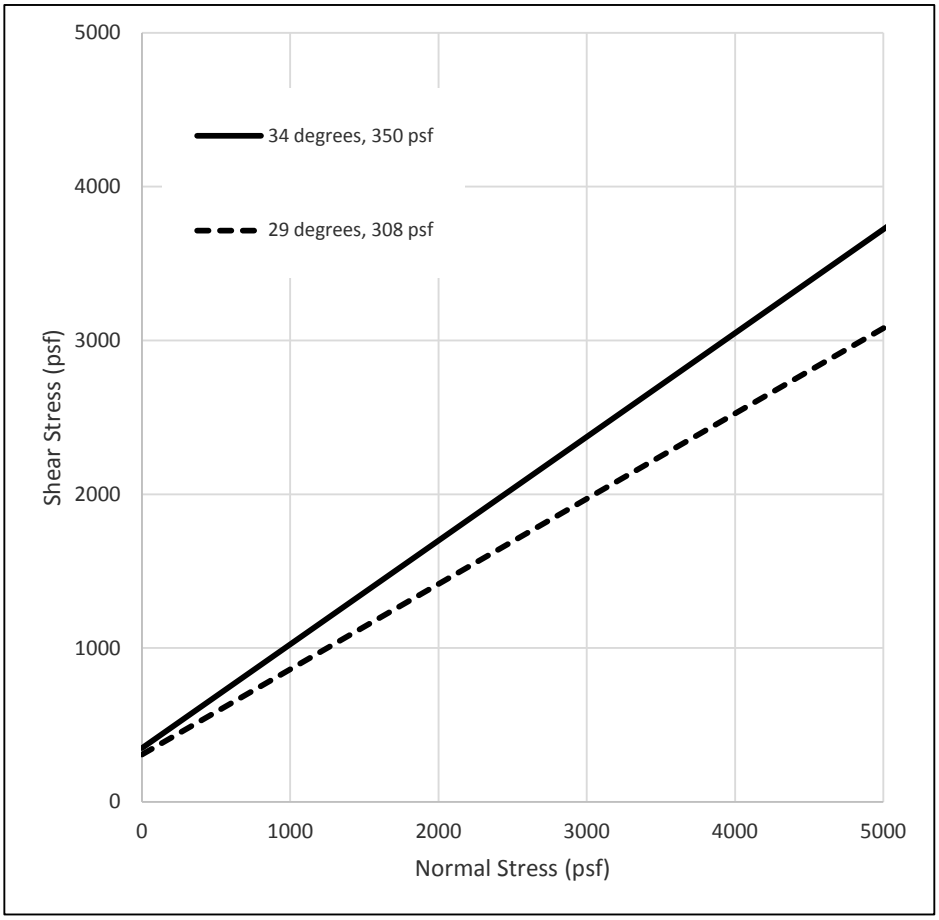
Sample was consolidated and drained

	Peak	Ultimate
Φ	33 °	30 °
c	414 psf	350 psf
	Initial	**Final**
γ_d	117.0 pcf	117.0 pcf
w_c	7.6 %	14.8 %
Saturation	47 %	92 %

ATLAS

Compton Community College - Visual and Performing Arts

By:	DRB	Date:	March, 2022
Job Number:	10-61187PW	Figure:	III-6

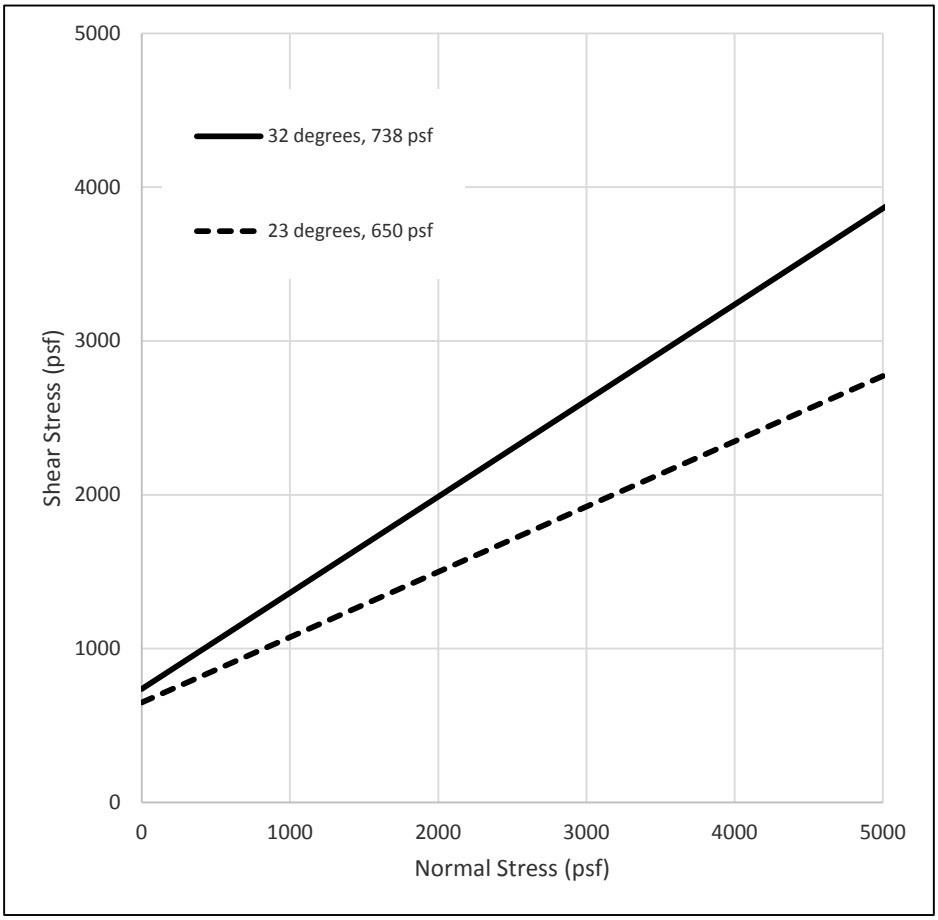


		Peak	Ultimate
SAMPLE ID: B-1 at 15 Feet	Φ	34 °	29 °
	c	350 psf	308 psf
Grey Fine Silty Sand		Initial	Final
NOTES: Insitu	γ_d	92.0 pcf	92.0 pcf
Strain Rate: 0.003 in/min	w_c	7.6 %	29.8 %
Sample was consolidated and drained	Saturation	25 %	98 %

ATLAS

Compton Community College - Visual and Performing Arts
Compton, California

By:	DRB	Date:	March, 2022
Job Number:	10-61187PW	Figure:	III-7



SAMPLE ID: B-3 at 10 Feet

Grey Brown Fine Silty Sand

NOTES: Insitu

Strain Rate: 0.003 in/min

Sample was consolidated and drained

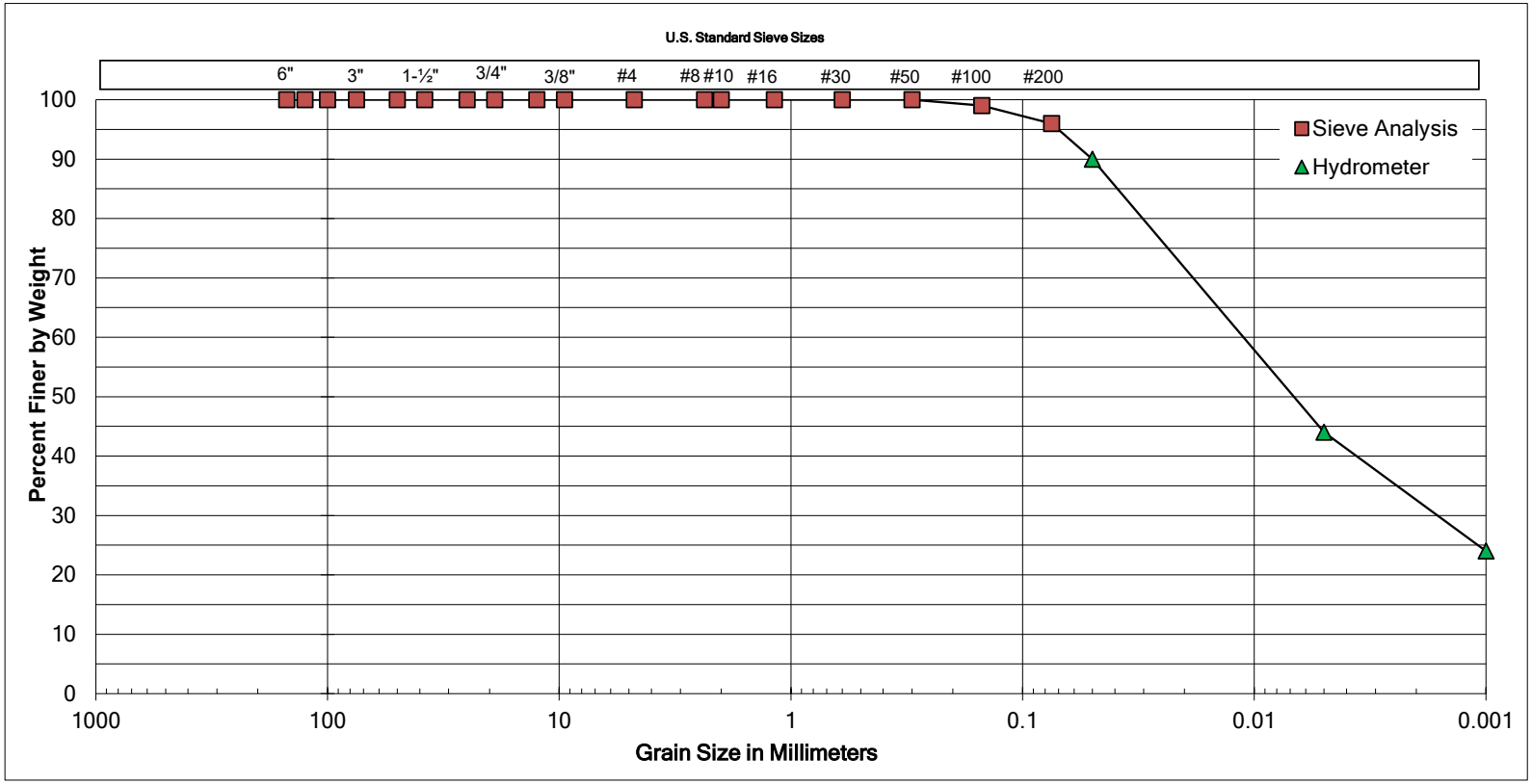
	Peak	Ultimate
Φ	32 °	23 °
c	738 psf	650 psf

	Initial	Final
γ_d	110.7 pcf	110.7 pcf
w_c	16.4 %	18.0 %
Saturation	86 %	94 %

ATLAS

Compton Community College - Visual and Performing Arts
Compton, California

By:	DRB	Date:	March, 2022
Job Number:	10-61187PW	Figure:	III-8



Cobbles	Gravel		Sand			Silt or Clay
	Coarse	Fine	Coarse	Medium	Fine	

SAMPLE LOCATION
B-3 at 20 Feet
SAMPLE NUMBER
DRB

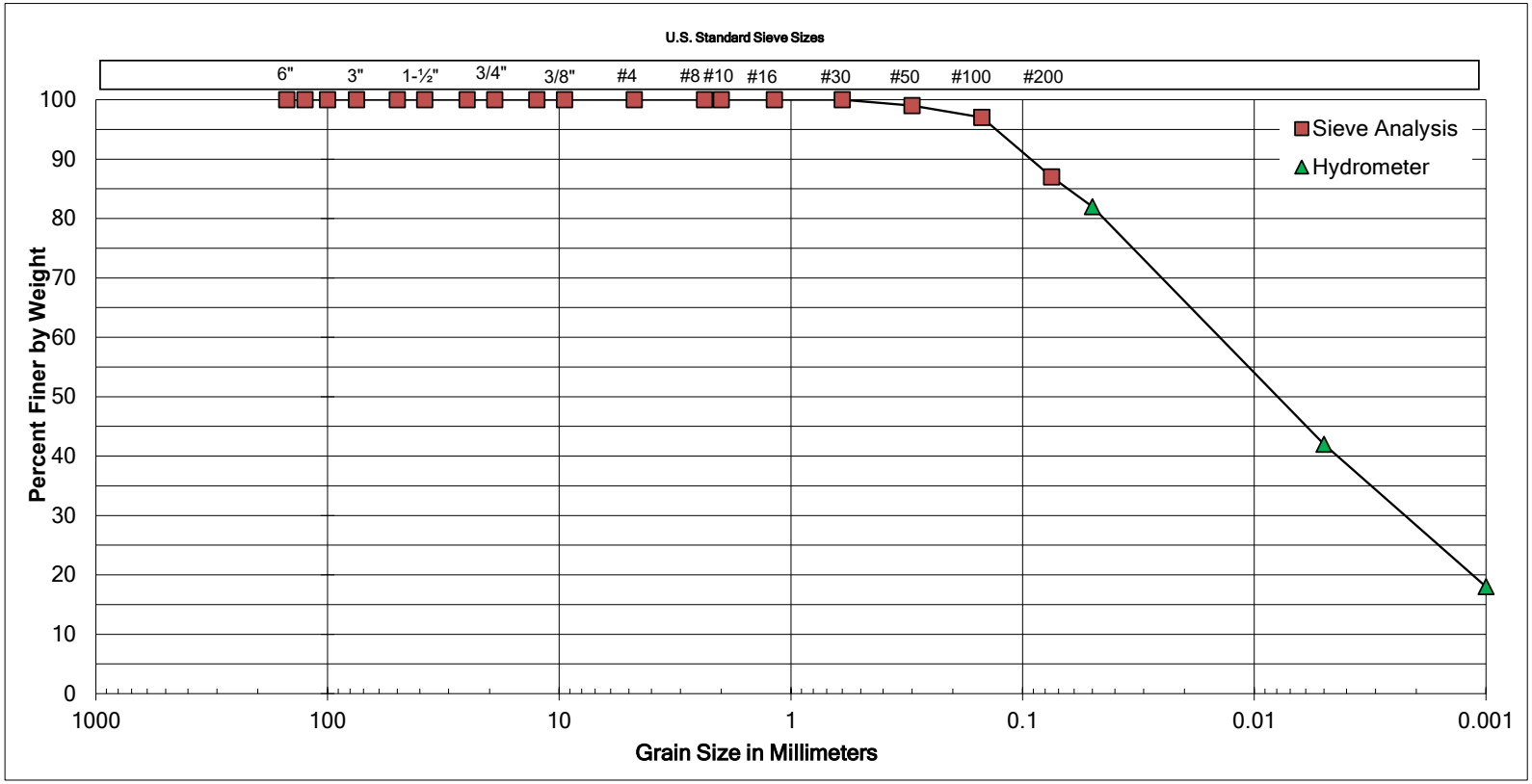
UNIFIED SOIL CLASSIFICATION:	ML
DESCRIPTION	CLAYEY SILT

ATTERBERG LIMITS	
LIQUID LIMIT	NP
PLASTIC LIMIT	NP
PLASTICITY INDEX	NP

ATLAS

Compton Community College - Visual and Perfoming Arts
Compton, California

By:	DRB	Date:	March, 2022
Job Number:	10-61187PW	Figure:	III-9



Cobbles	Gravel		Sand			Silt or Clay
	Coarse	Fine	Coarse	Medium	Fine	

SAMPLE LOCATION
B-3 at 25 Feet
SAMPLE NUMBER
DRB

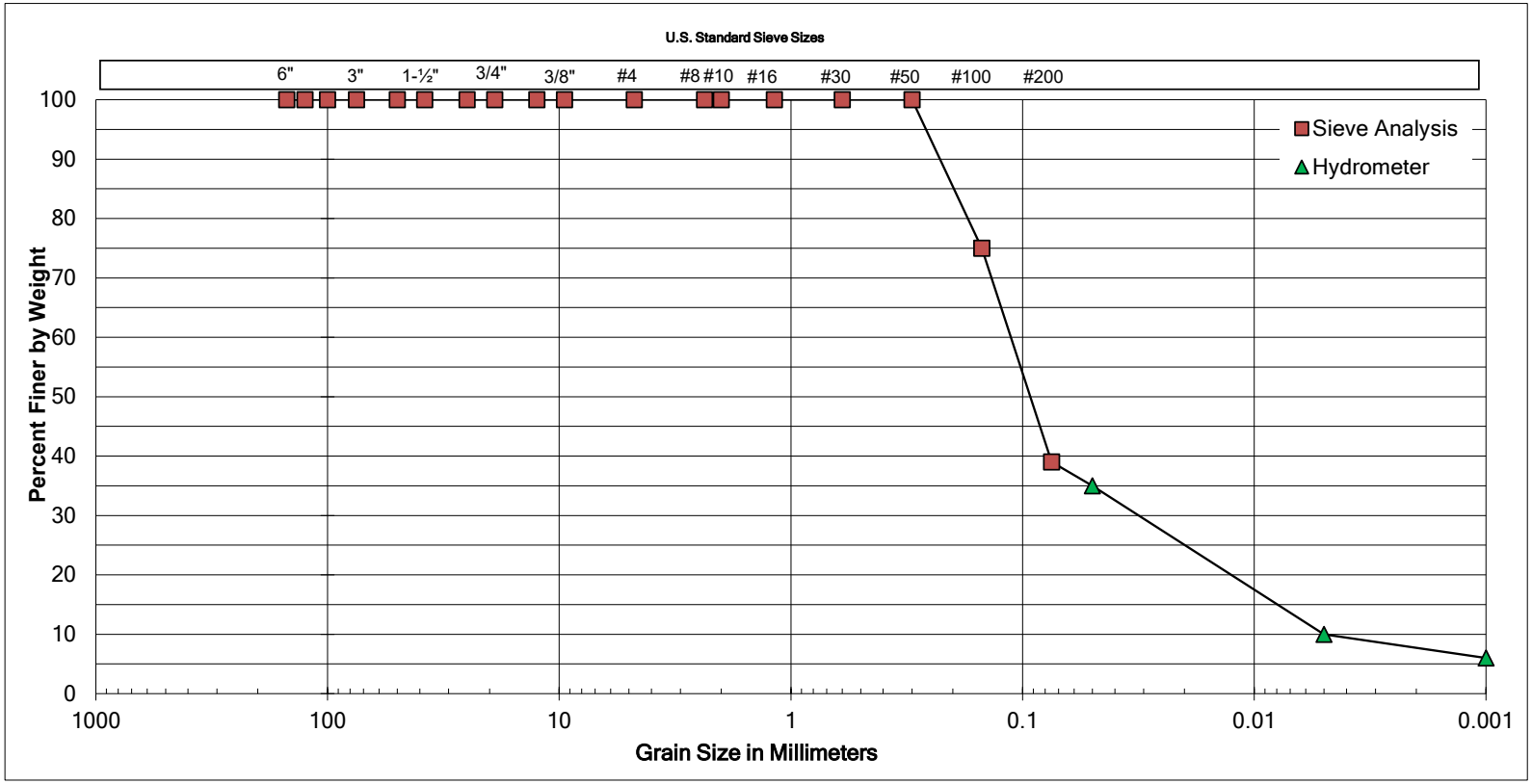
UNIFIED SOIL CLASSIFICATION:	ML
DESCRIPTION	SANDY SILT

ATTERBERG LIMITS	
LIQUID LIMIT	35
PLASTIC LIMIT	26
PLASTICITY INDEX	9

ATLAS

Compton Community College - Visual and Perfoming Arts
Compton, California

By:	DRB	Date:	March, 2022
Job Number:	10-61187PW	Figure:	III-10



Cobbles	Gravel		Sand			Silt or Clay
	Coarse	Fine	Coarse	Medium	Fine	

SAMPLE LOCATION
B-3 at 30 Feet
SAMPLE NUMBER
DRB

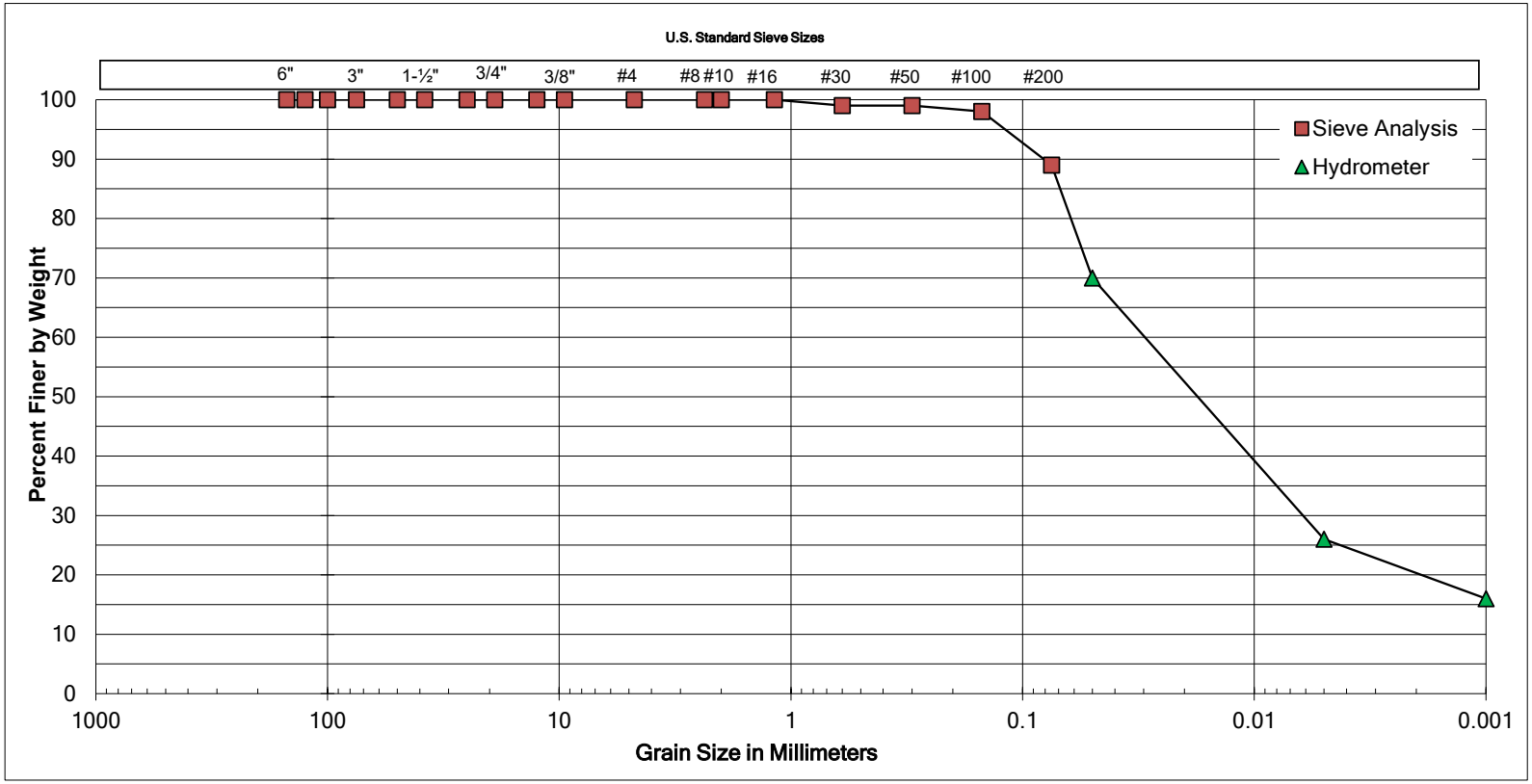
UNIFIED SOIL CLASSIFICATION:	CL/ML
DESCRIPTION	SILTY CLAY / CLAYE SILT

ATTERBERG LIMITS	
LIQUID LIMIT	40
PLASTIC LIMIT	25
PLASTICITY INDEX	15

ATLAS

Compton Community College - Visual and Perfoming Arts
Compton, California

By:	DRB	Date:	March, 2022
Job Number:	10-61187PW	Figure:	III-11



Cobbles	Gravel		Sand			Silt or Clay
	Coarse	Fine	Coarse	Medium	Fine	

SAMPLE LOCATION
B-3 at 35 Feet
SAMPLE NUMBER
DRB

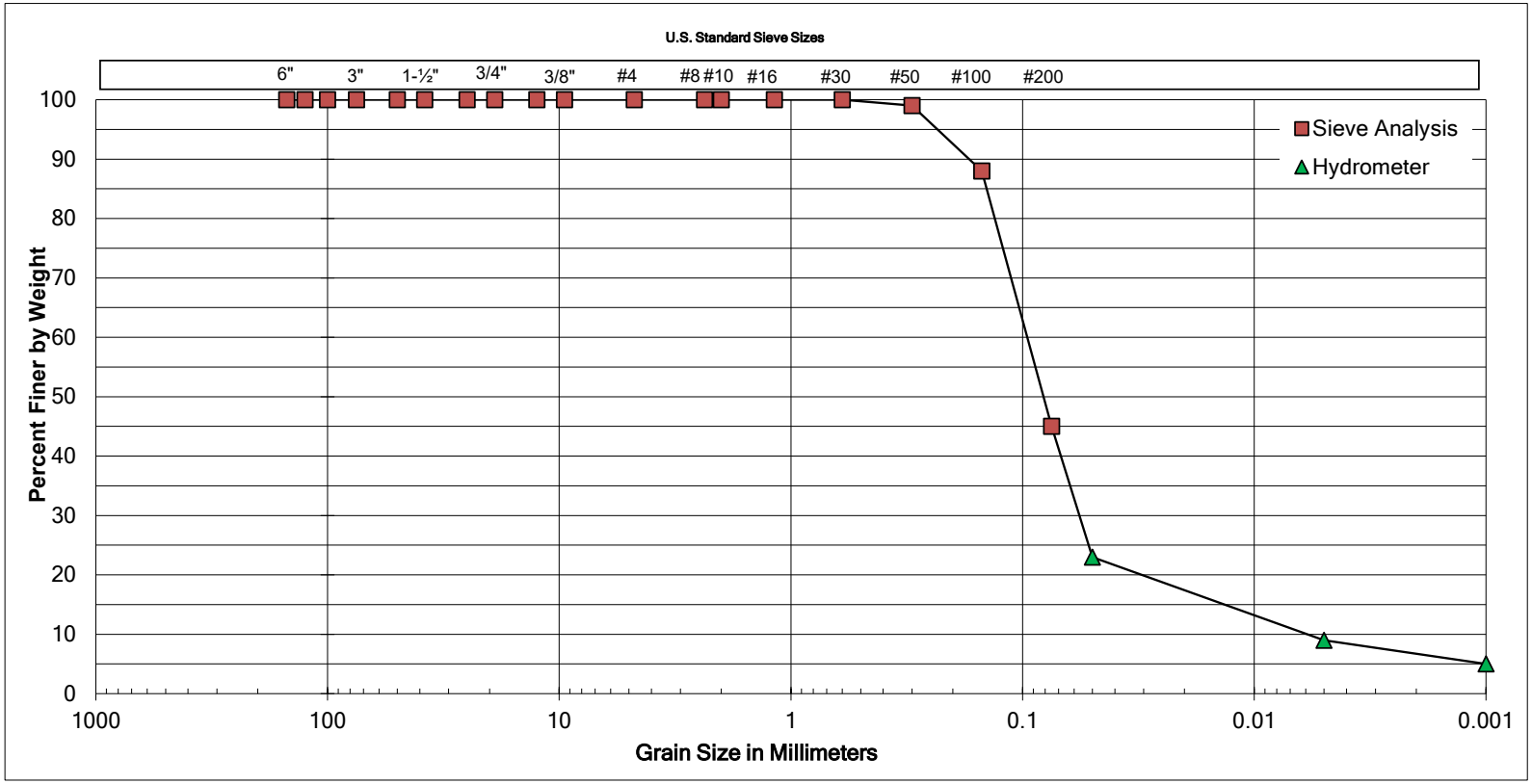
UNIFIED SOIL CLASSIFICATION:	ML
DESCRIPTION	SANDY SILT

ATTERBERG LIMITS	
LIQUID LIMIT	NP
PLASTIC LIMIT	NP
PLASTICITY INDEX	NP

ATLAS

Compton Community College - Visual and Perfoming Arts
Compton, California

By:	DRB	Date:	March, 2022
Job Number:	10-61187PW	Figure:	III-12



Cobbles	Gravel		Sand			Silt or Clay
	Coarse	Fine	Coarse	Medium	Fine	

SAMPLE LOCATION
B-3 at 40 Feet
SAMPLE NUMBER
DRB

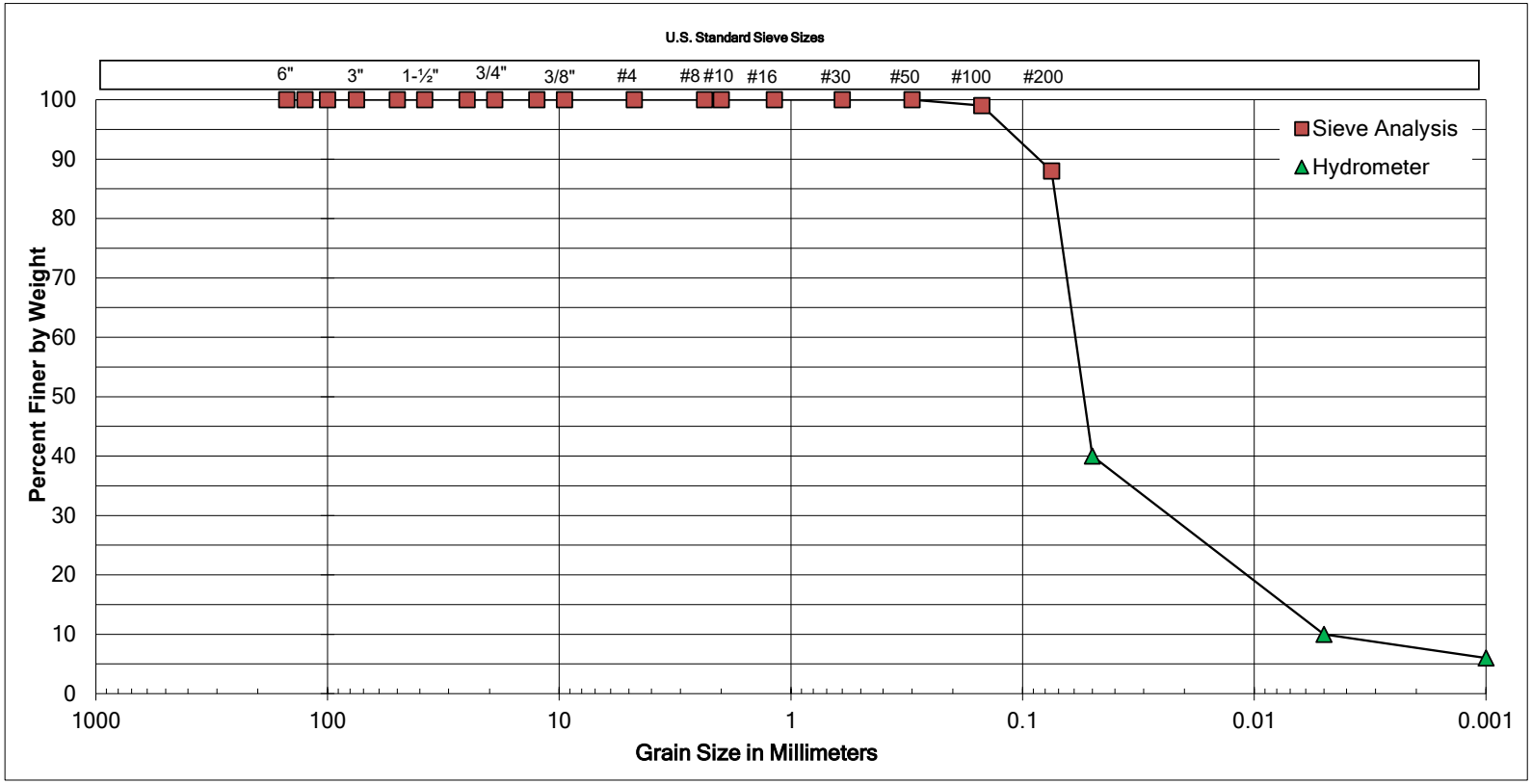
UNIFIED SOIL CLASSIFICATION:	ML
DESCRIPTION	SANDY SILT

ATTERBERG LIMITS	
LIQUID LIMIT	NP
PLASTIC LIMIT	NP
PLASTICITY INDEX	NP

ATLAS

Compton Community College - Visual and Perfoming Arts
Compton, California

By:	DRB	Date:	March, 2022
Job Number:	10-61187PW	Figure:	III-13



Cobbles	Gravel		Sand			Silt or Clay
	Coarse	Fine	Coarse	Medium	Fine	

SAMPLE LOCATION
B-3 at 50 Feet
SAMPLE NUMBER
DRB

UNIFIED SOIL CLASSIFICATION:	ML
DESCRIPTION	SANDY SILT

ATTERBERG LIMITS	
LIQUID LIMIT	NP
PLASTIC LIMIT	NP
PLASTICITY INDEX	NP

ATLAS

Compton Community College - Visual and Perfoming Arts
Compton, California

By:	DRB	Date:	March, 2022
Job Number:	10-61187PW	Figure:	III-14

APPENDIX IV
SITE CLASS CALCULATIONS

Project No.	10-61187PW	**Project Name**	Compton CC-VAPA
Boring No.	B-3		

Layer Top ft	Layer Bottom ft	Blow Count	Sampler Type Ring/SPT	Correction Factor*	Energy Correction**	Corrected Blow Count	Layer Thickness/N
0	5	10	Assumed SPT	1	1.25	12.5	0.40
5	10	7	SPT with Autohammer	1	1.25	8.8	0.57
10	15	24	Ring with Autohammer	0.65	1.25	19.5	0.26
15	20	11	SPT with Autohammer	1	1.25	13.8	0.36
20	25	28	Ring with Autohammer	0.65	1.25	22.8	0.22
25	30	12	SPT with Autohammer	1	1.25	15.0	0.33
30	35	16	Ring with Autohammer	0.65	1.25	13.0	0.38
35	40	20	SPT with Autohammer	1	1.25	25.0	0.20
40	45	51	Ring with Autohammer	0.65	1.25	41.4	0.12
45	50	31	SPT with Autohammer	1	1.25	38.8	0.13
50	55	50	Ring with Autohammer	0.65	1.25	40.6	0.12
55	60	35	Assumed SPT	1	1.25	43.8	0.11
60	75	35	Assumed SPT	1	1.25	43.8	0.34
75	100	35	Assumed SPT	1	1.25	43.8	0.57
						SUM:	4.13

*A 0.65 correction factor was used to convert ring/drive blow counts to standard (SPT) blow counts

**A correction of 1.25 was used for Autohammer

		Site Class
N average:	**24.2**	**D**

Input
Calculated

APPENDIX V
SITE-SPECIFIC GROUND MOTION HAZARD ANALYSES RESULTS

Performed for Compton College, Physical Education Complex Replacement and can be used for Compton College, Visual and Performing Arts Building.

SITE-SPECIFIC GROUND MOTION ANALYSIS (ASCE 7-16)

Project:	Compton Community College PE Complex	**Latitude:**	33.87696 deg	**Calculated By:**	GLC
Client:	Compton Community College District	**Longitude:**	-118.21110 deg	**Checked By:**	RS
Job No:	10-57575PW	**Vs_{30}:**	259 m/s	**Date:**	January, 2021

Period T (sec)	PROBABILISTIC (RISK-TARGETED) GROUND MOTION ANALYSIS				DETERMINISTIC (84TH-PERCENTILE) GROUND MOTION ANALYSIS			CODE-BASED (LOWER LIMIT) ASCE 7-16 SECTION 11.4.6		SITE-SPECIFIC DESIGN RESPONSE		
	Uniform Hazard Ground Motion (g)	Risk Targeted Ground Motion (g)	Maximum Direction Scale Factor	Maximum Directional Probabilistic Sa (g)	84th Percentile Spectral Accelaration (g)	Maximum Direction Scale Factor	Maximum Directional Deterministic Sa (g)	Code Based S_a (g)	80% of Code Based S_a (g)	Design S_{aM} (g)	Design S_a (g)	T x S_a (T>1s)
PGA	0.774	0.738	1.1	0.812	0.947	1.1	1.042	0.452	0.361	0.812	0.541	---
0.10	1.302	1.265	1.1	1.392	1.366	1.1	1.503	1.008	0.807	1.392	0.928	---
0.20	1.725	1.686	1.1	1.855	1.834	1.1	2.017	1.129	0.903	1.855	1.236	---
0.30	1.952	1.859	1.125	2.091	2.249	1.125	2.530	1.129	0.903	2.091	1.394	---
0.50	1.882	1.751	1.175	2.057	2.454	1.175	2.883	1.129	0.903	2.057	1.372	---
0.75	1.536	1.407	1.2375	1.741	2.205	1.2375	2.729	0.916	0.733	1.741	1.161	---
1.00	1.268	1.157	1.3	1.504	1.952	1.3	2.538	0.687	0.549	1.504	1.003	1.003
2.00	0.672	0.607	1.35	0.819	1.094	1.35	1.477	0.343	0.275	0.819	0.546	1.093
3.00	0.424	0.381	1.4	0.533	0.632	1.4	0.885	0.229	0.183	0.533	0.356	1.067
4.00	0.290	0.260	1.45	0.377	0.410	1.45	0.595	0.172	0.137	0.377	0.251	1.005
5.00	0.213	0.191	1.5	0.287	0.291	1.5	0.437	0.137	0.110	0.287	0.191	0.955

INPUT PARAMETERS - SEAOC (https://seismicmaps.org/)

Site Class=	D	
F_a=	1.000	Short Period Site Coefficient
S_S=	1.694	Mapped MCE_R, 5% Damped at T=0.2s
S_1=	0.606	Mapped MCE_R, 5% Damped at T=1s
S_{DS}=	1.129	Design, 5% Damped at Short Periods
S_{MS}=	1.694	The MCE_R, 5% Damped at Short Periods
T_L (sec)=	8.0	Long Period Transition (Sect 11.4.6)
F_{PGA} (g)=	1.1	Site Coefficient for PGA
PGA_M (g)=	0.802	
F_v=	1.700	Used Only for Calculation of T_o and T_s
S_{M1}=	1.030	
S_{D1}=	0.687	Design, 5% Damped at T=1s
T_o (sec)=	0.122	Defined in ASCE 7-16 Sect 11.4.6
T_s (sec)=	0.608	Defined in ASCE 7-16 Sect 11.4.6

SITE-SPECIFIC DESIGN PARAMETERS

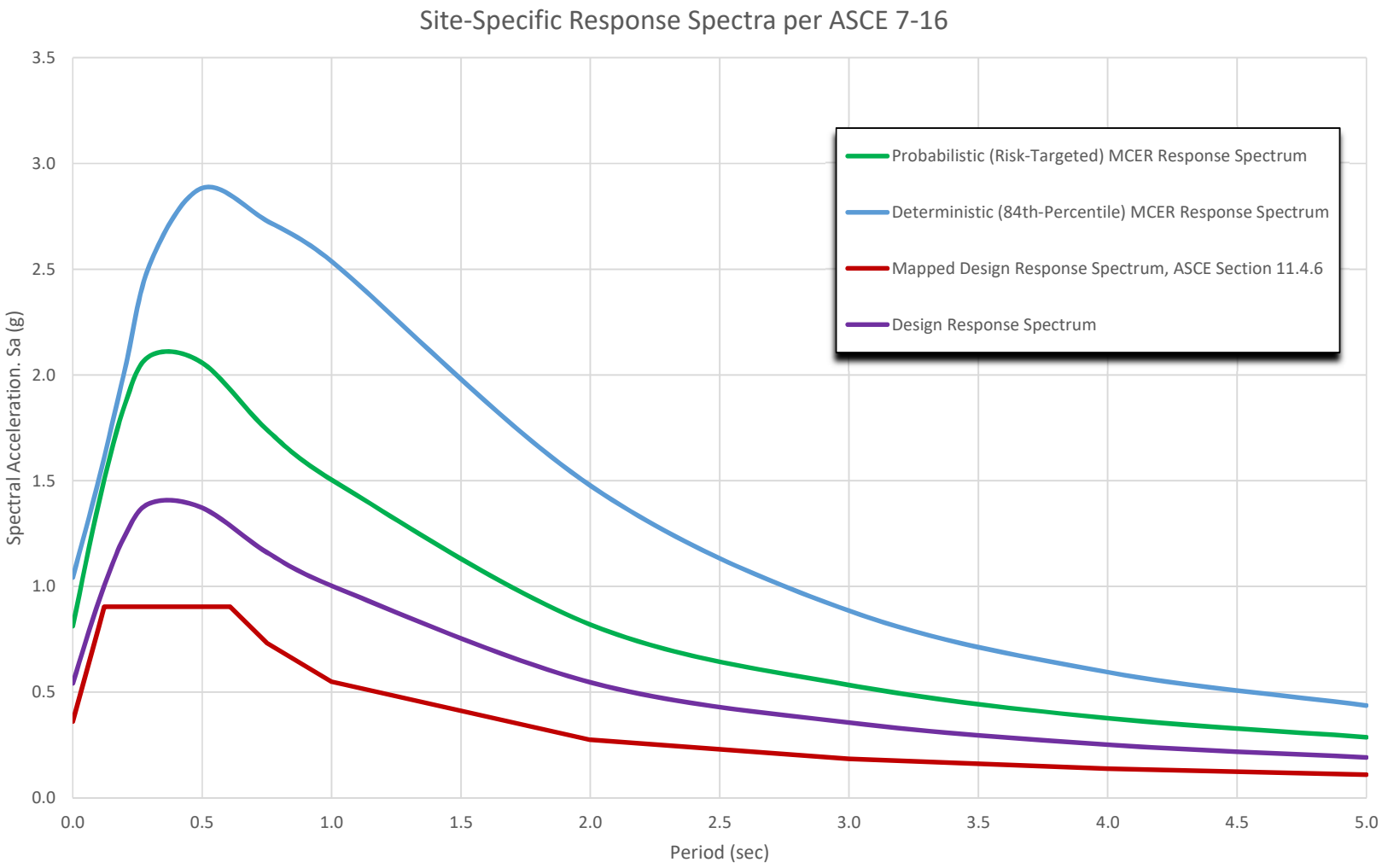
S_{DS}=	**1.255**	90% of max S_a (ASCE 7-16 Sect 21.4)
S_{MS}=	**1.882**	MCE_R, 5% Damped, adjusted for Site Class
S_{D1}=	**1.093**	Design, 5% Damped, at T=1s (Sect 11.4.5)
S_{M1}=	**1.639**	MCE_R, 5% Damped, at T=1s, adjusted for Site
F_a=	**1.000**	Short Period Site Coefficient (7-16 Sect 21.3)
F_v=	**2.500**	Long Period Site Coefficient (7-16 Sect 21.3)
S_S=	**1.882**	MCE_R, 5% Damped at T=0.2s
S_1=	**0.656**	MCE_R, 5% Damped at T=1s
$PGA_{Probabilistic}$ (g)=	**0.774**	Peak Ground Acceleration, Probabilistic
$PGA_{Deterministic}$ (g)=	**0.947**	Peak Ground Acceleration, Deterministic
F_{PGA} (g)=	**1.1**	Site Coefficient for PGA, when PGA = 0.5g
0.5*F_{PGA} (g)=	**0.550**	OK (Check $PGA_{Deterministic} > 0.5 \times F_{PGA}$)
0.8*PGA_M (g)=	**0.642**	PGA_M (g) (Determined from ASCE 7-16 Eq. 11.8-1)
Site Specific PGA (g) =	**0.774**	(Check $PGA_{Site\ Specific} > 0.8 \times PGA_M$)

ATLAS

Compton College PE Complex Compton, California

By:	GLC	Date:	July, 2021
Job Number:	10-57575PW	Figure:	V-1

DETERMINISTIC (84TH-PERCENTILE) GROUND MOTION ANALYSIS											
Fault	Period, T (sec)										
	PGA	0.10	0.20	0.30	0.50	0.75	1.00	2.00	3.00	4.00	5.00
Newport-Inglewood Alt 1 (M=7.15)	0.734	1.101	1.499	1.770	1.845	1.632	1.468	0.857	0.568	0.388	0.277
Newport-Inglewood Alt 2 (M=7.15)	0.762	1.133	1.537	1.829	1.923	1.716	1.548	0.905	0.602	0.410	0.291
Compton (M=7.45)	0.947	1.366	1.834	2.249	2.454	2.205	1.952	1.094	0.632	0.396	0.274
Palos Verdes (M=7.38)	0.472	0.757	1.054	1.186	1.156	0.970	0.843	0.491	0.333	0.240	0.178
Puente Hills - Santa Fe Springs (M=6.61)	0.618	0.965	1.341	1.559	1.507	1.229	1.040	0.511	0.291	0.175	0.116
84th Percentile Spectral Accelaration	**0.947**	**1.366**	**1.834**	**2.249**	**2.454**	**2.205**	**1.952**	**1.094**	**0.632**	**0.410**	**0.291**



ATLAS

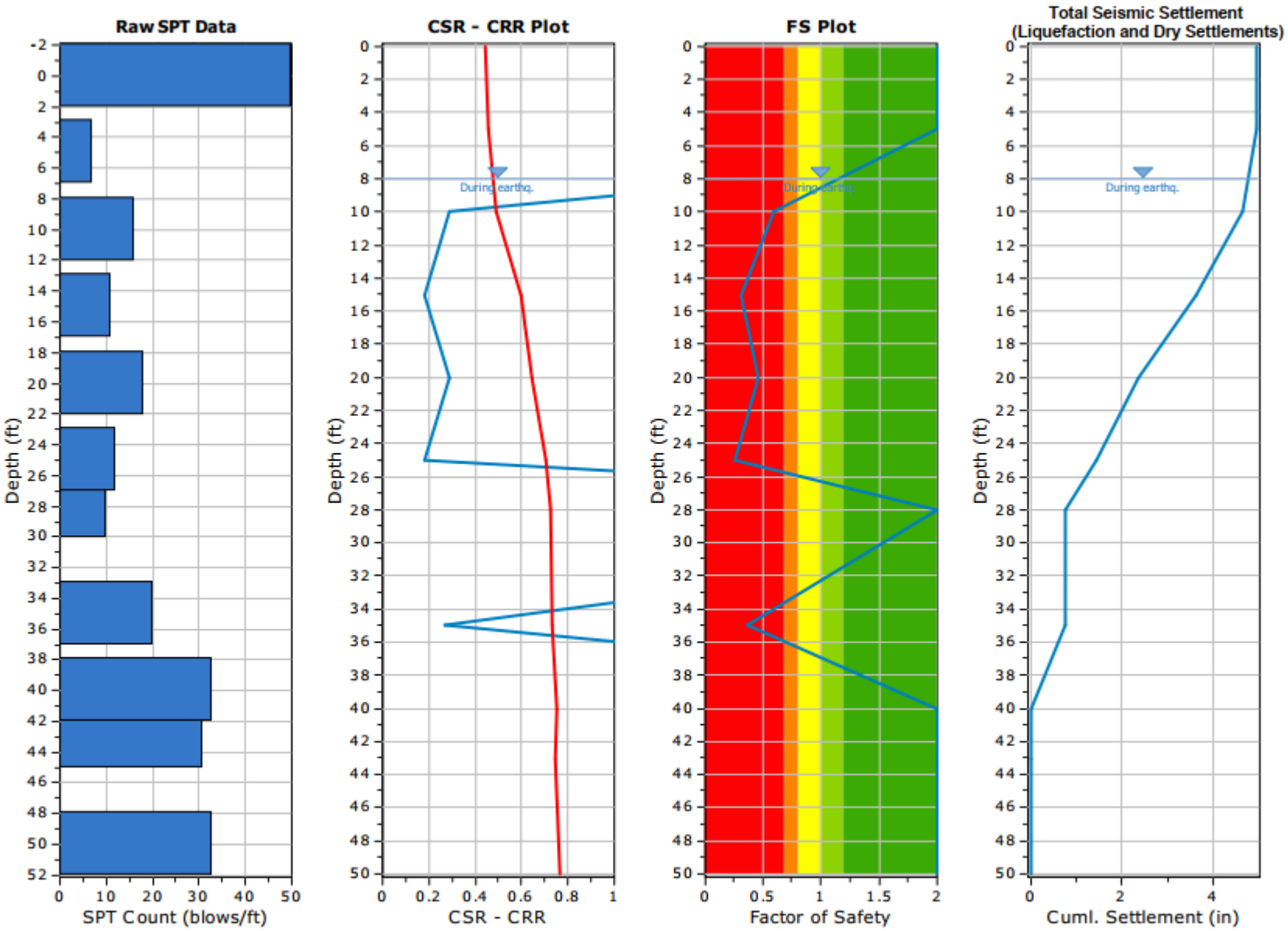
Compton College PE Complex Compton, California			
By:	GLC	Date:	July, 2021
Job Number:	10-57575PW	Figure:	V-3

APPENDIX VI
HISTORIC SEISMIC EVENTS

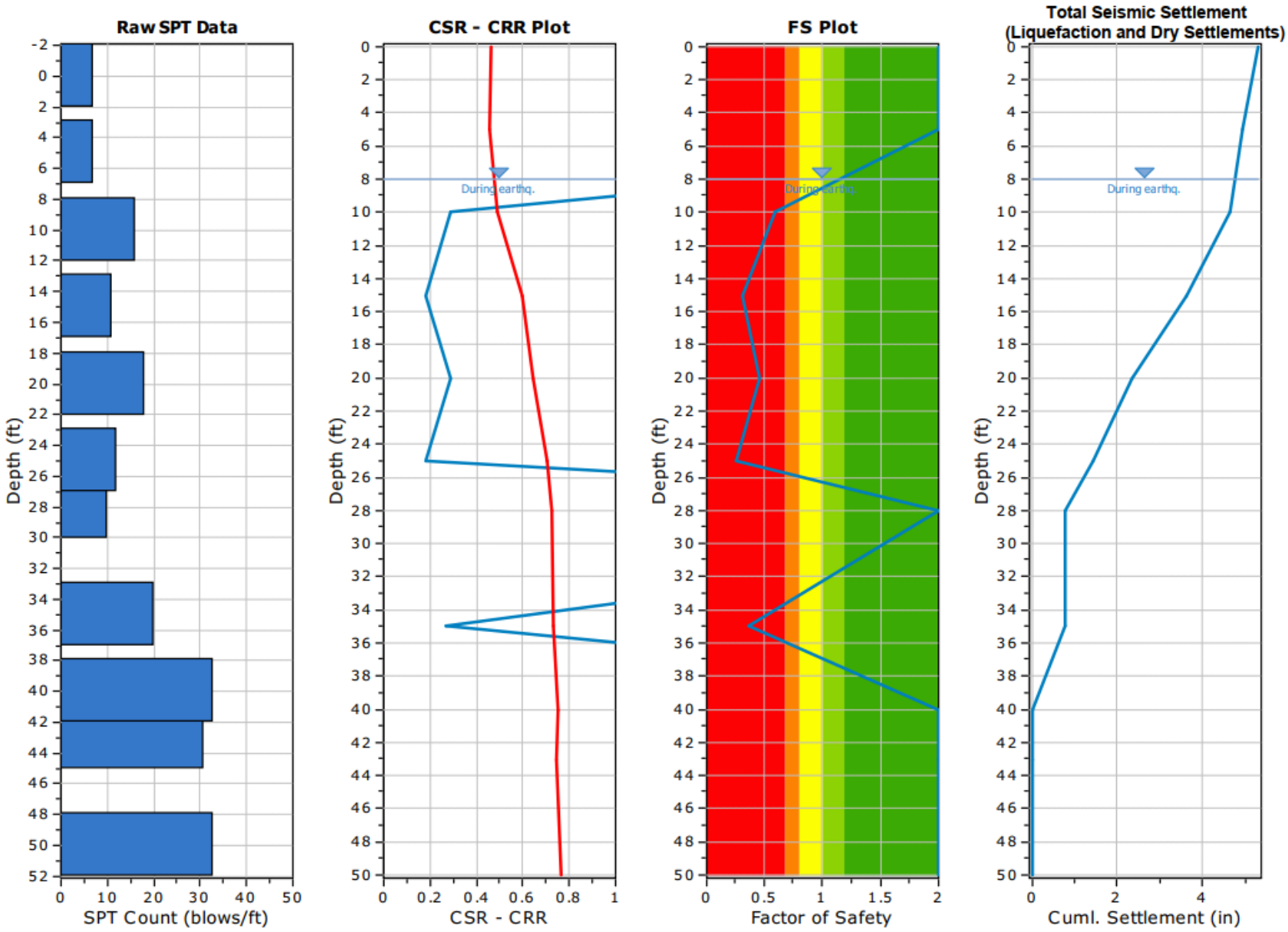
Historic Seismicity (1900 to 2018)
Within 100 km Search Radius and M_W > 5.0
Proposed Instructional Building #2, Compton College
1111 East Artesia Blvd., Compton, CA 90221

Local System Date and Time (UTC-08:00)	Latitude	Longitude	Depth (km)	Magnitude (M_W)	Place
2014-03-29T04:09:42.170Z	33.9325	-117.9158	5.1	5.1	2km NW of Brea, CA
2008-07-29T18:42:15.670Z	33.9485	-117.7663	15.5	5.4	5km S of Chino Hills, CA
1997-04-26T10:37:30.670Z	34.3690	-118.6700	15.9	5.1	12km ESE of Piru, California
1995-06-26T08:40:28.940Z	34.3940	-118.6690	12.8	5.0	11km SW of Valencia, California
1994-03-20T21:20:12.260Z	34.2310	-118.4750	12.4	5.2	3km WNW of Panorama City, California
1994-01-29T11:20:35.970Z	34.3060	-118.5790	0.6	5.1	6km NNE of Chatsworth, California
1994-01-19T21:11:44.900Z	34.3780	-118.6190	10.8	5.1	10km SSW of Valencia, California
1994-01-19T21:09:28.610Z	34.3790	-118.7120	13.8	5.1	8km ESE of Piru, California
1994-01-18T00:43:08.890Z	34.3770	-118.6980	10.7	5.2	10km ESE of Piru, California
1994-01-17T23:33:30.690Z	34.3260	-118.6980	9.1	5.6	7km NNE of Simi Valley, California
1994-01-17T12:40:36.120Z	34.3400	-118.6140	5.4	5.2	9km N of Chatsworth, California
1994-01-17T12:31:58.120Z	34.2750	-118.4930	5.3	5.9	1km ENE of Granada Hills, California
1994-01-17T12:30:55.390Z	34.2130	-118.5370	18.2	6.7	1km NNW of Reseda, CA
1991-06-28T14:43:54.660Z	34.2700	-117.9930	8.0	5.8	13km NNE of Sierra Madre, CA
1990-02-28T23:43:36.750Z	34.1440	-117.6970	3.3	5.5	6km NNE of Claremont, CA
1988-12-03T11:38:26.450Z	34.1510	-118.1300	13.7	5.0	1km SSE of Pasadena, CA
1987-10-04T10:59:38.190Z	34.0740	-118.0980	7.7	5.3	2km WSW of Rosemead, CA
1987-10-01T14:42:20.020Z	34.0610	-118.0790	8.9	5.9	2km SSW of Rosemead, CA
1981-09-04T15:50:48.700Z	33.5575	-119.1195	5.5	5.5	11km NNW of Santa Barbara Is., CA
1979-01-01T23:14:38.620Z	33.9165	-118.6872	13.3	5.2	13km S of Malibu Beach, CA
1973-02-21T14:45:56.140Z	33.9790	-119.0502	10.0	5.3	22km W of Malibu, CA
1971-02-09T14:10:29.040Z	34.4160	-118.3700	6.0	5.3	10km SSW of Agua Dulce, CA
1971-02-09T14:02:45.740Z	34.4160	-118.3700	6.0	5.8	10km SSW of Agua Dulce, CA
1971-02-09T14:01:12.450Z	34.4160	-118.3700	6.0	5.8	10km SSW of Agua Dulce, CA
1971-02-09T14:00:41.920Z	34.4160	-118.3700	9.0	6.6	10km SSW of Agua Dulce, CA
1970-09-12T14:30:53.000Z	34.2548	-117.5343	10.8	5.2	3km W of Lytle Creek, CA
1941-11-14T08:41:38.350Z	33.7907	-118.2637	6.0	5.1	5km E of Lomita, CA
1938-05-31T08:34:56.580Z	33.6993	-117.5112	10.2	5.2	8km ENE of Trabuco Canyon, CA
1933-03-11T06:58:45.610Z	33.6238	-118.0012	6.0	5.3	7km W of Newport Beach, CA
1933-03-11T05:18:48.490Z	33.7667	-117.9850	6.0	5.0	2km ENE of Westminster, CA
1933-03-11T01:54:10.660Z	33.6308	-117.9995	6.0	6.4	7km WNW of Newport Beach, CA
1922-03-10T11:21:04.000Z	34.2430	-119.0970	10.0	6.5	Greater Los Angeles area, California
1918-04-21T22:32:29.000Z	33.6470	-117.4330	10.0	6.7	Southern California

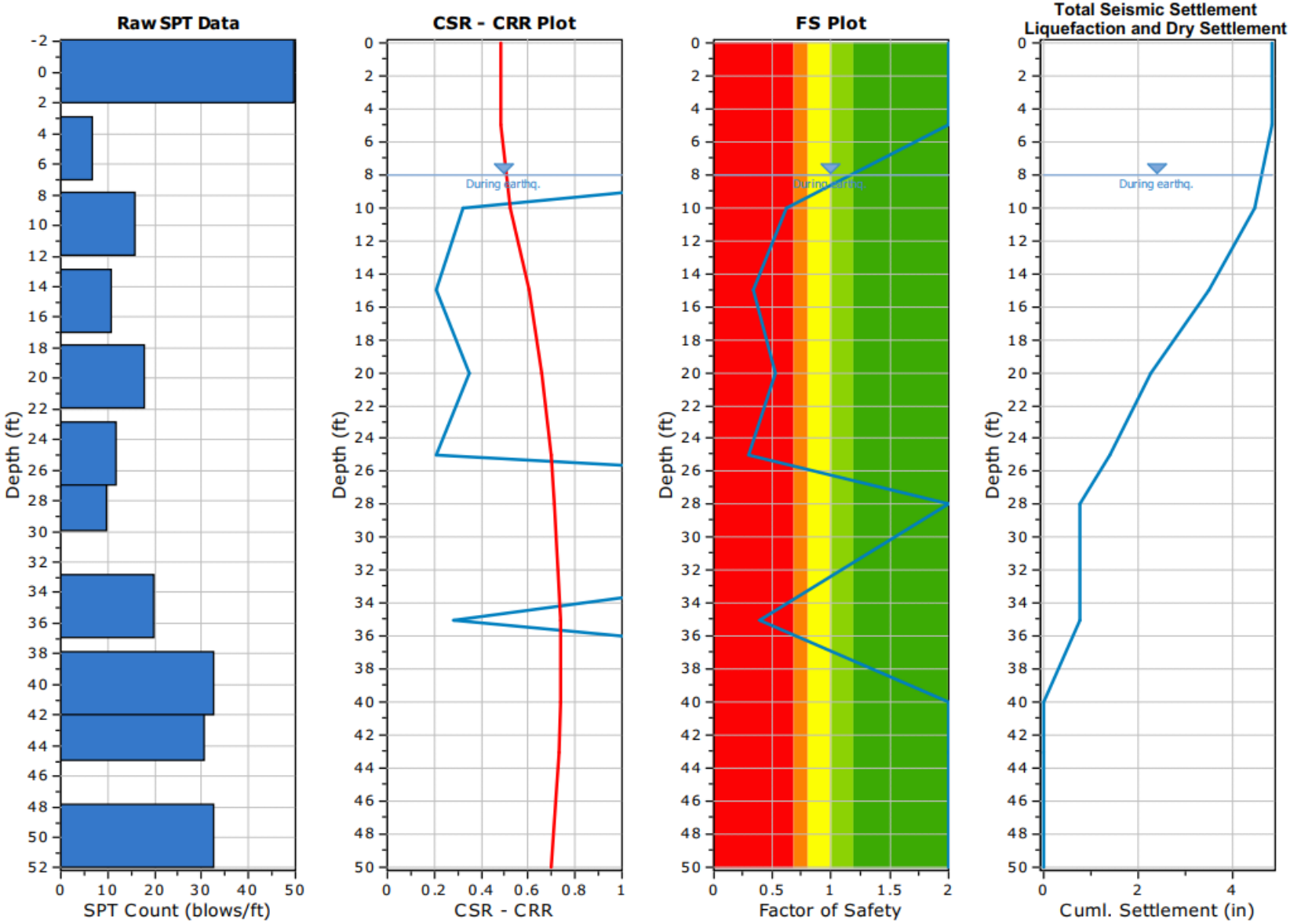
APPENDIX VII
LIQUEFACTION AND SEISMIC SETTLEMENTS CALCULATIONS RESULTS



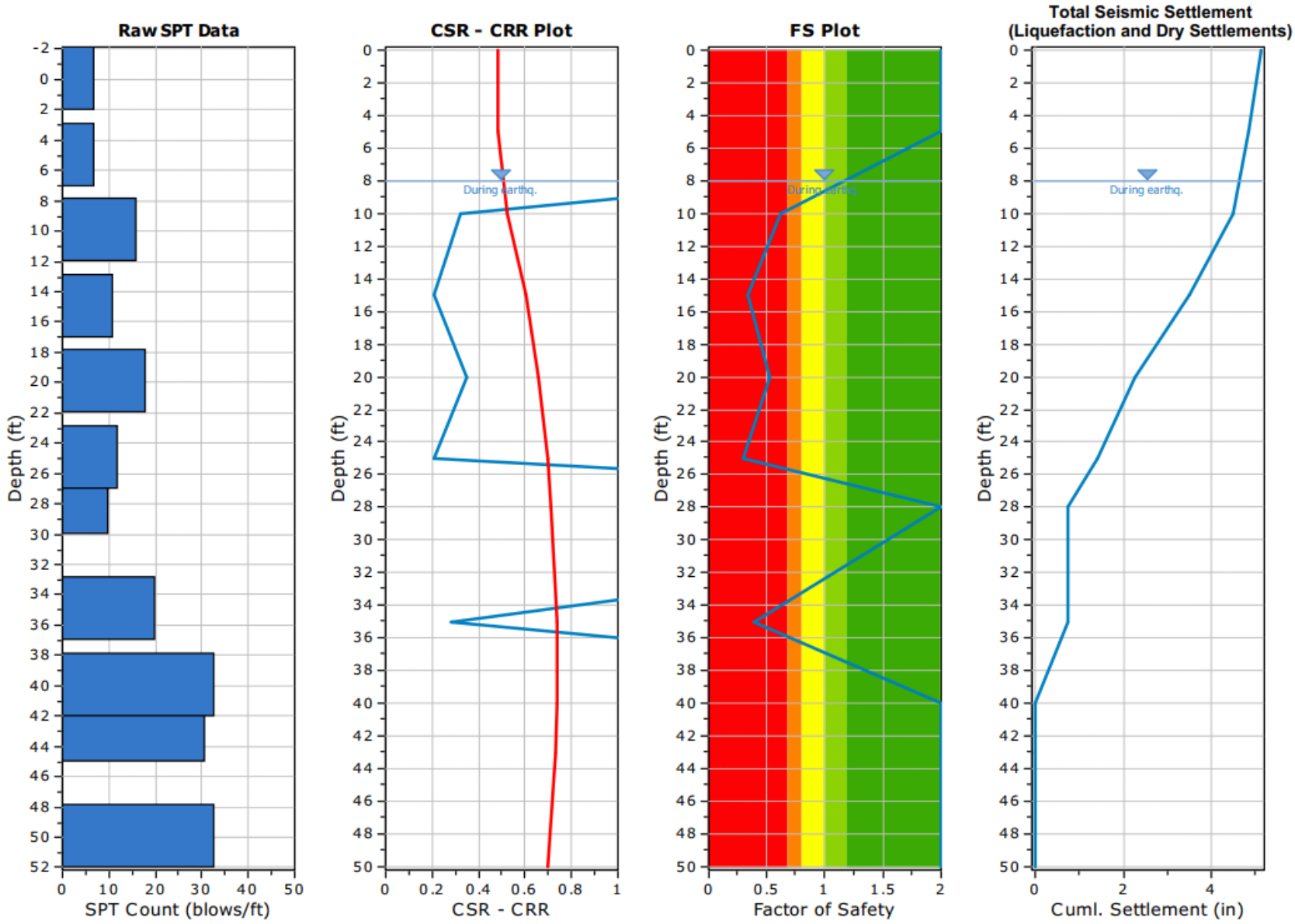
ATLAS	**B&I 2014** **B-3: Historically Highest Groundwater Table, 5ft of Compacted Fill**	Date: April, 2022 By: MNK Job No.: VAPA Compton College 10-61187PW	**Figure:** VII-1



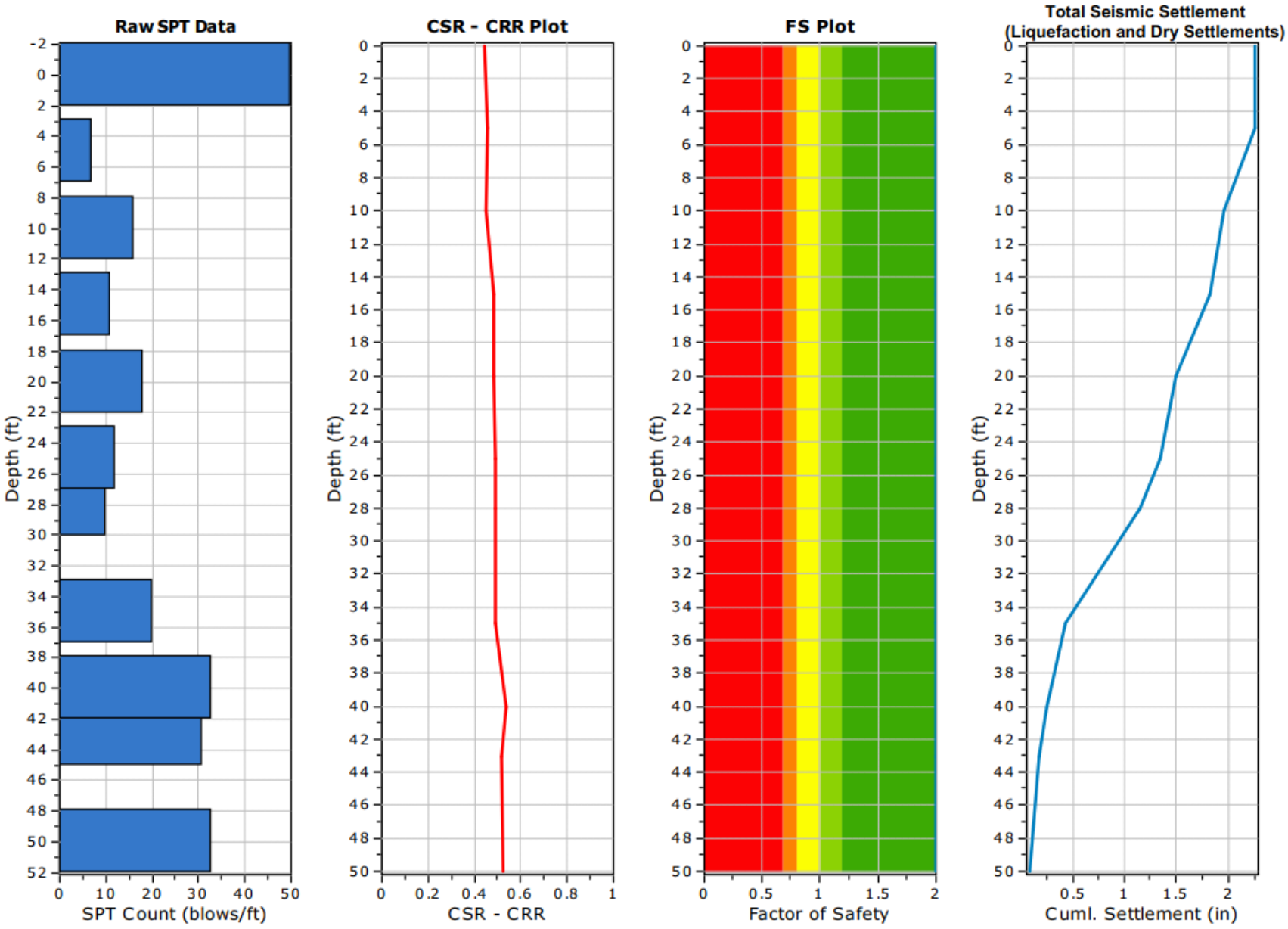
ATLAS	**B&I 2014** **B-3: Historically Highest Groundwater Table, No Compacted Fill**	Date: April, 2022 By: MNK Job No.: VAPA Compton College 10-61187PW	**Figure:** VII-2



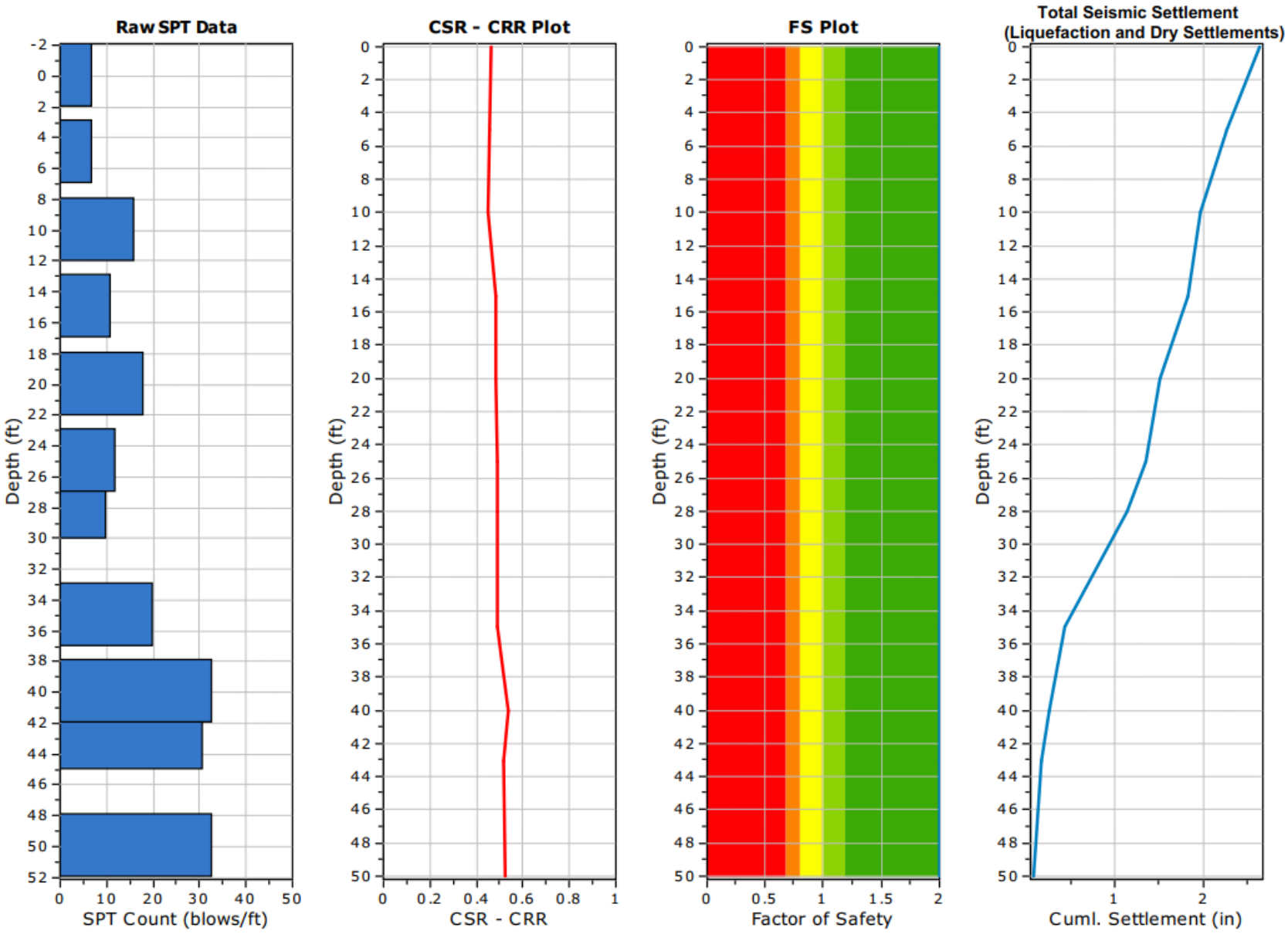
ATLAS	**NCEER 1998** **B-3: Historically Highest Groundwater Table, 5ft of Compacted Fill**	Date: April, 2022 By: MNK Job No.: VAPA Compton College 10-61187PW	**Figure:** VII-3



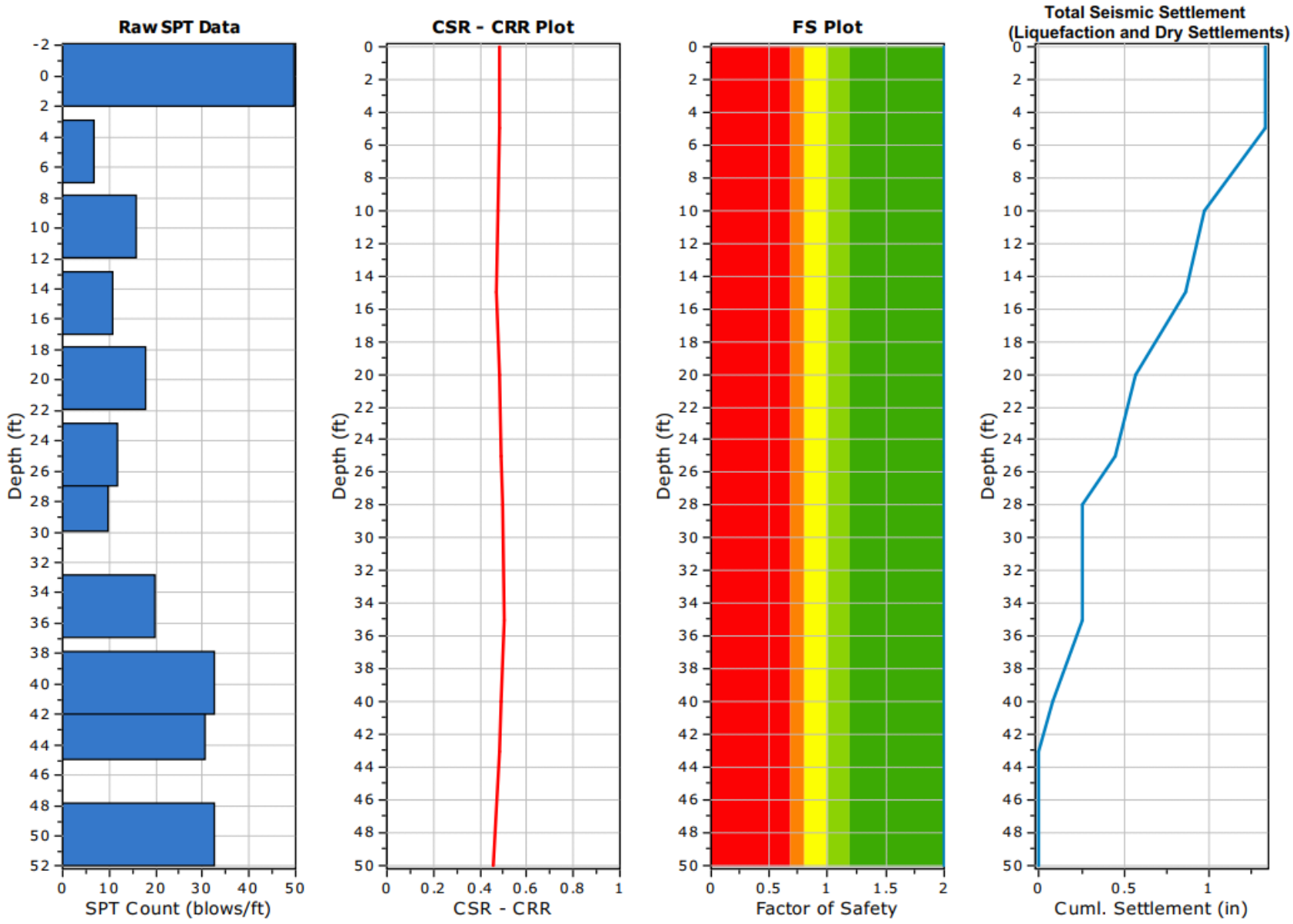
ATLAS	**NCEER 1998** **B-3: Historically Highest Groundwater Table, No Compacted Fill**	Date: April, 2022 By: MNK Job No.: VAPA Compton College 10-61187PW	**Figure:** VII-4



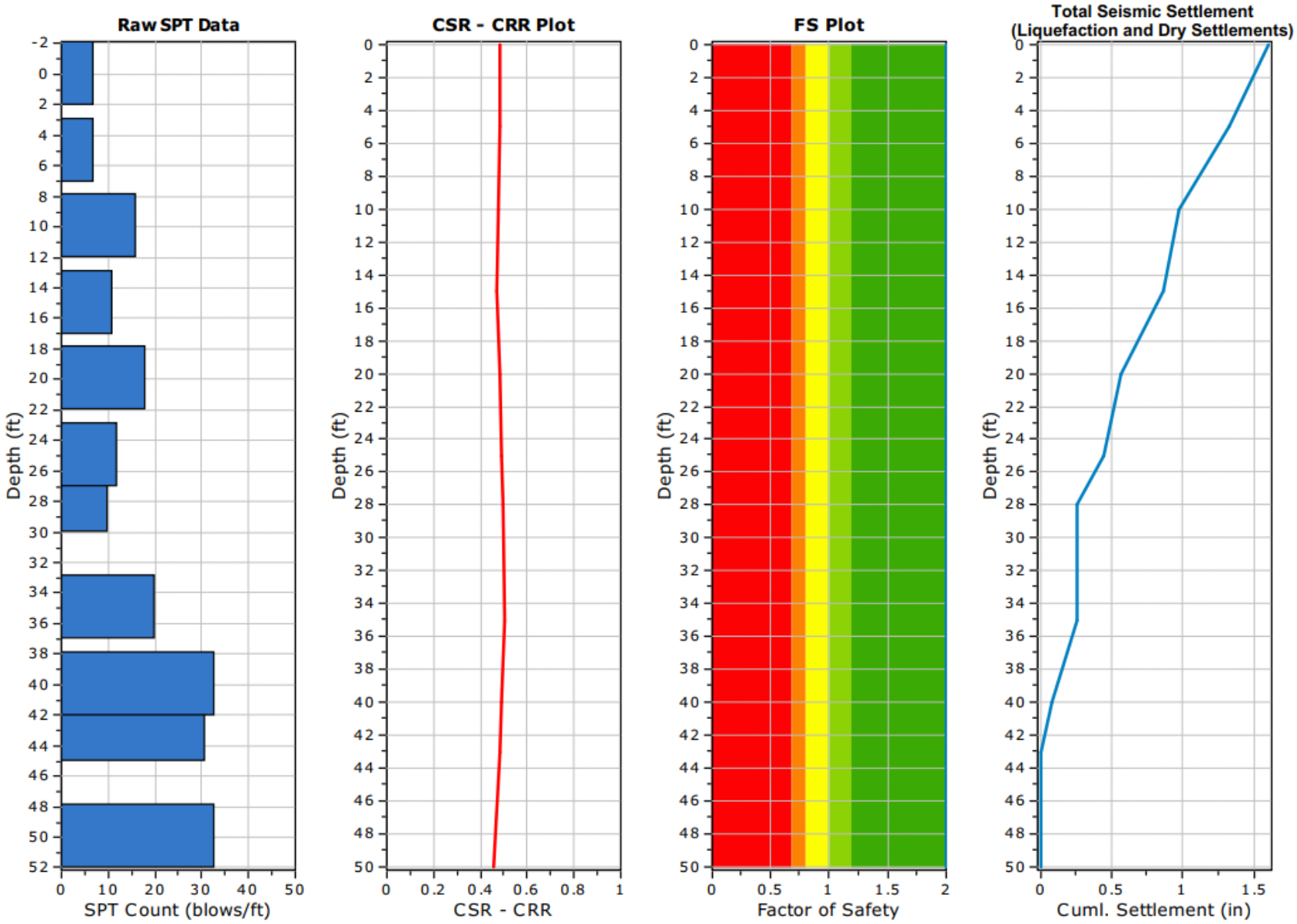
ATLAS	**B&I 2014** **B-3: Existing Groundwater Table, 5ft of Compacted Fill**	Date: April, 2022 By: MNK Job No.: VAPA Compton College 10-61187PW	**Figure:** VII-5



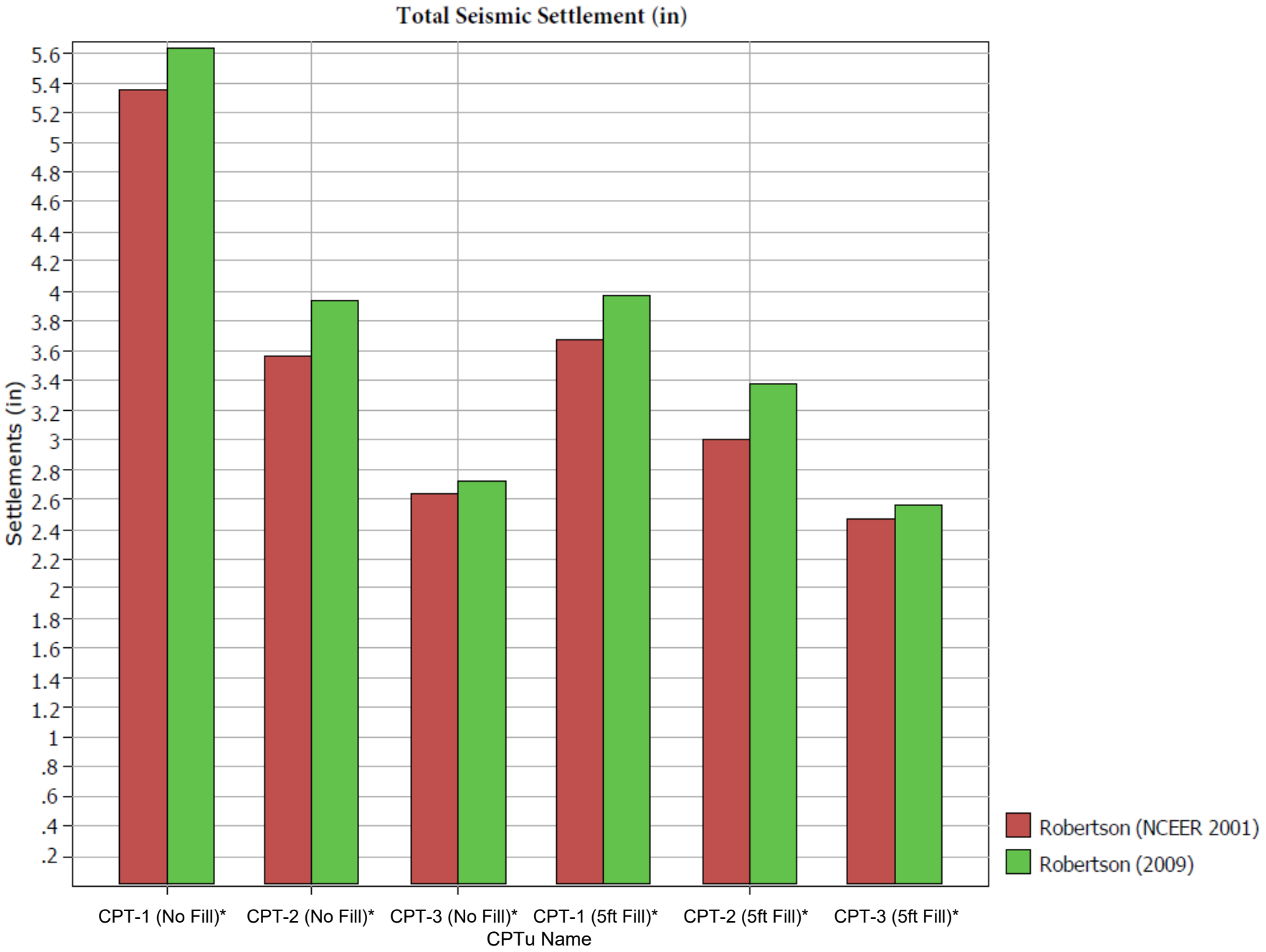
ATLAS	**B&I 2014** **B-3: Existing Groundwater Table, No Compacted Fill**	Date: April, 2022 By: MNK Job No.: VAPA Compton College 10-61187PW	**Figure:** VII-6



ATLAS	**NCEER 1998** **B-3: Existing Groundwater Table, 5ft of Compacted fill**	Date: April, 2022 By: MNK Job No.: VAPA Compton College 10-61187PW	**Figure:** VII-7



ATLAS	**NCEER 1998** **B-3: Existing Groundwater Table,** **No Compacted Fill**	Date: April, 2022 By: MNK Job No.: VAPA Compton College 10-61187PW	**Figure:** VII-8



ATLAS	**CPT-1,2,3: Historically High Groundwater Table** ***Fill: Compacted Fill**	Date: April, 2022 By: MNK Job No.: VAPA Compton College 10-61187PW	**Figure:** VII-9

ADDENDUM TO THE GEOTECHNICAL AND GEOHAZARD INVESTIGATION REPORT

VISUAL AND PERFORMING ARTS BUILDING
COMPTON COMMUNITY COLLEGE DISTRICT

PREPARED FOR:

Compton Community College District
1111 East Artesia Boulevard
Compton, CA 90221

PREPARED BY:
Atlas Technical Consultants LLC
14457 Meridian Parkway
Riverside, CA 92518

November 7, 2022

14457 Meridian Parkway
Riverside, CA 92518
(951) 697-4777. | oneatlas.com

November 7, 2022

Atlas No. 10-61187PW
Report No. 2

MS. LINDA OWENS, CHIEF FACILITIES OFFICER
COMPTON COMMUNITY COLLEGE DISTRICT
1111 EAST ARTESIA BOULEVARD
COMPTON, CALIFORNIA 90221

Subject: **Addendum to the Geotechnical and Geohazard Investigation Report**
Compton College Visual and Performing Arts Building
Compton College Campus
1111 East Artesia Boulevard, Compton, CA 90221

Reference:

1) **Geotechnical and Geohazard Investigation Report**
Visual and Performing Arts Building
Compton Community College District, 1111 East Artesia Boulevard, Compton, CA 90221. Prepared by Atlas Technical Consultants, Report No. 10-61187PW, dated April 27, 2022.

2) **Second Engineering Geology and Seismology Review for**
Compton College – New Visual and Performing Arts Building
1111 t Artesia Boulevard, Compton, California
CGS Application No. 03-CGS5512, dated October 26, 2022.

Dear Ms. Owens:

Atlas Technical Consultants is pleased to present this addendum geotechnical and geohazard investigation report for the proposed Visual and Performing Arts Building, Compton College, located at 1111 East Artesia Boulevard in Compton, California.

This addendum report has been prepared based on CGS' discussion provided in reference No. 2 about the reduced soil bearing capacity of those soils in their liquefied state. Based on the provided discussion in CGS' Letter (Reference No. 2), for the foundations that their bottom has been considered to be at the depth of 4 feet below the adjacent ground surface (and not more than that), we recommend a reduced/reevaluated allowable soil bearing capacity on the order of about 2,300 psf in seismic loading which can be used for the foundation systems provided in Reference 1, Sections: 4.3.2, 4.3.3, 4.3.4 and 4.10 (cannot be used for mat foundation). We recommend grading (civil) plans be provided to Atlas for our review based on the geotechnical aspect of the project. If you have any questions, please call us at (951) 697-4777.

REGISTERED PROFESSIONAL ENGINEER
MEHRAB JESMANI
GE 3175
EXP. 09/30/23
GEOTECHNICAL
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL GEOLOGIST
DOUGLAS A. SKINNER
No. 2472
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

Mehrab Jesmani, PhD, PE, GE 3175
Senior Engineer

Douglas A. Skinner, PG, CEG 2472
Senior Geologist

MJ:DS
Distribution: lowens@compton.edu, sphillips@pcm3.com and hraztan@struere.com

14457 Meridian Parkway
Riverside, CA 92518
(951) 697-4777 | oneatlas.com

February 27, 2023

Atlas No. 10-65139PW
Report No. 3

MS. LINDA OWENS, CHIEF FACILITIES OFFICER
COMPTON COMMUNITY COLLEGE DISTRICT
1111 EAST ARTESIA BOULEVARD
COMPTON, CALIFORNIA 90221

Subject: **Addendum No. 2-Geotechnical and Geohazard Parameters**
Compton College: Structural Upgrade of Existing Building "Y"
Compton College Campus, 1111 East Artesia Boulevard, Compton, CA

Reference: Atlas Technical Consultants, 2022, Geotechnical and Geohazard Investigation Report Visual and Performing Arts Building, Compton Community College District, 1111 East Artesia Boulevard, Compton, CA 90221.
Atlas Report No. 10-61187PW, dated April 27, 2022.

Dear Ms. Owens:

Atlas Technical Consultants is pleased to present this letter providing the requested geotechnical and geohazard parameters for the structural upgrade of the existing Building "Y" at Compton College in Compton, California. This letter has been prepared in general accordance with the request of the design team and Atlas proposal #23-00756 dated January 19, 2023.

Please note that the recommendations and parameters provided in this report are only for the existing Building Y and should not be used elsewhere in the project.

GEOTECHNICAL PARAMETERS

The allowable bearing design values for the existing shallow isolated footings are as follows:

- Bearing Pressure = 1,200 psf. The allowable bearing value may be increased by 33% for short duration of loading, including the effects of wind or seismic forces.
- Coefficient of Friction = 0.25.
- Passive Lateral Earth Pressure = 150 psf/ft with the maximum of 1,500 psf.
- The friction resistance and passive resistance of the soils may be combined provided that the passive resistance is reduced by one third.

SEISMIC PARAMETERS

Atlas performed site-specific seismic ground motion hazard analysis in general accordance with Section 2.4.2 of ASCE 41-17 Publication for the Seismic Evaluation and Retrofit of Existing Buildings. Our seismic evaluation included development of 5% damped site-specific response spectra for the BSE-2N (MCE_R), BSE-1N (two-thirds of BSE-2N), BSE-2E (5% probability of exceedance in 50 years), and BSE-1E (20% probability of exceedance in 50 years) seismic

hazard levels. For a detailed description of our site-specific seismic analyses, including probabilistic and deterministic seismic hazard analyses, please refer to our referenced report.

In addition to the site-specific ground motion hazard analysis, we obtained the mapped seismic ground motion values for the BSE-2N, 1N, 2E, and 1E seismic hazard levels using the ATC seismic design tool and developed the general response spectra for 5% damping in accordance with Section 2.4.1 of ASCE 41-17. The general and site-specific spectral response acceleration parameters for BSE-2N, 1N, 2E, and 1E seismic hazard levels are presented in Tables 1 through 4, respectively. The response spectra for all the hazard levels are provided in Attachment I in both tabular and graphical formats. The BSE-1N and BSE-2N values will remain unchanged comparing to the referenced report and are still valid based on the 2022 CBC.

Table 1 – ASCE 41-17 Seismic Design Parameters – BSE-2N Hazard Level

Site Coefficients and Spectral Response Acceleration Parameters	Value
Site Class	D
Mapped Spectral Response Acceleration at 0.2-second Period, S_s	1.693 g
Mapped Spectral Response Acceleration at 1.0-second Period, S_1	0.606 g
Mapped Site-Modified Spectral Response Acceleration at 0.2-second Period, S_{XS}	1.693 g
Mapped Site-Modified Spectral Response Acceleration at 1.0-second Period, S_{X1}	1.031 g
Site-Specific Spectral Response Acceleration at 0.2-second Period, S_{XS}	1.882 g
Site-Specific Spectral Response Acceleration at 1.0-second Period, S_{X1}	1.639 g

Table 2 – ASCE 41-17 Seismic Design Parameters – BSE-1N Hazard Level

Site Coefficients and Spectral Response Acceleration Parameters	Value
Site Class	D
Mapped Site-Modified Spectral Response Acceleration at 0.2-second Period, S_{XS}	1.129 g
Mapped Site-Modified Spectral Response Acceleration at 1.0-second Period, S_{X1}	0.687 g
Site-Specific Spectral Response Acceleration at 0.2-second Period, S_{XS}	1.255 g
Site-Specific Spectral Response Acceleration at 1.0-second Period, S_{X1}	1.093 g

Table 3 – ASCE 41-17 Seismic Design Parameters – BSE-2E Hazard Level

Site Coefficients and Spectral Response Acceleration Parameters	Value
Site Class	D
Mapped Spectral Response Acceleration at 0.2-second Period, S_s	1.251 g
Mapped Spectral Response Acceleration at 1.0-second Period, S_1	0.437 g
Mapped Site-Modified Spectral Response Acceleration at 0.2-second Period, S_{XS}	1.251 g
Mapped Site-Modified Spectral Response Acceleration at 1.0-second Period, S_{X1}	0.815 g
Site-Specific Spectral Response Acceleration at 0.2-second Period, S_{XS}	1.484 g
Site-Specific Spectral Response Acceleration at 1.0-second Period, S_{X1}	1.121 g

Table 4 – ASCE 41-17 Seismic Design Parameters – BSE-1E Hazard Level

Site Coefficients and Spectral Response Acceleration Parameters	Value
Site Class	D
Mapped Spectral Response Acceleration at 0.2-second Period, S_s	0.594 g
Mapped Spectral Response Acceleration at 1.0-second Period, S_1	0.200 g
Mapped Site-Modified Spectral Response Acceleration at 0.2-second Period, S_{XS}	0.787 g
Mapped Site-Modified Spectral Response Acceleration at 1.0-second Period, S_{X1}	0.440 g
Site-Specific Spectral Response Acceleration at 0.2-second Period, S_{XS}	0.835 g
Site-Specific Spectral Response Acceleration at 1.0-second Period, S_{X1}	0.549 g

We appreciate the opportunity to be of service on this project. If you have any questions, please contact the undersigned at your convenience.

Respectfully submitted,
Atlas Technical Consultants LLC

Morteza Mirshekari, PhD, PE
Senior Engineer

Mehrab Jesmani, PhD, PE, GE 3175
Senior Engineer

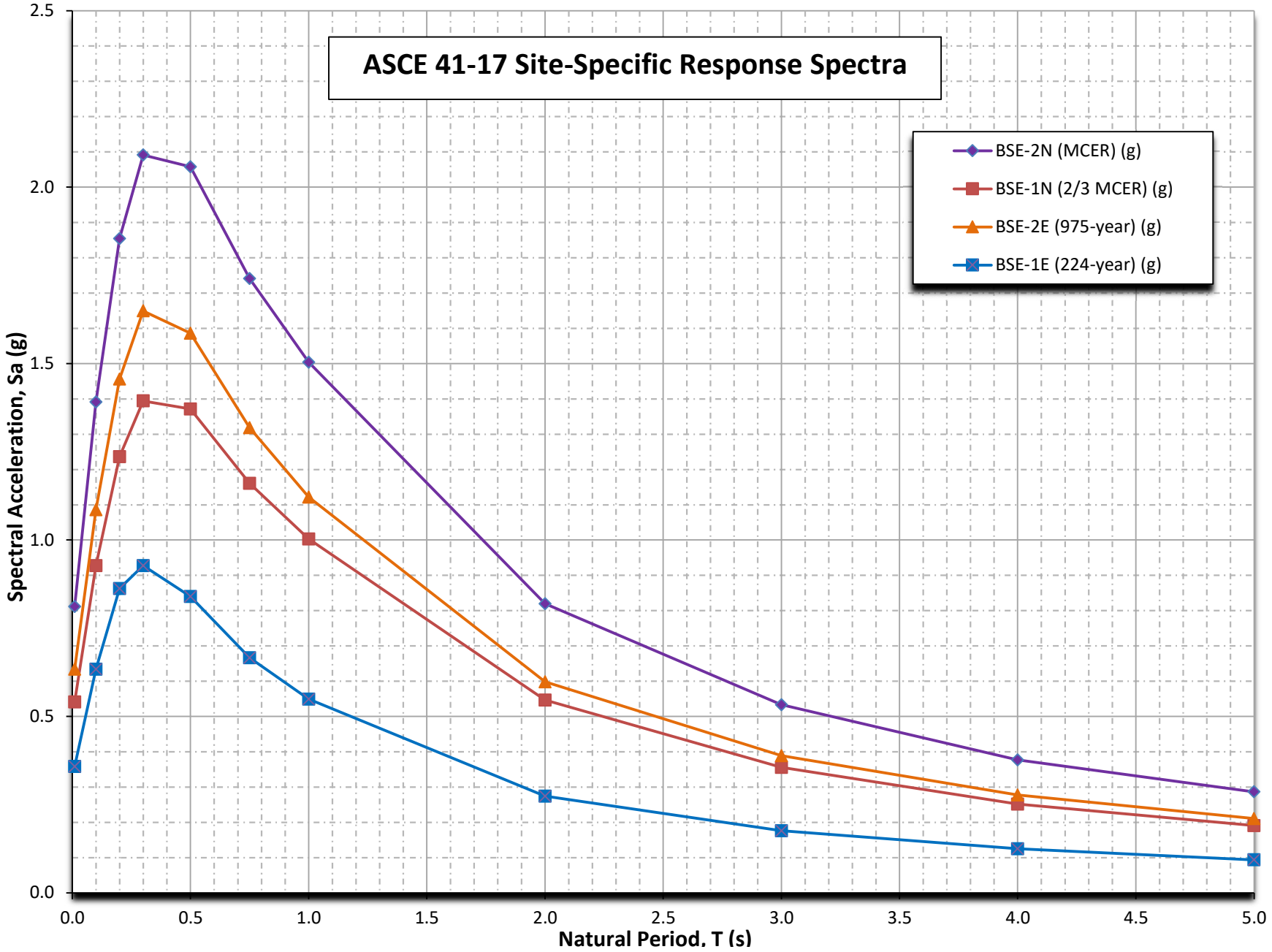
Douglas A. Skinner, PG, CEG 2472
Senior Geologist

MJ:DS:MM
Attachment: ASCE 41-17 Site-Specific Ground Motion Hazard Analysis
Distribution: lowens@compton.edu, sphillips@pcm3.com, hraztan@struere.com

ATTACHMENT I
ASCE 41-17 SITE-SPECIFIC GROUND MOTION HAZARD ANALYSIS

ASCE 41-17 Site-Specific Response Spectra

Period (s)	BSE-2N (MCE_R) (g)	BSE-1N (2/3 MCE_R) (g)	BSE-2E (975-year) (g)	BSE-1E (224-year) (g)
0.01	0.812	0.541	0.634	0.359
0.1	1.392	0.928	1.086	0.634
0.2	1.855	1.236	1.456	0.862
0.3	2.091	1.394	1.649	0.928
0.5	2.057	1.372	1.586	0.840
0.75	1.741	1.161	1.318	0.666
1	1.504	1.003	1.121	0.549
2	0.819	0.546	0.598	0.274
3	0.533	0.356	0.389	0.176
4	0.377	0.251	0.278	0.125
5	0.287	0.191	0.211	0.094
S_{XS}	1.882	1.255	1.484	0.835
S_{X1}	1.639	1.093	1.121	0.549


ASCE 41-17 Site-Specific Response Spectra
BSE-2N (MCER) (g)
BSE-1N (2/3 MCER) (g)
BSE-2E (975-year) (g)
BSE-1E (224-year) (g)
Spectral Acceleration, Sa (g)
Natural Period, T (s)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0

14457 Meridian Parkway
Riverside, CA 92518
(951) 697-4777 | oneatlas.com

September 07, 2023

Atlas No. 10-65139PW
Report No. 4R

MS. LINDA OWENS, CHIEF FACILITIES OFFICER
COMPTON COMMUNITY COLLEGE DISTRICT
1111 EAST ARTESIA BOULEVARD
COMPTON, CALIFORNIA 90221

Subject: **Addendum No. 2R-Geotechnical and Geohazard Parameters**
Compton College: Structural Upgrade of Existing Building "Y"
Compton College Campus, 1111 East Artesia Boulevard, Compton, CA

Reference: Atlas Technical Consultants, 2022, Geotechnical and Geohazard Investigation Report, Visual and Performing Arts Building, Compton Community College District, 1111 East Artesia Boulevard, Compton, CA 90221.
Atlas Report No. 10-61187PW, dated April 27, 2022.

Dear Ms. Owens:

Atlas Technical Consultants is pleased to present this letter providing the requested geotechnical and geohazard parameters for the structural upgrade of the existing Building "Y" at Compton College in Compton, California. This letter has been prepared in general accordance with the request of the design team and Atlas proposal #23-00756 dated January 19, 2023.

Please note that the recommendations and parameters provided in this report are only for the existing Building Y and should not be used elsewhere in the project. Additionally, per our correspondence with the structural engineer of the project, the footing elements will not be modeled as part of the structural analysis of the existing building. As such, the load-deformation characteristics of the shallow footings would not be required in this study.

GEOTECHNICAL PARAMETERS

The allowable bearing design values for the existing and new proposed: shallow isolated and continuous footings are as follows:

- In static condition and for existing foundation systems, the bearing pressure of isolated and/or continuous footings can be considered on the order of about 1,200 psf.
- In seismic condition (considering the historically highest groundwater table at the depth of about 8 feet and potential of the soil liquefaction: loss in bearing capacity) and for existing foundation systems, the bearing pressure of isolated and/or continuous footings can be considered on the order of about 1,000 psf.
- In static condition and for the new foundation systems, the bearing pressure of isolated and/or continuous footings can be considered on the order of about 2,000 psf.
- In seismic condition (considering the historically highest groundwater table at the depth of about 8 feet and potential of the soil liquefaction: loss in bearing capacity) and for new

foundation systems, the bearing pressure of isolated and/or continuous footings can be considered on the order of about 1,500 psf.

- Coefficient of Friction = 0.25.
- Passive Lateral Earth Pressure = 150 psf/ft with the maximum of 1,500 psf.
- The friction resistance and passive resistance of the soils may be combined provided that the passive resistance is reduced by one third.

GRADING RECOMMENDATIONS

In the area of footings enlargement and new proposed footings, undocumented fill shall be removed (to the depth of at least 5 feet), the bottom of the excavation shall be scarified to a minimum depth of 8 inches, moisture conditioned about 2% above optimum and compacted to 92 percent of relative compaction (maximum dry density per ASTM D1557).

The bottom of the footings shall be placed at least 2 feet below the existing grade and be supported by 3 feet of engineered/compacted fill.

Fill should be placed in loose lifts of 6 to 8 inches in thickness, moisture-conditioned above optimum (generally about 2% above optimum) and compacted to a minimum of 95% relative compaction (per ASTM D1557). Other conservative recommendations provided in the referenced reports are still applicable.

Where feasible, the over excavation and backfilling (recommended in this section) should be laterally extended a minimum of 5 feet beyond the edges of the footings discussed above. Due to the required depth of excavation, shoring may be needed to protect the excavations walls safely. The contractor should be responsible for shoring, and this is the contractor's responsibility to choose the proper methods and equipments for excavation, backfilling and compaction to avoid damaging the existing foundations and structures.

In some cases where the exerted pressures may exceed the provided bearing pressures, controlled low strength material (CLSM) with sufficient bearing capacity is recommended under the footings and foundation systems.

SEISMIC PARAMETERS

Atlas performed site-specific seismic ground motion hazard analysis in general accordance with Section 2.4.2 of ASCE 41-17 Publication for the Seismic Evaluation and Retrofit of Existing Buildings. Our seismic evaluation included development of 5% damped site-specific response spectra for the BSE-2N (MCE_R), BSE-1N (two-thirds of BSE-2N), BSE-2E (5% probability of exceedance in 50 years), and BSE-1E (20% probability of exceedance in 50 years) seismic hazard levels. For a detailed description of our site-specific seismic analyses, including probabilistic and deterministic seismic hazard analyses, please refer to our referenced report.

In addition to the site-specific ground motion hazard analysis, we obtained the mapped seismic ground motion values for the BSE-2N, 1N, 2E, and 1E seismic hazard levels using the ATC seismic design tool and developed the general response spectra for 5% damping in accordance with Section 2.4.1 of ASCE 41-17. The general and site-specific spectral response acceleration parameters for BSE-2N, 1N, 2E, and 1E seismic hazard levels are presented in Tables 1 through 4, respectively. The response spectra for all the hazard levels are provided in Attachment I in both tabular and graphical formats. The BSE-1N and BSE-2N values will remain unchanged comparing to the referenced report and are still valid based on the 2022 CBC.

Table 1 – ASCE 41-17 Seismic Design Parameters – BSE-2N Hazard Level

Site Coefficients and Spectral Response Acceleration Parameters	Value
Site Class	D
Mapped Spectral Response Acceleration at 0.2-second Period, S_s	1.693 g
Mapped Spectral Response Acceleration at 1.0-second Period, S_1	0.606 g
Mapped Site-Modified Spectral Response Acceleration at 0.2-second Period, S_{XS}	1.693 g
Mapped Site-Modified Spectral Response Acceleration at 1.0-second Period, S_{X1}	1.031 g
Site-Specific Spectral Response Acceleration at 0.2-second Period, S_{XS}	1.882 g
Site-Specific Spectral Response Acceleration at 1.0-second Period, S_{X1}	1.639 g

Table 2 – ASCE 41-17 Seismic Design Parameters – BSE-1N Hazard Level

Site Coefficients and Spectral Response Acceleration Parameters	Value
Site Class	D
Mapped Site-Modified Spectral Response Acceleration at 0.2-second Period, S_{XS}	1.129 g
Mapped Site-Modified Spectral Response Acceleration at 1.0-second Period, S_{X1}	0.687 g
Site-Specific Spectral Response Acceleration at 0.2-second Period, S_{XS}	1.255 g
Site-Specific Spectral Response Acceleration at 1.0-second Period, S_{X1}	1.093 g

Table 3 – ASCE 41-17 Seismic Design Parameters – BSE-2E Hazard Level

Site Coefficients and Spectral Response Acceleration Parameters	Value
Site Class	D
Mapped Spectral Response Acceleration at 0.2-second Period, S_s	1.251 g
Mapped Spectral Response Acceleration at 1.0-second Period, S_1	0.437 g
Mapped Site-Modified Spectral Response Acceleration at 0.2-second Period, S_{XS}	1.251 g
Mapped Site-Modified Spectral Response Acceleration at 1.0-second Period, S_{X1}	0.815 g
Site-Specific Spectral Response Acceleration at 0.2-second Period, S_{XS}	1.484 g
Site-Specific Spectral Response Acceleration at 1.0-second Period, S_{X1}	1.121 g

Table 4 – ASCE 41-17 Seismic Design Parameters – BSE-1E Hazard Level

Site Coefficients and Spectral Response Acceleration Parameters	Value
Site Class	D
Mapped Spectral Response Acceleration at 0.2-second Period, S_s	0.594 g
Mapped Spectral Response Acceleration at 1.0-second Period, S_1	0.200 g
Mapped Site-Modified Spectral Response Acceleration at 0.2-second Period, S_{XS}	0.787 g
Mapped Site-Modified Spectral Response Acceleration at 1.0-second Period, S_{X1}	0.440 g
Site-Specific Spectral Response Acceleration at 0.2-second Period, S_{XS}	0.835 g
Site-Specific Spectral Response Acceleration at 1.0-second Period, S_{X1}	0.549 g

SEISMIC SETTLEMENTS

Our referenced report dated April 27, 2022, provides the results of our seismic settlements analyses for a hazard level associated with a return period of 2,475 years (i.e., 2% probability of exceedance in 50 years per ASCE 7-16). Additional seismic settlement analyses were performed under hazard levels for existing Building “Y” (i.e., BSE-2E and BSE-1E) as part of the current study. Two sets of analyses were performed using historically highest groundwater table at a depth of approximately 8 feet and the existing groundwater level at a depth of approximately 60 feet. The results of each set of analyses are provided in this section. Additional details regarding our seismic settlement analyses are provided in our reference report.

Historically Highest Groundwater Table

The analyses considering historically highest groundwater level of approximately 8 feet below ground surface resulted in seismic dry settlement and liquefaction-induced settlement where the total settlement is generally due to liquefaction. The approximate seismic settlement values considering historically highest groundwater based on the site-specific seismic parameters for BSE-2E and BSE-1E hazard levels are as follows:

- BSE-2E (PGA = 0.640 g and earthquake magnitude = 7.3)
  - Approximate total seismic settlement of up to 5.0 inches
  - Corresponding approximate differential seismic settlement of up to 2 ½ inches over a horizontal distance of 40 feet.
- BSE-1E (PGA = 0.360 g and earthquake magnitude = 7.3)
  - Approximate total seismic settlement of up to 3½ inches
  - Corresponding approximate differential seismic settlement of up to 1 ¾ inches over a horizontal distance of 40 feet.

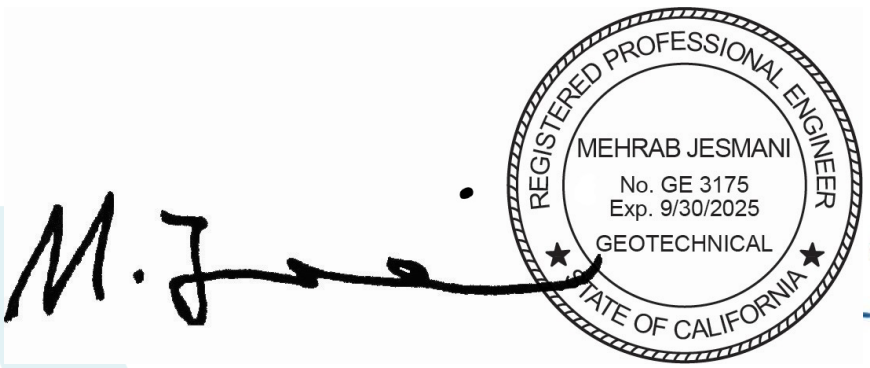
Existing Groundwater Table

The seismic settlement associated with the existing groundwater level of approximately 60 feet below ground surface is generally due to seismic compression of dry and partially saturated soils above the groundwater level. The approximate seismic settlement values considering the existing groundwater level based on the site-specific seismic parameters for BSE-2E and BSE-1E hazard levels are as follows:

- BSE-2E (PGA = 0.64 g and earthquake magnitude = 7.3)
  - Approximate total seismic settlement of up to 1½ inches
  - Corresponding approximate differential seismic settlement of up to ¾ inch over a horizontal distance of 40 feet.
- BSE-1E (PGA = 0.36 g and earthquake magnitude = 7.3)
  - Approximate total seismic settlement of up to ½ inches
  - Corresponding approximate differential seismic settlement of up to ½ inch over a horizontal distance of 40 feet.

We appreciate the opportunity to be of service on this project. If you have any questions, please contact the undersigned at your convenience.

Respectfully submitted,
Atlas Technical Consultants LLC



Mehrab Jesmani, PhD, PE, GE 3175
Senior Engineer

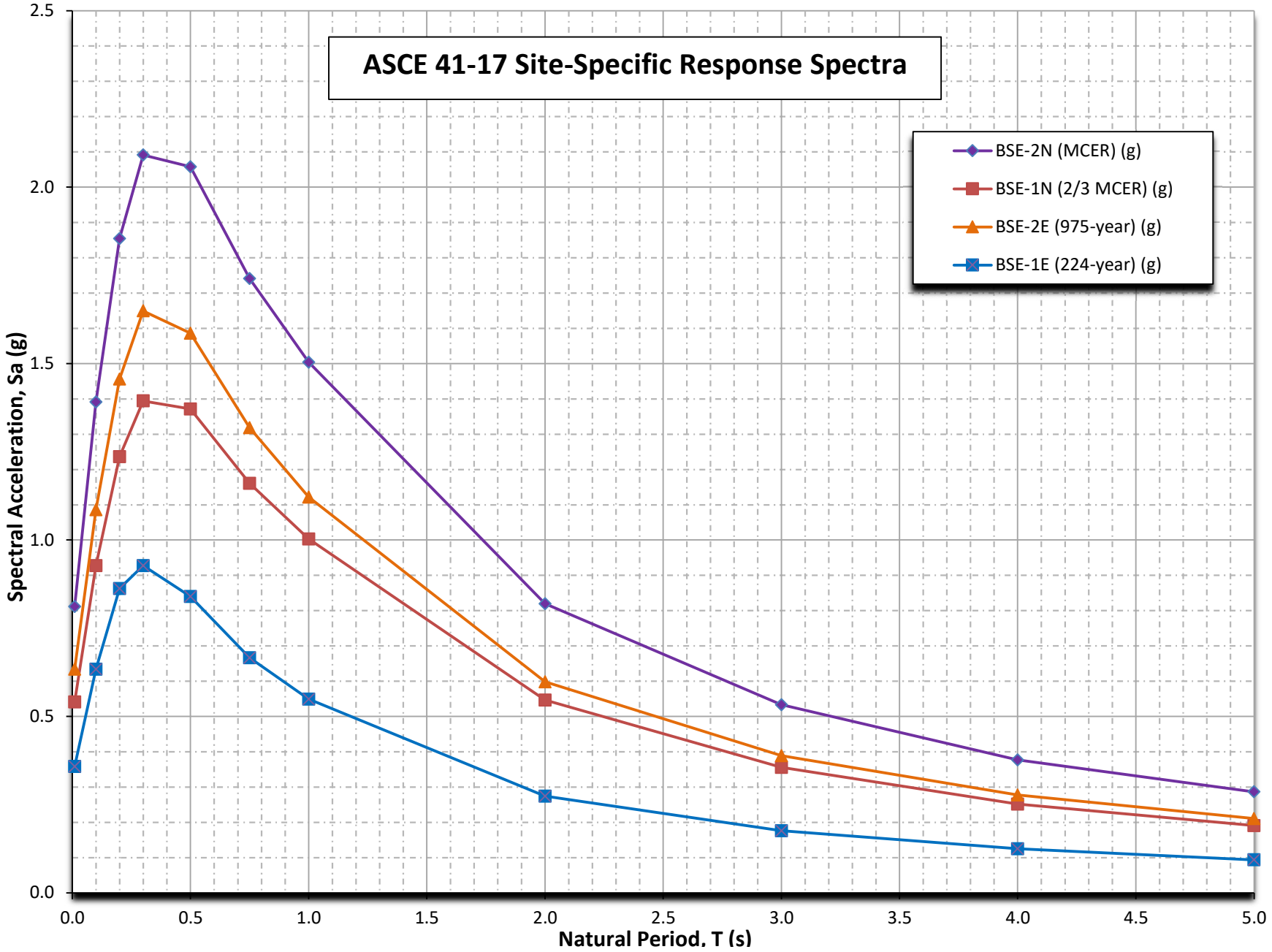
Douglas A. Skinner, PG, CEG 2472
Principal Geologist

MJ:DS
Attachment: ASCE 41-17 Site-Specific Ground Motion Hazard Analysis
Distribution: lowens@compton.edu, sphillips@pcm3.com, hraztan@struere.com

ATTACHMENT I
ASCE 41-17 SITE-SPECIFIC GROUND MOTION HAZARD ANALYSIS

ASCE 41-17 Site-Specific Response Spectra

Period (s)	BSE-2N (MCE_R) (g)	BSE-1N (2/3 MCE_R) (g)	BSE-2E (975-year) (g)	BSE-1E (224-year) (g)
PGA	0.812	0.541	0.634	0.359
0.1	1.392	0.928	1.086	0.634
0.2	1.855	1.236	1.456	0.862
0.3	2.091	1.394	1.649	0.928
0.5	2.057	1.372	1.586	0.840
0.75	1.741	1.161	1.318	0.666
1	1.504	1.003	1.121	0.549
2	0.819	0.546	0.598	0.274
3	0.533	0.356	0.389	0.176
4	0.377	0.251	0.278	0.125
5	0.287	0.191	0.211	0.094
S_{XS}	1.882	1.255	1.484	0.835
S_{X1}	1.639	1.093	1.121	0.549


ASCE 41-17 Site-Specific Response Spectra
BSE-2N (MCER) (g)
BSE-1N (2/3 MCER) (g)
BSE-2E (975-year) (g)
BSE-1E (224-year) (g)
Spectral Acceleration, Sa (g)
Natural Period, T (s)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0

California Department of Conservation
California Geological Survey

CALIFORNIA GEOLOGICAL SURVEY
DEPARTMENT OF CONSERVATION

APPLICATION
FOR ASSESSMENT OF GEOLOGIC HAZARD REPORTS

CGS Form 1A (1/2019)

For CGS use only
CGS project number 03-CGS 5512
Date received 7-21-2022

In order for CGS to review geologic hazard reports for a proposed school project, as described on Division of the State Architect (DSA) Interpretation of Regulations IR-4 (see http://www.dgs.ca.gov/dsa/Resources/IRManual.aspx), the following material must be submitted to CGS.

1. Upload to Box (https://www.conservation.ca.gov/cgs/upload-school):
   - this form; and site plan; and site data report
   - Geologic Hazard Report(s) and Geotechnical Report(s) to be reviewed
2. Mail to CGS:
   - this form, which will help CGS and the DSA coordinate reviews;
   - TWO *WET-SIGNED COPIES* of the Work Order (below), signed by an authorized representative of the District;
   - a check for $3600 to cover the time and materials needed for CGS review

RECEIVED
JUL 2 1 2022
California Geological Survey

Address: California Geological Survey
School Review Unit
801 K Street, MS 12-31
Sacramento, CA 95814-3531

Name of School: Compton College	
School District or State Agency: Compton Community College District	
Mailing Address (street, city, zip): 1111 E. Artesia Blvd., Compton, CA 90221	
District Superintendent: Dr. Keith Curry	
Telephone Number: (310) 900-1600	E-mail Address: kcurry@compton.edu
District Director of Facilities: Linda Owens, Chief Facilities Officer	
Telephone Number: (310) 900-1600 ext 2606	E-mail Address: lowens@compton.edu

Scope of Work:
New 1-Story Visual and Performing Arts Building in two separate wings, trellis structure and stepped planter.

Applicable Building Code (year): 2019 CBC Community College Project per: ☐ DSA-SS, or ☑ DSA-SS/CC amendments

This project includes a site-specific ground motion analysis in accordance with: ☐ none ☑ ASCE 7 ☐ ASCE 41

Project location (Street Address): 1111 E. Artesia Blvd.

City and Zip Code: Compton 90221 County: Los Angeles APN: 7318-006-900

OPSC Project Tracking Number: N/A DSA Application Number (if assigned): N/A

Plans, specifications, and related work were prepared by, and observation of construction will be performed by: (per Title 24, Part 1, Section 4-316, of the California Code of Regulations)	
Architect or Engineer in General Responsible Charge: Hraztan Zeitlan	
Printed Name: Hraztan Zeitlan	
Firm Name: Struere	
Address: 3324 Grand View Blvd, Los Angeles, CA 90066	
Telephone Number: (310) 748-7649	Fax Number:
California Registration Number: C28719	E-mail Address: hraztan@struere.com
The following individual is authorized to act as Alternate to the Architect or Engineer named above:	
Printed Name:	
Firm Name:	
Address:	
Telephone Number:	Fax Number:
California Registration Number:	E-mail Address:

Geologic hazards reports must be prepared by a Certified Engineering Geologist and a Geotechnical Engineer: (per Title 24, Part 2, Section 1803A, of the California Code of Regulations)	
Engineering Geologist Name: Douglas A. Skinner	Geotechnical Engineer Name: Mehrab Jesmani
Firm Name: Atlas Technical Consultants LLC	Firm Name: Atlas Technical Consultants LLC
Address: 6280 Riverdale Street, San Diego, CA 92120	Address: 14457 Meridian Parkway, Riverside, CA 92518
Telephone Number: (877) 215-4321	Telephone Number: (951) 697-4777
Fax Number:	Fax Number:
E-mail Address: doug.skinner@oneatlas.com	E-mail Address: mehrab.jesmani@oneatlas.com
California Registration Number: No. 2472	California Registration Number: GE 3175

For Information regarding review of Geologic Hazard Reports for school projects:	
Technical (geology) questions:	Submittal and tracking of reports:
Jennifer Thornburg, PG, CEG, CHG	Margaret Hyland
California Geological Survey	California Geological Survey
801 K Street, MS 12-32, Sacramento, CA 95814-3531	801 K Street, MS 12-32, Sacramento, CA 95814-3531
916.445.5488	916.324.7324
Jennifer.Thornburg@conservation.ca.gov	Margaret.Hyland@conservation.ca.gov

California Department of Conservation
California Geological Survey

CALIFORNIA GEOLOGICAL SURVEY
DEPARTMENT OF CONSERVATION

WORK ORDER 03-cgs5512
FOR ASSESSMENT OF GEOLOGIC HAZARD REPORTS

CGS Form 1B (1/2019)

The parties to this Work Order are the State of California, Department of Conservation, California Geological Survey (CGS) and Compton Community College District (District). The Parties agree to the following terms and conditions:

1. CGS agrees to conduct an independent assessment of District-provided geologic hazard report(s) associated with the District's proposed school construction project to determine whether the reports are technically adequate.

2. The State of California, Department of General Services, Division of the State Architect (DSA) will rely upon the CGS technical assessment in reviewing plans for construction of the District's proposed construction project and permitting the project. Information regarding CGS assessment of district geologic hazard reports and the DSA's instructions to K-12 and community college districts regarding the CGS assessment can be found in DSA Interpretation of Regulation (IR A-4) at http://www.dgs.ca.gov/dsa/Resources/IRManual.aspx

3. The District shall list the specific reports to be reviewed by CGS in the Application (above). The District shall provide copies of the reports to CGS when submitting the signed Work Order and payment, as described below.

4. The District shall provide any additional information determined by CGS to be needed to complete its assessment.

5. The term of this Work Order shall begin upon full execution of the Work Order by both parties and shall end in 365 days or 12 months, whichever occurs first. "Full execution" as used herein means approval by authorized representatives of both Parties and payment to CGS of three thousand, six hundred dollars ($3600) in consideration of the promise by CGS to perform the technical assessment. Payment in full shall accompany two copies of this Work Order, each containing an original signature of a District representative authorized to sign the Work Order. CGS will return a copy of the Work Order containing an original signature of its authorized representative upon execution of the Work Order.

6. Failure of the District to submit the necessary documents or the $3,600 payment will result in termination of this Work Order.

7. No amendment or variation of the terms of this Work Order shall be valid unless made in writing and signed by both Parties. No oral understanding not incorporated into this Work Order is binding on either Party.

8. Either Party, in writing, may terminate this Work Order at any time with 30 days written notice; however, should the District terminate this Work Order after work has been commenced by CGS, CGS will retain the $3,600 payment for any work completed by CGS prior to the notice of termination.

RECEIVED
JUL 2 1 2022
California Geological Survey

9. Contact information for each party:

California Geological Survey	District
Name: Jennifer Thornburg, PG, CEG, HG	Name: Linda Owens, Chief Facilities Officer
Mailing Address: California Geological Survey 801 K Street, MS 12-32 Sacramento, CA 95814	Mailing Address: Compton Community College District 1111 E. Artesia Blvd. Compton, CA 90221
Phone Number: 916-324-7324	Phone Number: 310-900-1600 ext 2606

10. The Parties agree that the agents and employees of the Parties are independent of the other and shall not act as officers or employees or agents of the other Party to this Work Order.

11. During the performance of this Agreement, the Parties shall not discriminate, harass, or allow harassment against any employee or applicant for employment on account of the employee's or applicant's race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation, or military and veteran status. (Gov. Code, §§ 12900, 12940, 12990.) The Parties shall ensure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. The Parties shall comply with all provisions of the Fair Employment and Housing Act (Gov. Code §12900 et seq.) and the applicable regulations promulgated thereunder (Cal. Code Regs., tit. 2, §§ 11000, 11105, 11122, et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code section 12990, set forth in Chapter 5 of Division 4.1 of Title 2 of the California Code of Regulations, are incorporated into the Agreement by reference and made a part hereof as if set forth in full.

DISTRICT

(Signature) 6/24/22 (Date)

Name: Linda Owens

Title: Chief Facilities Officer

CALIFORNIA GEOLOGICAL SURVEY

DocuSigned by:
Jeff Newton
BAAEA8E0BF1949C...

(Signature) 7/21/2022 (Date)

Name: Jeff Newton

Title: Chief Deputy, Operations

STRUERE 3324 Grand View, Los Angeles, CA 90066 (310) 748-7649

June 23, 2022

California Geological Survey
School Review Unit
801 K Street, MS 12-32 Sacramento, CA 95814-3531

Re: **Compton College**
Visual and Performing Arts (VAPA) Replacement
Site Data Report

To Whom It May Concern:

As required per CBC 1603A.2, the following project description for the Compton College Visual and Performing Arts (VAPA) Replacement Project is provided to accompany the Geotechnical Report submitted to CGS for review:

1. The new 1-story building will serve the Visual and Performing Arts departments, replacing most of a 1950's existing building. The VAPA Replacement building will contain a large rehearsal space/black box theater/dance rehearsal room, a general classroom, a faculty office suite, a large music rehearsal room, a piano Lab, a music computer lab, individual practice rooms, recording studios and corresponding back of house spaces such as theater support control room, restrooms, showers and dressing rooms.

2. Construction materials include concrete spread footing foundation and slab-on-grade on compacted fill, load-bearing wood stud walls, plywood sheathing deck assembly, and non-load bearing interior wood stud walls. Exterior finish material is mostly exterior stucco plaster.

3. The building will be new construction.

4. The project does not involve structural modifications to existing buildings.

5. The Structural system will include Wood structural walls with plywood sheathing.

6. The foundation system will be continuous wall footings under load-bearing walls and exterior load-bearing or non-load bearing walls.

7. Structural design analysis will use Equivalent Lateral Force Procedure.

8. The project consists of a one-story approximately 14,000 s.f. building at grade. The project site is basically flat.

Sincerely,

Hraztan Zeitlian, AIA, LEED BD+C, NCARB
CA License # C 28719
Founder and Design Principal, Architect of Record
STRUERE
3324 Grand View, Los Angeles, CA 90066
(310) 748-7649
E-mail: Hraztan@Struere.com

California
Department of Conservation
California Geological Survey

Gavin Newsom, Governor
David Shabazian, Director

Linda Owens Jackson
Chief Facilities Officer
Compton Community College District
1111 E. Artesia Boulevard
Compton, California 90221

October 12, 2023

Subject: **Second Engineering Geology and Seismology Review for Compton College – Little Theater Structural Upgrade 1111 East Artesia Boulevard, Compton, California CGS Application No. 03-CGS5998**

Dear Ms. Owens Jackson:

In accordance with your request and transmittal of additional documents received on September 7, 2023, the California Geological Survey (CGS) has reviewed the engineering geology and seismology aspects of the consulting reports prepared for the subject project at Compton College. It is our understanding that this project involves structural upgrade modifications to the Existing Building "Y" (Little Theatre). This review was performed in accordance with Title 24, California Code of Regulations, 2022 California Building Code (CBC) and followed CGS Note 48 guidelines. We reviewed the following reports for this additional review of the project:

CGS Application No. 03-CGS5998, Response to Review Comments, Engineering Geology and Seismology Review for Compton College – Little Theater Structural Upgrade, 1111 East Artesia Boulevard, Compton, California: Atlas Technical Consultants LLC, 14457 Meridian Parkway, Riverside, CA 92518; company Project No. 10-65139PW Report No. 5, report dated September 7, 2023, 4 pages, 2 attachments.

Addendum No. 2R-Geotechnical and Geohazard Parameters, Compton College: Structural Upgrade of Existing Building "Y", Compton College Campus, 1111 East Artesia Boulevard, Compton, CA: Atlas Technical Consultants LLC, 14457 Meridian Parkway, Riverside, CA 92518; company Project No. 10-65139PW Report No. 4R, report dated September 7, 2023, 5 pages, 1 attachment (included as Attachment 1 in the above report).

In addition, we previously reviewed the following reports:

Addendum No. 2R-Geotechnical and Geohazard Parameters, Compton College: Structural Upgrade of Existing Building "Y", Compton College Campus, 1111 East Artesia Boulevard, Compton, CA: Atlas Technical Consultants LLC, 14457 Meridian Parkway, Riverside, CA 92518; company Project No. 10-65139PW Report No. 3R, report dated May 24, 2023, 4 pages, 1 attachment.

Addendum to the Geotechnical and Geohazard Investigation Report, Compton College Visual and Performing Arts Building, Compton College Campus, 1111 East Artesia Boulevard, Compton, CA 90221: Atlas Technical Consultants LLC, 14457 Meridian Parkway, Riverside, CA 92518; company Project No. 10-61187PW Report No. 2, report dated November 7, 2022, 1 page.

Response To Review Comments, Engineering Geology and Seismology Review for Compton College – New Visual and Performing Arts Building, 1111 East Artesia Boulevard, Compton, California, CGS Application No. 03-CGS5512: Atlas Technical Consultants LLC, 14457 Meridian Parkway, Riverside, CA 92518; company Project No. 10-61187PW Report No. 2, report dated October 4, 2022, 4 pages, 2 attachments.

Geotechnical and Geohazard Investigation, Compton College Visual and Performing Arts Building, Compton College Campus, 1111 East Artesia Boulevard, Compton, CA 90221: Atlas Technical Consultants LLC, 14457 Meridian Parkway, Riverside, CA 92518; company Project No. 10-61187PW Report No. 1, report dated April 27, 2022, 30 pages, 8 figures, 7 appendices.

CGS previously submitted our findings regarding this project in a review letter dated August 2, 2023, in which the consultants were requested to provide updated geotechnical engineering recommendations that address the potential for surface manifestation and/or loss of bearing capacity due to liquefaction. In the documents received on September 7, 2023, the consultants have provided an updated discussion regarding surface manifestations of liquefaction, and updated geotechnical recommendations that address the bearing capacity question.

Discussion of Surface Manifestations of Liquefaction

The consultants report that for the new foundations, the upper 8 feet of soil (including 5 feet of compacted fill) above the depth to the highest historical groundwater table and the presence of clay interbeds below that depth can reduce the potential for surface manifestation of liquefaction sufficiently.

The consultants also note that the project includes existing building, foundation, and structural systems that are “generally going to be rehabilitated.” However, the project scope does not appear to include notable alterations of the existing foundations. Accordingly, the consultants do not issue specific recommendations with respect to the existing foundation system and note that it “may behave based on its original design." The consultants have reported soil liquefaction hazards at this site that include **total seismic settlement of up to 5½ to 6 inches with differential seismic settlement of about 3 to 3½ inches over a horizontal distance of 40 feet and the potential for surface manifestations (sand boils and fissures).** CGS is reporting this so that DSA and the District are aware of the hazards identified for this project site that may impact the existing structures.

Discussion of Geotechnical Engineering Recommendations

The consultants report that in the areas proposed for enlargement of existing footings and new proposed footings, “undocumented fill shall be removed to the depth of at least 5 feet below the existing ground surface” and replaced by engineered/compacted fill. The consultants also report that the “bottom of the footings shall be placed at least 2 feet below the existing grade and be supported by 3 feet of engineered/compacted fill.” Additionally, the consultants report that the

recommended bearing pressures in Addendum No. 2R dated September 7, 2023, are the reduced values for both existing and new foundation systems considering loss of soil strength due to liquefaction which appear to be reasonable.

Based on the discussion above, the consultants have addressed our earlier concerns regarding liquefaction related issues and effects upon geotechnical recommendations and foundation design. The consultants have now provided a thorough evaluation of engineering geology and seismology issues with respect to the proposed improvements.

In conclusion, ***the engineering geology and seismology issues at this site are adequately assessed in the referenced reports, and no further information is requested***. If you have any further questions about this review letter, please contact the primary reviewer at Justin.LaForge@conservation.ca.gov.

Respectfully submitted,

Justin LaForge
Engineering Geologist
PG 9796

Farshid Ghazavi
Civil Engineer
PE 88607

Concur:

Jennifer Thornburg
Senior Engineering Geologist
PG 5476, CEG 2240

Copies to:

Hraztan Zeitlan, *Project Architect*
Struere, 3324 Grand View Blvd, Los Angeles, CA 90066

Douglas A. Skinner, *Certified Engineering Geologist*
Atlas Technical Consultants LLC, 6280 Riverdale Street, San Diego, CA 92120

Mehrab Jesmani, *Registered Geotechnical Engineer*
Atlas Technical Consultants LLC, 14457 Meridian Parkway, Riverside, CA 92518

Douglas Humphrey, *Regional Manager*
Division of State Architect, 355 South Grand Avenue, Suite 2100, Los Angeles, CA 90071

14457 Meridian Parkway
Riverside, CA 518
(951) 697-4777 | oneatlas.com

September 07, 2023

Atlas No. 10-65139PW
Report No. 5

MS. LINDA OWENS, CHIEF FACILITY OFFICER
COMPTON COMMUNITY COLLEGE DISTRICT
1111 EAST ARTESIA BOULEVARD
COMPTON, CA 90221

Subject: **CGS Application No. 03-CGS5998**
RESPONSE TO REVIEW COMMENTS
Engineering Geology and Seismology Review for Compton College – Little Theater Structural Upgrade, 1111 East Artesia Boulevard, Compton, California

Reference:

1) California Department of Conservation, California Geological Survey, 2023, Engineering Geology and Seismology Review for Compton College – Little Theater Structural Upgrade, 1111 East Artesia Boulevard, Compton, California. CGS Application No. 03-CGS5998.

2) Atlas Technical Consultants, 2022, Geotechnical and Geohazard Investigation Report, Visual and Performing Arts Building, Compton Community College District, Compton, CA. Project No. 10-61187PW, Report No. 1, dated April 27, 2022.

3) Atlas Technical Consultants, 2023, Addendum No. 2R- Geotechnical and Geohazard Parameters, Compton College: Structural Upgrade of Existing Building “Y”, Compton College Campus, 1111 East Artesia Boulevard, Compton, CA. Project No. 10-65139PW, Report No. 3R, dated May 24,2023.

4) Atlas Technical Consultants, 2023, Addendum No. 2R- Geotechnical and Geohazard Parameters Compton College: Structural Upgrade of Existing Building “Y”, Compton College Campus, 1111 East Artesia Boulevard, Compton, CA. Project No. 10-65139PW, Report No. 4R, dated September 7,2023.

Dear Ms. Owens:

Atlas Technical Consultants prepared this letter to respond to the referenced review comments from the California Department of Conservation’s California Geological Survey (CGS) for the subject project.

In the review letter dated August 2, 2023 (Reference 1), CGS has requested additional information. For convenience, a copy of the review letter is attached. Our responses have been prepared per the CGS Comment Letter and based on: Title 24, California Code of Regulations, 2022 California Building Code (CBC) and followed CGS Note 48 Guidelines.

Comment No. 10: *Consideration of Geology in Geotechnical Engineering Recommendations:* ***Additional information is requested.*** *The consultants report that following their correspondence with the structural engineer of the project, the foundation elements will not be modeled as part of the structural analysis of the existing building. As such,* ***it is our understanding the load-deformation characteristics of the shallow foundations would not be required in this study*** *(ASCE 41-17, Section 8.4).*

The consultants also provide allowable bearing capacity for static and seismic conditions. However, as discussed in Item 21, the consultants have identified the potential for surface manifestation. The consultants are requested to review their site grading and foundation recommendations and further to evaluate the potential impact to the existing structure of the surface manifestation and/or loss of bearing capacity due to liquefaction, and to provide updated recommendations if warranted. Additionally, CGS notes that the Site Data Report lists the existing foundation as continuous wall footings but the consultants report it as shallow isolated footings. The consultants are requested to clarify this discrepancy.

ATLAS' Response:

Based on the information provided in Atlas' Report No. 1, Project No. 10-61187PW dated April 27, 2022, Fig. I-2, (Reference No. 2) the closest Boring and CPT are B-1 and CPT-3 respectively.

Generally, B-1 indicates 4 feet of fill underlain by medium dense of sandy silt to silty sand alluvium and CPT-3 indicates 5 feet of hand auger underlain by silty sand, sandy silt and thin layers of clay and silty clay. Based on our grading recommendations provided in the above referenced reports for new proposed foundation systems, the undocumented fill will be removed and replaced by compacted fill to the depth of about 5 feet.

Please note that the historically highest groundwater table is considered to be at a depth of 8 feet below the existing ground surface. This means that the upper 8 feet of the soil (including 5 feet of compacted fill) won't be liquified during seismic loading and surface manifestation (such as sand boiling) within the upper 8 feet of the soil won't occur. Below 8 feet, B-1 and CPT-3 indicate alternations of clay type layers within the silty and sandy soil layers which means the shallow layers are not clean sands. Also, the results of passing #200 sieve, presented in Appendix III of the addressed geotechnical investigation report (Reference 2), generally indicate the presence of sufficient fine content in the tested samples.

The upper 8 feet of unsaturated soil (including 5 feet of compacted fill on top) and the existing alterations in the soil layers with the fine content presented in our Lab results (discussed above) with some clay layers shown in B-1 and CPT-3 can reduce the potential of surface manifestation sufficiently. Also, the existing groundwater table is below 50 feet; therefore, in the current situation there is no potential of liquefaction within the shallow soil layers.

Care should be taken that based on the information provided in Reference 2, Fig. I-2, CPT-3 is the closest CPT to Building "Y" that based on Fig. VII-9, it gives the least seismic settlement, while in our calculation for this project we used the data from CPT-1 (the most conservative one).

In Reference No.4 we provided the allowable bearing pressures in static and seismic conditions for isolated and continuous footings. The bearing pressures in seismic condition are the reduced values considering loss of bearing capacity due to liquefaction.

Please be informed that there are existing building, foundation and structural systems that are generally going to be rehabilitated. Atlas' grading recommendations and corresponding discussions presented in this response and Reference 4, can be applied to the new proposed foundation systems (within the Atlas' scope of the work). The existing foundation system may behave based on its original design and construction; however,it is our professional opinion that the recommended conservative seismic settlements (total and differential) that shall be incorporated into the project structural design, can decrease the risk of the building tilting and significant differential settlements.

Site grading is not within the scope of this project.

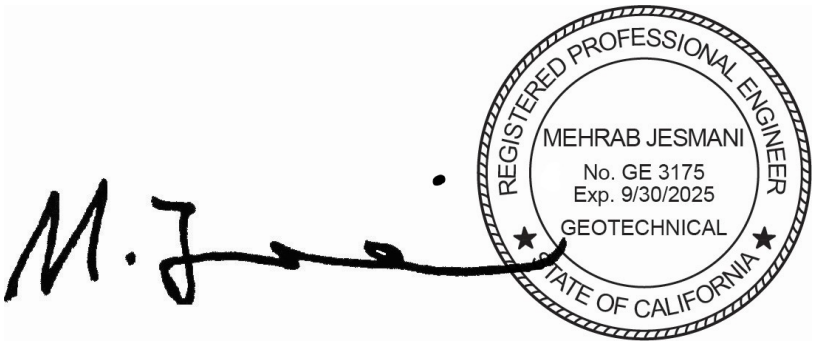
Comment No. 22: *Mitigation Options for Liquefaction/Seismic Settlement:* ***Additional information may be needed.*** *Based on consultants' response to Item 10, recommendation and mitigation measures to mitigate the potential impacts of surface manifestation such as tilting and loss of bearing capacity may be warranted.*

ATLAS' Response:

Please see our response to Comment No. 10.

If you have any questions, please call us at (951) 697-4777.

Respectfully submitted,
Atlas Technical Consultants LLC



Mehrab Jesmani, PhD, PE, GE, M. ASCE
Senior Engineer

Douglas A. Skinner, CEG 2472
Principal Geologist

MJ:DAS

Attachments:

I) Atlas Technical Consultants, 2023, Addendum No. 2R- Geotechnical and Geohazard Parameters Compton College: Structural Upgrade of Existing Building "Y", Compton College Campus, 1111 East Artesia Boulevard, Compton, CA. Project No. 10-65139PW, Report No. 4R, dated September 7,2023.

II) California Department of Conservation, California Geological Survey, 2023, Engineering Geology and Seismology Review for Compton College – Little Theater Structural Upgrade, 1111 East Artesia Boulevard, Compton, California. CGS Application No. 03-CGS5998.

Distribution:
Ms. Linda Owens at: lowens@compton.edu
Ms. Sheri Phillips at: sphillips@pcm3.com
Mr. Hraztan Zeitlian at: hraztan@struere.com

ATTACHMENT I

Atlas Technical Consultants, 2023, Addendum No. 2R- Geotechnical and Geohazard Parameters Compton College: Structural Upgrade of Existing Building "Y", Compton College Campus, 1111 East Artesia Boulevard, Compton, CA. Project No. 10-65139PW, Report No. 4R, dated September 7,2023.

14457 Meridian Parkway
Riverside, CA 92518
(951) 697-4777 | oneatlas.com

September 07, 2023

Atlas No. 10-65139PW
Report No. 4R

MS. LINDA OWENS, CHIEF FACILITIES OFFICER
COMPTON COMMUNITY COLLEGE DISTRICT
1111 EAST ARTESIA BOULEVARD
COMPTON, CALIFORNIA 90221

Subject: **Addendum No. 2R-Geotechnical and Geohazard Parameters**
Compton College: Structural Upgrade of Existing Building "Y"
Compton College Campus, 1111 East Artesia Boulevard, Compton, CA

Reference: Atlas Technical Consultants, 2022, Geotechnical and Geohazard Investigation Report, Visual and Performing Arts Building, Compton Community College District, 1111 East Artesia Boulevard, Compton, CA 90221.
Atlas Report No. 10-61187PW, dated April 27, 2022.

Dear Ms. Owens:

Atlas Technical Consultants is pleased to present this letter providing the requested geotechnical and geohazard parameters for the structural upgrade of the existing Building "Y" at Compton College in Compton, California. This letter has been prepared in general accordance with the request of the design team and Atlas proposal #23-00756 dated January 19, 2023.

Please note that the recommendations and parameters provided in this report are only for the existing Building Y and should not be used elsewhere in the project. Additionally, per our correspondence with the structural engineer of the project, the footing elements will not be modeled as part of the structural analysis of the existing building. As such, the load-deformation characteristics of the shallow footings would not be required in this study.

GEOTECHNICAL PARAMETERS

The allowable bearing design values for the existing and new proposed: shallow isolated and continuous footings are as follows:

- In static condition and for existing foundation systems, the bearing pressure of isolated and/or continuous footings can be considered on the order of about 1,200 psf.
- In seismic condition (considering the historically highest groundwater table at the depth of about 8 feet and potential of the soil liquefaction: loss in bearing capacity) and for existing foundation systems, the bearing pressure of isolated and/or continuous footings can be considered on the order of about 1,000 psf.
- In static condition and for the new foundation systems, the bearing pressure of isolated and/or continuous footings can be considered on the order of about 2,000 psf.
- In seismic condition (considering the historically highest groundwater table at the depth of about 8 feet and potential of the soil liquefaction: loss in bearing capacity) and for new

foundation systems, the bearing pressure of isolated and/or continuous footings can be considered on the order of about 1,500 psf.

- Coefficient of Friction = 0.25.
- Passive Lateral Earth Pressure = 150 psf/ft with the maximum of 1,500 psf.
- The friction resistance and passive resistance of the soils may be combined provided that the passive resistance is reduced by one third.

GRADING RECOMMENDATIONS

In the area of footings enlargement and new proposed footings, undocumented fill shall be removed (to the depth of at least 5 feet), the bottom of the excavation shall be scarified to a minimum depth of 8 inches, moisture conditioned about 2% above optimum and compacted to 92 percent of relative compaction (maximum dry density per ASTM D1557).

The bottom of the footings shall be placed at least 2 feet below the existing grade and be supported by 3 feet of engineered/compacted fill.

Fill should be placed in loose lifts of 6 to 8 inches in thickness, moisture-conditioned above optimum (generally about 2% above optimum) and compacted to a minimum of 95% relative compaction (per ASTM D1557). Other conservative recommendations provided in the referenced reports are still applicable.

Where feasible, the over excavation and backfilling (recommended in this section) should be laterally extended a minimum of 5 feet beyond the edges of the footings discussed above. Due to the required depth of excavation, shoring may be needed to protect the excavations walls safely. The contractor should be responsible for shoring, and this is the contractor's responsibility to choose the proper methods and equipments for excavation, backfilling and compaction to avoid damaging the existing foundations and structures.

In some cases where the exerted pressures may exceed the provided bearing pressures, controlled low strength material (CLSM) with sufficient bearing capacity is recommended under the footings and foundation systems.

SEISMIC PARAMETERS

Atlas performed site-specific seismic ground motion hazard analysis in general accordance with Section 2.4.2 of ASCE 41-17 Publication for the Seismic Evaluation and Retrofit of Existing Buildings. Our seismic evaluation included development of 5% damped site-specific response spectra for the BSE-2N (MCE_R), BSE-1N (two-thirds of BSE-2N), BSE-2E (5% probability of exceedance in 50 years), and BSE-1E (20% probability of exceedance in 50 years) seismic hazard levels. For a detailed description of our site-specific seismic analyses, including probabilistic and deterministic seismic hazard analyses, please refer to our referenced report.

In addition to the site-specific ground motion hazard analysis, we obtained the mapped seismic ground motion values for the BSE-2N, 1N, 2E, and 1E seismic hazard levels using the ATC seismic design tool and developed the general response spectra for 5% damping in accordance with Section 2.4.1 of ASCE 41-17. The general and site-specific spectral response acceleration parameters for BSE-2N, 1N, 2E, and 1E seismic hazard levels are presented in Tables 1 through 4, respectively. The response spectra for all the hazard levels are provided in Attachment I in both tabular and graphical formats. The BSE-1N and BSE-2N values will remain unchanged comparing to the referenced report and are still valid based on the 2022 CBC.

Table 1 – ASCE 41-17 Seismic Design Parameters – BSE-2N Hazard Level

Site Coefficients and Spectral Response Acceleration Parameters	Value
Site Class	D
Mapped Spectral Response Acceleration at 0.2-second Period, S_s	1.693 g
Mapped Spectral Response Acceleration at 1.0-second Period, S_1	0.606 g
Mapped Site-Modified Spectral Response Acceleration at 0.2-second Period, S_{XS}	1.693 g
Mapped Site-Modified Spectral Response Acceleration at 1.0-second Period, S_{X1}	1.031 g
Site-Specific Spectral Response Acceleration at 0.2-second Period, S_{XS}	1.882 g
Site-Specific Spectral Response Acceleration at 1.0-second Period, S_{X1}	1.639 g

Table 2 – ASCE 41-17 Seismic Design Parameters – BSE-1N Hazard Level

Site Coefficients and Spectral Response Acceleration Parameters	Value
Site Class	D
Mapped Site-Modified Spectral Response Acceleration at 0.2-second Period, S_{XS}	1.129 g
Mapped Site-Modified Spectral Response Acceleration at 1.0-second Period, S_{X1}	0.687 g
Site-Specific Spectral Response Acceleration at 0.2-second Period, S_{XS}	1.255 g
Site-Specific Spectral Response Acceleration at 1.0-second Period, S_{X1}	1.093 g

Table 3 – ASCE 41-17 Seismic Design Parameters – BSE-2E Hazard Level

Site Coefficients and Spectral Response Acceleration Parameters	Value
Site Class	D
Mapped Spectral Response Acceleration at 0.2-second Period, S_s	1.251 g
Mapped Spectral Response Acceleration at 1.0-second Period, S_1	0.437 g
Mapped Site-Modified Spectral Response Acceleration at 0.2-second Period, S_{XS}	1.251 g
Mapped Site-Modified Spectral Response Acceleration at 1.0-second Period, S_{X1}	0.815 g
Site-Specific Spectral Response Acceleration at 0.2-second Period, S_{XS}	1.484 g
Site-Specific Spectral Response Acceleration at 1.0-second Period, S_{X1}	1.121 g

Table 4 – ASCE 41-17 Seismic Design Parameters – BSE-1E Hazard Level

Site Coefficients and Spectral Response Acceleration Parameters	Value
Site Class	D
Mapped Spectral Response Acceleration at 0.2-second Period, S_s	0.594 g
Mapped Spectral Response Acceleration at 1.0-second Period, S_1	0.200 g
Mapped Site-Modified Spectral Response Acceleration at 0.2-second Period, S_{XS}	0.787 g
Mapped Site-Modified Spectral Response Acceleration at 1.0-second Period, S_{X1}	0.440 g
Site-Specific Spectral Response Acceleration at 0.2-second Period, S_{XS}	0.835 g
Site-Specific Spectral Response Acceleration at 1.0-second Period, S_{X1}	0.549 g

SEISMIC SETTLEMENTS

Our referenced report dated April 27, 2022, provides the results of our seismic settlements analyses for a hazard level associated with a return period of 2,475 years (i.e., 2% probability of exceedance in 50 years per ASCE 7-16). Additional seismic settlement analyses were performed under hazard levels for existing Building “Y” (i.e., BSE-2E and BSE-1E) as part of the current study. Two sets of analyses were performed using historically highest groundwater table at a depth of approximately 8 feet and the existing groundwater level at a depth of approximately 60 feet. The results of each set of analyses are provided in this section. Additional details regarding our seismic settlement analyses are provided in our reference report.

Historically Highest Groundwater Table

The analyses considering historically highest groundwater level of approximately 8 feet below ground surface resulted in seismic dry settlement and liquefaction-induced settlement where the total settlement is generally due to liquefaction. The approximate seismic settlement values considering historically highest groundwater based on the site-specific seismic parameters for BSE-2E and BSE-1E hazard levels are as follows:

- BSE-2E (PGA = 0.640 g and earthquake magnitude = 7.3)
  - Approximate total seismic settlement of up to 5.0 inches
  - Corresponding approximate differential seismic settlement of up to 2 ½ inches over a horizontal distance of 40 feet.
- BSE-1E (PGA = 0.360 g and earthquake magnitude = 7.3)
  - Approximate total seismic settlement of up to 3½ inches
  - Corresponding approximate differential seismic settlement of up to 1 ¾ inches over a horizontal distance of 40 feet.

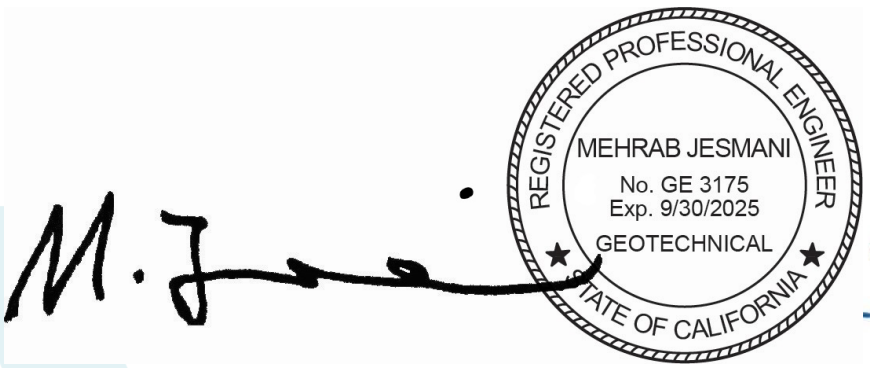
Existing Groundwater Table

The seismic settlement associated with the existing groundwater level of approximately 60 feet below ground surface is generally due to seismic compression of dry and partially saturated soils above the groundwater level. The approximate seismic settlement values considering the existing groundwater level based on the site-specific seismic parameters for BSE-2E and BSE-1E hazard levels are as follows:

- BSE-2E (PGA = 0.64 g and earthquake magnitude = 7.3)
  - Approximate total seismic settlement of up to 1½ inches
  - Corresponding approximate differential seismic settlement of up to ¾ inch over a horizontal distance of 40 feet.
- BSE-1E (PGA = 0.36 g and earthquake magnitude = 7.3)
  - Approximate total seismic settlement of up to ½ inches
  - Corresponding approximate differential seismic settlement of up to ½ inch over a horizontal distance of 40 feet.

We appreciate the opportunity to be of service on this project. If you have any questions, please contact the undersigned at your convenience.

Respectfully submitted,
Atlas Technical Consultants LLC



Mehrab Jesmani, PhD, PE, GE 3175
Senior Engineer

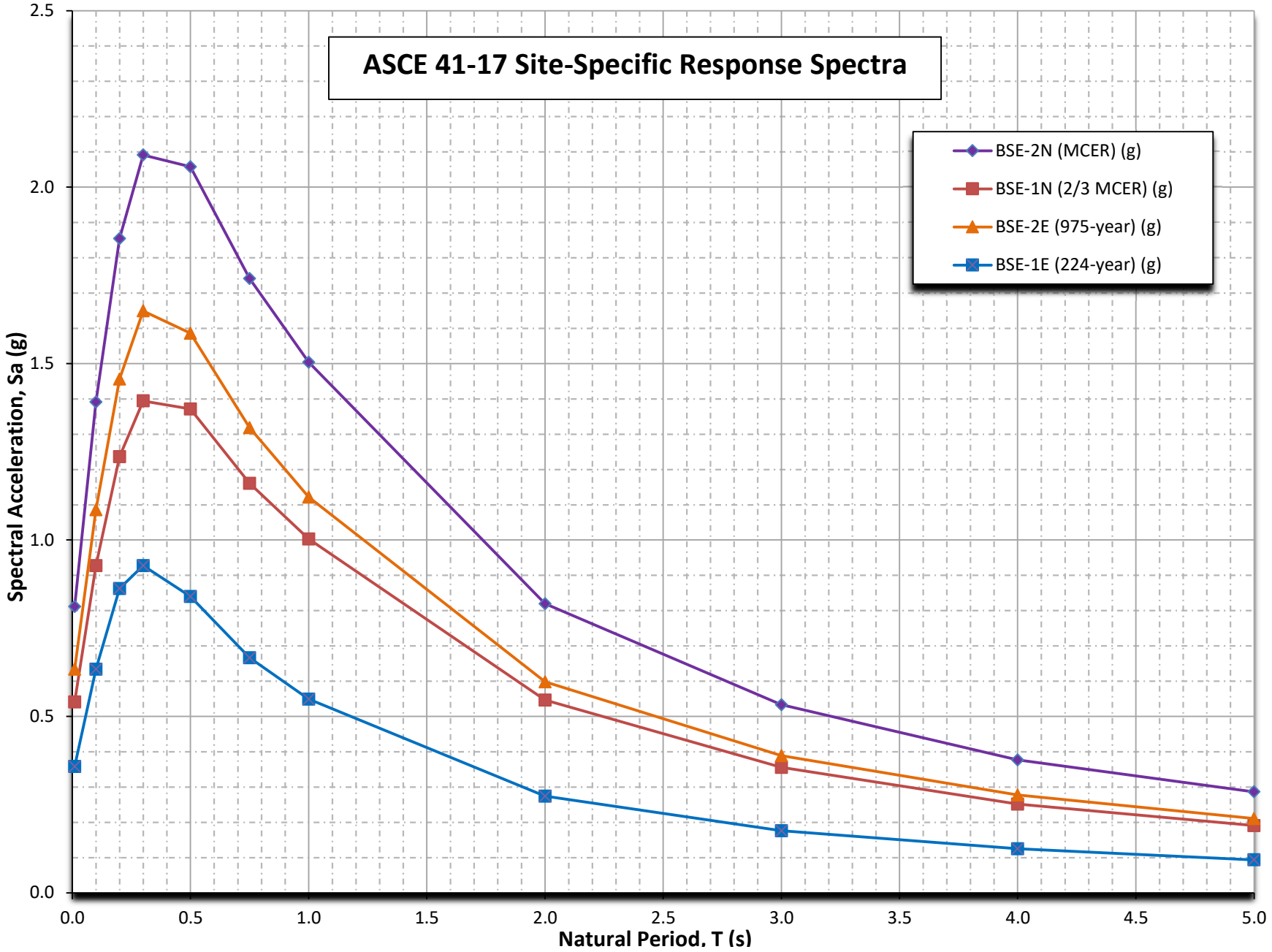
Douglas A. Skinner, PG, CEG 2472
Principal Geologist

MJ:DS
Attachment: ASCE 41-17 Site-Specific Ground Motion Hazard Analysis
Distribution: lowens@compton.edu, sphillips@pcm3.com, hraztan@struere.com

ATTACHMENT I
ASCE 41-17 SITE-SPECIFIC GROUND MOTION HAZARD ANALYSIS

ASCE 41-17 Site-Specific Response Spectra

Period (s)	BSE-2N (MCE_R) (g)	BSE-1N (2/3 MCE_R) (g)	BSE-2E (975-year) (g)	BSE-1E (224-year) (g)
PGA	0.812	0.541	0.634	0.359
0.1	1.392	0.928	1.086	0.634
0.2	1.855	1.236	1.456	0.862
0.3	2.091	1.394	1.649	0.928
0.5	2.057	1.372	1.586	0.840
0.75	1.741	1.161	1.318	0.666
1	1.504	1.003	1.121	0.549
2	0.819	0.546	0.598	0.274
3	0.533	0.356	0.389	0.176
4	0.377	0.251	0.278	0.125
5	0.287	0.191	0.211	0.094
S_{XS}	1.882	1.255	1.484	0.835
S_{X1}	1.639	1.093	1.121	0.549


ASCE 41-17 Site-Specific Response Spectra
BSE-2N (MCER) (g)
BSE-1N (2/3 MCER) (g)
BSE-2E (975-year) (g)
BSE-1E (224-year) (g)
Spectral Acceleration, Sa (g)
Natural Period, T (s)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0

ATTACHMENT II

California Department of Conservation, California Geological Survey, 2023, Engineering Geology and Seismology Review for Compton College – Little Theater Structural Upgrade, 1111 East Artesia Boulevard, Compton, California. CGS Application No. 03-CGS5998.

Linda Owens Jackson
Chief Facilities Officer
Compton Community College District
1111 E. Artesia Boulevard
Compton, California 90221

August 2, 2023

Subject: **Engineering Geology and Seismology Review for Compton College – Little Theater Structural Upgrade 1111 East Artesia Boulevard, Compton, California CGS Application No. 03-CGS5998**

Dear Ms. Owens Jackson:

In accordance with your request and transmittal of documents received on June 5, 2023, the California Geological Survey (CGS) has reviewed the engineering geology and seismology aspects of the consulting report prepared for the subject project at Compton College in Los Angeles County. It is our understanding that this project involves structural upgrade modifications to the Existing Building "Y" (Little Theatre). This review was performed in accordance with Title 24, California Code of Regulations, 2022 California Building Code (CBC) and followed CGS Note 48 guidelines. We reviewed the following reports:

Addendum No. 2R-Geotechnical and Geohazard Parameters, Compton College: Structural Upgrade of Existing Building "Y", Compton College Campus, 1111 East Artesia Boulevard, Compton, CA: Atlas Technical Consultants LLC, 14457 Meridian Parkway, Riverside, CA 92518; company Project No. 10-65139PW Report No. 3R, report dated May 24, 2023, 4 pages, 1 attachment.

Addendum to the Geotechnical and Geohazard Investigation Report, Compton College Visual and Performing Arts Building, Compton College Campus, 1111 East Artesia Boulevard, Compton, CA 90221: Atlas Technical Consultants LLC, 14457 Meridian Parkway, Riverside, CA 92518; company Project No. 10-61187PW Report No. 2, report dated November 7, 2022, 1 page.

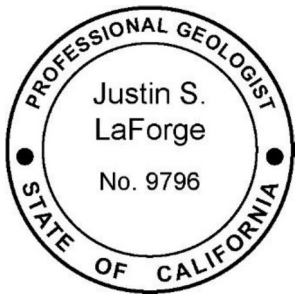
Response To Review Comments, Engineering Geology and Seismology Review for Compton College – New Visual and Performing Arts Building, 1111 East Artesia Boulevard, Compton, California, CGS Application No. 03-CGS5512: Atlas Technical Consultants LLC, 14457 Meridian Parkway, Riverside, CA 92518; company Project No. 10-61187PW Report No. 2, report dated October 4, 2022, 4 pages, 2 attachments.

Geotechnical and Geohazard Investigation, Compton College Visual and Performing Arts Building, Compton College Campus, 1111 East Artesia Boulevard, Compton, CA 90221: Atlas Technical Consultants LLC, 14457 Meridian Parkway, Riverside, CA 92518; company Project No. 10-61187PW Report No. 1, report dated April 27, 2022, 30 pages, 8 figures, 7 appendices.

Based on our review, the consultants provide an incomplete assessment of engineering geology and geotechnical issues with respect to the proposed improvements. The principal concerns identified by the report are seismic ground motion, liquefaction & seismic settlement, and corrosive soils. The consultants recommend design spectral acceleration parameters of **S_{DS} = 1.255g** and **S_{D1} = 1.093g**, which are considered reasonable, and appropriate seismic parameters for ASCE 41-17 are also provided. Their evaluation indicates fault rupture and landsliding are not design concerns for the project. However, the consultants are requested to **provide updated geotechnical engineering recommendations that address the potential for surface manifestation and/or loss of bearing capacity due to liquefaction**. Additional information is provided in the attached Checklist Comments.

In conclusion, ***the engineering geology and geotechnical issues at this site are not adequately assessed in the referenced reports***. It is recommended that additional information be provided as requested in the attached Note 48 Checklist Review Comments portion of this letter. The consultants are reminded that one copy of all supplemental documents should be submitted, should include the CGS application number, and should be uploaded directly to CGS at this link: https://www.conservation.ca.gov/cgs/upload-school. If you have any further questions about this review letter, please contact the primary reviewer at Justin.LaForge@conservation.ca.gov.

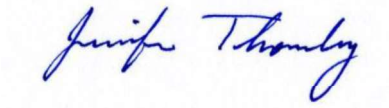
Respectfully submitted,



Justin LaForge
Engineering Geologist
PG 9796

Farshid Ghazavi
Civil Engineer
PE 88607

Concur:



Jennifer Thornburg
Senior Engineering Geologist
PG 5476, CEG 2240

Enclosures:

Note 48 Checklist Review Comments
Keyed to: *Note 48 - Checklist for the Review of Engineering Geology and Seismology Reports for California Public Schools, Hospitals, and Essential Services Buildings*

Copies to:

Hraztan Zeitlan, *Project Architect*
Struere, 3324 Grand View Blvd, Los Angeles, CA 90066

Douglas A. Skinner, *Certified Engineering Geologist*
Atlas Technical Consultants LLC, 6280 Riverdale Street, San Diego, CA 92120

Mehrab Jesmani, *Registered Geotechnical Engineer*
Atlas Technical Consultants LLC, 14457 Meridian Parkway, Riverside, CA 92518

Douglas Humphrey, *Regional Manager*
Division of State Architect, 355 South Grand Avenue, Suite 2100, Los Angeles, CA 90071

Note 48 Checklist Review Comments

In the numbered paragraphs below, this review is keyed to the paragraph numbers of California Geological Survey Note 48 (November 2022 edition), *Checklist for the Review of Engineering Geology and Seismology Reports for California Public Schools, Hospitals, and Essential Services Buildings.*

Project Location

1. Site Location Map, Street Address, County Name: Adequately addressed.
2. Plot Plan with Exploration Data and Building Footprint: Adequately addressed.
3. Site Coordinates: Adequately addressed. Latitude and Longitude provided in report: 33.87727°N, 118.21036°W.

Engineering Geology/Site Characterization

4. Regional Geology and Regional Fault Maps: Adequately addressed.
5. Geologic Map of Site: Not provided by the consultants, but not considered critical for this project.
6. Geologic Hazard Zones: Adequately addressed. The consultants report that the site is mapped by the California Geological Survey to be within a liquefaction seismic hazard zone.
7. Subsurface Geology: Adequately addressed. The consultants' report indicates the site is underlain by undocumented fill and young alluvial deposits predominantly comprised of inter-layered sand, silt, and clay. The consultants report that groundwater was not encountered in any borings. The consultants utilized information from three exploratory borings drilled to a maximum depth of 51.5 ft below ground surface and three CPT tests to a maximum depth of about 75 ft.
8. Geologic Cross Sections: Marginally addressed. The consultants are reminded to include soil layers and historical high depth to groundwater and to depict the extent of liquefiable soils in future cross sections.
9. Geotechnical Testing of Representative Samples: Adequately addressed.
10. Consideration of Geology in Geotechnical Engineering Recommendations: **Additional information is requested.** The consultants report that following their correspondence with the structural engineer of the project, the foundation elements will not be modeled as part of the structural analysis of the existing building. As such, **it is our understanding the load-deformation characteristics of the shallow foundations would not be required in this study** (ASCE 41-17, Section 8.4).

    The consultants also provide allowable bearing capacity for static and seismic conditions. However, as discussed in Item 21, the consultants have identified the potential for surface manifestation. The consultants are requested to review their site grading and foundation recommendations and further to evaluate the potential impact to the existing structure of the surface manifestation and/or loss of bearing capacity due to liquefaction, and to provide updated recommendations if warranted. Additionally, CGS notes that the Site Data Report lists the existing foundation as continuous wall footings but the consultants report it as shallow isolated footings. The consultants are requested to clarify this discrepancy.

11. Conditional Geotechnical Topics: Not applicable.

Seismology & Calculation of Earthquake Ground Motion

12. Evaluation of Historic Seismicity: Adequately addressed. The consultants provide a summary of historic seismicity in the project's vicinity. The consultants report that Compton College is mapped within an area that reportedly sustained damage that ranged from Modified Mercalli Scale Intensity 7 (people run outdoors, damage to poorly build structures) to Intensity 9 (buildings shifted off foundation) during the 1933 Long Beach Earthquake. During the same event, they note the worst building failures included Compton Junior College. However, the consultants note that "There was no conclusive evidence of surface manifestation of liquefaction such as sand boils and/or ground cracking that was reported near El Camino College Compton Center Campus (Compton College)" during the 1933 Long Beach Earthquake. CGS notes that surface effects from liquefaction were reported in the vicinity of the college from the 1933 Long Beach Earthquake, as depicted on consulting report Figure I-7.
13. Classify the Geologic Subgrade (Site Class): Marginally addressed. The consultants classify the site soil profile as Site Class D, Stiff Soil, based on geotechnical data from one borehole. This appears reasonable under the assumption the building has a fundamental period of less than 0.5 seconds and satisfies the requirements to apply the Exception of ASCE 7-16, Chapter 20.3.1.1. **The consultants are reminded that correction factors are inappropriate for site class determinations.** Chapter 20, Section 20.4.2 of ASCE7-16 notes that standard penetration resistance directly measured in the field without corrections should be utilized. The conversion of ring/drive blow counts to standard (SPT) blow counts is appropriate; the additional factor to correct for hammer energy is not appropriate. In this instance however, this error does not appear to impact the site class determination.
14. General Procedure Ground Motion Analysis: Adequately addressed. The consultants report the following parameters derived from a map-based analysis:
    S_S = 1.694 and S_1 = 0.606
    The consultants have provided additional map-based seismic parameters consistent with ASCE 41-17. The BSE parameters reported in the Addendum dated May 24, 2023, are considered appropriate.
15. Site-Specific Ground Motion Hazard Analysis: Adequately addressed. The consultants' deterministic and probabilistic MCE spectra appear reasonable based on comparison with results from the National Seismic Hazard Model (from Petersen and others, 2014). The consultants report their site-specific seismic design parameters are: **S_{DS} = 1.255g** and **S_{D1} = 1.093g**. Alternatively, S_a values presented in the column labeled "Design S_a" in Figure V-1 of Appendix V may be used with the equivalent lateral force procedure, per ASCE 7, Section 21.4. The site-specific ground motion analysis presented appears to be reasonable and in accordance with ASCE 7-16.

    The consultants have also provided the following site-specific seismic parameters in Addendum No. 2R dated May 24, 2023, which are considered consistent with ASCE 41-17.

Hazard Level	BSE-2N	BSE-1N	BSE-2E	BSE-1E
S_{XS}	1.882 g	1.255 g	1.484 g	0.835 g
S_{X1}	1.639 g	1.093 g	1.121 g	0.549 g

16. Deaggregated Seismic Source Parameters: Adequately addressed.
17. Time Histories of Earthquake Ground Motion: Not applicable.

Fault Rupture Hazard Evaluation

18. Active Faulting & Coseismic Deformation Across Site: Adequately addressed. The consultants report that there are no known active or potentially active faults that traverse the site, and the site is not located within an Alquist-Priolo Earthquake Fault Zone, although such faults are in general proximity to the subject site. They note that the nearest mapped Alquist-Priolo Earthquake Fault Zone is the Newport-Inglewood Fault Zone.

Liquefaction/Seismic Settlement Analysis

19. Geologic Setting for Occurrence of Liquefaction: Adequately addressed. The consultants provide an adequate characterization of the historical high depth to groundwater at about 8 feet below ground surface. They report that liquefaction susceptibility at the site is very high within various sandy silt and silty sand soil layers occurring below 8 feet. The data presented appear to support this conclusion.
20. Seismic Settlement Calculations: Adequately addressed. The consultants report seismic settlement values considering historically highest groundwater at the site of about **5 inches in total with differential seismic settlement of about 2½ inches over a horizontal distance of 40 feet**. CGS notes that the consultants also provide seismic settlement calculations considering no compacted fill which indicate a total seismic settlement of 5½ to 6 inches and differential seismic settlement of about 3 to 3½ inches over a horizontal distance of 40 feet.

    CGS notes that the consultants applied both a “transition zone” exclusion function in their CPT-based calculations of liquefaction triggering potential and a depth-weighting factor in their analysis of liquefaction-induced settlement. The application of these choices in liquefaction analyses tends to reduce the predicted amount and severity of liquefaction and resulting settlement and the consultants are cautioned about use and application. Despite these errors, the consultants originally reported seismic settlement values at the site appear sufficiently conservative.

    The consultants provide additional seismic settlement analyses under BSE-2E and BSE-1E hazard levels for existing Building “Y” and for the existing groundwater level of approximately 60 feet below ground surface. However, CGS understands the project must meet “collapse prevention” objective at the BSE-2N seismic hazard level. The potential for shallow ground water, and whether loss of soil bearing capacity could occur, is considered the primary geotechnical mechanism that could cause collapse of this structure.

21. Other Liquefaction Effects: Adequately addressed. **The consultants report that there is potential for surface manifestations of liquefaction at the site**. CGS notes this may include sand boils or loss of soil bearing capacity. The consultants note that no vertical free face or sloping ground is close to the site, therefore the potential for earthquake-Induced lateral displacement is considered low.
22. Mitigation Options for Liquefaction/Seismic Settlement: **Additional information may be needed.** Based on consultants’ response to Item 10, recommendation and mitigation measures to mitigate the potential impacts of surface manifestation such as tilting and loss of bearing capacity may be warranted.

Slope Stability Analysis

23. Geologic Setting for Occurrence of Landslides: Adequately addressed. The consultants report that the possibility for earthquake-induced landslides is considered negligible.
24. Determination of Static and Dynamic Strength Parameters: Not applicable.
25. Determination of Pseudo-Static Coefficient (K_{eq}): Not applicable.
26. Identify Critical Slip Surfaces for Static and Dynamic Analyses: Not applicable.
27. Dynamic Site Conditions: Not applicable.
28. Mitigation Options for Landsliding/Other Slope Failure: Not applicable.

Other Geologic Hazards or Adverse Site Conditions

29. Expansive Soils: Adequately addressed. The consultants report that sub-surface soils generally have very low expansion potential. They also note that some of the clay and silty layers on the site may have medium to high expansion potential
30. Corrosive/Reactive Geochemistry of the Geologic Subgrade: Adequately addressed. The consultants report that the on-site soil is generally considered to be **extremely corrosive towards buried ferrous metals** and recommend consideration of retaining a corrosion consultant to obtain recommendations for the protection of metal components embedded in the site soil.
31. Conditional Geologic Assessment: Adequately addressed.
    C. Flooding: The consultants report that the site is within a zone designated as “Other Flood Areas-Zone X: Areas of Reduced Flood Risk due to Levee” by the Federal Emergency Management Agency. They also note that the site is located in the inundation area of multiple dams and the potential of earthquake-induced flooding exists at the site.
    G. Hydrocollapse: The consultants report that based on tested samples, the potential for collapse was found to be on the order of about 0.5%.

Report Documentation

32. Geology, Seismology, and Geotechnical References: Adequately addressed.
33. Certified Engineering Geologist: Adequately addressed.
    Douglas A. Skinner, Certified Engineering Geologist #2472
34. Registered Geotechnical Engineer: Adequately addressed.
    Mehrab Jesmani, Registered Geotechnical Engineer #3175

AXIS Q6000-E PTZ Dome Network Camera

Full 360° overview with one-click PTZ control

AXIS Q6000-E integrated with any AXIS Q60-E camera offers full overview to detail in one click, enabling 360° overview while simultaneously capturing every detail with high pan/tilt/zoom precision. Its four 2-megapixel sensors provide a panoramic field of view over large areas. Used with two screens, this pioneering situational awareness solution delivers full overview video from AXIS Q6000-E and zoomed-in view from AXIS Q60-E. AXIS Q6000-E offers intelligent video features such as tampering alarm, motion detection and support for third-party applications. AXIS Q6000-E Stand-alone is also available which offers 360° overview without PTZ capability. This product can later be upgraded by adding an AXIS Q60-E.

> **Full 360° overview**

> **4 x HDTV 720p cameras**

> **One-Click PTZ control**

> **Compatible with any AXIS Q60-E model**

> **Axis Zipstream technology**

HDTV NETWORK VIDEO

ONVIF S

AXIS Q6000-E PTZ Dome Network Camera

Models	AXIS Q6000-E 50Hz AXIS Q6000-E 60Hz AXIS Q6000-E Solo 50Hz AXIS Q6000-E Solo 60Hz
Camera	
Supported products	AXIS Q60-E cameras[a]
Image sensor	2 MP Progressive scan RGB CMOS 4 x 1/2.8"
Lens	Fixed focus, Fixed iris, F2.0, Focal length: 1.37 mm Horizontal field of view default mode (4:3) 113° Horizontal field of view (16:9) 152° Vertical field of view (4:3 and 16:9) 85°
Light sensitivity	Color: 0.3 lux, F2.0
Shutter time	1/45500 s to 4 s
Pan/Tilt/Zoom	Remote Gatekeeper
Video	
Video compression	H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High profiles Motion JPEG
Resolutions	4 x 1280x720 (HDTV 720p) to 320x180, Default: 960x720 Quad view 1920x1440 (4:3) to 320x180
Frame rate	Up to 25/30 fps (50/60 Hz) in all resolutions
Video streaming	Multiple, individually configurable streams in H.264 and Motion JPEG Axis' Zipstream technology in H.264 Controllable frame rate and bandwidth MBR H.264
Image settings	Resolution, Compression, Color level, Brightness, Sharpness, Contrast, White balance, Exposure value, Exposure control, Automatic backlight compensation, Exposure zones, Shutter & gain fine tuning of behavior at normal and low light, Privacy masks
Network	
Security	Password protection, IP address filtering, HTTPS[b] encryption, IEEE 802.1X[b] network access control, Digest authentication, User access log, Centralized Certificate Management
Supported protocols	IPv4/v6, HTTP, HTTPS[b], SSL/TLS[b], QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, Bonjour, UPnP™, SNMP v1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS, SSH
System integration	
Application Programming Interface	Open API for software integration, including VAPIX® and AXIS Camera Application Platform; specifications at *www.axis.com* AXIS Video Hosting System (AVHS) with One-Click Connection ONVIF Profile S, specification at *www.onvif.org*
Analytics	Video motion detection, Active tampering alarm, Edge storage events, Shock detection Support for AXIS Camera Application Platform enabling installation of third-party applications, see *www.axis.com/acap*
Event triggers	Detectors (Live Stream Accessed, Shock detection, Tampering) Hardware (Fan, Network, Temperature) Input signal (Manual Trigger, Virtual Input) Storage (Disruption, Recording) System (System Ready) Time
Event actions	File upload: FTP, HTTP, HTTPS, Network share and email Notification: email, HTTP, HTTPS and TCP Video recording to edge storage Pre- and post-alarm video buffering Overlay text
Data streaming	Event data
Built-in installation aids	Pixel counter
General	
Casing	IP66- and NEMA 4X-rated, Die-casted aluminum, Polycarbonate dome
Sustainability	PVC free
Memory	1 GB RAM, 256 MB Flash
Power	AXIS Q6000-E: Axis Midspan 60 W 1-port: 100-240 V AC, max. 74 W AXIS Q6000-E Solo: Axis Midspan 30 W 1-port: 100-240 V AC, max. 30 W Power consumption: Typical 8 W, max. 18 W Included midspan recommended.
Connectors	RJ45 10BASE-T/100BASE-TX/1000BASE-T PoE RJ45 10BASE-T/100BASE-TX Q60-E port RJ45 10BASE-T/100BASE-TX Service port
Storage	Support for SD/SDHC/SDXC card Support for recording to dedicated network-attached storage (NAS) For SD card and NAS recommendations see *www.axis.com*
Operating conditions	-30 °C to 50 °C (-22 °F to 122 °F) Maximum temperature (intermittent): 60 °C (140 °F) Humidity 10-100% RH (condensing)
Storage conditions	-40 °C to 65°C (-40 °F to 149 °F)
Approvals	EMC EN 55022 Class A, EN 55024, EN 61000-6-1, EN 61000-6-2, EN 61000-3-2, EN 61000-3-3, EN 50121-4, FCC Part 15 Subpart B Class A, ICES-003 Class A, VCCI Class A, ITE, RCM AS/NZS CISPR 22 Class A, KCC KN22 Class A, KN24 Safety IEC/EN/UL 60950-1, IEC/EN/UL 60950-22 Environment EN 50581, IEC/EN 60529 IP66, IEC/EN 62262 IK10, NEMA 250 Type 4X, IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60721-4-3 Class 4K3, 4M3
Dimensions	Diameter: ø 389 mm (15 5/16 in) AXIS Q6000-E: 308 mm (12 1/8 in) AXIS Q6000-E Solo: 213 mm (8 3/8 in)
Weight	AXIS Q6000-E: 3.55 kg (7.8 lb) AXIS Q6000-E Solo: 4.20 kg (9.26 lb)
Included accessories	Ethernet adaptor, Bayonet screws, Installation Guide, Windows decoder 1-user license AXIS Q6000-E Solo: Axis Midspan 30 W 1-port.
Optional accessories	AXIS T91A and AXIS T91B Mounting accessories AXIS Q6000-E: Axis Midspan 60 W 1-port
Video management software	AXIS Camera Companion, AXIS Camera Station, Video management software from Axis' Application Development Partners available on *www.axis.com/techsup/software*
Languages	English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Traditional Chinese
Warranty	Axis 3-year warranty and AXIS Extended Warranty option, see *www.axis.com/warranty*

a. *AXIS Q6000-E Solo does not need an AXIS Q60-E camera.*
b. *This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (www.openssl.org), and cryptographic software written by Eric Young (eay@cryptsoft.com).*

Environmental responsibility:

www.axis.com/environmental-responsibility

1476543/EN/M3.3/042016

COMPTON COMMUNITY COLLEGE DISTRICT
RESOLUTION NO. 06-27-2022J

AUTHORIZATION TO CONTRACT WITH JOHNSON CONTROLS FIRE PROTECTION LP FOR FIRE ALARM PRODUCTS AND SERVICES

DESIGNATION OF JOHNSON CONTROLS FIRE PROTECTION LP EQUIPMENT AS DISTRICT STANDARD FIRE ALARM PRODUCTS

WHEREAS, all existing buildings on the Compton College campus are equipped with fire alarm equipment and systems ("Fire Alarms").

WHEREAS, continuous operation of the Fire Alarms is necessary, critical and essential for fire/life-safety protection to prevent injury to persons or damage to property.

WHEREAS, continuous operation of the Fire Alarms requires periodic maintenance, repairs, modifications, replacements, upgrades and other similar actions (collectively "Fire Alarm Services").

WHEREAS, the timely completion of Fire Alarm Services is necessary for maintaining public safety in Compton College buildings.

WHEREAS, in order to provide for centralized management and monitoring, all Fire Alarms in existing buildings and other improvements on the Compton College campus are manufactured by Johnson Controls Fire Protection LP ("Johnson Controls Fire Protection LP").

WHEREAS, the materials, products and equipment forming a part of the Fire Alarms are proprietary products of Johnson Controls Fire Protection LP; in order to ensure that Fire Alarm Services are completed by technicians with specific knowledge and skills, Fire Alarm Services can be completed only by the Johnson Controls Fire Protection LP.

WHEREAS, applicable law generally requires the District to engage in a competitive process to procure services such as the Fire Alarm Services.

WHEREAS, California courts recognize a legal exception to the competitive procurement process when a public agency determines that competitive selection would be futile, unavailing, undesirable, impractical, impossible, or would cause additional delay or costs. (*Meakin v. Steveland* (1977) 68 Cal.App.3d 490; *Los Angeles Dredging v. Long Beach* (1930) 210 Cal. 348);

WHEREAS, the District would realize no benefit from a competitive selection process for to procure Fire Alarm Services insofar as Johnson Controls Fire Protection LP has the sole authority to Fire Alarm Services.

WHEREAS, Public Contract Code §3400(c) authorizes the District to designate a particular product, material or service by specific brand or trade name in specifications for the District's

public works projects if the designation is for purposes of matching other products in use in other District facilities.

WHEREAS, designating Johnson Controls Fire Protection LP products as the District standard Fire Alarm products in facilities and other improvements to be constructed on the Compton College campus will match the existing Fire Alarms currently in use in other facilities and improvements on the Compton College campus and is essential for fire detection and prevention.

NOW, THEREFORE, the Governing Board of the District hereby finds, determines, resolve as follows:

RESOLVED, the foregoing recitals and determinations are true, correct and incorporated herein by this reference.

FURTHER RESOLVED, that a competitive selection process for Fire Alarm Services would be undesirable, impractical and may impair public safety.

FURTHER RESOLVED, that it would cause an incongruity and not produce any advantage for the District to competitively procure Fire Alarm Services.

FURTHER RESOLVED, that pursuant to Education Code §81655, the Board delegates to the District's Vice-President, Administrative Services the authority to contract with Johnson Controls Fire Protection LP to provide the Fire Alarm Services as and when deemed necessary by District staff.

FURTHER RESOLVED, in accordance with the then current District Board Policies/Administrative Regulations, the District's Vice-President, Administrative Services shall present to the Board, for approval or ratification, any contract with Johnson Controls Fire Protection LP entered into pursuant to these Resolutions.

FURTHER RESOLVED, in accordance with Education Code §81655, any contract entered by the District's Vice-President, Administrative Services with Johnson Controls Fire Protection LP shall not be binding or enforceable against the District until the Board has approved or ratified such contract.

FURTHER RESOLVED, Johnson Controls Fire Protection LP Fire Alarm products, materials, equipment and services are designated as the District standard Fire Alarm products pursuant to Public Contract Code §3400(c).

FURTHER RESOLVED, that these Resolutions shall be effective as of the date of its adoption.

APPROVED AND ADOPTED by the Board of Trustees of the Compton Community College District of Los Angeles County, State of California, this 27th day of June 2022.

Sonia Lopez (Jun 28, 2022 20:17 PDT)

Sonia Lopez, President
Compton Community College District
Board of Trustees

I, Keith Curry, Secretary of the Board of Trustees of the Compton Community College District, do hereby certify that the foregoing Resolution was adopted by the Board of Trustees of said District at a meeting of said Board held on the 27th day of June 2022, and that it was so adopted by the following vote:

AYES: 5

NOES: 0

ABSTAIN: 0

ABSENT: 0

Date: Jun 29, 2022

Keith Curry, Ed.D.
Secretary to the Board of Trustees
Compton Community College District

COMPTON COMMUNITY COLLEGE DISTRICT
RESOLUTION NO. 06-27-2022F

AUTHORIZATION TO CONTRACT WITH STANLEY CONVERGENT SECURITY SOLUTIONS, INC FOR BUILDING SECURITY PRODUCTS AND SERVICES

DESIGNATION OF STANLEY CONVERGENT SECURITY SOLUTIONS, INC EQUIPMENT AS DISTRICT STANDARD BUILDING SECURITY PRODUCTS

WHEREAS, existing buildings on the Compton College campus are equipped with building security equipment and systems including building security alarms, surveillance cameras, motion detection devices and electronic door access ("Building Security Systems").

WHEREAS, continuous operation of the Building Security Systems is necessary, critical and essential for safety of persons and property.

WHEREAS, continuous operation of the Building Security Systems requires periodic maintenance, repairs, modifications, replacements, upgrades and other similar actions (collectively "Building Security Systems Services").

WHEREAS, the timely completion of Building Security Systems Services is necessary for maintaining public safety in Compton College buildings.

WHEREAS, in order to provide for centralized management and monitoring, all Building Security Systems in existing buildings and other improvements on the Compton College campus are manufactured by Stanley Convergent Security Solutions, Inc.

WHEREAS, the materials, products and equipment forming a part of the Building Security Systems are proprietary products of Stanley Convergent Security Solutions, Inc; in order to ensure that Building Security Systems Services are completed by technicians with specific knowledge and skills, Building Security Systems Services can be completed only by the Stanley Convergent Security Solutions, Inc.

WHEREAS, applicable law generally requires the District to engage in a competitive process to procure services such as the Building Security Systems Services.

WHEREAS, California courts recognize a legal exception to the competitive procurement process when a public agency determines that competitive selection would be futile, unavailing, undesirable, impractical, impossible, or would cause additional delay or costs. (*Meakin v. Steveland* (1977) 68 Cal.App.3d 490; *Los Angeles Dredging v. Long Beach* (1930) 210 Cal. 348);

WHEREAS, the District would realize no benefit from a competitive selection process to procure Building Security Systems Services insofar as Stanley Convergent Security Solutions, Inc has the sole authority to perform Building Security Systems Services.

WHEREAS, Public Contract Code §3400(c) authorizes the District to designate a particular product, material or service by specific brand or trade name in specifications for the District's public works projects if the designation is for purposes of matching other products in use in other District facilities.

WHEREAS, designating Stanley Convergent Security Solutions, Inc products as the District standard Building Security Systems products in facilities and other improvements to be constructed on the Compton College campus will match the existing Building Security Systems currently in use in other facilities and improvements on the Compton College campus and is essential for safety and security of persons and property.

NOW, THEREFORE, the Governing Board of the District hereby finds, determines, resolve as follows:

RESOLVED, the foregoing recitals and determinations are true, correct and incorporated herein by this reference.

FURTHER RESOLVED, that a competitive selection process for Building Security Systems Services would be undesirable, impractical and may impair public safety.

FURTHER RESOLVED, that it would cause an incongruity and not produce any advantage for the District to competitively procure Building Security Systems Services.

FURTHER RESOLVED, that pursuant to Education Code §81655, the Board delegates to the District's Vice-President, Administrative Services the authority to contract with Stanley Convergent Security Solutions, Inc to provide the Building Security Systems Services as and when deemed necessary by District staff.

FURTHER RESOLVED, in accordance with the then current District Board Policies/Administrative Regulations, the District's Vice-President, Administrative Services shall present to the Board, for approval or ratification, any contract with Stanley Convergent Security Solutions, Inc entered into pursuant to these Resolutions.

FURTHER RESOLVED, in accordance with Education Code §81655, any contract entered by the District's Vice-President, Administrative Services with Stanley Convergent Security Solutions, Inc shall not be binding or enforceable against the District until the Board has approved or ratified such contract.

FURTHER RESOLVED, Stanley Convergent Security Solutions, Inc Building Security Systems products, materials, equipment and services are designated as the District standard Building Security Systems products pursuant to Public Contract Code §3400(c).

FURTHER RESOLVED, that these Resolutions shall be effective as of the date of its adoption.

APPROVED AND ADOPTED by the Board of Trustees of the Compton Community College District of Los Angeles County, State of California, this 27th day of June 2022.

_____

Sonia Lopez, President
Compton Community College District
Board of Trustees

I, Keith Curry, Secretary of the Board of Trustees of the Compton Community College District, do hereby certify that the foregoing Resolution was adopted by the Board of Trustees of said District at a meeting of said Board held on the 27th day of June 2022, and that it was so adopted by the following vote:

AYES: _____

NOES: _____

ABSTAIN: _____

ABSENT: _____

Date: _____

_____

Keith Curry, Ed.D.
Secretary to the Board of Trustees
Compton Community College District