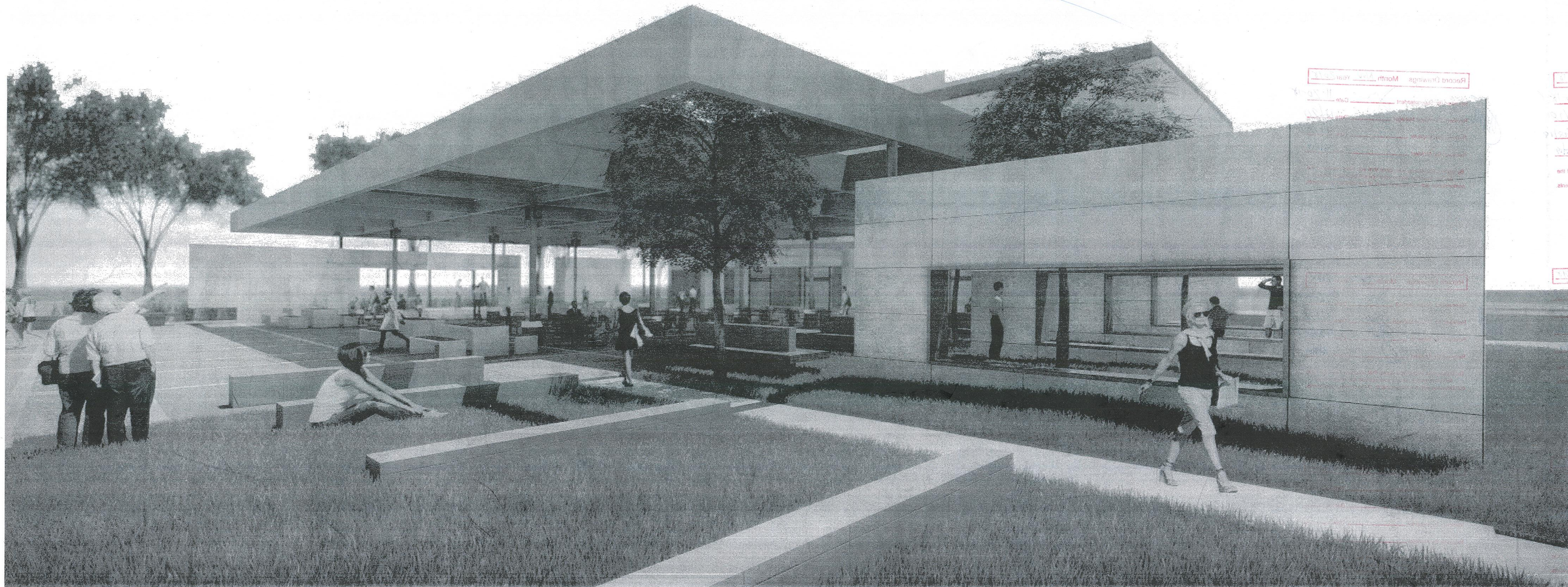


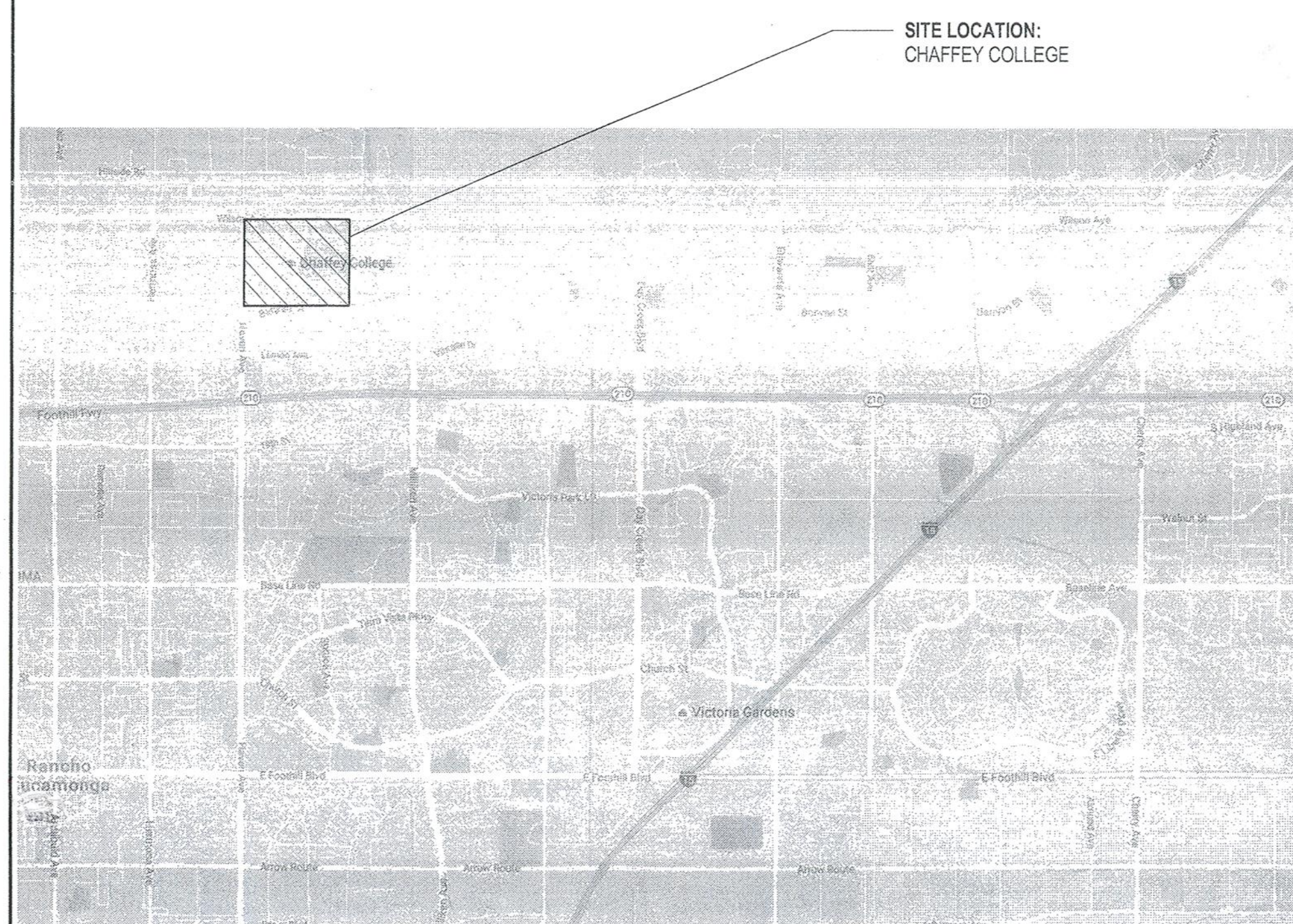
# CAMPUS CENTER SHADE STRUCTURE

## MEASURE L PROJECTS AT CHAFFEY COLLEGE

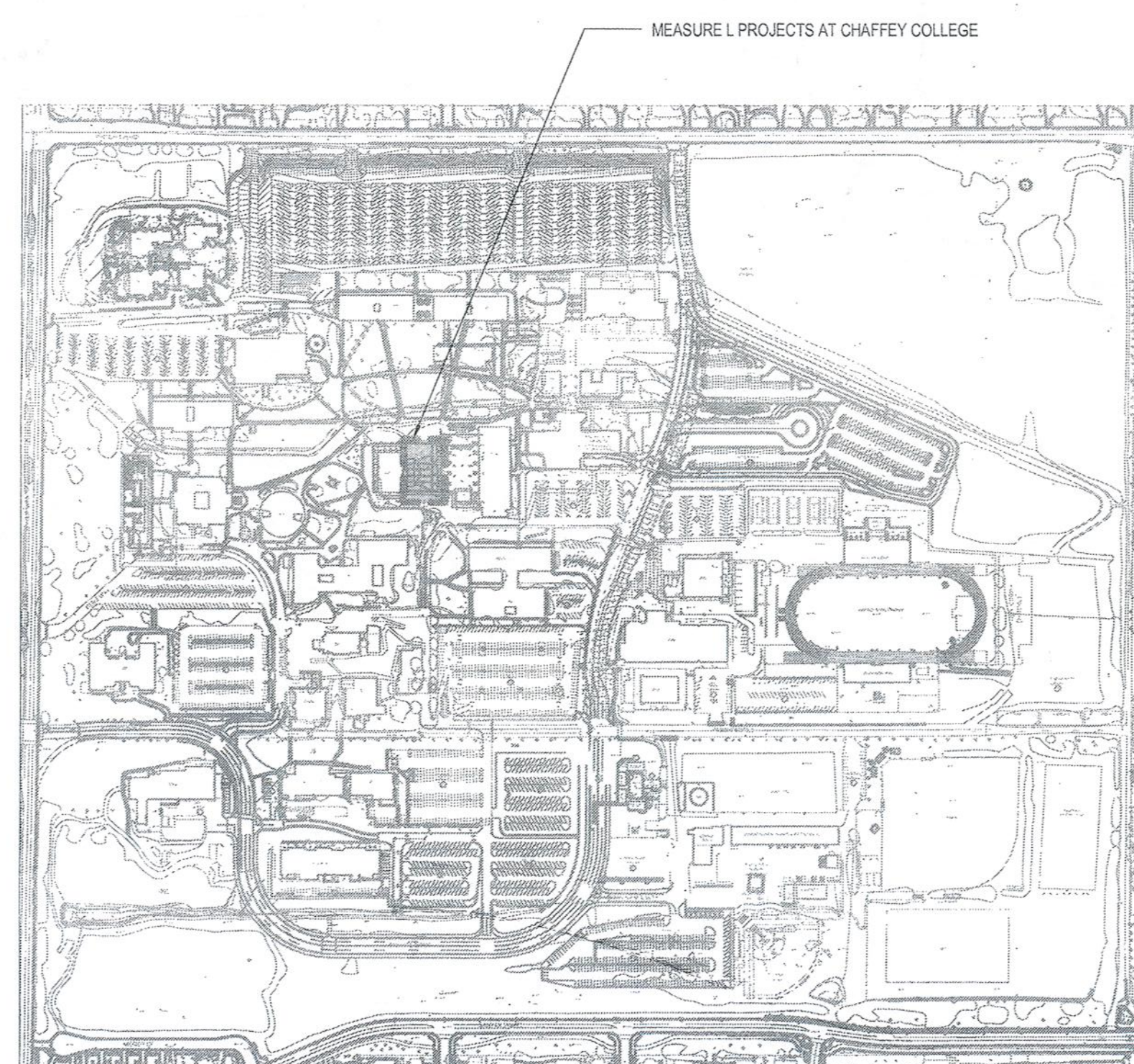
CHAFFEY COMMUNITY COLLEGE DISTRICT  
5885 HAVEN AVENUE  
RANCHO CUCAMONGA, CA 91737



### VICINITY MAP:



### SITE MAP:



### PROJECT DIRECTORY:

#### OWNER

Chaffey Community College District  
5885 Haven Ave  
Rancho Cucamonga, CA 91737

#### ARCHITECT

DLR Group  
1650 Spruce St., Suite 300  
Riverside, CA 92507  
Contact: Michael J. Stephens, AIA  
Phone: 951-682-0470

#### CIVIL ENGINEER

Valued Engineering  
180 N Benson Ave  
Upland, CA 91786  
Contact: Jeff Meiter, President  
Phone: 909-982-4601

#### STRUCTURAL

DLR Group  
700 South Flower Street, 22nd Floor  
Los Angeles, CA 90017  
Contact: Siu Fung Yiu, S.E.  
Phone: 213-800-9400

#### PLUMBING

TK1SC Engineers  
11870 Pierce Street, Suite 160  
Riverside, CA 92505  
Contact: David Mitchell, P.E.  
Phone: 951-299-4160

#### ELECTRICAL

TK1SC Engineers  
11870 Pierce Street, Suite 160  
Riverside, CA 92505  
Contact: Bill Voller, P.E.  
Phone: 951-299-4160

#### LANDSCAPE

Ridge Landscape Architecture  
8841 Research Drive, Suite 200  
Irvine, CA 92618  
Contact: Jim Ridge, RLA  
Phone: 949-387-1323

### SPECIFICATIONS

AWC | WEST  
24990 Greensbrier Drive  
Stevenson Ranch, CA 91381  
Contact: Andrew Wilson  
Phone: 661-287-4211

### PROGRAM MANAGER

Bernards  
5885 Haven Ave  
Rancho Cucamonga, CA 91737  
Contact: William Winslow  
Phone: 909-652-6163

### SCOPE OF WORK:

IT IS THE INTENT OF THIS CONTRACT TO MODERNIZE THE EXISTING THEATRE BUILDING AND ASSOCIATED MISCELLANEOUS SITE WORK. WORK INCLUDED IN THIS CONTRACT WILL CONSIST OF, BUT NOT BE LIMITED TO, THE FOLLOWING:

- NEW SITE WORK AT SHADE STRUCTURE AREA, INCLUDING PAVING, BUILT-IN SEATING, AND NEW SHADE STRUCTURE

### DEFERRED APPROVALS:

N/A



**GENERAL NOTES:**

- GENERAL NOTES APPLY TO ALL SHEETS.
- DIMENSIONS ARE ACTUAL AND ARE TO FACE OF STUDS, FACE OF CONCRETE WALLS, FACE OF CMU WALLS, FACE OF FRAMES OR CENTERLINE OF COLUMNS, UNLESS NOTED OTHERWISE.
- NOT USED.
- NOT USED.
- NOT USED.
- NOT USED.
- NOT USED.
- NOT USED.
- THE OWNER SHALL FURNISH AND INSTALL ALL EQUIPMENT AND FURNITURE. INCLUDE OWNER-FURNISHED AND INSTALLED ITEMS AND OWNER FURNISHED AND CONTRACTOR INSTALLED ITEMS IN THE CONSTRUCTION SCHEDULE AND COORDINATE WITH OWNER TO ACCOMMODATE THESE ITEMS.
- NOT USED.
- NOT USED.
- NOT USED.
- REFER TO CIVIL DRAWINGS FOR ACTUAL ELEVATION OF ARCHITECTURAL FINISH FLOOR ELEVATION INDICATED AS 0'-0".
- NOT USED.
- NOT USED.
- THE ARCHITECTURAL DRAWINGS ARE A PART OF A LARGER SET OF DRAWINGS WHICH, WHEN COMPLETE, CONSISTS OF ALL DRAWINGS LISTED BY THE INDEX OF DRAWINGS. THE WORK DESCRIBED BY THE DRAWINGS OF ANY ONE DISCIPLINE MAY BE AFFECTED BY THE WORK DESCRIBED ON DRAWINGS OF ANOTHER DISCIPLINE AND MAY REQUIRE REFERENCE TO THE DRAWINGS OF ANOTHER DISCIPLINE. PARTIAL SETS OF DRAWINGS ARE INCOMPLETE AND SHOULD NOT BE DISTRIBUTED OR UTILIZED BY THE CONTRACTOR. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW AND COORDINATE THE WORK OF ALL SUBCONTRACTORS, TRADES, AND SUPPLIERS WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS BEFORE COMMENCING CONSTRUCTION AND TO ASSURE THAT ALL PARTIES ARE AWARE OF ALL REQUIREMENTS, REGARDLESS OF WHERE THE REQUIREMENTS OCCUR IN THE CONTRACT DOCUMENTS, WHICH MIGHT AFFECT THE WORK OF THAT PARTY.
- AS PART OF THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE THE WORK OF ALL SUBCONTRACTORS, TRADES, AND SUPPLIERS, THE CONTRACTOR SHALL ENDEAVOR TO IDENTIFY AND NOTIFY THE ARCHITECT OF ANY CONFLICTS BETWEEN THE WORK OF DIFFERENT PARTIES AT THE EARLIEST POSSIBLE DATE SO AS TO ALLOW REASONABLE AND ADEQUATE TIME FOR THE CONFLICT TO BE RESOLVED WITHOUT DELAYING THE WORK. ALL DEVIATIONS FROM THAT WHICH IS REQUIRED BY THE CONTRACT DOCUMENTS MUST BE APPROVED IN ADVANCE BY THE ARCHITECT.
- THE ARCHITECTURAL FLOOR PLANS, REFLECTED CEILING PLANS, SECTIONS, AND ELEVATIONS ILLUSTRATE THE EXACT LOCATION OF MANY, BUT NOT ALL, EXPOSED PARTS OF THE WORK. LOCATIONS SHOWN ON OTHER DRAWINGS ARE SCHEMATIC UNLESS OTHERWISE NOTED ON THE ARCHITECTURAL DRAWINGS. THE ARCHITECTURAL DRAWINGS TAKE PRECEDENCE FOR THE FINISH APPEARANCE AND EXACT LOCATION OF ALL PARTS OF THE WORK. APPLY THE RULES INDICATED BY THE DRAWING "TYPICAL RULES FOR DETERMINING MOUNTING HEIGHTS AND LOCATIONS" TO DETERMINE THE EXACT LOCATION OF EACH EXPOSED PART OF THE WORK.
- REFER TO THE STRUCTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR THE DETAILED DESIGN OF STRUCTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING SYSTEMS, OF WHICH PORTIONS MAY BE SHOWN ON THE ARCHITECTURAL DRAWINGS.
- FINISH FLOOR ELEVATIONS ARE TO TOP OF CONCRETE FLOOR SLAB, U.N.O. WHERE THE CONCRETE IS DERESSED TO ACCOMMODATE MORTAR BEDS, SETTING BEDS, RAISED ACCESS FLOORS, AND OTHER SIMILAR FLOOR ASSEMBLIES. FINISHED FLOOR ELEVATIONS ARE TO TOP OF FINISH FLOOR ASSEMBLY INDICATED. CEILING HEIGHT DIMENSIONS ARE TO FINISHED SURFACES, UNLESS OTHERWISE NOTED. REFER TO REFLECTED CEILING PLAN SHEET NOTES FOR CEILING HEIGHTS.
- ADDITIONAL SYMBOLS, NOT SHOWN OR DEFINED ON THE DRAWING "ARCHITECTURAL SYMBOLS", MAY OCCUR AND ARE DEFINED ON OTHER ARCH DRAWINGS.
- UNLESS OTHERWISE NOTED OR SPECIFIED, PROVIDE ALL EXTERIOR WALLS WITH MINIMUM R-19 BATT INSULATION AND ALL ROOFS OVER CONDITIONED SPACES WITH MINIMUM R-30 RIGID INSULATION. REFER TO SPECIFICATIONS FOR INSULATION PRODUCT INFORMATION.
- NOT USED.
- DUCT ENCLOSURES: SEE MECHANICAL AND ARCHITECTURAL DRAWINGS AND DETAILS.
- NOT USED.
- CALLING NOTE: CALLING CAVITY SHALL BE NO LARGER THAN 3/8" WITH BACKER ROD.
- ALL EXTERIOR BUILDING WALLS SHALL BE PROVIDED WITH 5/8" GYPSUM SHEATHING / BACKING BOARD AS SPECIFIED IN SECTION 09 29 00, REGARDLESS OF WHETHER THE BACKING BOARD IS SHOWN IN DETAILS OR NOT.
- IN AREAS WITH OPEN CEILING (NO FINISHED CEILING), CALCULATE FIRE FLOW REQUIREMENTS AND SIZE RISERS AND MAINS SO THAT ADDITIONAL CAPACITY WILL BE AVAILABLE TO ADDRESS THE INSTALLATION OF A DROPPED FINISHED CEILING IN THE FUTURE.
- NOT USED.
- NOT USED.
- PROVIDE SPECIAL TESTING AND INSPECTION PER CBC 1706A.1 FOR WELDING (CBC 1705A.2.2.1), SPRAY-APPLIED FIRE RESISTIVE MATERIALS (CBC 1706A.10), WASTIC / INTUMESCENT MATERIALS (CBC 1706A.14), AND AS OTHERWISE DIRECTED BY THE PROJECT INSPECTOR OR DSA FIELD ENGINEER.
- FIRE WALLS, FIRE BARRIERS, FIRE PARTITIONS, SMOKE BARRIERS AND SMOKE PARTITIONS OR ANY OTHER WALL REQUIRED TO HAVE PROTECTED OPENINGS OR PENETRATIONS SHALL FOLLOW PROVISIONS UNDER CBC SECTIONS 714 AND 716.
- SEE CBC CHAPTER 33 FOR FIRE SAFETY DURING CONSTRUCTION.
- THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CONSTRUCTION CHANGE DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK. (SECTION 4.311G, PART 1, TITLE 24, CCR).
- GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.

**FLOOR PLAN GENERAL NOTES:**

- INTERIOR STUD WALLS SHALL EXTEND TO UNDERSIDE OF FLOOR OR ROOF DECK ABOVE UNLESS NOTED OTHERWISE.
- GYPSUM BOARD SURFACES SHALL BE ISOLATED WITH CONTROL JOINTS WHERE SHOWN ON DRAWINGS AND AS DESCRIBED IN THE SPECIFICATIONS.

**ROOF PLAN GENERAL NOTES:**

- MOIST ROOF SLOPES ARE CREATED WITH TAPERED INSULATION. TAPERED INSULATION SHALL PROVIDE A MINIMUM OF 1/4" INCH PER FOOT OF SLOPE TO ROOF DRAINS, UNLESS NOTED OTHERWISE.
- NEW ROOF MECHANICAL PADS TO BE A MINIMUM OF 8" ABOVE ROOFING LEVELS. PROVIDE TAPERED INSULATION CRICKETS AT ROOF MECHANICAL PADS TO PROVIDE APPROPRIATE DRAINAGE.
- SEE STRUCTURAL FOR FRAMING AND ROOF PENETRATIONS.
- COORDINATE THE SIZE AND LOCATION OF ROOF PENETRATIONS FOR MECHANICAL AND ELECTRICAL EQUIPMENT. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR PENETRATIONS NOT SHOWN ON SHEETS A4.1-ROOF PLANS & A10-DETAILS.
- FLASH DRAINS, CURBS, PADS, VENTS AND STACKS PER DETAILS IN CONTRACT DRAWINGS AND ROOFING MANUFACTURERS PUBLISHED INSTRUCTIONS.

**REFLECTED CEILING PLAN GENERAL NOTES:**

- CEILING GRID/PANELS SHALL BE CENTERED IN EACH ROOM U.N.O.
- ELECTRICAL FIXTURES, SPEAKERS, SMOKE AND THERMAL DETECTORS, MECHANICAL GRILLES, SPRINKLER HEADS, ETC. SHALL BE CENTERED BETWEEN CEILING GRIDS U.N.O. SPRINKLER HEADS SHALL BE WITHIN A 3' RADIUS CENTERED BETWEEN CEILING GRIDS.
- NOT USED.
- ALL DIMENSIONS ON REFLECTED CEILING PLANS ARE ACTUAL AND ARE TO FACE OF FINISHED WALL, FINISHED BULKHEAD, CENTERLINE OF COLUMNS, AND CENTERLINE OF TEES U.N.O.
- LIGHT FIXTURES ARE DIMENSIONED TO THE CENTERLINE OF THE FIXTURE U.N.O.
- MECHANICAL, ELECTRICAL & PLUMBING FIXTURES SHOWN ON ARCHITECTURAL PLANS ARE FOR ACCURACY OF LOCATION ONLY. FIXTURES NOT SHOWN ARE TO BE LOCATED PER MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS.
- IN AREAS WITH EXPOSED STRUCTURE CEILING, COORDINATE EXACT LOCATIONS OF MECHANICAL GRILLES, DIFFUSERS, DUCTWORK, AND ELECTRICAL FIXTURES WITH EACH RESPECTIVE SUBCONTRACTOR.
- GYPSUM BOARD CEILING TO BE PAINTED P-1, U.N.O.
- SEE ELECTRICAL DRAWINGS FOR LIGHTING INFORMATION.
- ACCESS PANELS ARE LOCATED 6" FROM ADJACENT WALL FINISH TO EDGE OF ACCESS PANEL U.N.O.
- CONTROL SCREEDS ON EXTERIOR SOFFITS TO BE ALIGNED WITH CONTROL SCREEDS ON ELEVATIONS, U.N.O.
- NOT USED.

**FURNITURE, EQUIPMENT & SIGNAGE PLAN GENERAL NOTES:**

- REFER TO SHEETS 0.4 & A2.1 FOR SIGNAGE PLAN / DETAILS.
- PROVIDE BACKING TO SIGNAGE AS REQUIRED.
- REFER TO CFC 303.3 FOR ELECTRICAL ROOM SIGNAGE REQUIREMENTS.
- REFER TO CFC 502.1 FOR FIRE ALARM SPRINKLER RISER EQUIPMENT ROOM SIGNAGE REQUIREMENTS.
- REFER TO CFC 2703.5 & 2703.6 FOR HAZARDOUS MATERIALS IDENTIFICATION SIGNAGE REQUIREMENTS.
- NOT USED.

**FINISH PLAN GENERAL NOTES:**

- WALLS AND HARD LID CEILING SHALL BE PAINTED P-1, U.N.O. SEE FINISH PLANS, REFLECTED CEILING PLANS, & INTERIOR ELEVATIONS FOR ACCENT PAINT LOCATIONS.
- WALL BASE TO BE RB (RUBBER WALL BASE), U.N.O. REFER TO INTERIOR ELEVATIONS & FINISH SCHEDULE, TYPICAL.
- WALLS SHALL BE DEFINED AS SURFACES FROM FLOOR TO CEILING, INCLUDING FASCIAS, JAMBS, BUCKS, REVEALS, RETURNS, AND ALL VERTICAL SURFACES NOT INCLUDED IN CEILING.
- USE FULL TILE WHEREVER POSSIBLE.
- COMPLETED FLOOR SHALL BE FREE FROM IMPERFECTIONS. SEAMS SHALL BE KEPT IN ACCURATE ALIGNMENT ALONG BOTH COORDINATES. TILES HAVING CHIPPED OR ROUNDED CORNERS WILL BE REJECTED AND IF INSTALLED, SHALL BE REMOVED AND REPAIRED WITH ACCEPTABLE TILES AT CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL COORDINATE WORK OF FLOORING SUB-CONTRACTORS TO ENSURE THAT VARYING FLOOR MATERIALS ARE INSTALLED FLUSH. PROVIDE TRANSITION METHODS AS INDICATED PER TRANSITION DETAILS.
- CARPET PATTERN TO ALIGN AT SEAMS WITH ADJACENT CARPET.
- NOT USED.
- FINISH MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF CBC/CFR CHAPTER 8.

**EXTERIOR ELEVATIONS GENERAL NOTES:**

- PATCH/REPAIR EXISTING CONCRETE SURFACE/FINISH WHERE DAMAGED.
- ALL BUILDING SURFACES TO BE PAINTED WITH P-1 UNLESS NOTED OTHERWISE.

**INTERIOR ELEVATIONS GENERAL NOTES:**

- WALLS & HARD LID CEILING TO BE PAINTED P-1, U.N.O. SEE FINISH PLANS, REFLECTED CEILING PLANS & INTERIOR ELEVATIONS FOR ACCENT PAINT LOCATIONS.
- NOT USED.
- SEE GENERAL NOTES AND ABBREVIATION FOR FINISH ABBREVIATIONS.
- THE CONTRACTOR SHALL HOLD A PRE-INSTALLATION MEETING WITH ALL PARTIES INVOLVED, INCLUDING THE ARCHITECT, ON SITE TO COORDINATE THE LOCATION OF EXPOSED MECHANICAL, PLUMBING, ELECTRICAL (INCLUDING WRING MOLDING), FIRE ALARM LOW VOLTAGE, AND SPRINKLER ITEMS WITH A FINISHED SPACE, BEFORE COMMENCING CONSTRUCTION.
- FOR ACCESSIBLE MOUNTING HEIGHTS SEE SHEET 0.4.

**DOOR & STOREFRONT SCHEDULE GENERAL NOTES:**

- EXTERIOR SWINGING DOORS: EVERY EXIT DOOR SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY, TOOL OR SPECIAL KNOWLEDGE OR EFFORT AND SPECIAL LOCKING DEVICES SHALL BE OF AN APPROVED TYPE.
- REFER TO ELECTRICAL DRAWINGS FOR DOOR FIRE ALARM AND SECURITY REQUIREMENTS.
- ALL DOOR AND FRAME FINISHES TO BE P-1 EXCEPT AS NOTED TO MATCH ADJACENT WALL COLOR OR U.N.O.
- INSTALL EXTERIOR FRAMES WITH 1/4" INCH SHIM AND JOINT SEALANT AROUND PERIMETER OF FRAME.
- MASONRY LINTELS AND STEEL LINTELS ARE INDICATED ON STRUCTURAL DRAWINGS.
- GLASS TYPES FOR DOORS ARE INDICATED IN MATERIAL COLUMNS OF DOOR AND FRAME SCHEDULE OR IN SPECIFICATIONS. GLASS TYPES FOR FRAMES ARE INDICATED ON FRAME ELEVATIONS OR IN SPECIFICATIONS.
- OVERHEAD COILING DOORS, GRILLES AND SECTIONAL DOORS WIDTH AND HEIGHT DIMENSIONS INDICATED IN DOOR AND FRAME SCHEDULE REPRESENT FINISHED OPENING SIZE. CONTRACTOR TO COORDINATE EXACT SIZE OF DOOR WITH MANUFACTURER.
- FRAME MANUFACTURER SHALL COORDINATE LOCATIONS OF CONCEALED CONDUIT AND J-BOXES REQUIRED FOR SECURITY SYSTEM HARDWARE PRIOR TO MANUFACTURING OF HOLLOW METAL FRAMES AND COORDINATE WITH SECURITY HARDWARE AND DEVICES.
- PROVIDE HEAD RECEIVERS AT ALUMINUM STOREFRONTS AND CURTAIN WALLS AS REQUIRED FOR FRAME AND STRUCTURAL DEFLECTION.
- REFER TO CBC 716.5 FOR FIRE DOOR ASSEMBLY PROVISIONS.
- REFER TO CBC 716.2 FOR FIRE-PROTECTION RATED GLAZING IN FIRE DOOR ASSEMBLIES.
- SEE SPECIFICATIONS 07100 HARDWARE FOR HARDWARE SET NOTED IN DOOR SCHEDULE.

**DEMOLITION GENERAL NOTES:**

- REMOVE AND CAP ANY ON-SITE UTILITIES OR CONDUIT RUNS NOT BEING REUSED. PROVIDE A TRAFFIC RATED PULL BOX AT ALL CAPPED UTILITY LOCATIONS.
- ALL EXISTING ITEMS TO REMAIN ARE TO BE PROTECTED IN PLACE.
- PATCH/REPAIR IN KIND ALL SURFACES WHERE VOIDS WERE CREATED FROM DEMOLITION.
- SEE STRUCTURAL DRAWINGS FOR LOCATION FOR SAWCUT FOR NEW FOOTINGS, PATCH AND REPAIR AS REQUIRED FOR NEW FLOORING.
- WHERE WALL CEILING FINISHES & CASEWORK HAVE BEEN MOVED, CONTRACTOR TO PATCH, SAND & PRIME PAINT FOR NEW FINISHES.
- SEE STRUCTURAL, ELECTRICAL, PLUMBING AND MECHANICAL DRAWINGS FOR ADDITIONAL DEMOLITION WORK.
- SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR LOCATIONS TO SAWCUT FOR NEW UNDERGROUND UTILITIES. PATCH AND REPAIR AS REQUIRED.
- ALL ITEMS BEING REMOVED (CASEWORK, HVAC COMPONENTS, FAUCETS, SINKS, PAPER TOWEL DISPENSERS, AUDIO/VISUAL EQUIPMENT, ETC) TO BE SALVAGED AND TURNED OVER TO THE DISTRICT. THE DISTRICT WILL DETERMINE IF THEY ARE SALVAGEABLE OR HAVE THE CONTRACTOR DISPOSE OF THEM.

**SHEET INDEX**

.GENERAL.		.PLUMBING.	
0.0	COVER SHEET	P.0	LEGEND & NOTES
0.1	SHEET INDEX & GENERAL NOTES	P.1	PLUMBING FLOOR PLAN
0.2	SYMBOLS AND ABBREVIATIONS		
0.4	ACCESSIBILITY DETAILS		
0.5	FIRE PROTECTION SITE PLAN		
CP1.0	CODE PLAN		
			.ELECTRICAL.
		E.0	SYMBOLS LIST
		E.0.1	SITE ELECTRICAL PLAN
		E.1.10	ELECTRICAL DEMOLITION PLAN
C1.1	CIVIL PLANS - DEMOLITION	E.1.1	POWER & SIGNAL PLAN
C1.2	CIVIL PLANS - GRADING	E.1.2	LIGHTING PLAN
C1.3	CIVIL PLANS - HORIZONTAL CONTROL	E.2.1	SINGLE LINE DIAGRAM & PANEL SCHEDULE
		E.3.1	LIGHTING FIXTURE SCHEDULE
		E.3.2	EXTERIOR TITLE 24
		E.4.1	DETAILS
			.LANDSCAPE.
L.0.0	LANDSCAPE COVER SHEET		
L.1.1	IRRIGATION PLAN		
L.2.1	IRRIGATION LEGEND & CALCULATIONS		
L.2.2	IRRIGATION NOTES		
L.3.1	IRRIGATION DETAILS		
L.4.1	PLANTING PLAN		
L.5.1	PLANTING DETAILS		
			.ARCHITECTURAL.
A.0.0	OVERALL SITE PLAN		
A.0.1	ACCESSIBILITY SITE PLAN		
A.0.2	ENLARGED SITE PLAN - DEMO		
A.0.3	ENLARGED SITE PLAN - NEW		
A1.2	REFLECTED CEILING PLAN		
A2.1	ENLARGED PLANS & DOOR SCHEDULE		
A4.1	ROOF PLANS		
A5.1	EXTERIOR ELEVATIONS		
A6.1	BUILDING SECTIONS		
A7.1	WALL SECTIONS		
A10.1	DETAILS		
A10.2	SITE DETAILS		
			.STRUCTURAL.
S.0.1	STRUCTURAL NOTES		
S.1.1	FOUNDATION PLAN		
S.1.2	CANOPY FRAMING		
S.1.3	WALL ELEVATIONS & PARTIAL PLANS		
S2.1	TYP FOUNDATION & SLAB-ON-GRADE DETAILS		
S3.1	STRUCTURAL DETAILS		
S4.1	TYPICAL LIGHT GAUGE DETAILS		

**CERTIFICATION OF CONSTRUCTION:**

A. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDA OR A CONSTRUCTION CHANGE DOCUMENT APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-388, PART 1, TITLE 24 CCR.

B. A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.

C. INSPECTOR OF RECORD (IOR) TO BE CLASS 2 AND SHALL BE DSA APPROVED.

**STATEMENT OF GENERAL CONFORMANCE**

FOR ARCHITECTS / ENGINEERS WHO UTILIZE PLANS, INCLUDING BUT NOT LIMITED TO SHOP DRAWINGS, PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND / OR CONSULTANTS

APPLICATION NO. 04-119007 FILE NO. 38-C1

THE DRAWINGS OR SHEETS LISTED ON THE COVER OR INDEX SHEET.

THIS DRAWING, PAGE OF SPECIFICATIONS / CALCULATIONS.

THIS DRAWING, PAGE OF SPECIFICATIONS / CALCULATIONS.

HAVE BEEN PREPARED BY OTHER DESIGN PROFESSIONALS OR CONSULTANTS WHO ARE LICENSED AND / OR APPROVED TO PREPARE SUCH DRAWINGS IN THIS STATE. IT HAS BEEN EXAMINED BY ME FOR:

- DESIGN INTENT AND APPEARS TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS AND THE PROJECT SPECIFICATIONS PREPARED BY ME AND
- COORDINATION WITH MY PLANS AND SPECIFICATIONS AND IS ACCEPTABLE FOR INCORPORATION INTO THE CONSTRUCTION OF THE PROJECT.

THE STATEMENT OF GENERAL CONFORMANCE SHALL NOT BE CONSIDERED AS RELIEVING ME OF MY RIGHTS, DUTIES AND RESPONSIBILITIES UNDER SECTIONS 17052 AND 8108 OF THE EDUCATION CODE AND SECTIONS 438, 4341 AND 4341.5 OF TITLE 24, PART 1, TITLE 24, CCR.

I CERTIFY THAT:  ALL DRAWINGS OR SHEETS LISTED ON THE COVER OR INDEX SHEET  THIS DRAWING OR PAGE.

I / ARE IN GENERAL CONFORMANCE WITH THE PROJECT DESIGN, AND

HAS / HAVE BEEN COORDINATED WITH THE PROJECT PLANS AND SPECIFICATIONS

I / ARE IN GENERAL CONFORMANCE WITH THE PROJECT DESIGN INTENT, AND

HAS / HAVE BEEN COORDINATED WITH THE PROJECT PLANS AND SPECIFICATIONS

12-21-2016 DATE

ARCHITECT OR ENGINEER DESIGNATED TO BE IN GENERAL RESPONSIBLE CHARGE: **MICHAEL STEPHENS**

ARCHITECT OR ENGINEER DELEGATED RESPONSIBILITY FOR THIS PORTION OF THE WORK:

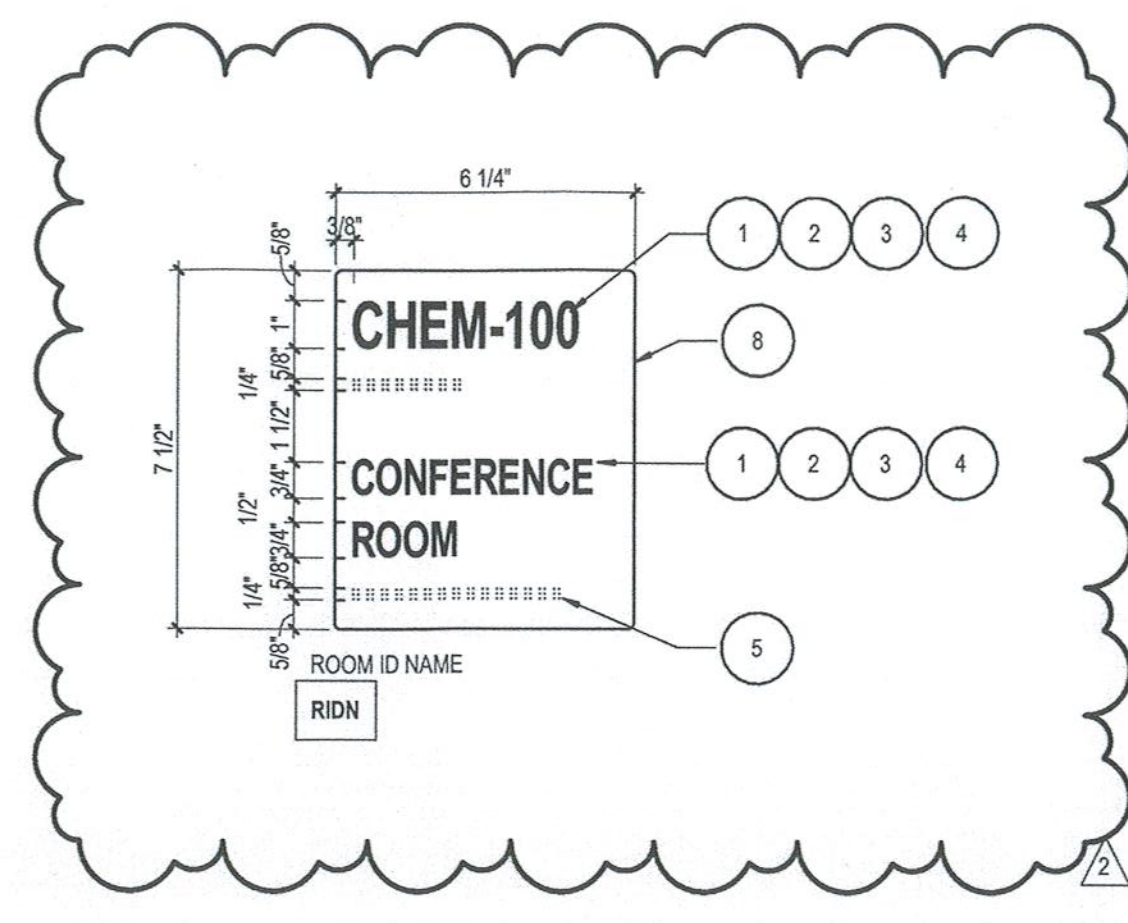
PRINT NAME: **MICHAEL STEPHENS** LICENSE NUMBER: **C-0660** EXPIRATION DATE: **07/02/2017**

PRINT NAME: \_\_\_\_\_ LICENSE NUMBER: \_\_\_\_\_ EXPIRATION DATE: \_\_\_\_\_





- CHARACTER TYPE: TACTILE CHARACTERS ON SIGNS SHALL BE RAISED 1/32" (0.8 mm) MINIMUM. ALL CHARACTERS SHALL BE SERIF UPPERCASE CHARACTERS ACCOMPANIED BY CONTRACTED GRADE 2 BRAILLE. (SEE NOTE 5)
- CHARACTER SIZE: RAISED CHARACTERS SHALL BE MINIMUM OF 5/8" INCH (15.9 mm) AND MAXIMUM OF 2" (51 mm) IN HEIGHT. VISUAL CHARACTERS SHALL COMPLY WITH CBC TABLE 11B-703.5.5, WHERE CBC TABLE 11B-703.5.5 REQUIRES CHARACTER HEIGHTS IN EXCESS OF 2"; SEPARATE RAISED AND VISUAL CHARACTERS SHALL BE PROVIDED.
- FINISH AND CONTRAST (VISUAL CHARACTERS): CHARACTERS AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH. CHARACTERS SHALL CONTRAST WITH THEIR BACKGROUND (LIGHT-ON-DARK OR DARK-ON-LIGHT).
- TYPE STYLE: SEE DETAIL 55- FOR TYPE STYLE TEMPLATE AND TESTING PROCEDURES.  
 - PROPORTIONS: THE WIDTH OF THE UPPERCASE LETTER "O" FOR VISUAL AND TACTILE CHARACTERS ON SIGNS SHALL BE 80% MINIMUM TO 110% MAXIMUM THE HEIGHT OF THE UPPERCASE LETTER "I".  
 - STROKE THICKNESS: THE STROKE THICKNESS OF THE UPPERCASE LETTER "I" SHALL BE 15% MAXIMUM THE HEIGHT OF THE CHARACTER.  
 - CHARACTER SPACING (EXCLUDING WORD SPACES): RAISED CHARACTERS SHALL BE SPACED 1/8" MINIMUM TO 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM. VISUAL CHARACTERS SHALL BE SPACED 10% MINIMUM TO 35% MAXIMUM OF CHARACTER HEIGHT.
- BRAILLE: CONTRACTED GRADE 2 BRAILLE SHALL BE USED WHEREVER BRAILLE IS REQUIRED IN OTHER PORTIONS OF THESE STANDARDS. SEE DETAIL 56-.
- ATTACH SIGNING AT LEAST (2) TYPICAL HEAD POINTERS/SCREWS TO SOLID BACKING & ADHESIVE TO BACK. SEE DETAIL 54- FOR TYPICAL MOUNTING HEIGHTS.
- PLATE OF 1/8" THICK ACRYLIC PLASTIC MATTE SINGLE PLAQUE: SIGNS WILL BE TWO-COLOR DESIGN WITH DARK BACKGROUND & LIGHT CHARACTERS TO MATCH CAMPUS SIGNAGE COLORS. (SUBMIT COLORS WITH LRV DATA TO ARCHITECT FOR APPROVAL; ASSUME RED COLOR BACKGROUND 29% LRV WITH GREY COLOR CHARACTERS 20% LRV FOR BIDDING PURPOSES).
- PLATE OF 1/4" THICK ACRYLIC PLASTIC MATTE: SIGN SHALL UTILIZE (2) 1/8" THICK PIECES CONNECTED TO BE 1/4" FINISH SIZE.  
 NOTE: ALL LOCATION OF SIGNAGE WITHIN ROOM AND ON WALL SHALL BE REVIEWED BY OWNER BEFORE INSTALLATION.  
 SEE DETAIL 54D.3 FOR MOUNTING LOCATION.



11 SIGNAGE KEYNOTE  
SCALE: 3/4\"/>

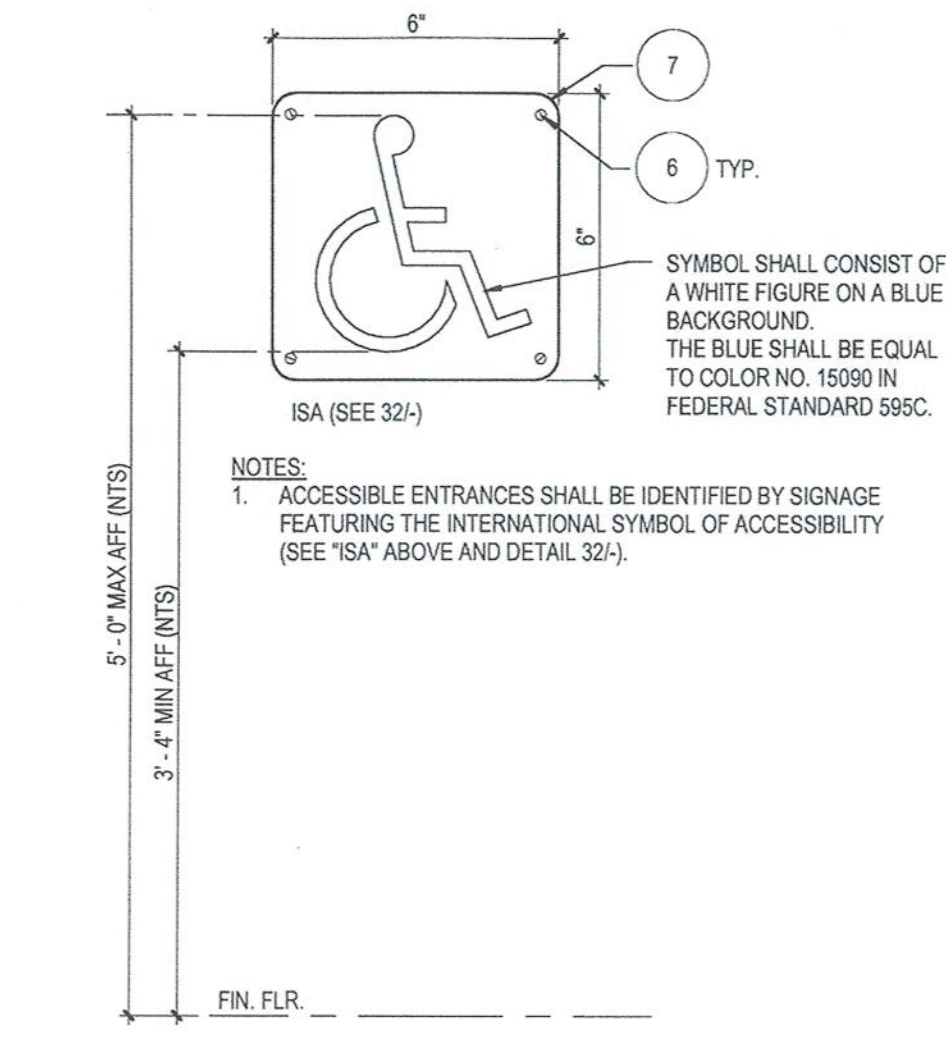
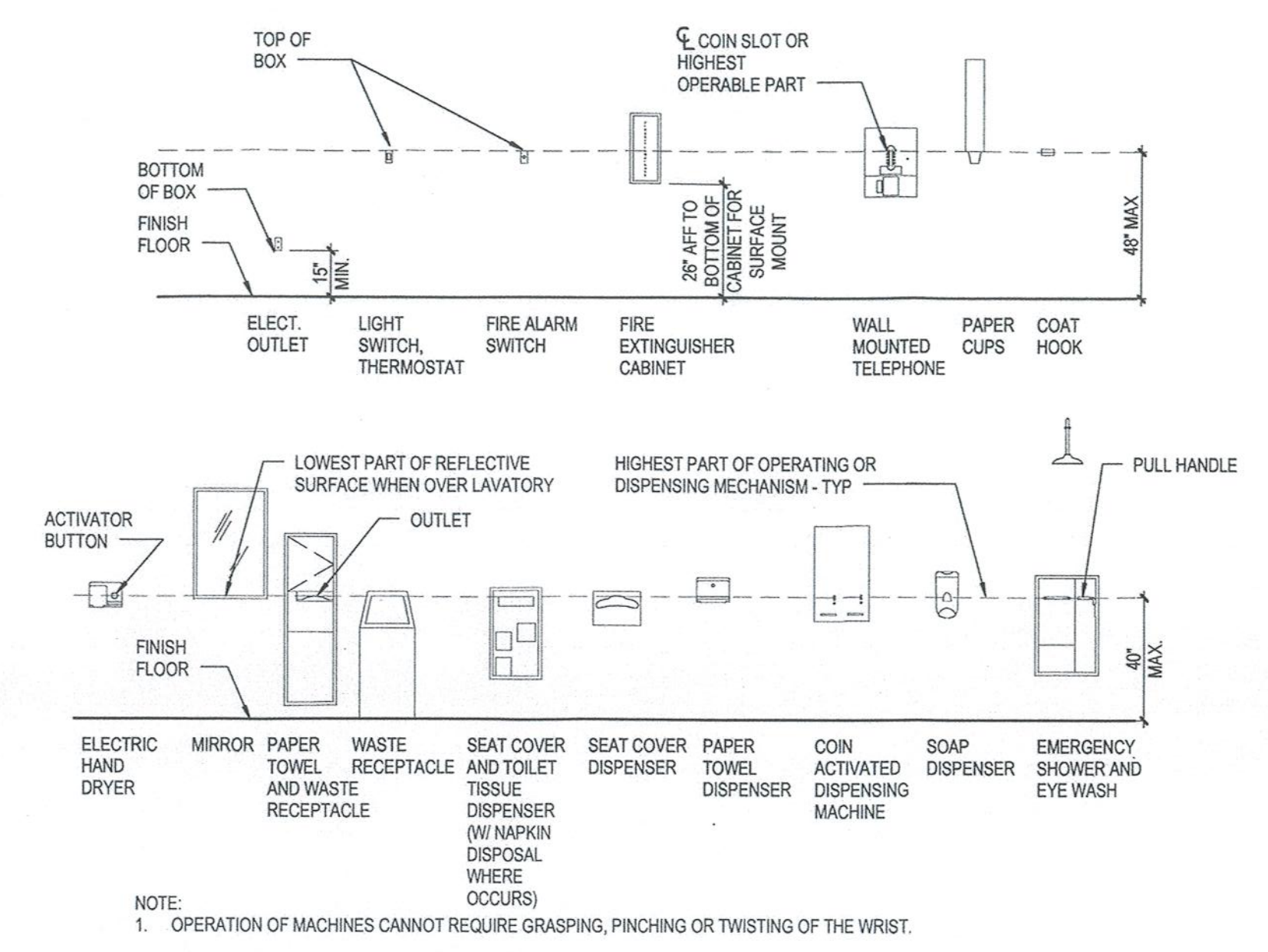
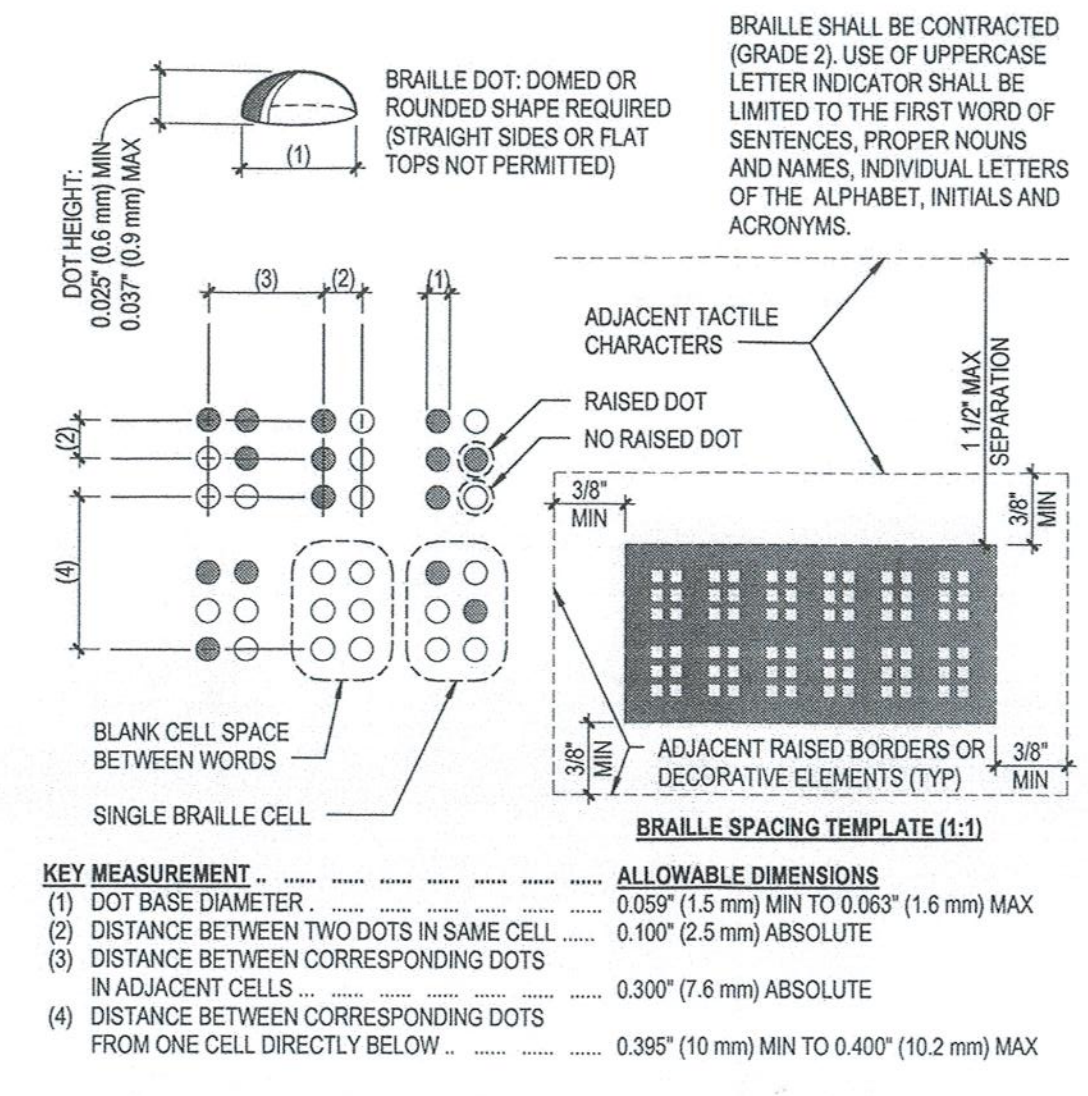
12 ROOM SIGNAGE  
SCALE: 3/4\"/>

- ROOM SIGNAGE NOTES:
- PROVIDE ROOM ID (RID) SIGN AT ALL ROOMS EXCEPT RESTROOMS.
  - PROVIDE ROOM ID NAME (RIDN) SIGN AT EQUIPMENT ENCLOSURE.
  - PROVIDE OCCUPANT COUNT SIGN (RCS) AT EACH ENTRANCE.
- SEE CP1.0 FOR OCCUPANT COUNTS.

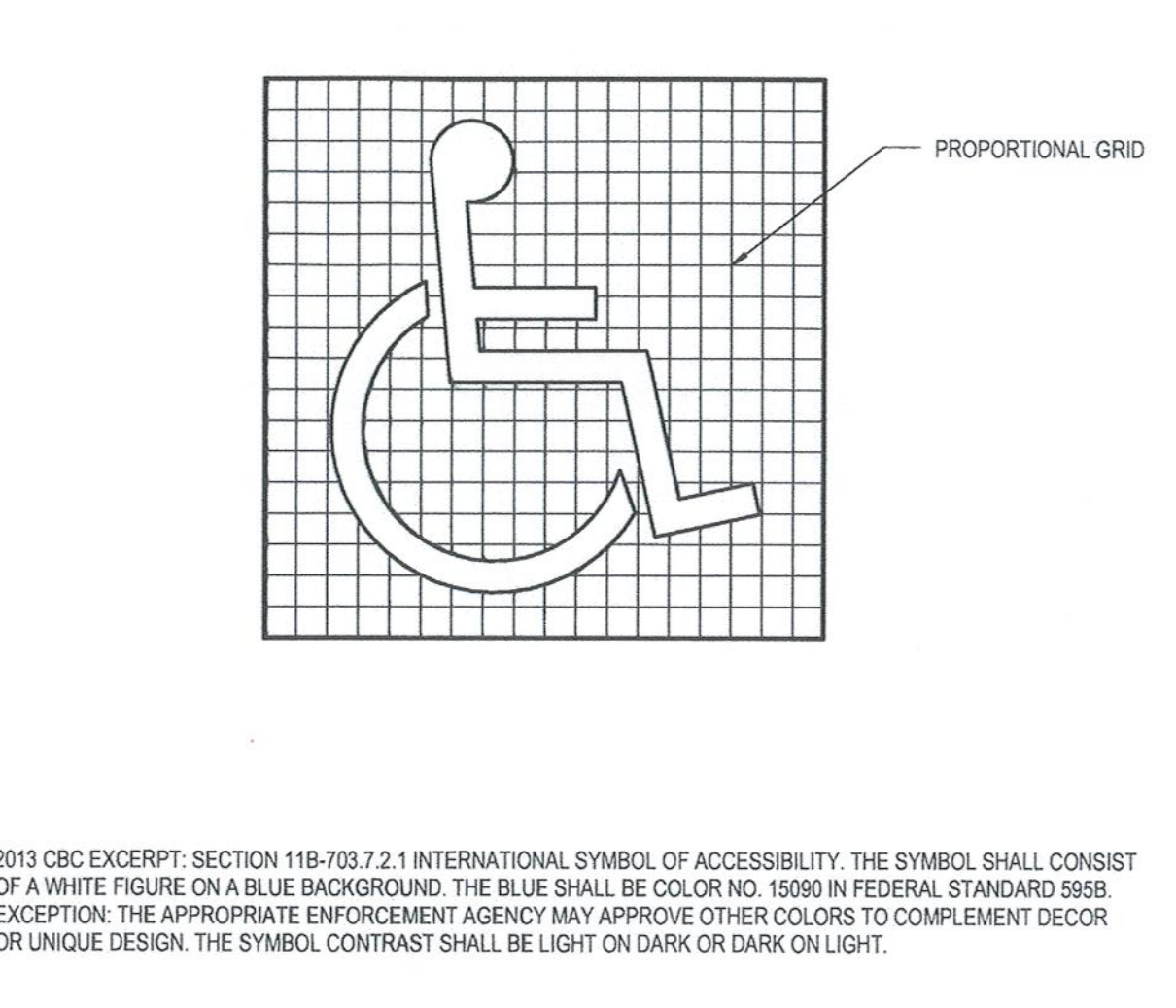
13 SIGNAGE MOUNTING LOCATION  
SCALE: 1/2\"/>

15 BRAILLE PROPORTIONS AND TEMPLATE  
SCALE: 1/2\"/>

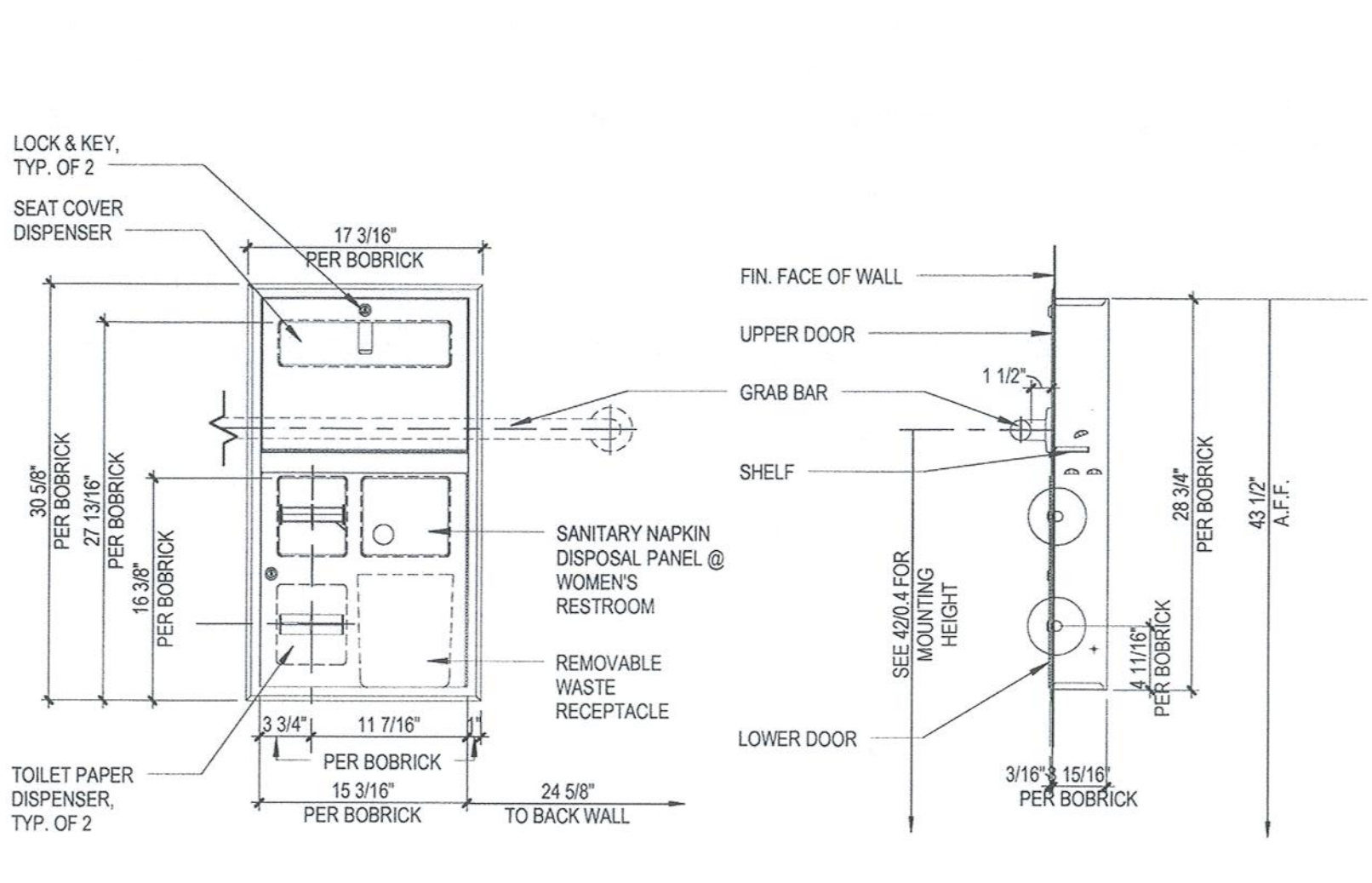
14 ACCESSIBLE MOUNTING HEIGHTS  
SCALE: 1/4\"/>



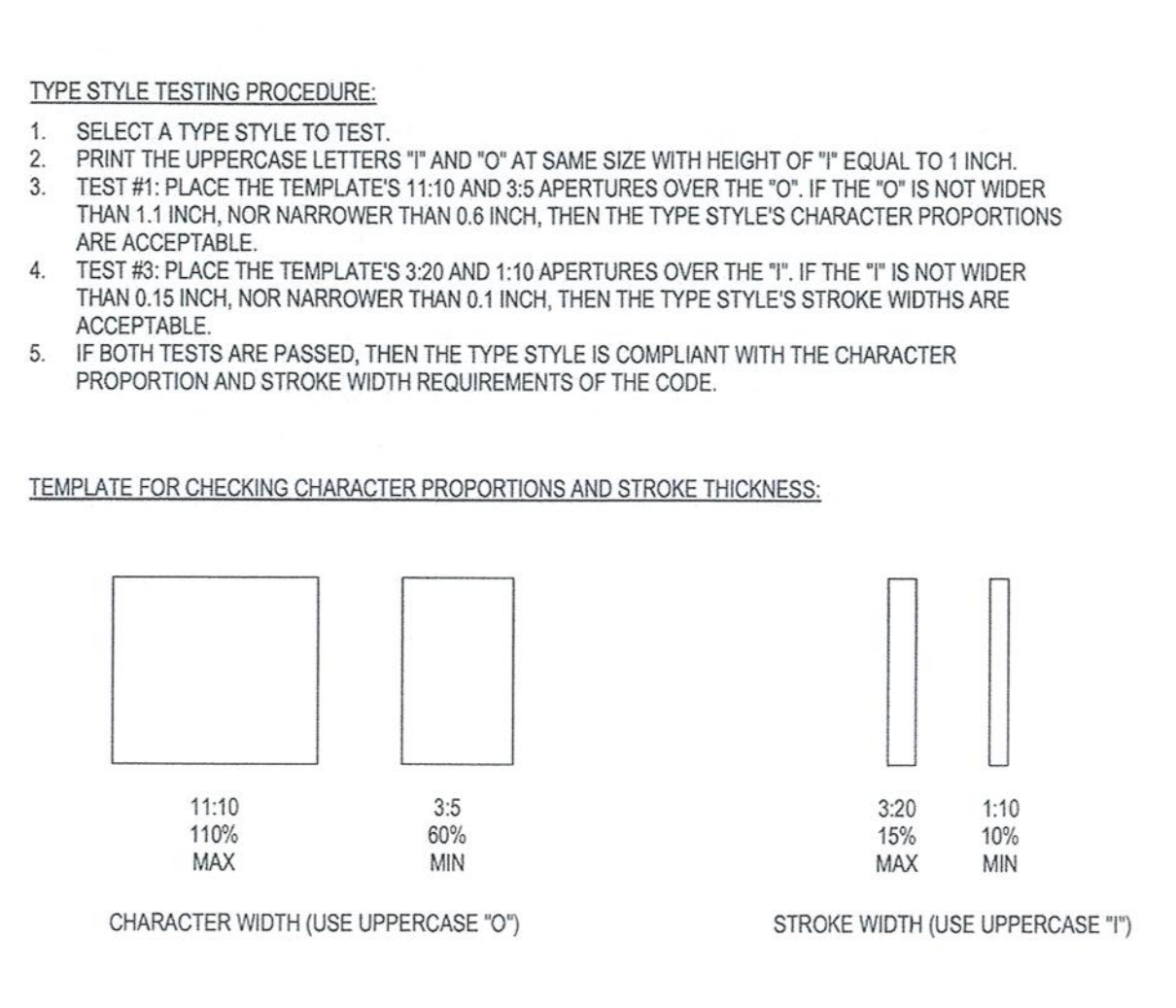
31 INTERNATIONAL SIGN OF ACCESSIBILITY LOCATION  
SCALE: 3/4\"/>



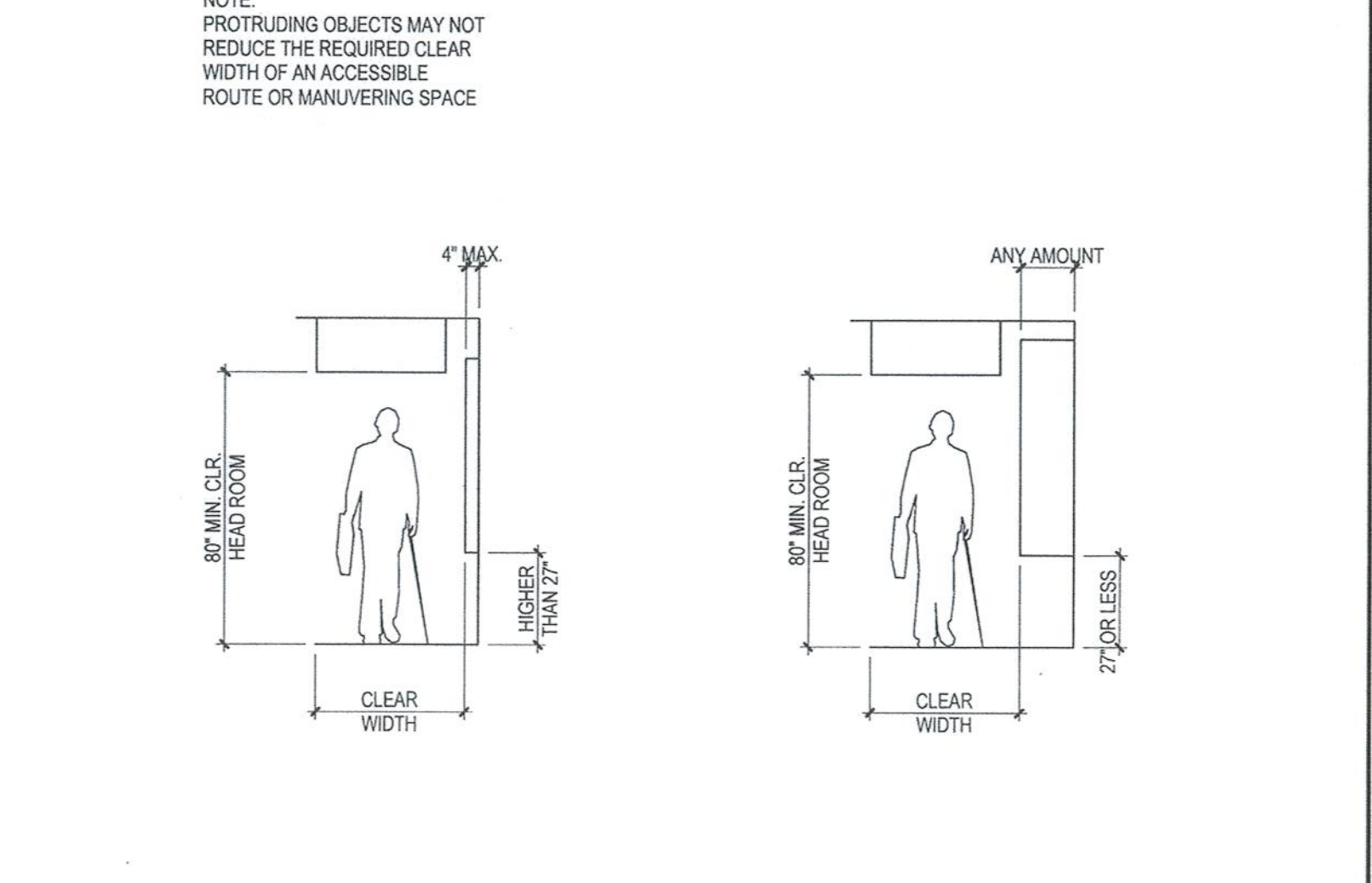
32 INTERNATIONAL SYMBOL OF ACCESSIBILITY (ISA)  
SCALE: 1\"/>



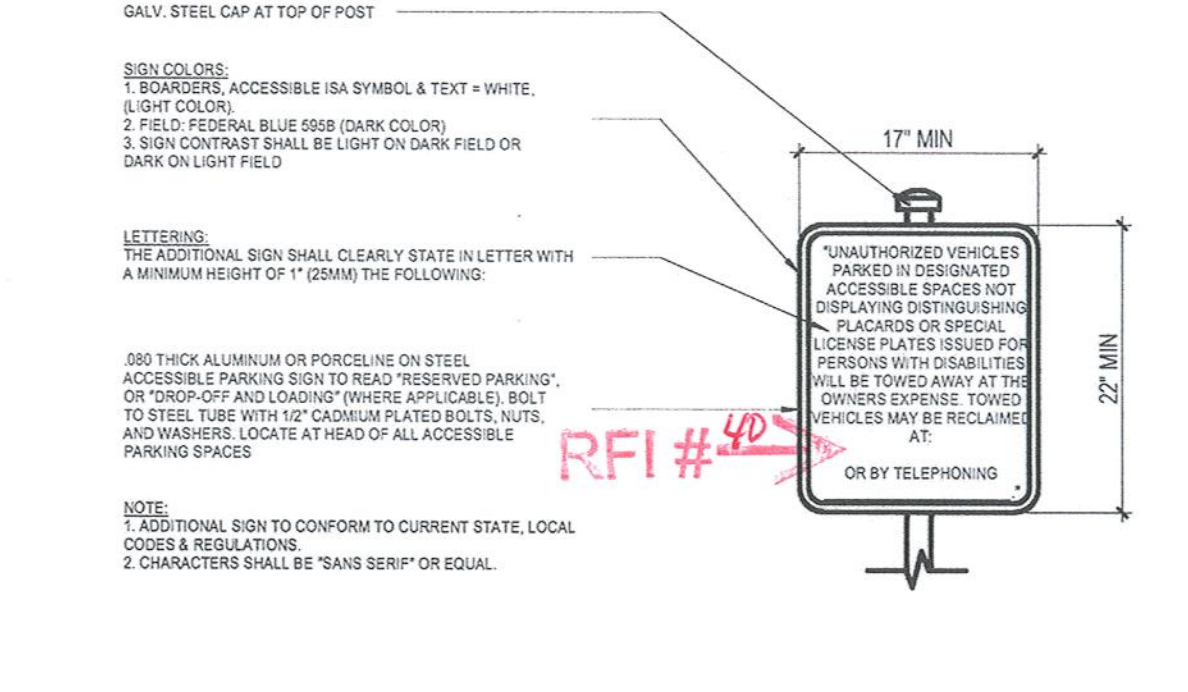
33 FLUSH MOUNTED SEAT COVER, SANITARY NAPKIN, & TP DISPENSER  
SCALE: 1\"/>



34 CHARACTER PROPORTIONS  
SCALE: 6\"/>



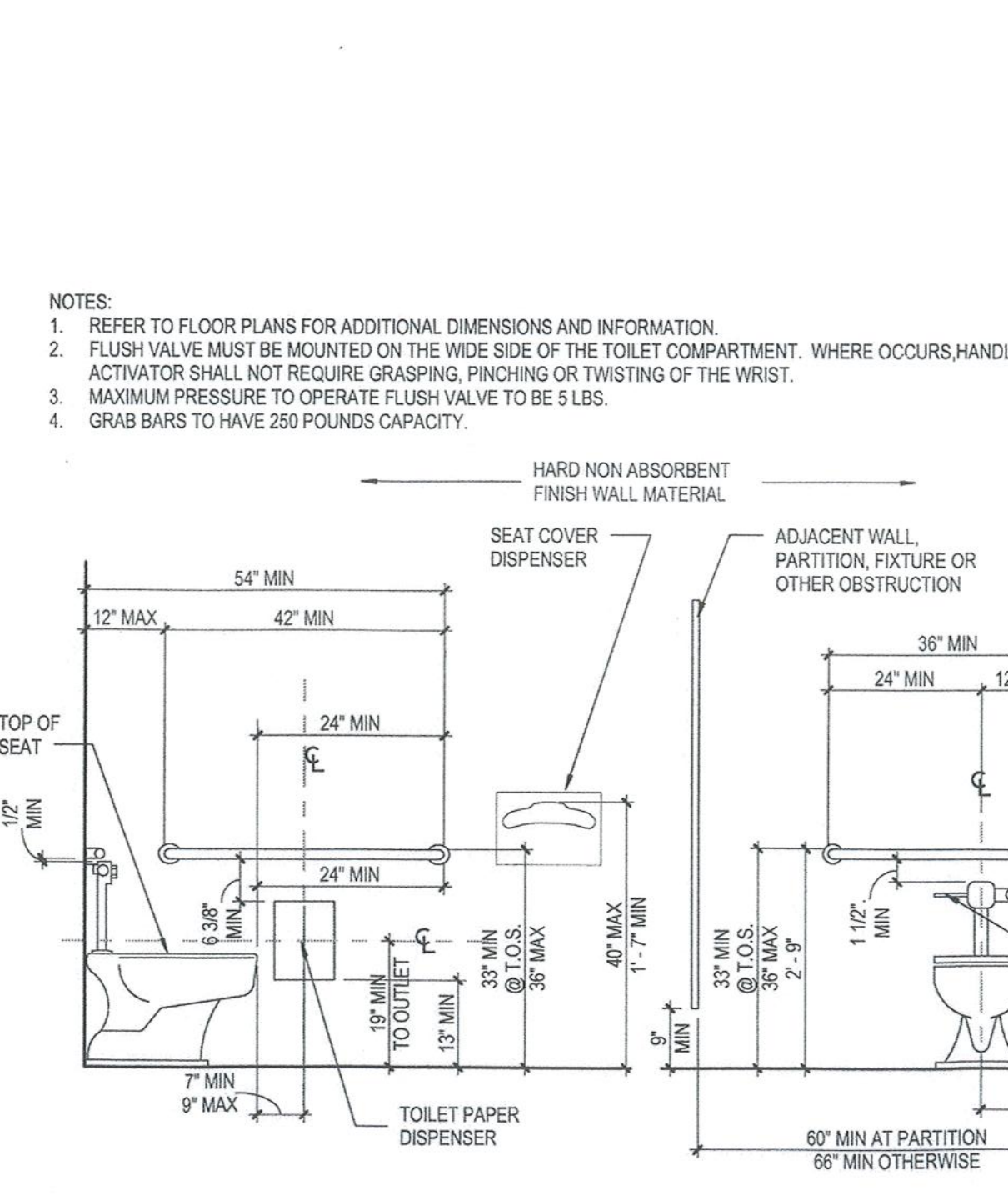
36 ACCESSIBLE ROUTE CLEARANCES  
SCALE: 1/4\"/>



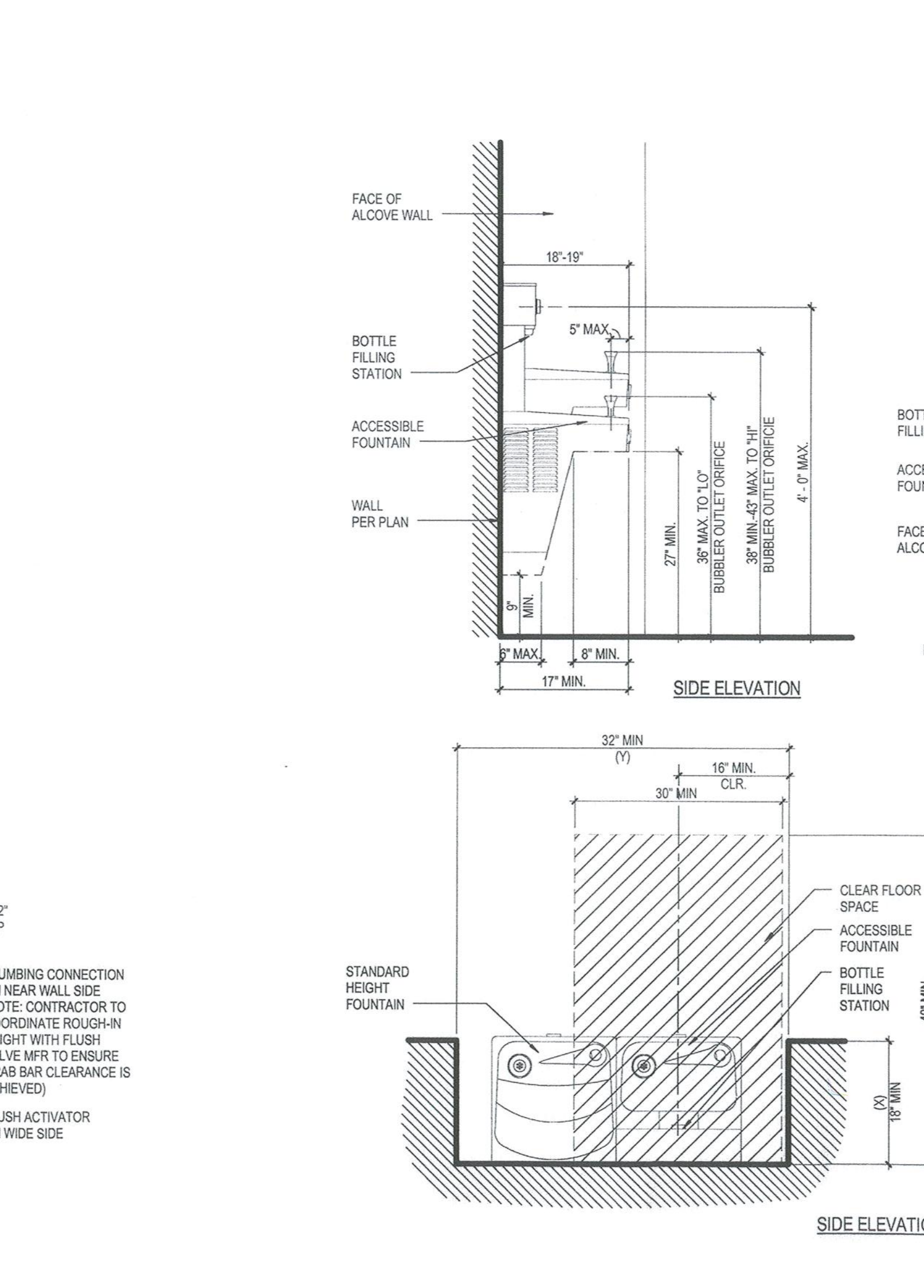
2 ADDITIONAL PARKING SIGNS  
SCALE: 3/4\"/>



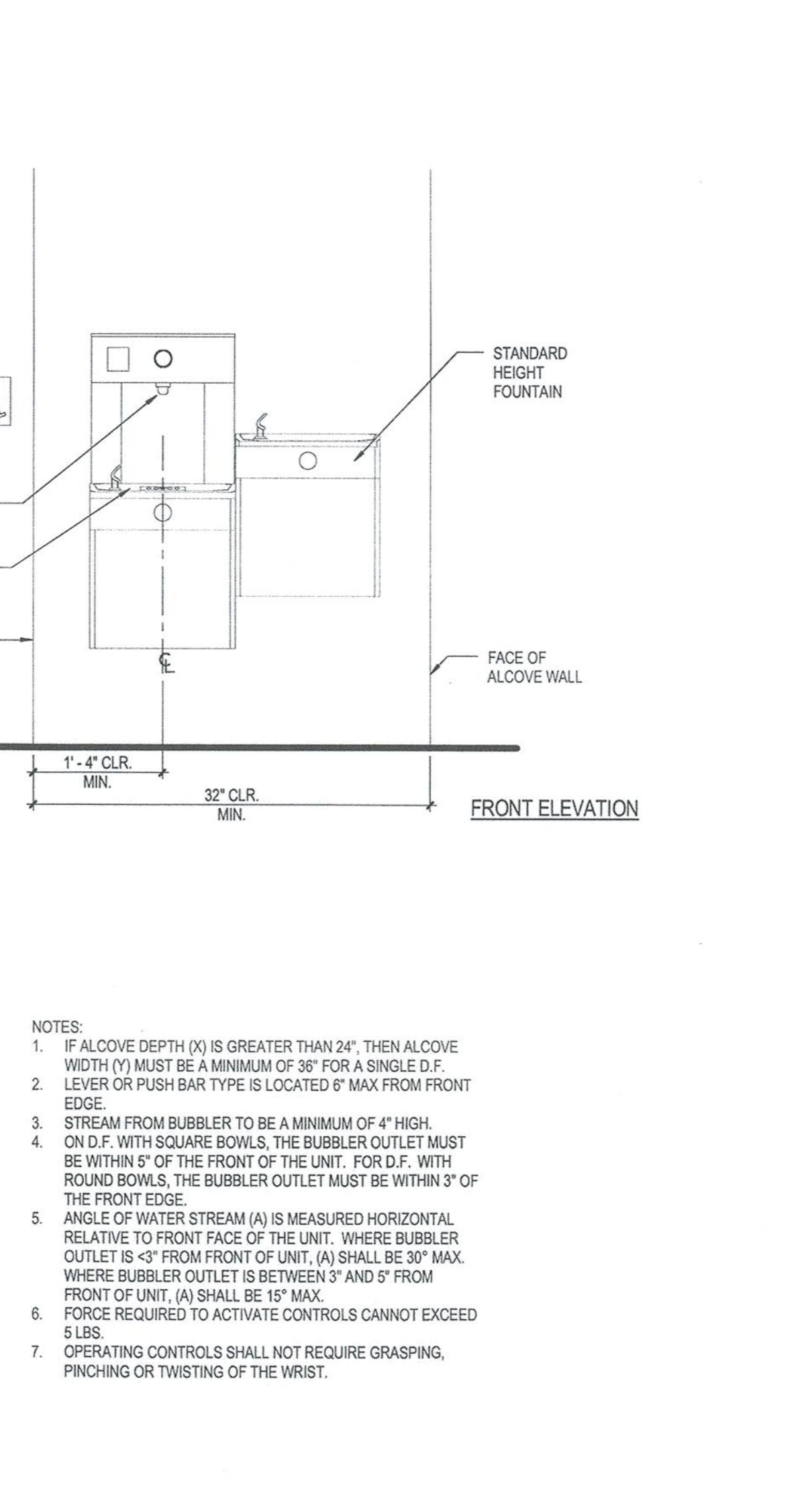
1 TYP. ADDITIONAL PARKING SIGN POST  
SCALE: 1/2\"/>



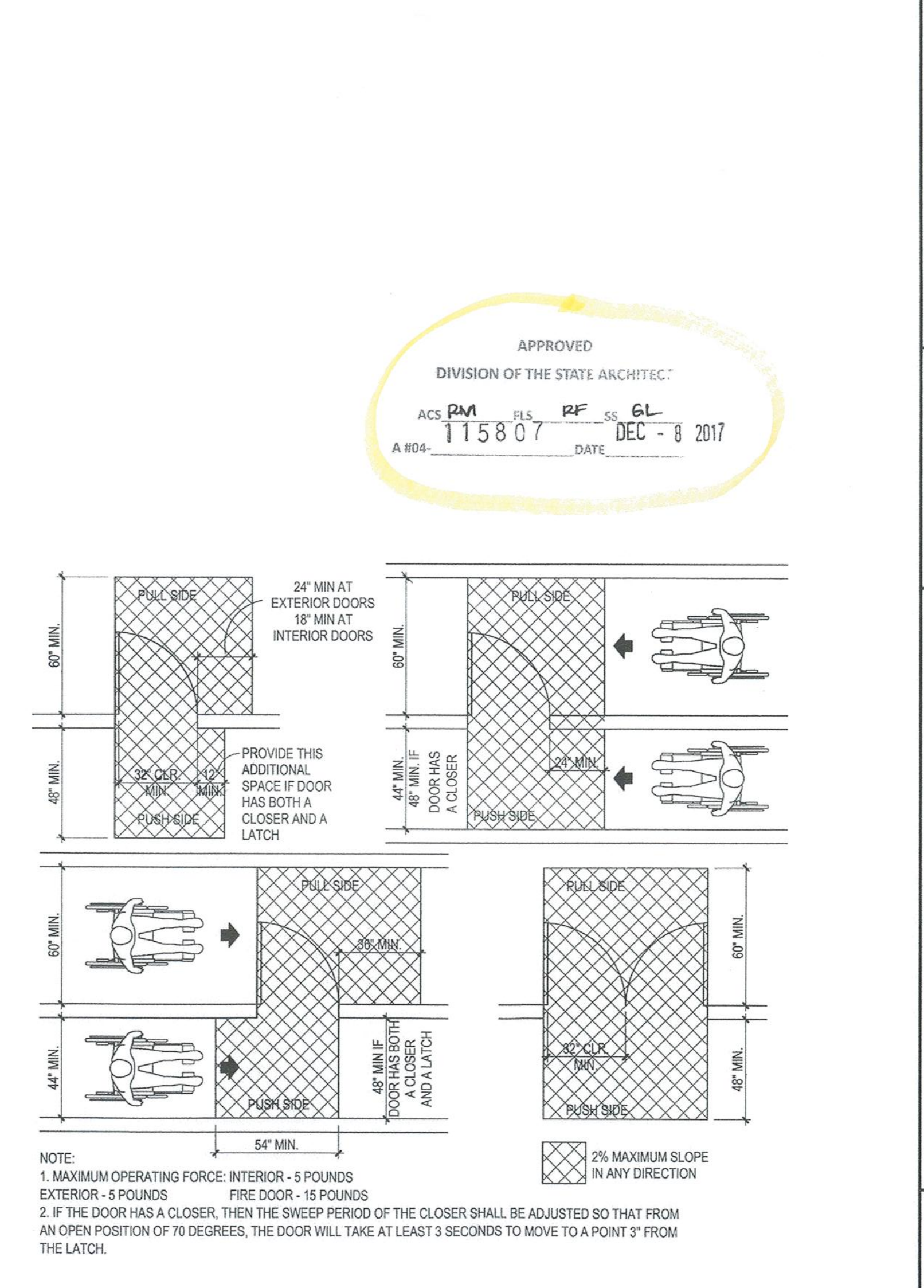
42 ACCESSIBLE TOILET MOUNTING DIMENSIONS  
SCALE: 1/2\"/>



44 DRINKING FOUNTAIN W/BOTTLE FILLER  
SCALE: 3/4\"/>



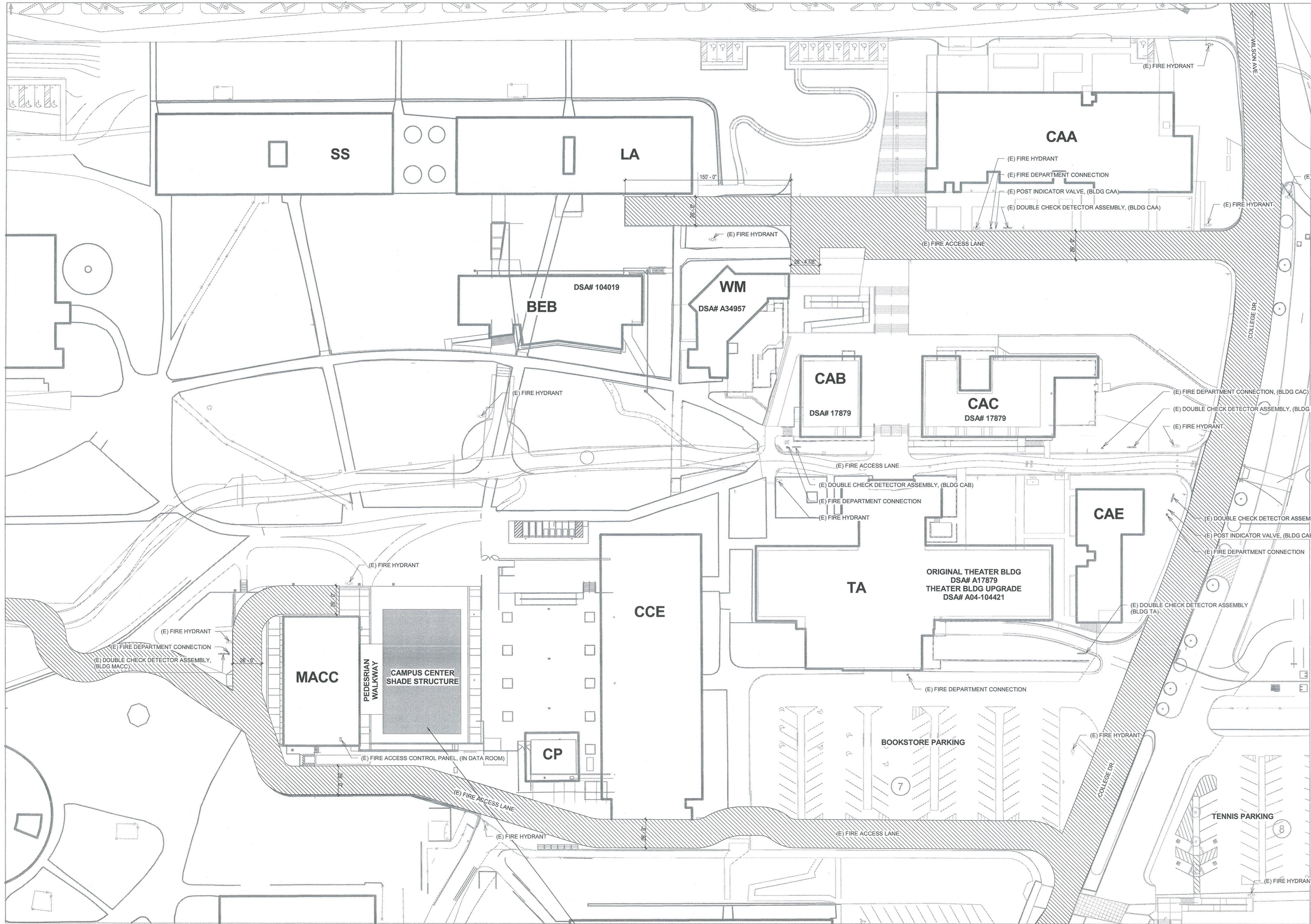
45 DOOR CLEARANCES  
SCALE: 1/4\"/>



38 ACCESSIBLE ROUTE CLEARANCES  
SCALE: 1/4\"/>

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DSA - SAN DIEGO



12/20/2016	12/20/2016	PMT2016-04954
Submission Date	Review Date	Record Number
DSA review for Chaffey College		
Project Description		
5885 HAVEN AVE		
Project Location		

CITY OF RANCHO CUCAMONGA  
BUILDING AND SAFETY SERVICES DEPT.  
FIRE CONSTRUCTION SERVICES

These plans have been reviewed for compliance with all applicable codes and standards as adopted by the Rancho Cucamonga Fire District.

**APPROVED**

This review does not relieve the developer, architect, designer, contractor or installer of the responsibility to meet all of the applicable Federal, State, County, City, Fire District Laws, Codes Ordinances or Regulations. Subject to final approval by field inspections and test.

NOTE:  
1. PREVIOUSLY APPROVED FIRE ACCESS LANES NOT SHOWN.  
2. FIRE LANES ARE 26'-0" MINIMUM, PER RCPFD FIRE LANE STANDARD 5-1.

**LOCAL FIRE AUTHORITY REVIEW**

<b>PROJECT INFORMATION</b>	
School District / Owner:	CHAFFEY COMMUNITY COLLEGE DISTRICT
Project Name / School:	CAMPUS CENTER SHADE STRUCTURE
Project Address:	5885 HAVEN AVE, RANCHO CUCAMONGA, CA 91737

<b>LOCAL FIRE AUTHORITY (LFA)</b>	
LFA Agency Name:	RANCHO CUCAMONGA CITY FIRE DEPARTMENT
LFA Reviewer Name:	MOISES ESKENAZI
Title:	SR PLAN EXAMINER
Email:	Moises.eskenazi@cityofrc.com
Telephone Number:	(909)477-2710

I have reviewed and responded to the applicable items for this project as listed below.  
Note: Only sign this form when it is stamped onto the site plan. This form is not acceptable to DSA.

LFA Reviewer's Signature: *[Signature]* Date: 12/22/16

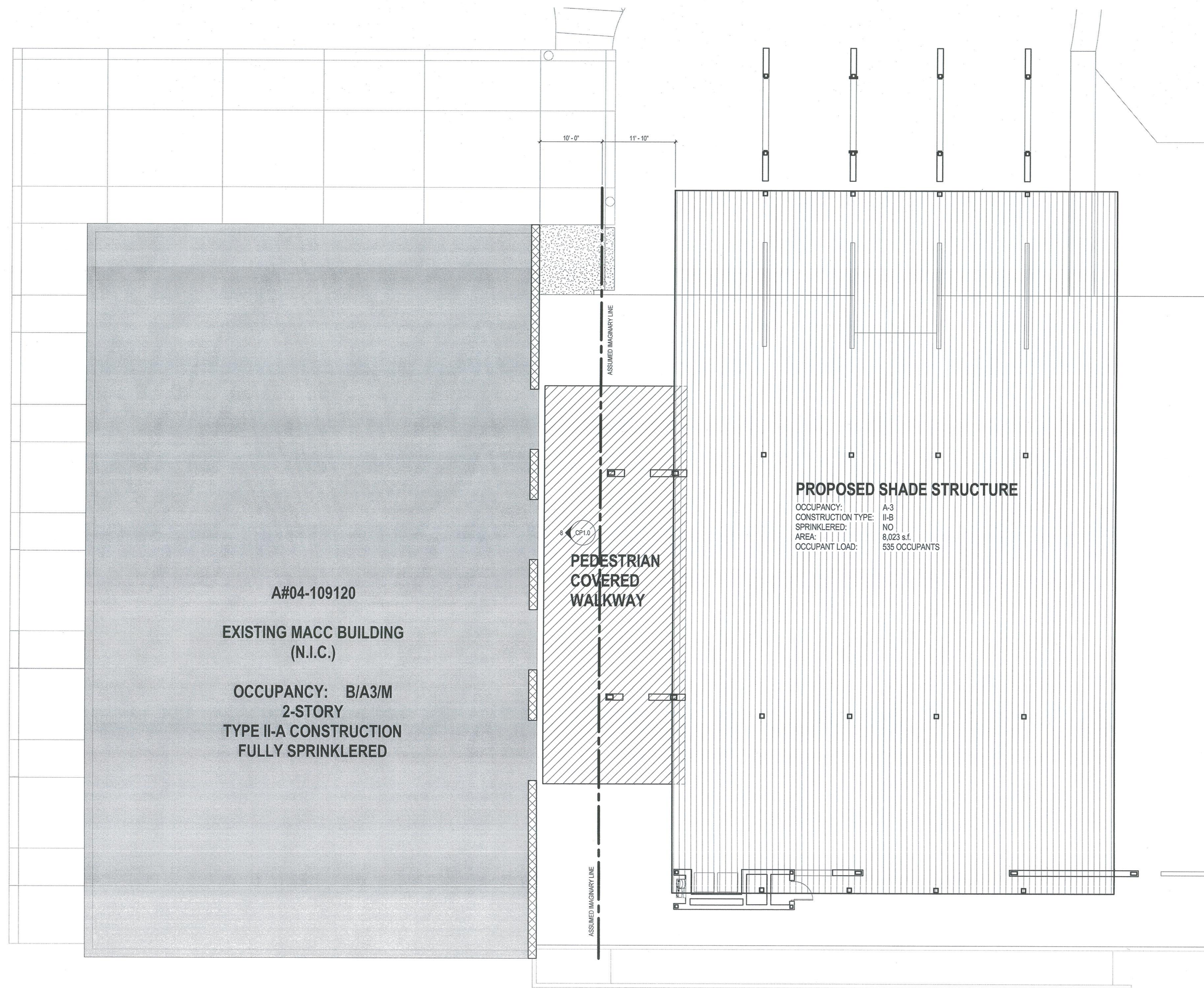
Review Key: "Y" = Complies with LFA requirements "N" = Not approved (complete Section 8)  
"NA" = Not Applicable to the project "NR" = LFA elects not to review

DESCRIPTION	Y	N	NA	NR
1 Where an elevator does not meet medical emergency service cab size, per the California Building Code (CBC), use of stairways for emergency rescue and patient transport is acceptable.				✓
2 Access roads, fire lane markings, pavers and gate entrances are in accordance with Title 19, California Code of Regulations and the California Fire Code, Chapter 5.	✓			
3 Fire hydrant location and distribution complies with the California Fire Code (or see #4).	✓			
4 Fire hydrant location and distribution complies with NFPA 1142, "Alternate Means." If "NR" is checked, DSA can only approve on-site water storage as an alternate. The signature of the school district official is required to acknowledge the use of alternate means.				
5 Signature of School District Official: _____ Date: _____				
6 Print the School District Official's Name: _____				
7 The location(s) of the proposed post indicator valve and fire department connection meet the requirements of this jurisdiction.				✓
8 The location(s) of the detector check valve assembly meet the requirements of this jurisdiction.				✓
9 Is the project located in a hazard severity zone area? (CBC, Chapter 7A, Section 701A) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
10 Check type if "Yes": <input type="checkbox"/> Moderate <input type="checkbox"/> High <input type="checkbox"/> Very High <input type="checkbox"/> WFA (if one of these boxes is checked, the project design must meet the requirements of Chapter 7A.)				
11 COMMENTS (note deficiencies):				

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**FIRE PROTECTION SITE PLAN**  
CAMPUS CENTER SHADE STRUCTURE  
MEASURE L PROJECTS AT CHAFFEY COLLEGE  
5885 HAVEN AVE  
RANCHO CUCAMONGA, CA 91737





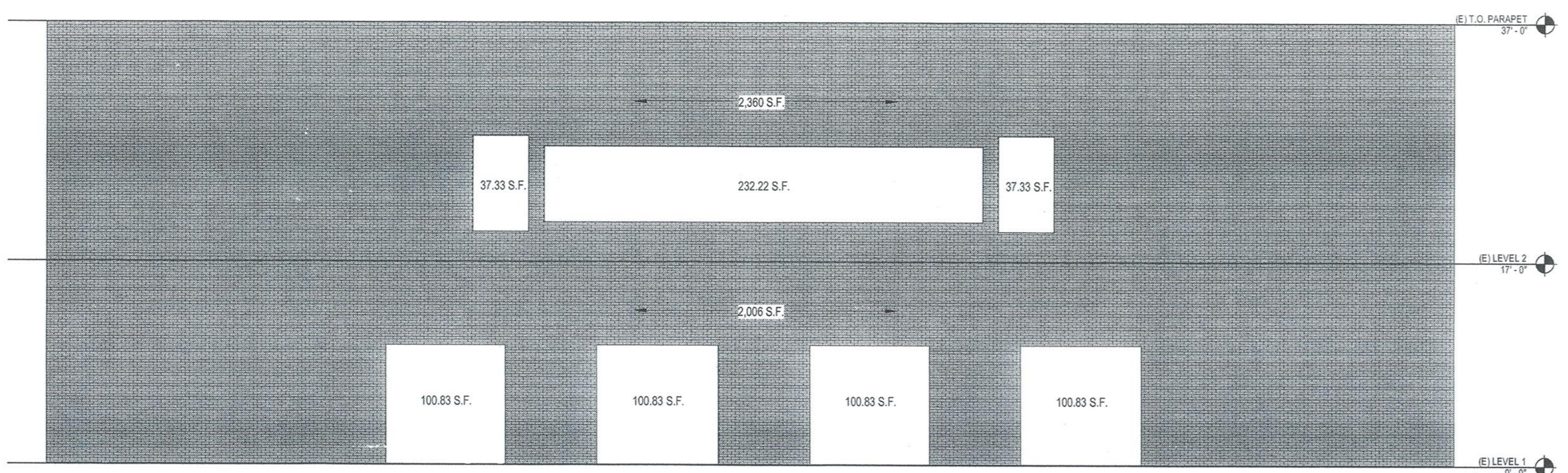
**A#04-109120**  
**EXISTING MACC BUILDING**  
**(N.I.C.)**  
**OCCUPANCY: B/A3/M**  
**2-STORY**  
**TYPE II-A CONSTRUCTION**  
**FULLY SPRINKLERED**

**PROPOSED SHADE STRUCTURE**  
**OCCUPANCY: A-3**  
**CONSTRUCTION TYPE: II-B**  
**SPRINKLERED: NO**  
**AREA: 8,023 s.f.**  
**OCCUPANT LOAD: 535 OCCUPANTS**

**PEDESTRIAN COVERED WALKWAY**

WALL TYPE CONFORMS TO UL ASSEMBLY NO. U419- 1HR RATED WALL

**1 CODE PLAN**  
 CP1.0 SCALE: 1/8" = 1'-0"



**MAXIMUM ALLOWABLE AREA OF EXTERIOR WALL OPENINGS (CBC TABLE 705.8)**  
 FOR FIRE SEPARATION DISTANCE IS 10' TO LESS THAN 15', AND WHEN DEGREE OF OPENING PROTECTION IS UNPROTECTED & SPRINKLERED:

ALLOWABLE AREA =	45%
<b>EAST WALL: TOTAL AREA OF OPENINGS/ TOTAL WALL AREA + OPENINGS</b>	
1ST FLOOR: [(4 X 100.83 S.F.) / 2,006 S.F.] =	20%
2ND FLOOR: [232.22 S.F. + (2 X 37.33 S.F.) / 2,360 S.F.] =	13%
<b>TOTAL =</b>	<b>33%</b>

- GENERAL NOTES:**
- EXISTING BUILDING INFORMATION, PROVIDED FOR REFERENCE ONLY. REFER TO EXISTING BUILDING AS-BUILT DRAWINGS AND PERFORM ON-SITE VERIFICATION.
  - REFER TO A0.3 & A1.2 SERIES FLOOR PLAN SHEETS FOR WALL LOCATIONS AND WALL TAGS.
  - REFER TO SHEETS A0.1 FOR EXTERIOR PATHS OF TRAVEL AND SITE EXISTING.

**OCCUPANT LOADS 2013 CBC:**  
 ASSEMBLY 1:15 SF  
 OCC. LOAD TOTAL: 535 OCCUPANTS

**OCCUPANCY LEGEND:**

- A-3 OCCUPANCY
- EXISTING
- PEDESTRIAN COVERED WALKWAY

**BUILDING ANALYSIS:**

OCCUPANCY: A-3  
 CONSTRUCTION TYPE: II-B  
 SPRINKLERED: NO

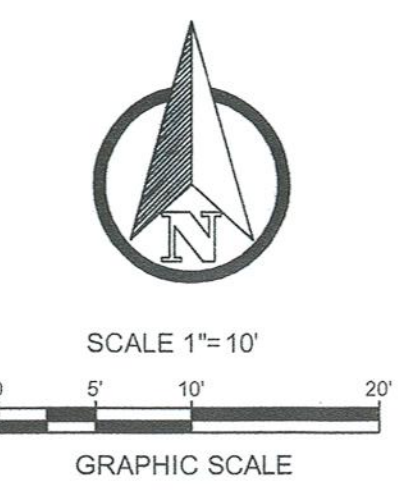
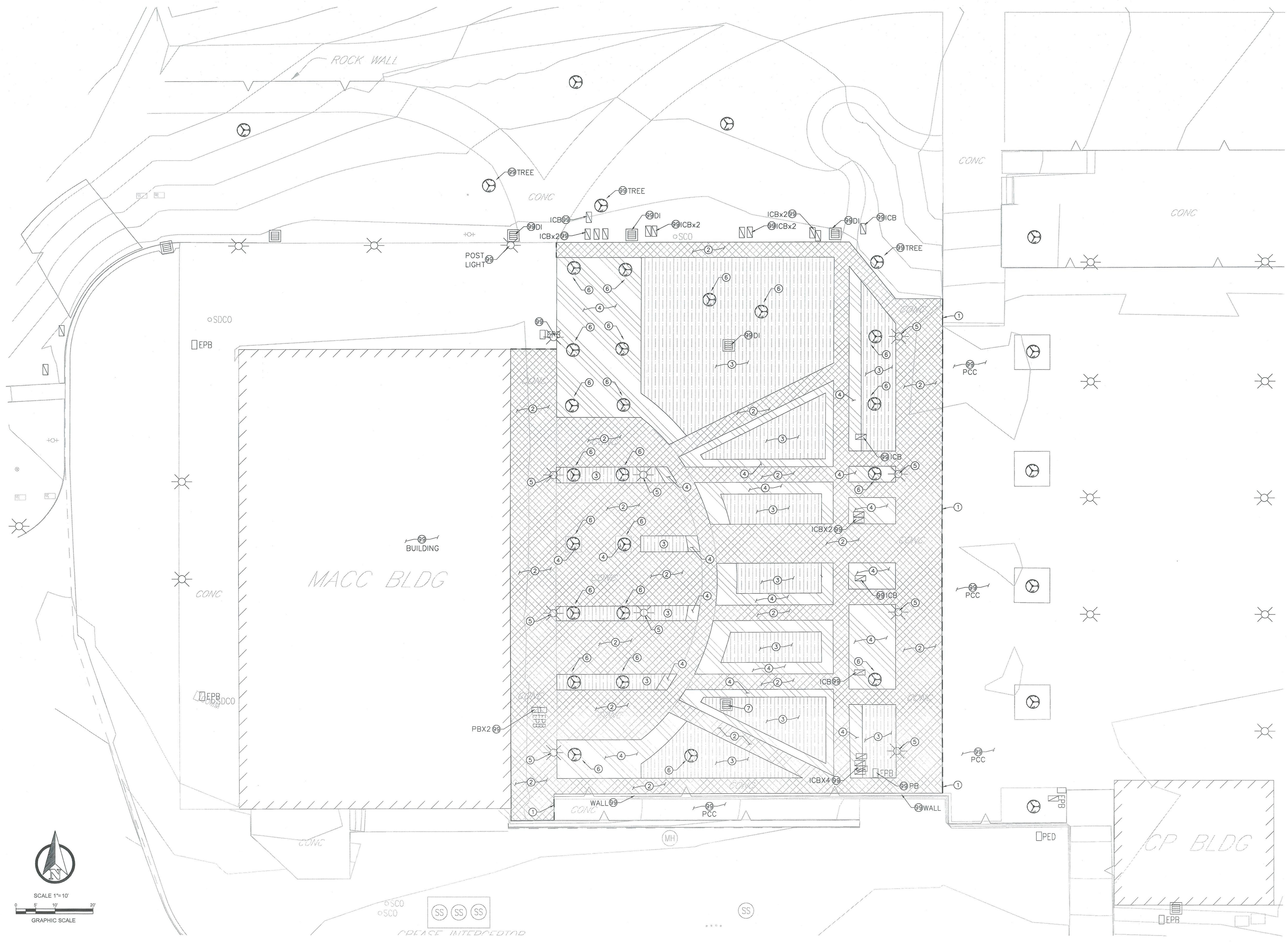
SHADE STRUCTURE IS OPEN ON ALL SIDES

**ACTUAL:**  
 STORES: 1  
 BLDG AREA: 8,023 s.f.

**ALLOWABLE:**  
 STORES: 2  
 MAX. BLDG AREA: 9,500 s.f.  
 MAX. AREA INCREASE: N/A

PEDESTRIAN WALKWAY AND TUNNELS (CBC A104)  
 NOT FIRE RATED PER CBC 2013 3104.5, EXCEPTION 2

- PARTIAL LIST OF APPLICABLE CODES GOVERNING THIS PROJECT:**
- 2013 CALIFORNIA ADMINISTRATIVE CODE (PART 1, TITLE 24 C.C.R.)
  - 2013 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R.
  - 2013 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R.
  - 2012 INTERNATIONAL BUILDING CODE VOLUMES 1-2 AND 2013 CALIFORNIA AMENDMENTS)
  - 2011 NATIONAL ELECTRICAL CODE AND 2013 CALIFORNIA AMENDMENTS)
  - 2013 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R.
  - 2013 CALIFORNIA MECHANICAL CODE AND 2013 CALIFORNIA AMENDMENTS)
  - 2013 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.
  - 2012 UNIFORM PLUMBING CODE AND 2013 CALIFORNIA AMENDMENTS)
  - 2013 CALIFORNIA ENERGY CODE (CEC), PART 5, TITLE 24 C.C.R.
  - 2013 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R.
  - 2012 INTERNATIONAL FIRE CODE AND 2013 CALIFORNIA AMENDMENTS)
  - 2013 CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24 C.C.R.
  - 2013 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R.
  - TITLE 19 C.C.R. PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS
  - 2007 ASME A17.1 (w/ A17.1a/CSA B44-09 ADDENDA) SAFETY CODE FOR ELEVATORS AND ESCALATORS
  - TITLE 8 C.C.R., CHAPTER 4, SUBCHAPTER 6, ELEVATOR SAFETY ORDERS
- PARTIAL LIST OF APPLICABLE STANDARDS:**
- |           |  |              |
|-----------|--|--------------|
| NFPA 13   | AUTOMATIC SPRINKLER SYSTEMS                          | 2013 EDITION |
| NFPA 14   | STANDPIPE SYSTEMS                                    | 2013 EDITION |
| NFPA 17   | WET CHEMICAL SYSTEMS                                 | 2013 EDITION |
| NFPA 20   | STATIONARY PUMPS                                     | 2013 EDITION |
| NFPA 24   | PRIVATE FIRE MAINS                                   | 2013 EDITION |
| NFPA 72   | NATIONAL FIRE ALARM CODE                             | 2013 EDITION |
| NFPA 80   | FIRE DOORS AND OTHER OPENING PROTECTIVES             | 2013 EDITION |
| NFPA 92   | STANDARD OF SMOKE CONTROL SYSTEMS                    | 2012 EDITION |
| NFPA 223  | CRITICAL RADIANT FLUX OF FLOOR COVERING SYSTEMS      | 2006 EDITION |
| NFPA 2001 | CLEAN AGENT FIRE EXTINGUISHING SYSTEMS               | 2012 EDITION |
| UL 464    | AUDIBLE SIGNAL APPLIANCES                            | 2003 EDITION |
| UL 521    | HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS | 1999 EDITION |
- REFERENCE CODE SECTION FOR NFPA STANDARDS - 2013 CBC (SFM) CHAPTER 36, SEE CHAPTER 36 FOR STATE OF CALIFORNIA AMENDMENTS TO NFPA STANDARDS.



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 ACS: FLS SS  
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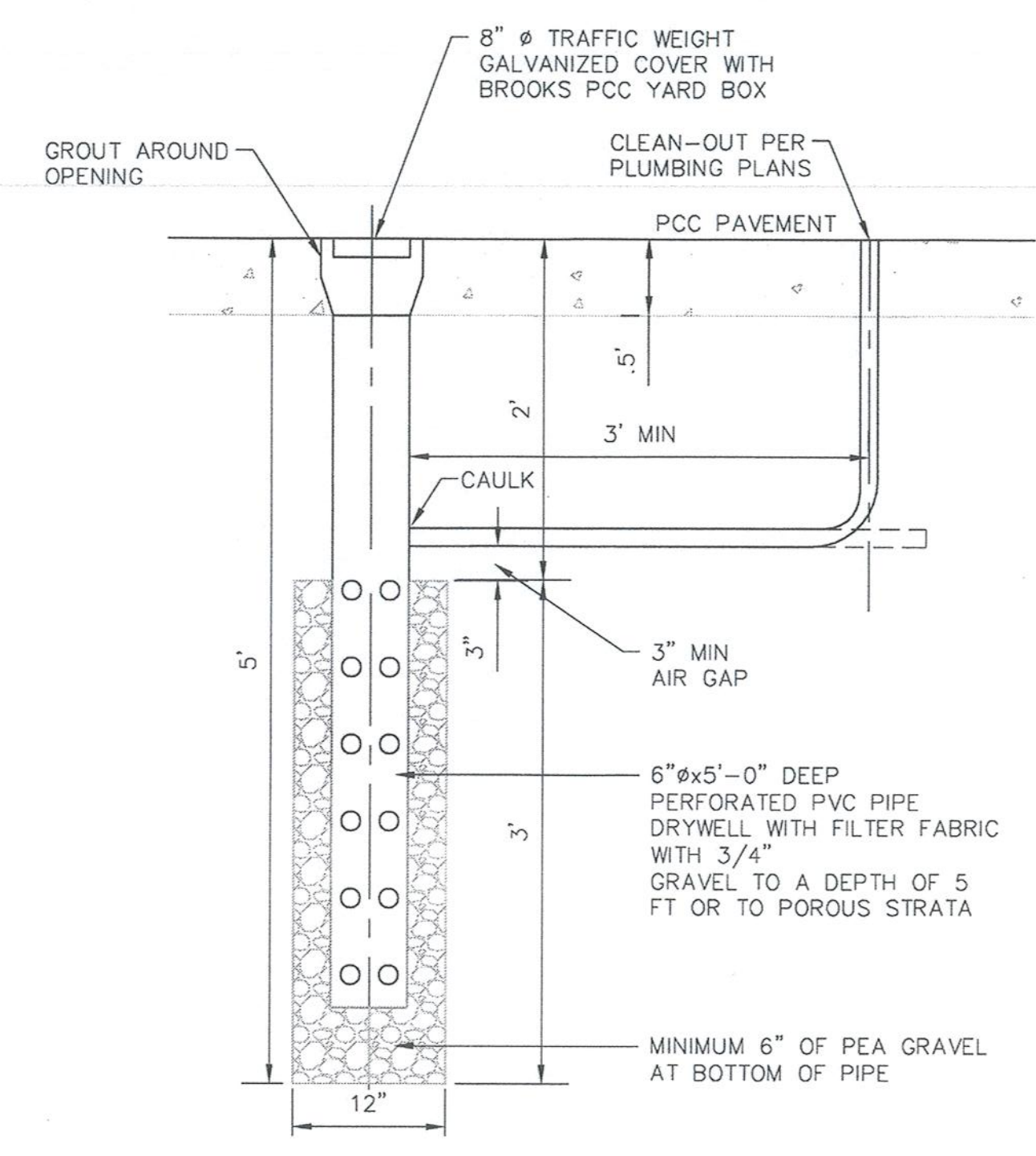
**DEMOLITION ITEMS**

① SAWCUT TO A CLEAN AND STRAIGHT EDGE	149 LF
② REMOVE PCC PAVEMENT AND DISPOSE	8,067 SF
③ REMOVE HARDSCAPE, DISPOSE	4,212 SF
④ CLEAR AND GRUB	2,967 SF
⑤ REMOVE POST LIGHT, RETURN TO SCHOOL	10 EA
⑥ REMOVE TREE, DISPOSE	22 EA
⑦ REMOVE DROP INLET AND DISPOSE CAP STORM DRAIN LINE	1 EA
Ⓢ PROTECT IN PLACE, ITEM PER PLAN	

**LEGEND**

--- ---	SAWCUT LINE
▨ ▨ ▨	CLEAR & GRUB
▩ ▩ ▩	PCC REMOVAL
▧ ▧ ▧	HARDSCAPE REMOVAL





**DRYWELL**  
SCALE: 1" = 1'

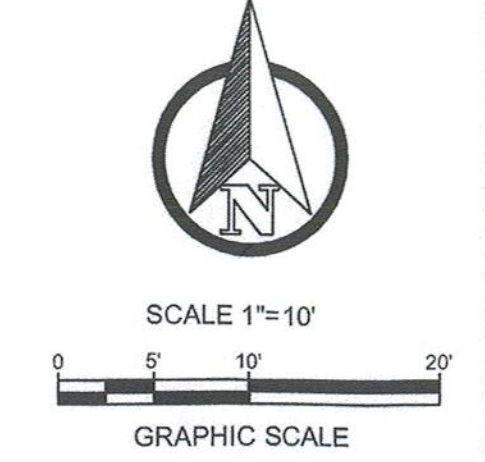
APPROVED  
DIVISION OF THE STATE ARCHITECT  
ACS: RAM / JLS / CF / SS / GL  
A 804-115807 DATE: DEC - 8 2017

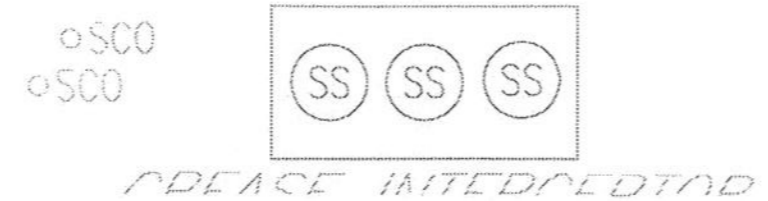
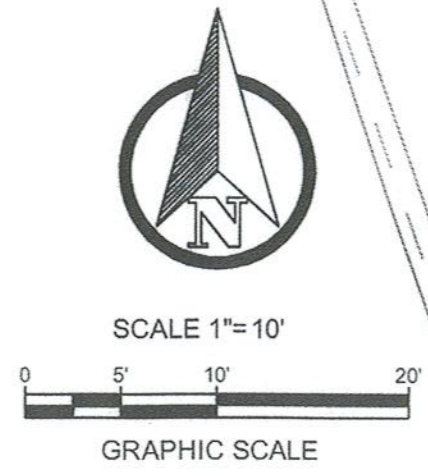
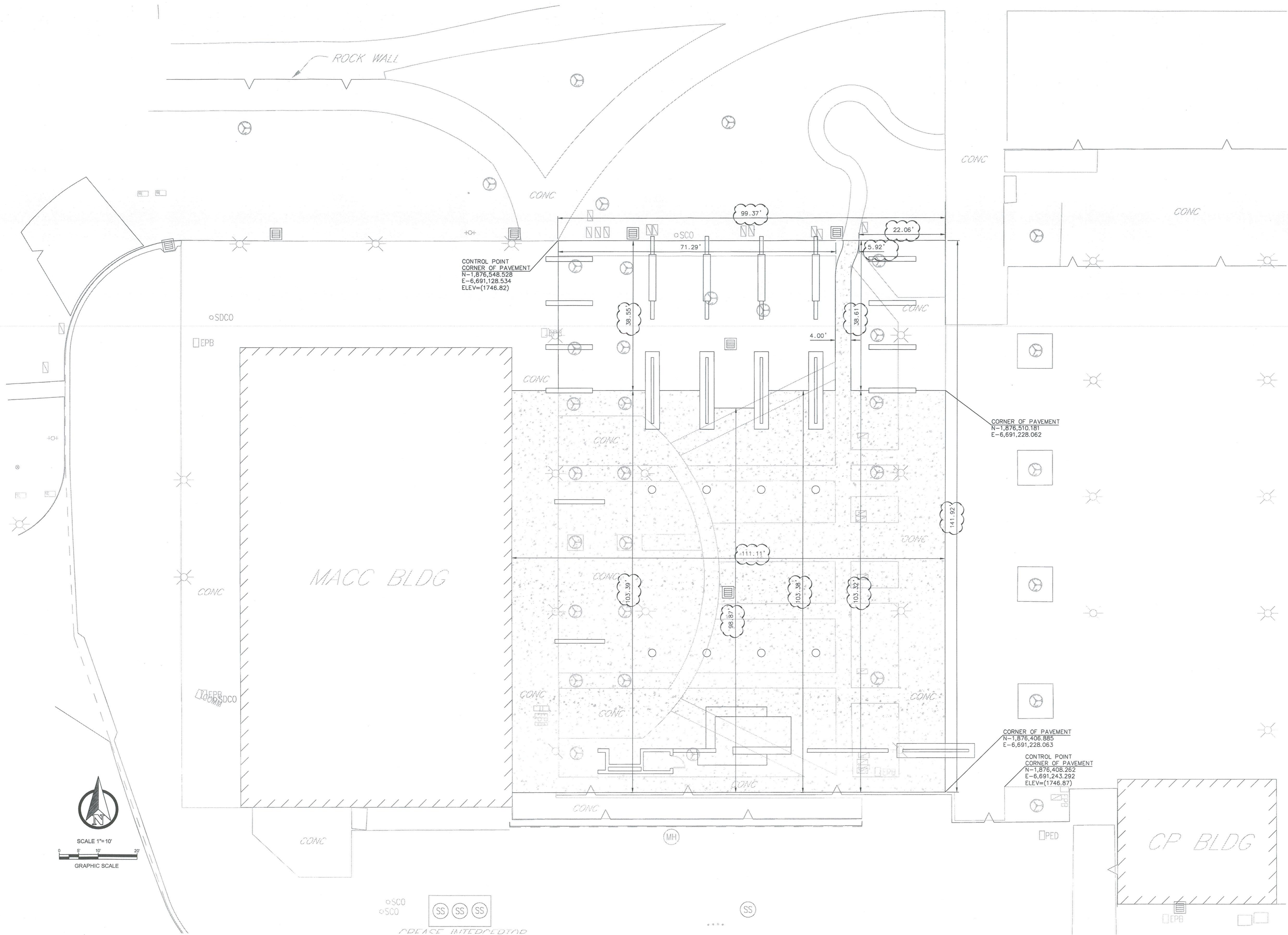
**CONSTRUCTION ITEMS**

- ① CONSTRUCT 6" PCC PAVEMENT 8,800 SF
- ② INSTALL DROP INLET CATCH BASIN, 2424CB BY BROOKS PRODUCTS, OR EQUAL 1 EA
- ③ INSTALL 6" PVC STORM DRAIN LINE 13 LF
- ④ FURNISH AND INSTALL 18"X18"X6" TEE 4 EA
- ⑤ LANDSCAPING PER LANDSCAPE ARCHITECT
- ⑥ STRUCTURE PER ARCHITECTURAL PLAN
- ⑦ SEATING PER ARCHITECTURAL PLAN
- ⑧ ADJUST TO GRADE, ITEM PER PLAN
- ⑨ INSTALL 4" PVC STORM DRAIN LINE 136 LF
- ⑩ INSTALL 2" PVC SDR 35 SEWER LINE 3 LF
- ⑪ INSTALL 3/4" COPPER WATER LINE 220 LF
- ⑫ INSTALL DRYWELL PER DETAIL HEREON 1 EA
- ⑬ CONNECT TO ROOF DRAIN 7 EA
- ⑭ FURNISH AND INSTALL 18"X6" CROSS 1 EA
- ⑮ PROTECT IN PLACE, ITEM PER PLAN

**LEGEND**

- STAMPED PCC
- LANDSCAPING
- STORM DRAIN PIPE SLOPE
- FINISHED SURFACE SLOPE
- PROPOSED ELEVATION
- EXISTING ELEVATION

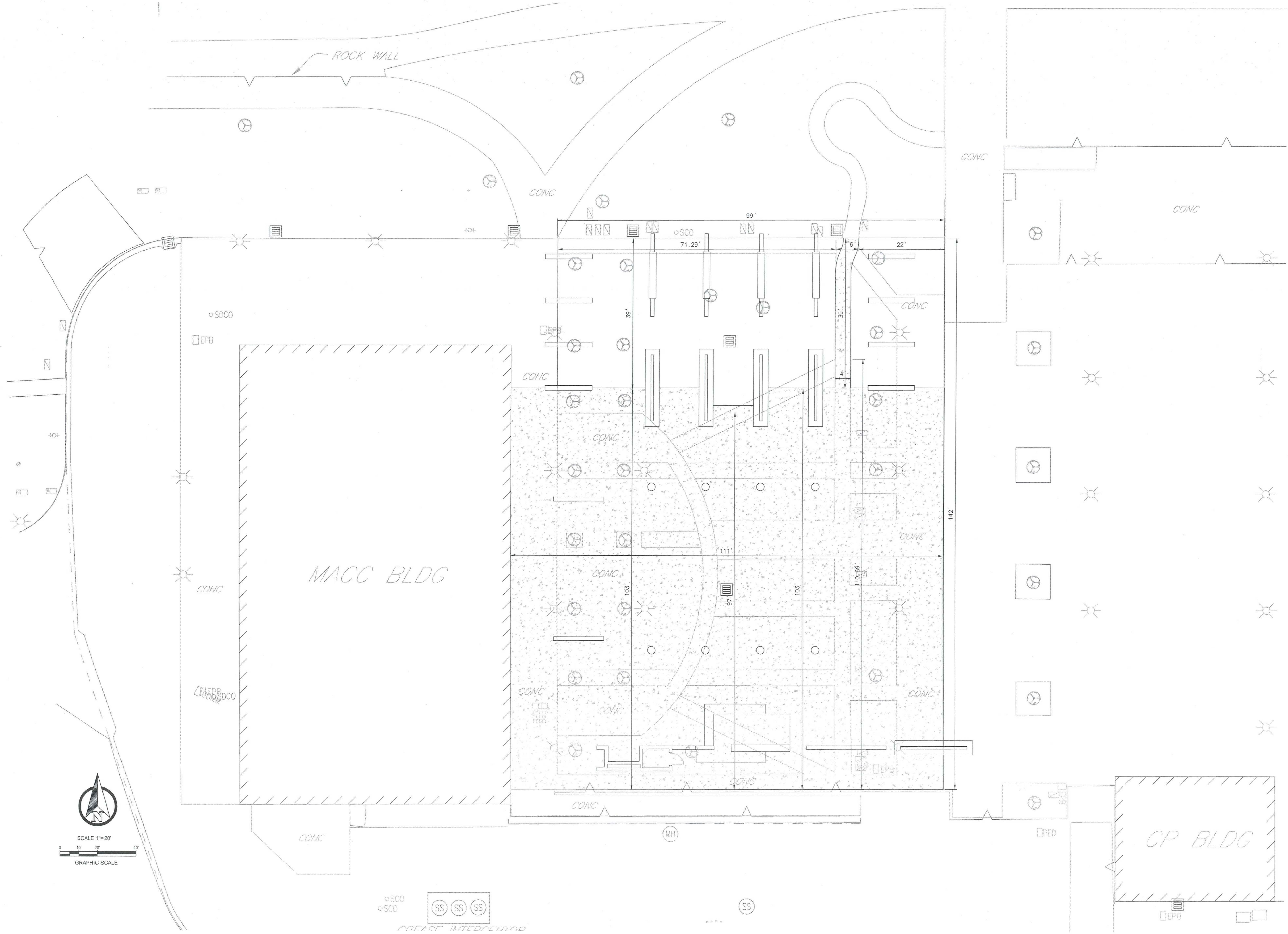




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 A NO. 115807 DATE DEC - 8 2017

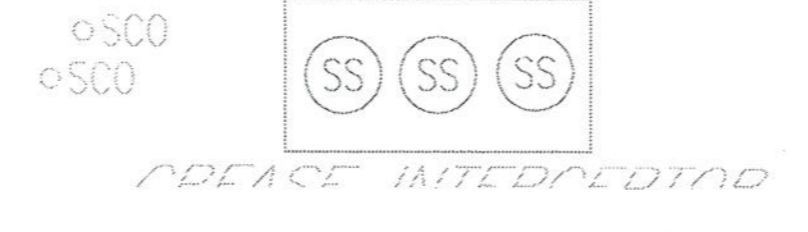
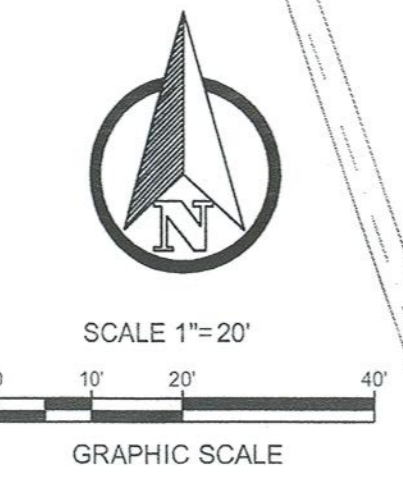
**NOTE:** SEE ARCHITECTURAL PLANS FOR HORIZONTAL CONTROLS ON BUILDING STRUCTURE AND SEATING  
**NOTE:** LOCAL COORDINATE CONTROL LISTED ABOVE





MACC BLDG

CP BLDG



SEE ARCHITECTURAL  
PLANS FOR HORIZONTAL  
CONTROLS ON BUILDING  
STRUCTURE AND SEATING

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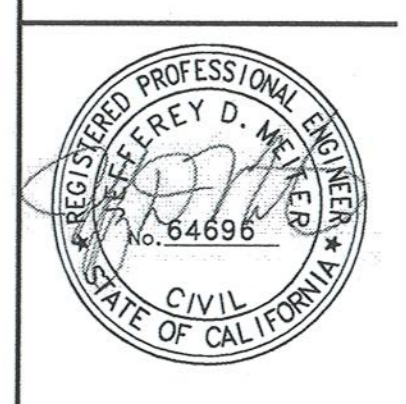
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DSA SUBMITTAL  
PROJECT NUMBER: 121502016  
ISSUE DATE: 12/15/2016

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Architecture Engineering Planning Interiors  
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CIVIL PLANS - HORIZONTAL CONTROL  
CAMPUS CENTER SHADE STRUCTURE  
MEASURE L PROJECTS AT CHAFFEY COLLEGE  
RANCHO CUCAMONGA, CA 91737



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**Chaffey College**  
6885 Haven Avenue  
Rancho Cucamonga, California 91737  
Telephone (909) 997-1737  
www.chaffey.edu

# CHAFFEY COLLEGE CAMPUS CENTER SHADE STRUCTURE LANDSCAPE CONSTRUCTION PLANS

5885 HAVEN AVE, RANCHO  
CUCAMONGA, CALIFORNIA 91737

## GENERAL NOTES

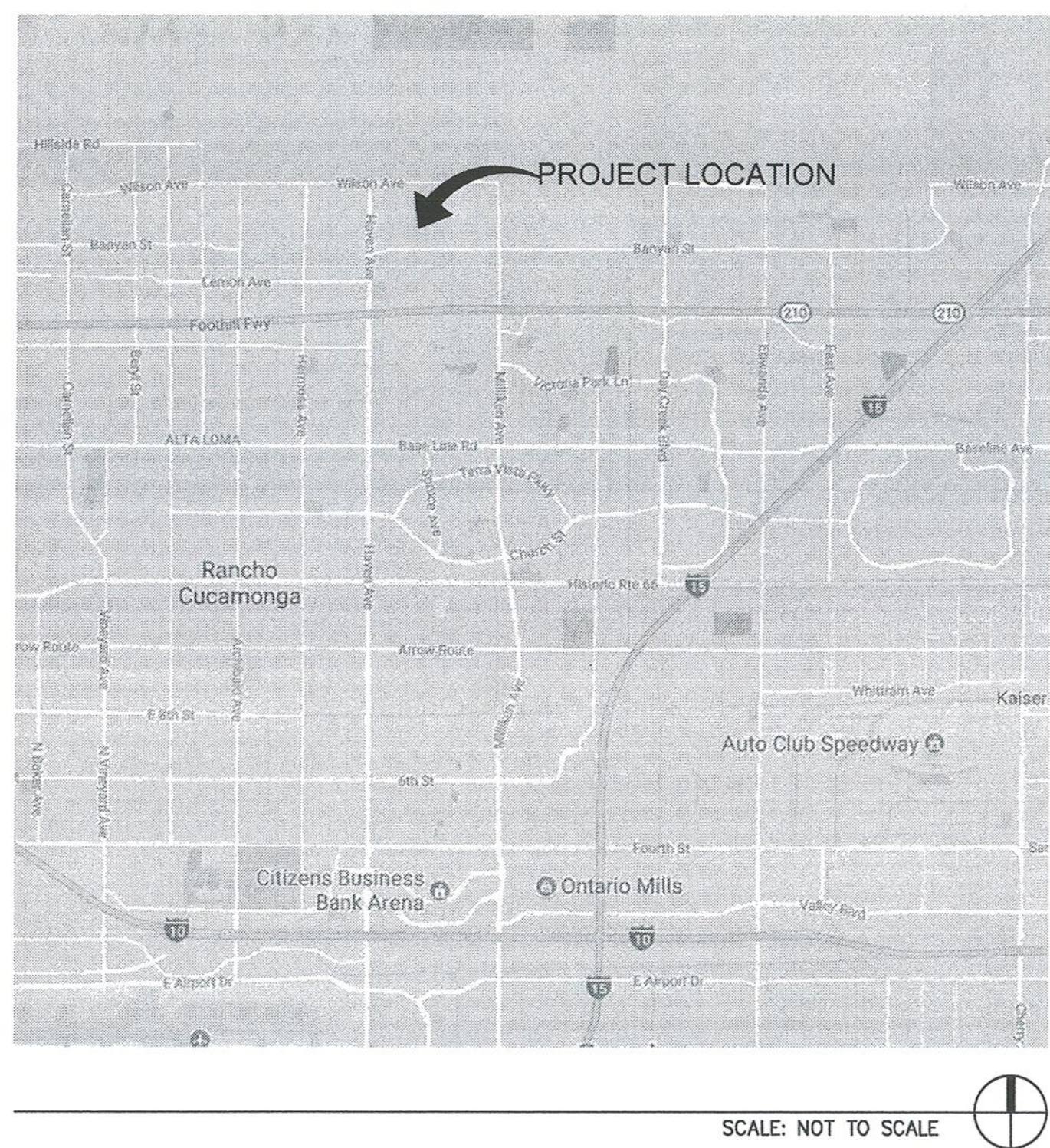
## ABBREVIATIONS

## VICINITY MAP

## SHEET INDEX

- A. VISIT SITE PRIOR TO SUBMITTING BIDS.
- B. VERIFY ALL EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS BEFORE PROCEEDING WITH THE WORK. NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY SHOULD FIELD CONDITIONS VARY FROM THOSE SHOWN ON PLANS.
- C. DO NOT SCALE DRAWINGS.
- D. ALL WORK CONSTRUCTION AND MATERIALS SHALL COMPLY WITH ALL PROVISIONS OF THE APPLICABLE BUILDING CODE AND WITH OTHER RULES, REGULATIONS AND ORDINANCES GOVERNING THE LOCATION OF THE WORK. BUILDING CODE REQUIREMENTS TAKE PRECEDENCE OVER THE DRAWINGS AND IT SHALL BE THE RESPONSIBILITY OF ANYONE SUPPLYING LABOR OR MATERIALS OR BOTH TO BRING TO THE ATTENTION OF THE ARCHITECT ANY DISCREPANCIES OR CONFLICT BETWEEN THE REQUIREMENTS OF THE CODE AND THE DRAWINGS.
- E. REFERENCE TO ANY DETAIL OR DRAWING IS FOR CONVENIENCE ONLY AND DOES NOT LIMIT THE APPLICATION OF SUCH DETAIL OR DRAWINGS.
- F. DISCREPANCIES IN THE DRAWINGS OR BETWEEN THE DRAWINGS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT. CORRECTED DRAWINGS OR INSTRUCTIONS SHALL BE ISSUED PRIOR TO THE CONTINUATION OF THIS WORK. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY CORRECTIONS DUE TO FAILURE TO REPORT KNOWN DISCREPANCIES.
- G. GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL WORK SHOWN ON THESE DRAWINGS AND SPECIFICATIONS UNLESS SPECIFICALLY NOTED OTHERWISE.
- H. THE CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE UNLESS OTHERWISE SHOWN; THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE GENERAL CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY FIELD REPRESENTATIVES OF THE ARCHITECT AND HIS ENGINEERS SHALL NOT INCLUDE INSPECTIONS OF THE PROTECTIVE MEASURES OR THE CONSTRUCTION PROCEDURES REQUIRED FOR SAME, WHICH ARE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR. ANY SUPPORT SERVICES PERFORMED BY THE ARCHITECT AND HIS ENGINEERS DURING CONSTRUCTION SHALL BE DISTINGUISHED FROM CONTINUOUS AND DETAILED INSPECTION SERVICES WHICH ARE FURNISHED BY OTHERS. THESE SUPPORT SERVICES PERFORMED BY THE ARCHITECT AND HIS ENGINEERS, WHETHER OF MATERIAL OR WORK, AND WHETHER PERFORMED BEFORE, DURING OR AFTER COMPLETION OF CONSTRUCTION ARE PERFORMED SOLELY FOR THE PURPOSE OF ASSISTING IN QUALITY CONTROL AND IN ACHIEVING CONFORMANCE WITH CONTRACT DRAWINGS AND SPECIFICATIONS, BUT THEY DO NOT GUARANTEE GENERAL CONTRACTOR'S PERFORMANCE AND SHALL NOT BE CONSTRUED AS SUPERVISION OF CONSTRUCTION.
- I. A PROTECTION FENCE SHALL BE CONSTRUCTED AND MAINTAINED DURING CONSTRUCTION CONFORMING TO THE REQUIREMENTS OF THE BUILDING CODE.
- J. MAINTAIN SANITARY TOILET FACILITIES DURING CONSTRUCTION AS REQUIRED BY APPLICABLE REGULATIONS.
- K. THE GENERAL CONTRACTOR WARRANTS TO THE OWNER AND THE ARCHITECT THAT ALL MATERIALS AND EQUIPMENT FURNISHED WILL BE NEW UNLESS OTHERWISE SPECIFIED AND THAT ALL WORK WILL BE OF GOOD QUALITY, FREE FROM FAULTS AND DEFECTS.
- L. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK AND/OR EQUIPMENT SUPPLIED BY THE OWNER.
- M. PROVIDE FACILITIES FOR THE PHYSICALLY DISABLED IN ACCORDANCE WITH C.A.C. TITLE 24 AND AS REQUIRED BY THE CALIFORNIA BUILDING CODE CURRENT EDITION.
- N. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHETHER SHOWN HEREON OR NOT AND TO PROTECT THEM FROM DAMAGE. THE GENERAL CONTRACTOR SHALL BEAR ALL EXPENSE OF REPAIR OR REPLACEMENT IN CONJUNCTION WITH THE EXECUTION OF THIS WORK.
- O. PAVING, MASONRY AND CONCRETE SUBCONTRACTORS ARE TO COORDINATE WITH THE ELECTRICIAN, DRAINLINE SUBCONTRACTOR AND IRRIGATION SUBCONTRACTOR FOR SLEEVEING, PIPING AND/OR CONDUIT INSTALLATION UNDER OR THROUGH HARDSCAPE ELEMENTS.
- P. VERIFY ALL PROPERTY LINES OR OTHER LIMIT OF WORK LINES PRIOR TO COMMENCING WORK.
- Q. IN THE CASE OF DISCREPANCIES IN THE DRAWINGS, SPECIFICATIONS TAKE PRECEDENCE OVER DETAILS, AND DETAILS TAKE PRECEDENCE OVER PLANS.
- R. SUBSTITUTIONS MUST BE APPROVED IN WRITING BY THE OWNER.
- S. THE GENERAL CONTRACTOR SHALL ENSURE THAT ALL TRADES ARE PROVIDED WITH CURRENT DRAWINGS AND SPECIFICATIONS APPROVED FOR CONSTRUCTION. DO NOT ALLOW DOCUMENTS NOT APPROVED FOR CONSTRUCTION TO BE USED IF SEEN ON SITE.
- T. REPAIR OR REPLACE ANY DAMAGE TO ADJACENT PROPERTIES, CURBS, WALKS, PLANTING, WALLS, ETC. AT NO ADDITIONAL COST TO THE OWNER.
- U. LOCATIONS OF N.I.C. CONSTRUCTION ELEMENTS SUCH AS LIGHTS, SIGNS, VENTS, HYDRANTS, TRANSFORMERS, ETC., ARE APPROXIMATE. NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY SHOULD THE LOCATION OF THESE ITEMS INTERFERE WITH THE PROPER EXECUTION OF WORK.
- V. PROVIDE THE OWNER WITH ALL WARRANTIES, GUARANTEES, AND INSTRUCTION MANUALS FOR EQUIPMENT, APPLIANCES, FIXTURES, ETC. AS DESCRIBED IN THE SPECIFICATIONS.
- W. NOTIFY THE CITY'S AUTHORIZED REPRESENTATIVE 48 HOURS PRIOR TO COMMENCEMENT OF WORK TO COORDINATE PROJECT INSPECTION SCHEDULES.
- X. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED TO PERFORM THE WORK INDICATED HEREIN BEFORE BEGINNING WORK.
- Y. CONTRACTOR SHALL OBTAIN THE PERTINENT ENGINEERING OR ARCHITECTURAL PLANS BEFORE BEGINNING WORK.

@	AT	MISC	MISCELLANEOUS
CL	CENTERLINE	N.A.P.	NOT A PART
#	NUMBER	NCN	NO COMMON NAME
AC	ASPHALTIC CONCRETE	NIC	NOT IN CONTRACT
CF	CUBIC FOOT	NTS	NOT TO SCALE
CLR	CLEAR	O.C.	ON CENTER
CONC	CONCRETE	O.D.	OUTSIDE DIAMETER
CTR	CENTER	PL	PROPERTY LINE
DIA	DIAMETER	P.A.	PLANTER AREA
DIM	DIMENSION	RAD	RADIUS
DWG	DRAWING	REV	REVISION
EJ	EXPANSION JOINT	SHT	SHEET
EQ	EQUAL	SPEC	SPECIFICATION
E.W.	EACH WAY	SF	SQUARE FOOT
FG	FINISH GRADE	SQ	SQUARE
FS	FINISH SURFACE	SS	STAINLESS STEEL
GA	GALVE	STD	STANDARD
GALV	GALVANIZED	T	TRANSFORMER
HORIZ	HORIZONTAL	T.C.	TOP OF CURB
HT	HEIGHT	T.D.	TOP OF DRAIN
I.D.	INSIDE DIAMETER	T.R.	TOP OF RAILING
INCL	INCLUDING	T.S.	TOP OF STEP
INV	INVERT ELEVATION	T.W.	TOP OF WALL
M	METER	TYP	TYPICAL
MAX	MAXIMUM	VERT	VERTICAL
MFR	MANUFACTURER	W/	WITH
MH	MANHOLE	W.I.	WROUGHT IRON
MIN	MINIMUM	WT	WEIGHT



SHEET NO.	DESCRIPTION	SCALE
L0.0	LANDSCAPE COVERSHEET	--
L1.1	IRRIGATION PLAN	AS SHOWN
L2.1	IRRIGATION LEGEND & CALCULATIONS	--
L2.2	IRRIGATION NOTES	--
L3.1	IRRIGATION DETAILS	AS SHOWN
L4.1	PLANTING PLAN	AS SHOWN
L5.1	PLANTING DETAILS	AS SHOWN

## OWNER

5885 HAVEN AVENUE  
RANCHO CUCAMONGA, CA 91737

## CONSTRUCTION MANAGER

5885 HAVEN AVE  
RANCHO CUCAMONGA, CA 91737

**BERNARDS**  
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PH: (909) 652-6163

## ARCHITECT

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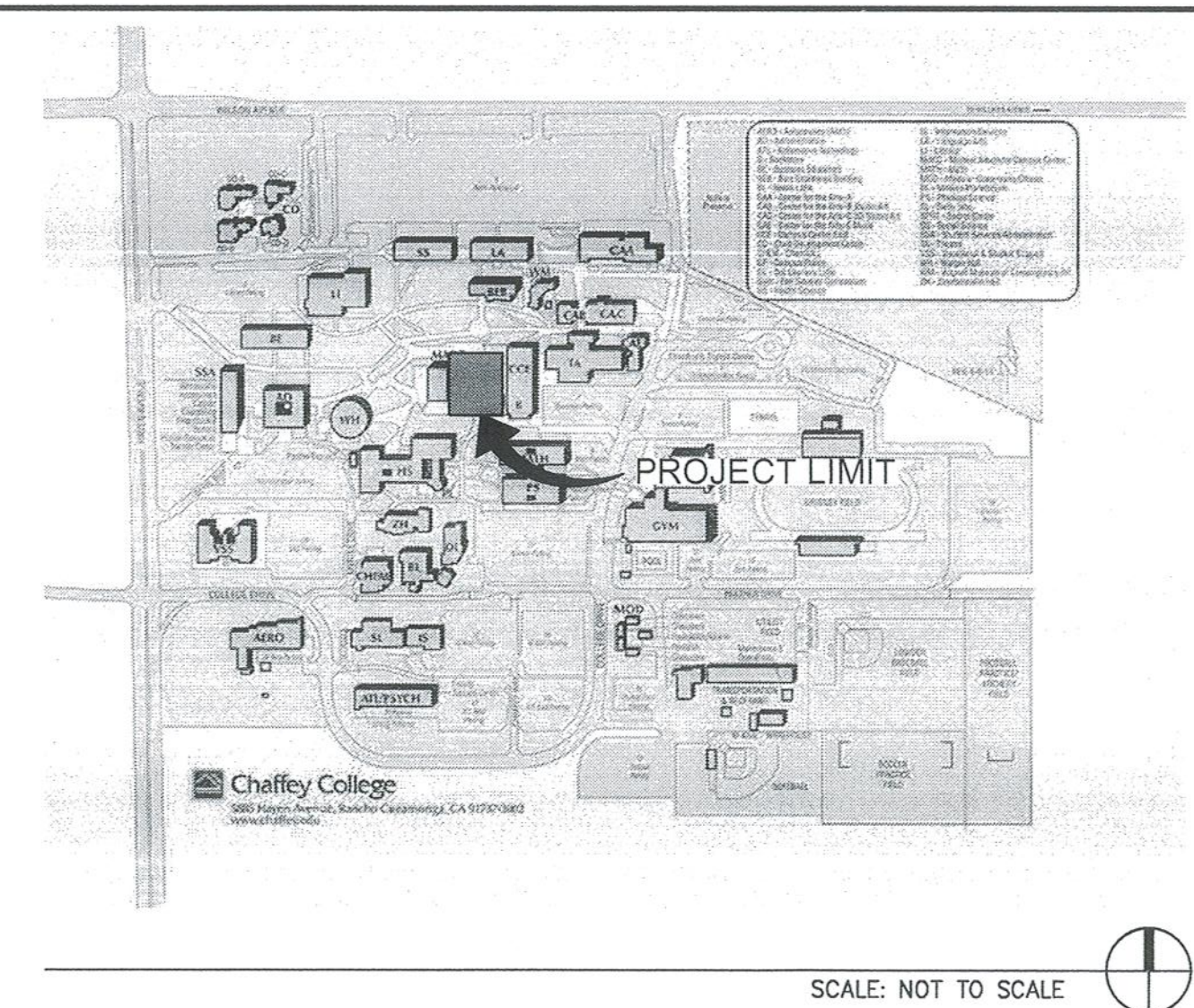
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## LANDSCAPE ARCHITECT

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**RIDGE LANDSCAPE ARCHITECTS**  
CONTACT: MIKE MICHALEK  
PH: (949) 387-1323 X23

## CAMPUS MAP



**STATEMENT OF COMPLIANCE**

I HAVE COMPLIED WITH THE CRITERIA OF THE WATER EFFICIENT LANDSCAPE ORDINANCE AND APPLIED THEM ACCORDINGLY FOR THE EFFICIENT USE OF WATER IN THE IRRIGATION DESIGN PLAN.

*James J. Ridge*  
JAMES J. RIDGE, LANDSCAPE ARCHITECT RLA #2809 07-26-2017 DATE

**NOTE:**  
CHANGES TO THE APPROVED DRAWINGS OR SPECIFICATIONS SHALL BE MADE BY ADDENDA OR CONSTRUCTION CHANGE DOCUMENTS (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY THE SECTIONS 4-338 OF CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 1, (CAC 4-338)



LANDSCAPE COVERSHEET  
CAMPUS CENTER SHADE STRUCTURE  
MEASURE L PROJECTS AT CHAFFEY COLLEGE  
5885 HAVEN AVENUE  
RANCHO CUCAMONGA, CA 91737



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Architecture Engineering Planning Interiors  
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**L0.0**  
PROJECT NUMBER: 75-1800-10  
DATE: 07/26/17





**Recycled and Potable Water Notes**

- A. THE INSTALLATION OF THE IRRIGATION WATER SYSTEM SHALL CONFORM TO THE REGULATIONS FOR THE CONSTRUCTION OF IRRIGATION WATER SYSTEMS WITHIN THE WATER DISTRICT AND THE ACCOMPANYING PLANS AND SPECIFICATIONS.
- B. ALL ONSITE RECYCLED AND POTABLE WATER PIPING INSTALLED ON THIS PROJECT SHALL BE IDENTIFIED IN ACCORDANCE WITH THE CITY REGULATIONS AND THE IRRIGATION SPECIFICATIONS.
- C. RECYCLED WATER PIPING SHALL BE PURPLE PVC MANUFACTURED FOR RECYCLED (RECLAIMED) WATER SYSTEMS.
- D. MARKING ON THE PURPLE PVC PIPE SHALL INCLUDE THE FOLLOWING: CAUTION RECYCLED (OR RECLAIMED) WATER, NOMINAL PIPE SIZE, PVC 1120, PRESSURE RATING IN POUNDS PER SQUARE INCH AT 73 DEGREES; ASTM DESIGNATIONS SUCH AS 1785, 2241, 2672, 3139. PRINTING SHALL BE PLACED CONTINUOUSLY ON TWO SIDES OF THE PIPE.
- E. ALL RECYCLED WATER SPRINKLER BOX COVERS AND CONTROL VALVES, ISOLATION VALVES, QUICK COUPLERS, AND ALL APPURTENANCES SHALL BE TAGGED WITH IDENTIFICATION TAGS. 1. TAGS SHALL BE WEATHERPROOF PLASTIC, 3"x4", PURPLE IN COLOR WITH THE WORDS "WARNING RECYCLED (OR RECLAIMED) WATER - DO NOT DRINK" IMPRINTED ON ONE SIDE, AND "AVISA AGUA IMPURA - NO TOMAR" ON THE OTHER SIDE. IMPRINTING SHALL BE PERMANENT AND BLACK IN COLOR. USE TAGS AS MANUFACTURED BY T. CHRISTY ENTERPRISES OR APPROVED EQUAL. 2. ONE TAG SHALL BE ATTACHED TO EACH APPURTENANCE AS FOLLOWS, OR: IDENTIFICATION SHALL BE AFFIXED TO EACH IRRIGATION VALVE LID COVER AND VALVE AS FOLLOWS: (A) IDENTIFY VALVE COVER WITH LABEL OR BRANDED HOT STAMP THAT READS "RECYCLED (OR RECLAIMED) WATER DO NOT DRINK" OR USE PURPLE COVER WITH SAME IDENTIFICATION. (B) ATTACH TAG TO CONTROL VALVE STEM DIRECTLY OR WITH PLASTIC TIE-WRAP. OR (C) ATTACH TAG TO CONTROL VALVE SOLENOID WIRE DIRECTLY OR WITH PLASTIC TIE-WRAP. (D) ATTACH TO BODY OF THE RELATIVE APPURTENANCE WITH A PLASTIC TIE-WRAP.
- F. WARNING TAPES SHALL BE USED ON ALL CONSTANT PRESSURE MAIN LINE PIPING CARRYING POTABLE WATER.
- G. WARNING TAPES SHALL BE A MINIMUM OF 3-INCHES WIDE AND SHALL RUN CONTINUOUSLY FOR THE ENTIRE LENGTH OF ALL CONSTANT PRESSURE MAIN LINE PIPING. THE TAPE SHALL BE ATTACHED TO THE TOP OF THE PIPE WITH PLASTIC TAPE BANDED AROUND THE WARNING TAPE AND THE PIPE EVERY 5 FEET ON CENTER.
- H. WARNING TAPE FOR THE CONSTANT PRESSURE POTABLE WATER PIPING SHALL BE BLUE IN COLOR WITH THE WORDS "CAUTION BURIED WATER LINE BELOW" IMPRINTED IN MINIMUM 1 INCH HIGH LETTERS, BLACK IN COLOR. IMPRINTING SHALL BE CONTINUOUS AND PERMANENT.
- I. CITY SHALL BE NOTIFIED TWO DAYS PRIOR TO THE START OF IRRIGATION CONSTRUCTION AND EACH WORKDAY THEREAFTER UNTIL THE COMPLETION OF PROJECT.
- J. ALL PRESSURE MAIN LINE PIPING FROM THE RECYCLED WATER SYSTEM SHALL BE INSTALLED TO MAINTAIN 10 FEET MINIMUM HORIZONTAL SEPARATION FROM ALL POTABLE WATER PIPING. WHERE RECYCLED AND POTABLE WATER PRESSURE MAIN LINE PIPING CROSS, THE RECYCLED WATER PIPING SHALL BE INSTALLED BELOW THE POTABLE WATER PIPING IN A CLASS 200 PURPLE PVC SLEEVE WHICH EXTENDS A MINIMUM OF 8 FEET ON EITHER SIDE OF THE POTABLE WATER PIPING. PROVIDE A MINIMUM VERTICAL CLEARANCE OF 6-INCHES. CONVENTIONAL (WHITE) PVC PIPE MAY BE USED FOR SLEEVING MATERIAL. IF IT IS TAPED WITH 3-INCH WIDE PURPLE WARNING TAPE WHICH READS "CAUTION, RECYCLED (OR RECLAIMED) WATER".
- K. THE IRRIGATION SYSTEM HAS BEEN DESIGNED TO AND MUST BE OPERATED BETWEEN THE HOURS OF 9:00 PM AND 6:00 AM UNLESS OTHERWISE DIRECTED BY THE DISTRICT ENGINEER.
- L. ALL NEW COMMON AREAS WHERE RECYCLED WATER IS USED AND THAT ARE ACCESSIBLE TO THE GENERAL PUBLIC SHALL BE POSTED WITH CONSPICUOUS SIGNS THAT INCLUDE THE FOLLOWING WORDING IN A SIZE NO LESS THAN 4 INCHES HIGH BY 8 INCHES WIDE: "RECYCLED WATER - DO NOT DRINK" "RECLAIMED WATER - DO NOT DRINK". EACH SIGN SHALL ALSO DISPLAY AN INTERNATIONAL SYMBOL CONVEYING THE SAME WARNING.
- M. ADJUST SPRAY HEADS TO ELIMINATE OVERSPRAY ONTO AREAS NOT UNDER THE CONTROL OF THE CUSTOMER. FOR EXAMPLE: POOL DECKS, PRIVATE PATIOS, STREETS AND SIDEWALKS.
- N. CONTACT THE CITY OFFICE TWO DAYS PRIOR TO THE IRRIGATION SYSTEM COVERAGE/AND CROSS CONNECTION TEST AT AND ARRANGE A WALK THROUGH OF THE SYSTEM.
- O. FAILURE TO COMPLY WITH ANY OR ALL OF THE ABOVE GUIDELINES WILL PLACE THE SYSTEM IN VIOLATION OF DISTRICT RULES AND REGULATIONS, AND WILL RESULT IN TERMINATION OF SERVICE UNTIL THE APPROPRIATE CORRECTIVE MEASURES HAVE BEEN TAKEN.
- P. WARNING TAPE ON RECYCLED WATER CONSTANT PRESSURE MAIN LINE PIPING IS ONLY ALLOWED ON PROJECT-BY-PROJECT APPROVAL FROM THE DISTRICT ENGINEER. IF APPROVED, IT MUST FOLLOW THESE INSTALLATION SPECIFICATIONS. 1. WARNING TAPE SHALL BE USED ON ALL CONSTANT PRESSURE MAINS. 2. WARNING TAPE SHALL BE A MINIMUM OF 3-INCHES WIDE AND SHALL RUN CONTINUOUSLY FOR THE ENTIRE LENGTH OF ALL CONSTANT PRESSURE MAIN LINE PIPING. THE TAPE SHALL BE ATTACHED TO THE TOP OF THE PIPE WITH PLASTIC TAPE BANDED AROUND THE WARNING TAPE AND THE PIPE EVERY 5 FEET ON CENTER. 3. WARNING TAPE FOR THE CONSTANT PRESSURE RECYCLED WATER PIPING SHALL BE PURPLE IN COLOR WITH THE WORDS "CAUTION RECYCLED (OR RECLAIMED) WATER" IMPRINTED A MINIMUM OF 1-INCH HIGH AND BLACK IN COLOR. IMPRINTING SHALL BE CONTINUOUS AND PERMANENT.

**Guidelines For Recycled Water Use**

The following guidelines are intended to provide the basic parameters for the use of reclaimed water in landscape irrigation. To operate your system in compliance with these guidelines you must:

- 1. Irrigate between the hours of 10:00 p.m. and 6:00 a.m. only. Watering outside this time frame must be done manually with qualified supervisory personnel on-site. No system shall at any time be left unattended during use outside the normal schedule.
  - 2. Irrigate in a manner that will minimize runoff pooling and ponding. The application rate shall not exceed the infiltration rate of the soil. Timers must be adjusted so as to be compatible with the lowest soil infiltration rate present. This procedure may be facilitated by the efficient scheduling of the automatic control clocks, (i.e. employing the repeat function to break up the total irrigation time into cycles that will promote maximum soil absorption).
  - 3. Adjust spray heads to eliminate overspray into areas not under the control of the customer. For example, pool decks, private patios, streets and sidewalks.
  - 4. Monitor and maintain the system to minimize equipment and material failure. Broken sprinkler heads, leaks, unreliable valves, etc. should be repaired as soon as they become apparent.
  - 5. Educate all maintenance personnel, on a continuous basis, of the presence of reclaimed water, and the fact that it is not approved for drinking purposes. Given the high turnover rate of employees in the landscape industry, it is important that this information be disseminated on an almost daily basis. It is you, the landscape contractor, who is responsible for educating each and every one of your employees.
  - 6. Obtain prior approval for all proposed changes and modifications to any on-site facilities. Such changes must be submitted to, and approved by, the District Engineering office and designed in accordance with District standards.
- Failure to comply with any or all of the above guidelines puts your system in violation of the District's Rules and Regulations and will result in termination of service until the appropriate corrective steps have been taken.

**ONSITE RECYCLED AND POTABLE WATER SEPARATION REQUIREMENTS:**

**HORIZONTAL SEPARATIONS:** THE PRESSURIZED RECLAIMED WATER PIPING SHALL MAINTAIN A (10) FOOT HORIZONTAL SEPARATION AT ALL TIMES FROM ALL POTABLE WATER PIPING AND A PARALLEL SANITARY SEWER SYSTEM. IF A 10-FOOT HORIZONTAL SEPARATION IS NOT POSSIBLE, SPECIAL CONSTRUCTION REQUIREMENTS SHALL BE CONSIDERED, REFER TO DISTRICT STANDARDS. COMMON TRENCH CONSTRUCTION IS PROHIBITED.

**VERTICAL SEPARATIONS:** THE PRESSURIZED RECLAIMED WATER PIPING SHALL MAINTAIN A MINIMUM OF ONE FOOT VERTICAL SEPARATION AT ALL TIMES FROM ALL PRESSURIZED POTABLE WATER PIPING AND/OR A SANITARY SEWER SYSTEM. THE PRESSURIZED RECLAIMED WATER PIPING SHALL BE INSTALLED ONE FOOT BELOW ALL PRESSURIZED POTABLE WATER PIPING ONE FOOT ABOVE ALL SANITARY SEWER SYSTEMS. IF A ONE FOOT VERTICAL SEPARATION IS NOT POSSIBLE, SPECIAL CONSTRUCTION REQUIREMENTS SHALL BE CONSIDERED. REFER TO DISTRICT STANDARDS.

**Existing Irrigation Notes**

- 1. THE CONTRACTOR MUST FAMILIARIZE HIMSELF WITH THE EXISTING IRRIGATION AND PLANTING ON PROPERTY. ANY DAMAGE OR ADJUSTMENTS REQUIRED INCLUDING REPLACING OR RELOCATING IRRIGATION LINES, HEADS, VALVES, WIRES OR ANY UTILITY THAT OCCURS ON THE PARCEL DUE TO THE CONSTRUCTION OF THIS PROJECT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER. THE OWNER'S REPRESENTATIVE MUST REVIEW ANY REQUIRED MODIFICATIONS TO THESE AREAS PRIOR TO COMMENCING WORK. THE CONTRACTOR MUST NOTIFY THE OWNER'S AUTHORIZED REPRESENTATIVE OF THESE CONDITIONS OR ANY DISCREPANCIES PRIOR TO COMMENCING WORK.
- 2. CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS, PROPERTY LINES, DIMENSIONS, ETC. PRIOR TO COMMENCING WORK. ALL EXISTING IRRIGATION SYSTEMS SHALL BE VERIFIED IN THE FIELD AT START OF CONSTRUCTIONS. ALL EXISTING MAINLINES, RCVS, BACKFLOW DEVICES, CONTROLLERS, METERS, SERVICE LINES, ETC. SHALL BE VERIFIED IN FIELD. ALL EXISTING IRRIGATION EQUIPMENT SHALL BE CLEARLY INDICATED INCLUDING SIZES AND MODEL NUMBERS TO SCALE ON AN ACCURATE BASE DRAWING AND SUBMITTED AS A SHOP DRAWING. SAID SHOP DRAWING SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT, AND OWNER'S AUTHORIZED REPRESENTATIVE FOR REVIEW AND APPROVAL. NOTIFY THE OWNER'S AUTHORIZED REPRESENTATIVE IMMEDIATELY IF ANY DISCREPANCIES ARE FOUND. NO WORK SHALL PROCEED WITHOUT APPROVAL OF SAID SHOP DRAWINGS.
- 3. ALL EQUIPMENT LOCATIONS AND PIPE ROUTING SHALL BE STAKED IN FIELD FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. ALL LAYOUT SHALL BE AS APPROVED BY, LANDSCAPE ARCHITECT, AND OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION. NO EQUIPMENT SHALL BE INSTALLED WITHOUT APPROVAL OF LAYOUT.
- 4. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE INSTALLATION OF PROPOSED IRRIGATION EQUIPMENT AND RELATED EQUIPMENT, INCLUDING BUT NOT LIMITED TO R.C.V. CONTROL WIRES, ELECTRICAL WIRES, CONDUIT, REMOTE CONTROL VALVES, ETC. ALL LAYOUT AND LOCATIONS SHALL BE CONFIRMED WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK.
- 5. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE REMOVAL AND DISPOSAL OF ALL EXISTING IRRIGATION EQUIPMENT AFFECTED BY THE PROPOSED IRRIGATION IMPROVEMENTS. CONTRACTOR SHALL VERIFY ALL EQUIPMENT TO BE REMOVED AND DISPOSED OF IN FIELD PRIOR TO COMMENCING WORK.
- 6. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR/MODIFICATION OF ALL ADJACENT IRRIGATION SYSTEM EQUIPMENT THAT IS AFFECTED BY PROPOSED IRRIGATION IMPROVEMENTS. CONTRACTOR SHALL REPAIR SAID SYSTEMS TO A LIKE NEW MANNER, PROVIDING COMPLETE 100% HEAD TO HEAD COVERAGE IN ALL AREAS WITH SYSTEM LAYOUT AS APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE. CONTRACTOR SHALL CONFIRM ALL AREAS REQUIRING MODIFICATION WITH THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO BIDDING WORK AND PRIOR TO COMMENCING WORK.
- 7. CONTRACTOR SHALL ADJUST AND CAP OFF EXISTING ADJACENT IRRIGATION SYSTEM AS REQUIRED. SYSTEM SHALL PROVIDE COMPLETE 100% HEAD TO HEAD COVERAGE IN ALL AREAS AS APPROVED BY OWNER'S AUTHORIZED REPRESENTATIVE. ALL LAYOUT SHALL BE CONFIRMED WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK.
- 8. CONTRACTOR SHALL REFER TO CORRESPONDING ON-SITE WATER AND SEWER PLAN FOR UNDERLYING WATERLINES, EASMENTS, AND OTHER RELATED EQUIPMENT. CONTRACTOR SHALL VERIFY ALL EXISTING SITE CONDITIONS IN FIELD WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK.
- 9. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REPAIRS TO EXISTING IRRIGATION, LANDSCAPE AND HARDSCAPE DAMAGED BY NEW CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
- 10. CONTRACTOR SHALL MEET WITH THE OWNER PRIOR TO BEGINNING DEMOLITION OR ANY OTHER WORK, AND WALK SITE TO LOCATE EXISTING CONTROLLER AND LINES AND OTHER IRRIGATION TO BE PROTECTED IN PLACE.
- 11. CONTRACTOR SHALL PROVIDE FOR THE IRRIGATION OF EXISTING PLANT MATERIAL THROUGHOUT THE CONSTRUCTION PROCESS. ANY DAMAGE DUE TO CONSTRUCTION SHALL BE REPAIRED IMMEDIATELY TO PREVENT ANY LAME IN IRRIGATION OF THE EXISTING PLANT MATERIAL. ANY PLANT MATERIAL AND/OR IRRIGATION DAMAGED AS PART OF CONSTRUCTION SHALL BE REPAIRED TO A LIKE NEW CONDITION AS PART OF CONTRACT.
- 12. ANY EXISTING IRRIGATION CONTROL VALVES CONNECTED TO THE EXISTING CONTROLLER SHALL BE RECONNECTED TO THE NEW CONTROLLER. CONFIRM PROPER CONTROLLER OPERATION AND INSTALLATION WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK AND UPON COMPLETION OF WORK.
- 13. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE ADJUSTMENT/MODIFICATION OF EXISTING IRRIGATION SYSTEM WITHIN THIS AND OTHER AREAS AFFECTED BY THE PROPOSED IMPROVEMENTS. ALL LAYOUT SHALL BE CONFIRMED WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK.
- 14. NO DISRUPTION OF THE EXISTING IRRIGATION SYSTEMS WATERING WILL BE ALLOWED DURING CONSTRUCTION. ALL ADJACENT SYSTEM SHALL MAINTAIN AUTOMATIC PROGRAMMED WATERING SCHEDULES THROUGHOUT CONSTRUCTION.
- 15. CONTRACTOR SHALL OBTAIN EXISTING IRRIGATION AS-BUILT RECORD DRAWINGS FOR ADJACENT IRRIGATED AREAS PRIOR TO STARTING WORK. ALL EXISTING IRRIGATION EQUIPMENT LOCATION, SIZES, AND CONDITIONS SHALL BE VERIFIED IN FIELD WITH OWNER'S AUTHORIZED REPRESENTATIVE AT START OF WORK.
- 16. WHENEVER ROOTS OF EXISTING TREES ARE ENCOUNTERED DURING TRENCHING OPERATIONS, THE CONTRACTOR SHALL REROUTE MAIN LINE TRENCHES. DO NOT CUT ROOTS OVER 1" IN DIAMETER. ALL CUTS SHALL BE A CLEAN SHARP CUT. IF TRENCHING IS REQUIRED, THE CONTRACTOR SHALL HAND DIG THE TRENCHES TAKING CARE NOT TO DAMAGE ROOTS. NO MECHANICAL TRENCHING WITHIN THE DRIPLINE OF THE EXISTING TREE WILL BE ALLOWED. PROTECT ALL ROOTS EXPOSED TO SUNLIGHT WITH MOIST BURLAP UNTIL COVERED WITH SOIL.

**AS-BUILT NOTE:**

AS-BUILT RECORD DRAWINGS WERE NOT AVAILABLE AT TIME OF SYSTEM DESIGN. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING EXISTING IRRIGATION SYSTEM AS-BUILTS FROM OWNER PRIOR TO COMMENCING WORK. CONTRACTOR SHALL CONFIRM ALL CONNECTION POINTS AND EXISTING IRRIGATION SYSTEMS AFFECTED IN FIELD WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF PROPOSED IRRIGATION SYSTEM CONNECTION POINT AND CONTROLLER LOCATION FOR APPROVAL BY OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK. ALL LABOR AND MATERIALS REQUIRED TO IRRIGATE AREAS WITHIN THE LIMITS OF WORK AND TO ADJUST AREAS ADJACENT TO THE LIMITS OF WORK SHALL BE INCLUDED AS PART OF THIS CONTRACT. NO ADDITIONAL COSTS WILL BE ALLOWED FOR THE PROPOSED IRRIGATION IMPROVEMENTS OR ADJUSTMENT OF THE EXISTING ADJACENT IRRIGATION SYSTEMS.

**NOTE:**

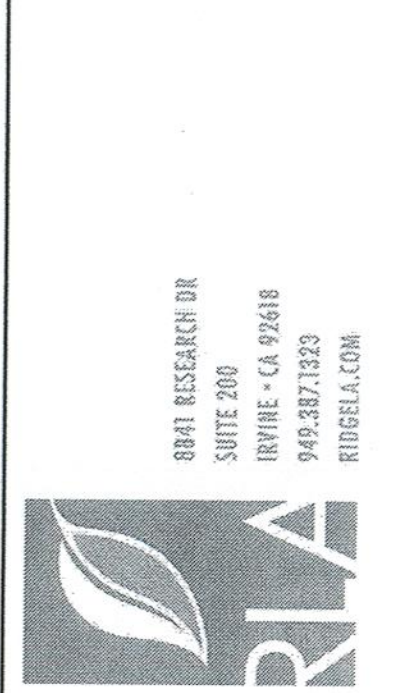
"CONTRACTOR TO REPAIR OR REPLACE ALL LANDSCAPE AND IRRIGATION MISSING OR NOT WORKING TO A FULLY FUNCTIONING SYSTEM WITH 100% COVERAGE". ALL EXISTING SYSTEMS SHALL BE REPAIRED TO PREVENT OVERSPRAY OR RUNOFF ONTO SIDEWALKS OR STREETS.

**Irrigation Installation Notes**

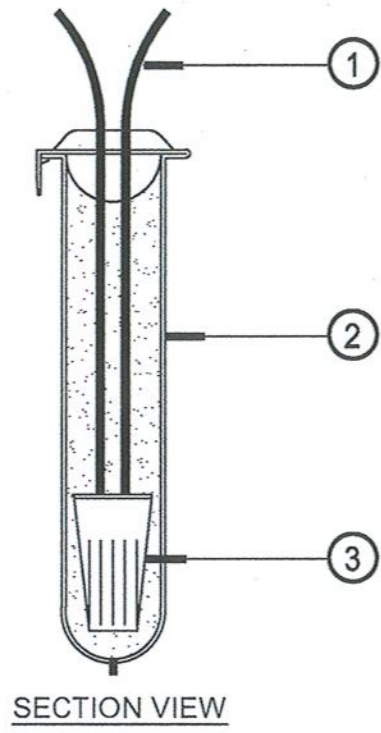
- 1. THE CONTRACTOR SHALL OBTAIN, COORDINATE AND PAY FOR ANY AND ALL PERMITS AND ALL INSPECTIONS AS REQUIRED.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE AND LIABLE FOR ANY AND ALL DAMAGES TO OPERATIONS OR WORK OF OTHER CONTRACTORS. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ACTIVITIES WITH ALL AGENCIES AND OTHER TRADES.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE AND LIABLE FOR ANY ENCROACHMENT INTO ADJACENT PROPERTY, R.O.W.'S, EASEMENTS, SETBACKS OR ANY OTHER LEGAL PROPERTY RESTRICTIONS EITHER MARKED OR UNMARKED.
- 4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL UNDERGROUND UTILITIES. CONTRACTOR SHALL REPAIR OR REPLACE, AT NO ADDITIONAL COST TO THE OWNER, ANY DAMAGE TO UNDERGROUND UTILITIES THAT MAY OCCUR.
- 5. THE CONTRACTOR SHALL OBTAIN THE PERTINENT ENGINEERING PLANS BEFORE BEGINNING WORK.
- 6. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS SHOWN ON PLANS AT THE SITE PRIOR TO COMMENCEMENT OF ANY WORK. ALL DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO PROJECT LANDSCAPE ARCHITECT FOR DIRECTION. ANY CONTINUATION OF WORK IS AT THE CONTRACTOR'S RISK AND EXPENSE.
- 7. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, STRUCTURES AND SERVICES BEFORE COMMENCING WORK. THE LOCATIONS OF UTILITIES, STRUCTURES AND SERVICES SHOWN IN THESE PLANS ARE APPROXIMATE ONLY. ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE PROJECT LANDSCAPE ARCHITECT FOR DIRECTION.
- 8. BEFORE ANY WORK COMMENCES, A CONFERENCE SHALL BE HELD WITH THE CITY'S PUBLIC WORKS INSPECTOR, LANDSCAPE ARCHITECT AND THE CONTRACTOR, REGARDING GENERAL REQUIREMENTS OF THIS WORK.
- 9. INSTALL ALL IRRIGATION COMPONENTS ACCORDING TO LOCAL CODES AND ORDINANCES.
- 10. THE IRRIGATION WATER METER IS TO BE PROVIDED BY THE OWNER UNLESS SHOWN OTHERWISE ON THE PLANS. CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ALL IRRIGATION EQUIPMENT DOWNSTREAM OF THE POINT OF CONNECTION (P.O.C.) AT THE IRRIGATION WATER METER.
- 11. ALL IRRIGATION EQUIPMENT NOT OTHERWISE DETAILED OR SPECIFIED SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
- 12. THE CONTRACTOR SHALL NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS (INCLUDING EXISTING AND/OR NEW PLANT MATERIAL), GRADE DIFFERENCES OR DIFFERENCES IN THE AREA'S DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE DESIGN. SUCH OBSTRUCTIONS OR DIFFERENCES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.
- 13. THE WORK SHOWN ON THESE PLANS IS DIAGRAMMATIC. ALL ITEMS, I.E. CONTROLLERS, VALVES, MAINLINES, SLEEVES, WIRES, IRRIGATION HEADS, ETC. ARE SHOWN IN THEIR APPROXIMATE LOCATIONS ONLY. DO NOT SCALE DIMENSIONS. DETAIL DRAWINGS MAY CLARIFY LOCATIONS OF SOME ITEMS. THE CONTRACTOR SHALL NOT LOCATE ANY ITEMS WHERE IT IS OBVIOUS THAT THEY ARE IN CONFLICT WITH UNDERGROUND UTILITIES, STRUCTURES, OTHER IMPROVEMENTS, OR VEHICULAR OR PEDESTRIAN SAFETY CONSIDERATIONS.
- 14. CONTROLLER LOCATIONS ARE APPROXIMATE. FINAL LOCATION OF THE AUTOMATIC CONTROLLER AND THE BACKFLOW DEVICE SHALL BE APPROVED BY THE OWNER AND THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- 15. ALL CONSTANT PRESSURE LINES SHALL BE TESTED FOR 3 HOURS UNDER A HYDROSTATIC PRESSURE OF 150 POUNDS PER SQUARE INCH AND BE PROVEN WATERTIGHT. CONTRACTOR SHALL PROVIDE ALL EQUIPMENT FOR HYDROSTATIC TESTS. HYDROSTATIC TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE LANDSCAPE ARCHITECT. CITY PUBLIC WORKS INSPECTOR SHALL BE PRESENT TO WITNESS TESTING. CONTRACTOR MAY E-MAIL DIGITAL PHOTOGRAPHS OF THE PRESSURE GAUGE TO THE LANDSCAPE ARCHITECT AT BEGINNING AND END OF TEST PERIOD.
- 16. 120-VOLT ELECTRICAL POWER OUTLET AT THE AUTOMATIC CONTROLLER LOCATION SHALL BE PROVIDED PER THE ELECTRICAL ENGINEER'S PLANS AND SPECIFICATIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ELECTRICAL SERVICE WITH THE GENERAL CONTRACTOR AND TO MAKE THE FINAL hook-UP FROM THE ELECTRICAL OUTLET TO THE AUTOMATIC CONTROLLER.
- 17. ALL LOCAL MUNICIPAL AND STATE LAWS AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR.
- 18. BACKFLOW DEVICE SHALL BE INSTALLED IN GROUND COVER AREA WHEREVER POSSIBLE. FINAL LOCATION SHALL BE DETERMINED BY THE OWNER'S AUTHORIZED REPRESENTATIVE AND MAY VARY FROM THAT INDICATED ON THE DRAWINGS.
- 19. QUICK COUPLER VALVES, CONTROL VALVES, AND SHUT-OFF VALVES SHALL BE INSTALLED IN GROUND COVER AREAS WHEREVER POSSIBLE.
- 20. PIPING AND WIRE CONDUIT PENETRATIONS THROUGH WALLS AND INSTALLATION EQUIPMENT UNDER PAVING SHALL BE INSTALLED IN SCH 40 PVC SLEEVES, AS CALLED OUT ON PLANS, OR AS PER LOCAL CODES AND MUST BE COORDINATED WITH THE GENERAL CONTRACTOR AND CONTRACTORS OF ALL VARIOUS TRADES THAT MAY BE INVOLVED TO ELIMINATE PROBLEMS THAT MAY ARISE FROM INACCESSIBILITY OR DAMAGE TO ANOTHER TRADE'S WORK. PIPING AND WIRE CONDUIT PENETRATIONS THROUGH EXISTING WALLS SHALL BE CORE DRILLED AND SLEEVED PER ABOVE, UNLESS AN EXISTING SLEEVE IS AVAILABLE FOR RE-USE WHICH WILL NOT SIGNIFICANTLY AFFECT THE SYSTEM DESIGN.
- 21. USE CHECK VALVES AS REQUIRED TO ELIMINATE LOW HEAD DRAINAGE.
- 22. THE CONTRACTOR SHALL INSTALL KBY SERIES ANTI-SIPHON VALVES ON ALL LATERALS IN AREAS WHERE SLOPE OF GRADE EXCEEDS 4:1, WHERE POST VALVE SHUT-OFF DRAINING OF THE IRRIGATION OCCURS, OR AS DIRECTED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.
- 23. THE CONTRACTOR SHALL ONLY APPLY SUFFICIENT WATER AT A RATE OF FREQUENCY WHICH CAUSES RUNOFF OR OVER-SATURATION OF THE SOIL.
- 24. THE CONTRACTOR SHALL FLUSH AND ADJUST ALL SPRINKLER HEADS FOR OPTIMUM PERFORMANCE AND TO PREVENT OVERSPRAY ONTO ADJACENT PAVING, WALLS OR OTHER HARDSCAPE ELEMENTS TO THE EXTENT POSSIBLE. THIS SHALL INCLUDE SELECTING THE APPROPRIATE ARC TO FIT THE EXISTING SITE CONDITIONS AND ADJUSTING THE FLOW CONTROL AT EACH VALVE TO OBTAIN THE OPTIMUM OPERATING FLOW FOR EACH SYSTEM.
- 25. WHEN RADIUS OF SPRINKLER HEADS AS REQUIRED FOR PROPER COVERAGE IS LESS THAN RADIUS SHOWN ON LEGEND, THE CONTRACTOR SHALL EQUIP SPRINKLER HEAD WITH A PRESSURE COMPENSATING SCREEN (PCS) FOR LOW FLOW AND RADIUS CONTROL.
- 26. USE ADJUSTABLE ARC NOZZLES FOR ALL HEADS LOCATED IN AREAS WHERE A STANDARD ARC PATTERN SPRAYS OVER ONTO ADJACENT PAVING, WALLS OR OTHER HARDSCAPE ELEMENTS. ADJUSTABLE ARC NOZZLE SHOULD HAVE THE SAME RADIUS OF THROW AS THE NOZZLE BEING REPLACED.
- 27. NO OVERSPRAY OR LOW HEAD DRAINAGE SHALL BE ALLOWED.
- 28. WHEN VERTICAL OBSTRUCTIONS (LIGHT POLES, FIRE HYDRANTS, TREES, ETC.) INTERFERE WITH THE SPRAY PATTERN OF THE SPRINKLER HEADS SO AS TO PREVENT PROPER COVERAGE, THE CONTRACTOR SHALL FIELD ADJUST THE SPRINKLER SYSTEM BY INSTALLING A QUARTER CIRCLE OR HALF CIRCLE SPRINKLER HEAD ON EACH SIDE OF THE OBSTRUCTION SO AS TO PROVIDE PROPER COVERAGE. ALL ADJUSTMENTS SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.
- 29. PIPE SIZES SHALL CONFORM TO THOSE SHOWN ON THE DRAWING. NO SUBSTITUTIONS OF SMALLER PIPE SIZES SHALL BE PERMITTED, BUT SUBSTITUTIONS OF LARGER SIZES MAY BE APPROVED. ALL DAMAGED AND REJECTED PIPE SHALL BE REMOVED FROM THE SITE IMMEDIATELY UPON REJECTION.
- 30. ALL ELECTRICAL CONTROL WIRE SHALL BE DIRECT BURIAL, #14 UL APPROVED, IN AN 18" DEEP TRENCH, INSTALLED UNDERNEATH THE MAINLINE PIPE WHEN RUN IN THE SAME TRENCH. WIRE CONNECTORS SHALL BE PENNITE OR DR1-SPICE ONLY. EXTRA HOT WIRE - 2 PER EACH GROUP OF 5 WIRES - LABEL ALL SPARE WIRES AT BOTH ENDS. COLORS FOR CONTROL WIRE SHALL BE AS FOLLOWS: A. COMMON WIRE - WHITE B. HOT WIRE - BLACK C. EXTRA COMMON WIRE, MINIMUM 3 EACH DIRECTION AND ONE TO EACH LEG OF MAINLINE FROM POC PER CONTROLLER - WHITE WITH ORANGE STRIPE (DIFFERENT STRIPE COLOR PER CONTROLLER)
- 31. ALL AUTOMATIC CONTROLLER PROGRAMS MUST BE SET TO OPERATE BETWEEN THE HOURS OF 10 P.M. AND 6 A.M.
- 32. THE ENTIRE SPRINKLER SYSTEM SHALL BE GUARANTEED BY THE CONTRACTOR AS TO MATERIAL AND WORKMANSHIP, INCLUDING THE SETTLING OF BACKFILLED AREAS AND TRENCHES FOR A PERIOD OF ONE YEAR FOLLOWING THE DATE OF FINAL ACCEPTANCE OF THE WORK. SHOULD ANY OPERATION DIFFICULTIES IN CONNECTION WITH THE SPRINKLER SYSTEM DEVELOP WITHIN THE SPECIFIED GUARANTEE PERIOD, WHICH IN THE OPINION OF THE OWNER MAY BE DUE TO INFERIOR MATERIAL AND/OR WORKMANSHIP, SAID DIFFICULTIES SHALL BE IMMEDIATELY CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST.
- 33. THE CONTRACTOR SHALL AT ALL TIMES PROTECT HIS WORK FROM DAMAGE AND THEFT AND REPLACE ALL DAMAGED OR STOLEN PARTS AT HIS EXPENSE UNTIL THE WORK IS ACCEPTED IN WRITING BY THE OWNER.
- 34. THE IRRIGATION SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE AND THE MAXIMUM FLOW DEMAND SHOWN ON THE IRRIGATION DRAWINGS AT EACH POINT OF CONNECTION. THE CONTRACTOR SHALL VERIFY WATER PRESSURE IN THE FIELD PRIOR TO CONSTRUCTION TO DETERMINE IF IT IS SUFFICIENT TO OPERATE SYSTEMS AS DESIGNED. REPORT ANY DIFFERENCE BETWEEN THE WATER PRESSURE INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READINGS AT THE IRRIGATION POINT OF CONNECTION TO THE PROJECT LANDSCAPE ARCHITECT. IN THE EVENT PRESSURE DIFFERENCES ARE NOT REPORTED PRIOR TO START OF CONSTRUCTION, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY AT NO ADDITIONAL COST TO THE OWNER.
- 35. AFTER INSTALLATION OF THE IRRIGATION SYSTEM IS COMPLETED, THE CONTRACTOR SHALL PERFORM A COVERAGE TEST BY LIGHTING THE LANDSCAPE ARCHITECT AND CITY PUBLIC WORKS INSPECTOR TO DETERMINE IF THE IRRIGATION COVERAGE FOR PLANTING AREAS IS ADEQUATE AND COMPLETE. FURNISH ALL MATERIALS AND PERFORM ALL WORK REQUIRED TO CORRECT ANY INADEQUACIES OF COVERAGE DUE TO DEVIATIONS FROM THE PLANS OR BECAUSE DISCREPANCIES BETWEEN THE PLANS AND ACTUAL FIELD CONDITIONS WERE NOT BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

**Irrigation General Notes**

- 1. IRRIGATION PLANS ARE DESIGNED AS DIAGRAMMATIC AND APPROXIMATE. ALL IRRIGATION EQUIPMENT, SPRINKLERS AND PIPE ARE TO BE INSTALLED IN LANDSCAPED AREA. NO IRRIGATION EQUIPMENT SHALL BE LOCATED IN HARDSCAPE. THE IRRIGATION CONTRACTOR SHALL ENSURE NO OVERSPRAY ONTO HARDSCAPE, STREETS, WALLS OR ANY OTHER HARDSCAPE / STRUCTURE.
- 2. MAINLINE SHOWN WITHIN PAVING FOR DRAWING CLARITY ONLY. ACTUAL MAINLINE LOCATION TO BE A MINIMUM OF 18" OFF ADJACENT HARDSCAPE AND OTHER OBSTACLES TYP.
- 3. WHEN VERTICAL OBSTRUCTIONS (PROPS, STREET LIGHTS, TREES, ETC.) INTERFERE WITH THE SPRAY PATTERN OF THE SPRINKLER HEADS SO AS TO PREVENT PROPER COVERAGE, THE IRRIGATION CONTRACTOR SHALL FIELD ADJUST THE SPRINKLER SYSTEM BY INSTALLING A QUARTER CIRCLE OR HALF CIRCLE SPRINKLER HEAD ON EACH SIDE OF THE OBSTRUCTION SO AS TO PROVIDE PROPER COVERAGE. ALL ADJUSTMENTS SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.
- 4. WHEN RADIUS OF SPRINKLER HEADS, REQUIRED FOR PROPER COVERAGE, IS LESS THAN RADIUS SHOWN ON LEGEND, THE CONTRACTOR SHALL EQUIP SPRINKLER HEAD WITH A RAIN RIB "PCS" PRESSURE COMPENSATING SCREEN FOR LOW FLOW AND RADIUS CONTROL.
- 5. USE ADJUSTABLE ARC NOZZLES FOR ALL HEADS LOCATED IN AREAS WHERE A STANDARD ARC PATTERN OVER SPRAYS ONTO BUILDINGS, WALLS OR PAVING. ADJUSTABLE ARC NOZZLE SHOULD HAVE THE SAME RADIUS OF THROW AS THE NOZZLE BEING REPLACED.
- 6. OVERHEAD IRRIGATION SHALL NOT BE PERMITTED WITHIN 24 INCHES OF ANY NON-PERMEABLE SURFACE. (PER STATE ORDINANCE AB 1861). ABSOLUTELY NO OVERSPRAY OR LOW HEAD DRAINAGE IS ALLOWED.
- 7. IRRIGATION SLEEVES SHOWN FOR MAJOR STREET AND DRIVEWAY CROSSINGS FOR CLARITY ONLY. CONTRACTOR SHALL INSTALL SLEEVING BELOW ALL PAVING, HARDSCAPE, ETC. AND AS DIRECTED BY OWNER'S AUTHORIZED REPRESENTATIVE.
- 8. ALL PIPING AND WIRE SHALL BE SLEEVED UNDER PAVING. ALL SLEEVES TO BE MINIMUM 2X DIAMETER OF PIPE SLEEVE. ALL MAINLINE LOOP SPARE WIRE IN A NEARBY VALVE BOX WITH MINIMUM 2" OF COILED WIRE. SPARE WIRES SHALL BE A DIFFERENT COLOR THAN REMOTE CONTROL VALVE WIRES. LABEL WIRES "SPARE" AT BOTH ENDS.
- 9. ALL LEAD WIRES TO BE #14 GAUGE, AND BLACK IN COLOR. ALL COMMON WIRE TO BE #14 GAUGE AND WHITE WITH COLORED STRIPE. FOR MULTIPLE CONTROLLERS USE DIFFERING COLOR PER CONTROLLER.
- 10. PROVIDE A MINIMUM OF TWO (2) EXTRA SPARE WIRES FOR EACH GROUP OF TEN (10) CONTROL VALVES AND ALSO TO EACH END OF MAINLINE LOOP SPARE WIRE IN A NEARBY VALVE BOX WITH MINIMUM 2' OF COILED WIRE. SPARE WIRES SHALL BE A DIFFERENT COLOR THAN REMOTE CONTROL VALVE WIRES. LABEL WIRES "SPARE" AT BOTH ENDS.
- 11. ALL IRRIGATION ADJACENT TO BUILDING SHALL BE INSTALLED A MINIMUM DISTANCE OF 12" INCHES FROM BUILDING TO AVOID WATER/OVERSPRAY ONTO BUILDING OR WINDOWS. ALL LAYOUT SHALL BE CONFIRMED IN FIELD WITH OWNER'S REPRESENTATIVE PRIOR TO COMMENCING WORK.
- 12. ALL SPRAY HEADS ADJACENT TO PARKING STALLS CURBS WITHIN CAR OVERHANG AREAS SHALL BE INSTALLED WITH 6" POP-UP SPRAY HEADS LOCATED 6" FROM CURB TO AVOID CAR OVERHANG INTERFERENCE. CONTRACTOR SHALL VERIFY ALL CAR OVERHANG AREAS THAT SHALL RECEIVE THE 6" POP-UP SPRAY HEADS.
- 13. TREE BUBBLERS AND LATERAL LINES ARE SHOWN WITHIN PAVING AND BUILDINGS FOR DRAWING CLARITY ONLY. ACTUAL LOCATION TO BE WITHIN PLANTER. BUBBLERS SHALL BE ALIGNED WITH TREES AND AS DIRECTED BY OWNER'S AUTHORIZED REPRESENTATIVE. CONFIRM ALL LAYOUT IN FIELD WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK.
- 14. IRRIGATION SYSTEM LAYOUT HAS BEEN DESIGNED TO ACCOMMODATE SHRUB HEDGES AND TO MINIMIZE SPRAY PATTERN DISTORTION OR BLOCKAGE FROM HEDGE ROWS. CONTRACTOR SHALL INSTALL SPRINKLERS IN FRONT OF HEDGE ROWS TO AVOID ANY DISTORTION OR BLOCKAGE FROM HEDGE ROWS AND ALSO TO PROVIDE ADEQUATE COVERAGE TO ALL PLANTER AREAS INCLUDING THE HEDGE ROWS. ALL LAYOUT SHALL BE CONFIRMED IN FIELD WITH OWNER'S REPRESENTATIVE PRIOR TO COMMENCING WORK.
- 15. CONTROLLER LOCATION SHOWN ON THIS DRAWING IS APPROXIMATE. THE LANDSCAPE CONTRACTOR SHALL STAKE OUT THE CONTROLLER LOCATION FOR REVIEW AND APPROVAL BY THE OWNER PRIOR TO INSTALLATION OF THIS EQUIPMENT. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ELECTRICAL CONNECTION FROM 120 VOLT POWER SOURCE TO THE CONTROLLER AND ALL WIRE CONNECTIONS FROM ALL VALVES AND APPURTENANCE VALVES TO TERMINAL STRIP. REFER TO ELECTRICAL ENGINEER'S DRAWINGS FOR POWER SOURCE. ALL ELECTRICAL WORK SHALL CONFORM TO LOCAL STATE AND NATIONAL ELECTRICAL CODES AND REGULATIONS. FINAL LOCATION AND EXACT POSITIONING OF THE CONTROLLER SHALL BE DETERMINED BY THE OWNER. MINOR MODIFICATIONS OF CONTROLLER REQUESTED BY THE OWNER SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. FAILURE TO OBTAIN OWNER'S APPROVAL PRIOR TO THE INSTALLATION SHALL CAUSE THE CONTRACTOR TO MAKE OWNER DIRECTED REVISIONS AT NO ADDITIONAL COST TO THE OWNER.
- 16. ELECTRIC CONTROL VALVES AND ISOLATION VALVE LOCATIONS ON THIS DRAWING ARE APPROXIMATE. THE LANDSCAPE CONTRACTOR SHALL STAKE OUT EACH ELECTRICAL CONTROL VALVE AND ISOLATION VALVE LOCATION FOR REVIEW AND APPROVAL BY OWNER PRIOR TO INSTALLATION OF ALL VALVES. FINAL LOCATION AND EXACT POSITIONING FOR ELECTRIC CONTROL VALVES AND ISOLATION VALVES SHALL BE DETERMINED BY THE OWNER. MINOR MODIFICATIONS OF ELECTRIC CONTROL VALVES AND ISOLATION VALVE LOCATIONS AS REQUESTED BY THE OWNER SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. FAILURE TO OBTAIN OWNER'S APPROVAL PRIOR TO THE INSTALLATION SHALL CAUSE THE CONTRACTOR TO MAKE OWNER DIRECTED REVISIONS AT NO ADDITIONAL COST TO THE OWNER. IN GENERAL, UNLESS OTHERWISE DIRECTED BY OWNER, ALL VALVES SHALL BE INSTALLED THREE FEET FROM EDGE OF HARDSCAPE, WALK OR CURB IN SHRUB PLANTING AREAS.
- 17. BACKFLOW PREVENTER LOCATION SHOWN ON THIS DRAWING ARE APPROXIMATE. THE LANDSCAPE CONTRACTOR SHALL STAKE OUT THE BACKFLOW PREVENTER, AND ALL IRRIGATION APPURTENANCE LOCATION FOR REVIEW AND APPROVAL BY OWNER, LANDSCAPE ARCHITECT AND CITY'S PUBLIC WORKS INSPECTOR PRIOR TO INSTALLATION OF THIS EQUIPMENT. FINAL LOCATION AND EXACT POSITIONING OF BACKFLOW PREVENTER AND ALL IRRIGATION APPURTENANCE SHALL BE DETERMINED BY THE OWNER. MINOR MODIFICATIONS OF THE BACKFLOW PREVENTER, AND ALL IRRIGATION APPURTENANCE AS REQUESTED BY THE OWNER SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. FAILURE TO OBTAIN OWNER'S APPROVAL PRIOR TO THE INSTALLATION SHALL CAUSE THE CONTRACTOR TO MAKE OWNER DIRECTED REVISION AT NO CHARGE.



FOR IRRIGATION PLAN - SEE SHEET L1.1  
FOR IRRIGATION LEGEND & CALCULATIONS - SEE SHEET L2.1  
FOR IRRIGATION DETAILS - SEE SHEET L3.1  
FOR LANDSCAPE SPECIFICATIONS - SEE PROJECT MANUAL

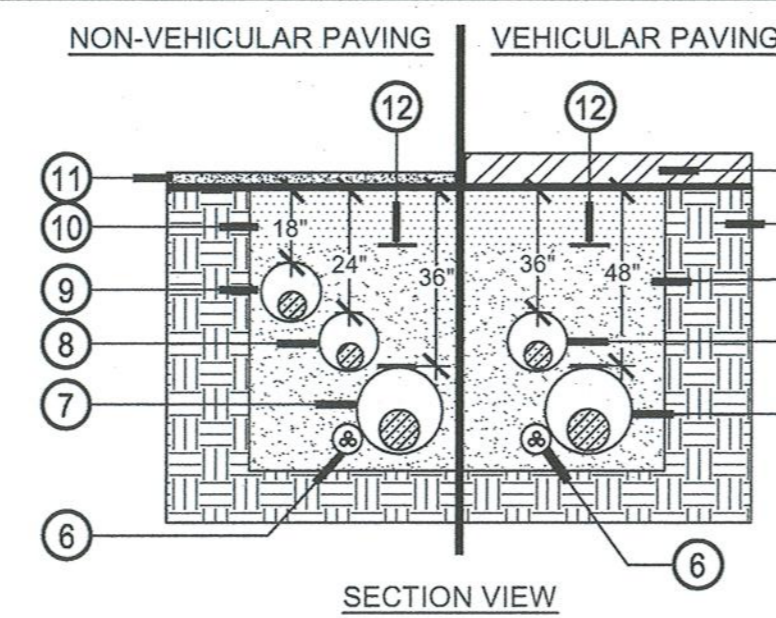


- LEGEND:**
1. LOW VOLTAGE WIRES - SEE LEGEND FOR SIZE AND TYPE.
  2. POLY TUBE PRE-FILLED WITH WATERPROOF GEL - SEE LEGEND FOR TYPE.
  3. WIRE CONNECTOR - AS APPROVED.

**NOTES:**

- WIRES SHALL BE PRE-STRIPPED OF 1/2" OF THE INSULATION. JOIN WIRES AND TWIST TOGETHER PRIOR TO INSTALLING CONNECTOR FOR PROPER CONNECTION. TWIST CONNECTOR ONTO WIRES TO SEAT FIRMLY.
- ALL WIRE CONNECTIONS SHALL INCLUDE A WIRE NUT CONNECTOR AND A POLY TUBE PRE-FILLED WITH WATERPROOF SEALING GEL.
- DIRECT BURY SPLICE KIT MODEL # SA 101 SHALL BE USED TO ELECTRICALLY CONNECT 2 - #14 AND/OR 1 - #18 PRE-STRIPPED COPPER WIRES. LARGER WIRES OR GREATER QUANTITIES OF WIRES SHALL REQUIRE MODEL # SA102, A LARGER WIRE CONNECTOR.

**(M) WIRE CONNECTION** NOT TO SCALE



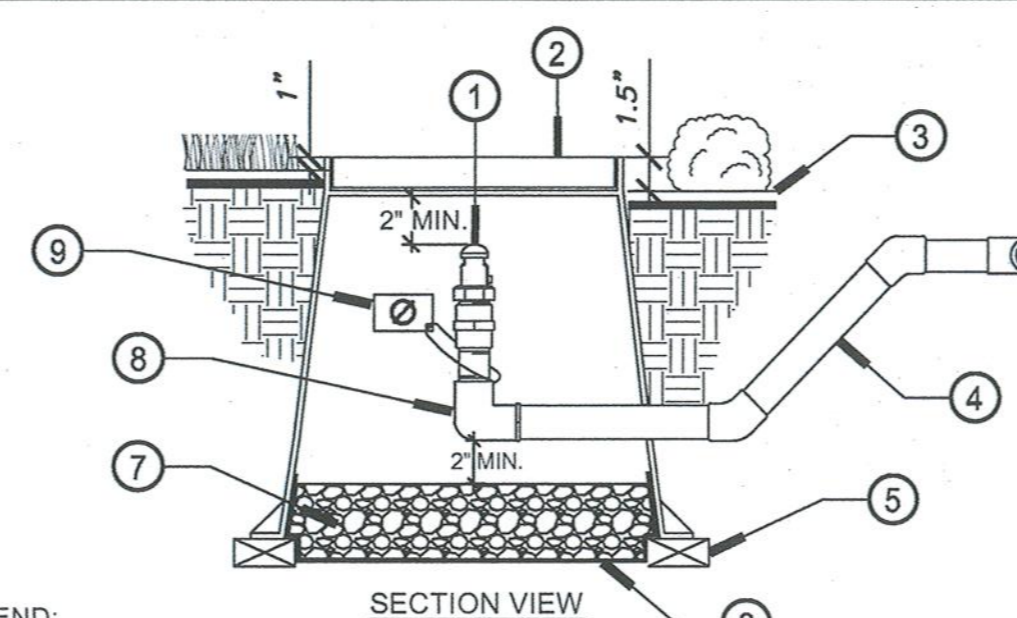
**LEGEND:**

1. ROAD PAVING.
2. UNDISTURBED SOIL.
3. SAND BACKFILL.
4. LATERAL LINE SLEEVES UNDER ROADS, (PURPLE) "RECYCLED WATER" SCH. 40 PVC PIPE, WITH WORDS "RECYCLED WATER-DO NOT DRINK", 6" DIAMETER OR GREATER = 48" COVER.
5. MAINLINE SLEEVES UNDER ROADS, (PURPLE) "RECYCLED WATER" SCH. 40 PVC PIPE, WITH WORDS "RECYCLED WATER-DO NOT DRINK", 6" DIAMETER OR GREATER = 48" COVER.
6. PVC SCH. 40 WIRE SLEEVE.
7. MAINLINE SLEEVES UNDER HARDSCAPE (PURPLE) "RECYCLED WATER" SCH. 40 PVC PIPE, WITH WORDS "RECYCLED WATER-DO NOT DRINK", 6" DIAMETER OR GREATER = 36" COVER.
8. LATERAL LINE SLEEVES UNDER HARDSCAPE (PURPLE) "RECYCLED WATER" PVC SCH. 40 PVC PIPE, WITH WORDS "RECYCLED WATER-DO NOT DRINK", 2"-2.5" DIAMETER = 18" COVER.
9. LATERAL LINE SLEEVES UNDER HARDSCAPE (PURPLE) "RECYCLED WATER" PVC SCH. 40 PVC PIPE, WITH WORDS "RECYCLED WATER-DO NOT DRINK", 2"-2.5" DIAMETER = 18" COVER.
10. 12" CLEAN COMPACTED BACKFILL.
11. HARDSCAPE / PAVING (NON-ROAD).
12. (2) TWO 3" MINIMUM WIDTH, "PURPLE" RECYCLED WATER, DETECTIBLE METALLIC MARKING TAPES CONTINUOUS ALONG SLEEVE ROUTING. ONE SHALL BE LOCATED IMMEDIATELY ON TOP OF SLEEVE ATTACHED @ 5' O.C. AND ONE LOCATED 12" ABOVE SLEEVE.

**NOTES:**

- SLEEVES UNDER PAVING (NON-ROADS) SHALL BE TWICE THE DIAMETER OF THE PIPE OR WIRE BUNDLE CARRIED. LESS THAN 3" DIAMETER = 18" COVER, 3" - 5-1/2" DIAMETER = 24" COVER, 6" DIAMETER OR GREATER = 36" COVER - SCHEDULED 40 PVC PIPE.
- SLEEVE LOCATIONS SHALL BE MARKED AT EACH END AT THE TIME OF INSTALLATION WITH A PAINTED SPOT ON THE BACK FACE OF THE CURB OR OTHER SIMILAR MARKING.
- EXACT SLEEVE LOCATIONS SHALL BE MARKED ON RECORD DRAWINGS WITH DIMENSIONING FOR IRRIGATION AS-BUILT PLANS PRIOR TO RECORD.

**(J) SLEEVE INSTALLATION** NOT TO SCALE



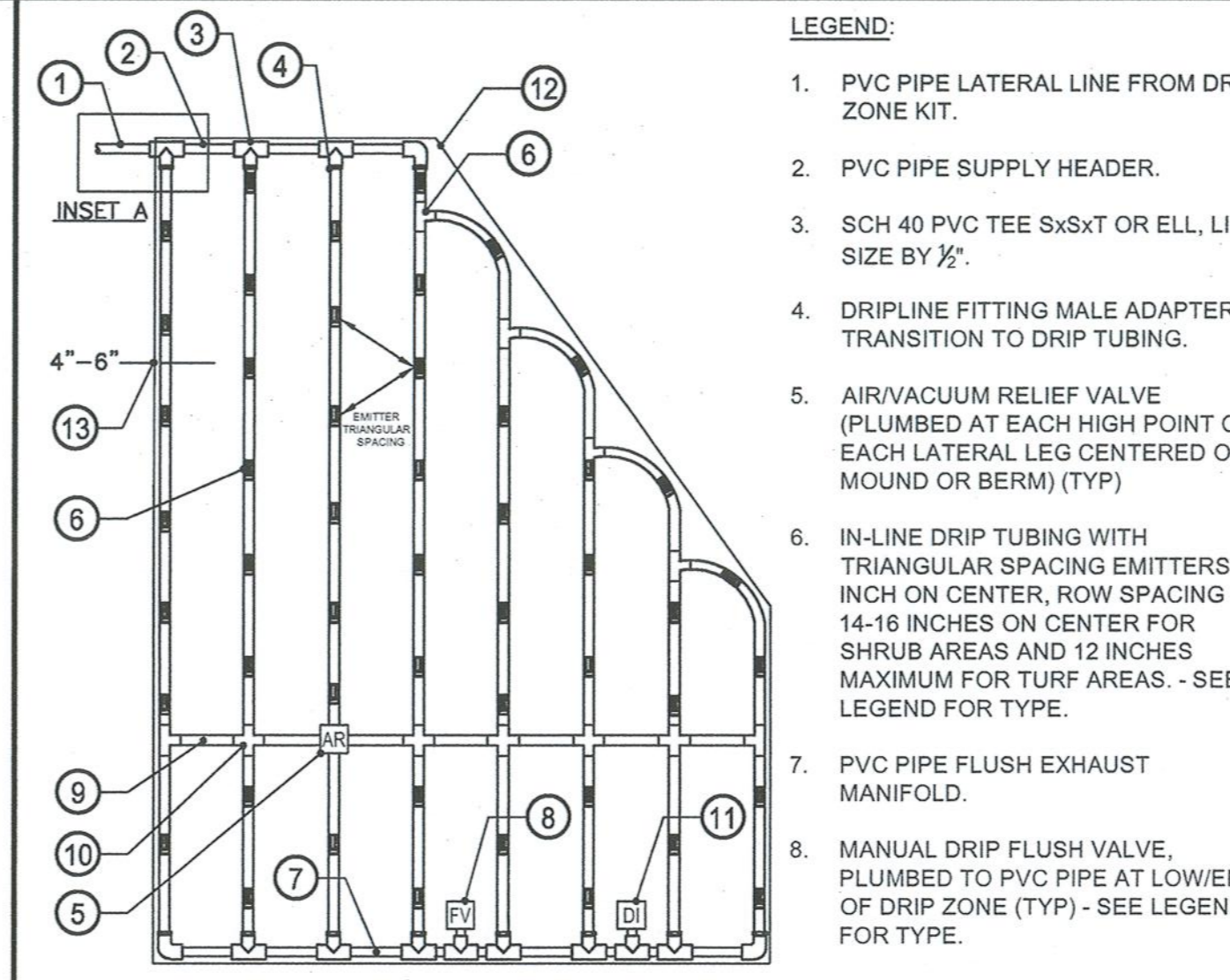
**LEGEND:**

1. DRIP SYSTEM AIR RELEASE VALVE, SEE LEGEND FOR TYPE. INSTALLED ON SCH. 40 PVC THREADED COUPLING WITH A 3/4" SCH. 80 NIPPLE, LENGTH AS REQUIRED TO LOCATE VALVE 2" FROM TOP OF VALVE BOX.
2. (PURPLE) "RECYCLED WATER" SIX INCH ROUND PLASTIC VALVE BOX, HEAT BRAND "RV" ONTID LID.
3. FINISHED GRADE.
4. (PURPLE) "RECYCLED WATER" PVC PIPE FROM DISCHARGE HEADER, 1/2" SCH 40, LENGTH AS REQUIRED.
5. NOMINAL SIZE SOLID BRICK SUPPORTS (3 REQUIRED - EQUALLY SPACED).
6. LANDSCAPE FABRIC.
7. 1/2" ROUND WASHED PEA GRAVEL - MINIMUM 4" DEPTH.
8. PVC SCH 40 ELBOW (6X7) OR TEE, 3/4" SIZE WITH 3/4" x 1/2" SCH 40 PVC SLIP BUSHING.
9. (PURPLE) "RECYCLED WATER" PLASTIC LABEL ATTACHED WITH NYLON TIE. LABEL TO READ: "RECYCLED WATER-DO NOT DRINK" IN ENGLISH AND SPANISH.

**NOTES:**

- USE SCH 40 PVC 45 DEGREE ELLS TO TRANSITION TO DRIPLINE HEADER DEPTH.
- SET TOP OF VALVE BOX 1-1/2" ABOVE FINISHED GRADE IN GROUND COVER / SHRUB AREAS.
- USE TEFLON TAPE ON ALL THREADED FITTINGS, TYPICAL.
- INSTALL AIR RELIEF VALVE 18" FROM PAVING.

**(G) DRIP AIR RELIEF VALVE** NOT TO SCALE



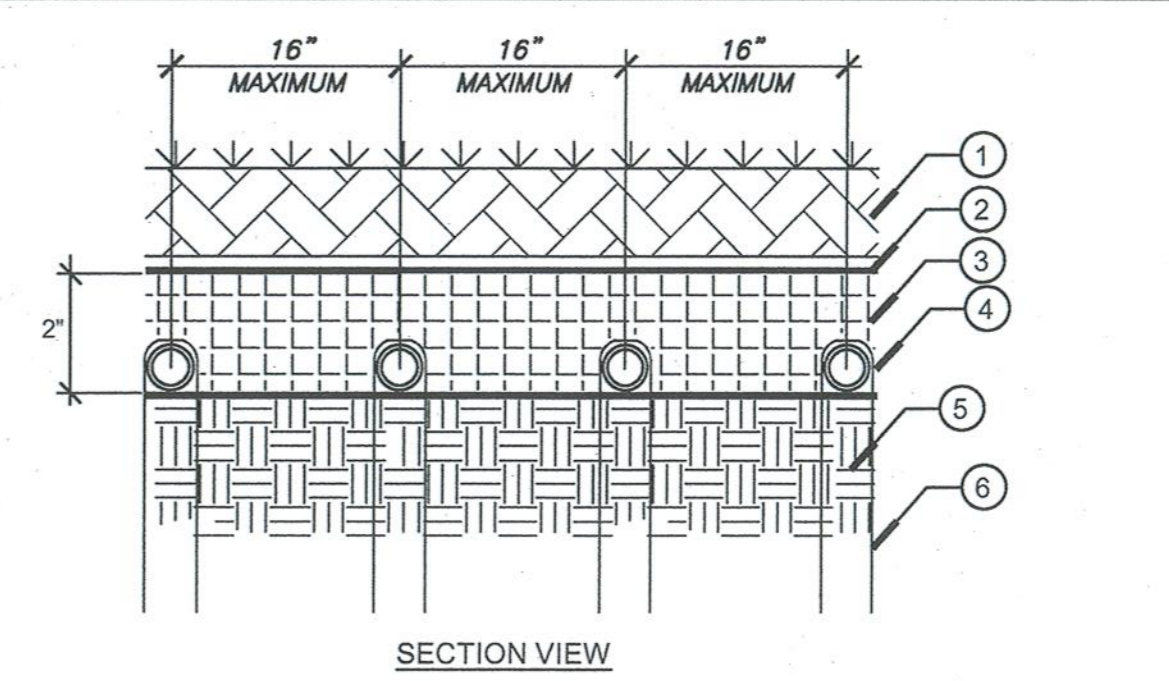
**LEGEND:**

1. PVC PIPE LATERAL LINE FROM DRIP ZONE KIT.
2. PVC PIPE SUPPLY HEADER.
3. SCH 40 PVC TEE SxSxT OR ELL, LINE SIZE BY 1/2".
4. DRIPLINE FITTING MALE ADAPTER TRANSITION TO DRIP TUBING.
5. AIR/VACUUM RELIEF VALVE (PLUMBED AT EACH HIGH POINT OF EACH LATERAL LEG CENTERED ON MOUND OR BERM) (TYP)
6. IN-LINE DRIP TUBING WITH TRIANGULAR SPACING EMITTERS 12 INCH ON CENTER, ROW SPACING 14-18 INCHES ON CENTER FOR SHRUB AREAS AND 12 INCHES MAXIMUM FOR TURF AREAS. - SEE LEGEND FOR TYPE.
7. PVC PIPE FLUSH EXHAUST MANIFOLD.
8. MANUAL DRIP FLUSH VALVE, PLUMBED TO PVC PIPE AT LOW END OF DRIP ZONE (TYP) - SEE LEGEND FOR TYPE.
9. 1/2" POLYETHYLENE BLANK TUBING.
10. BARB X BARB INSERT TEE OR CROSS, TYP.
11. DRIP OPERATIONAL INDICATOR - SEE LEGEND FOR TYPE.
12. PLANTER AREA PERIMETER.
13. PERIMETER DRIPLINE PIPE TO BE INSTALLED 4"-6" FROM PERIMETER OF PLANTER AREA, MINIMUM 12" DISTANCE FROM BUILDING.
14. PVC PIPE SCH 40 RISER, LENGTH AS REQUIRED.

**NOTES:**

- USE SCH 40 PVC 45 DEGREE ELLS TO TRANSITION TO DRIPLINE HEADER DEPTH.
- SET TOP OF VALVE BOX 1-1/2" ABOVE FINISHED GRADE IN GROUND COVER / SHRUB AREAS.
- USE TEFLON TAPE ON ALL THREADED FITTINGS, TYPICAL.
- INSTALL AIR RELIEF VALVE 18" FROM PAVING.

**(D) DRIPLINE LAYOUT (TYP)** NOT TO SCALE



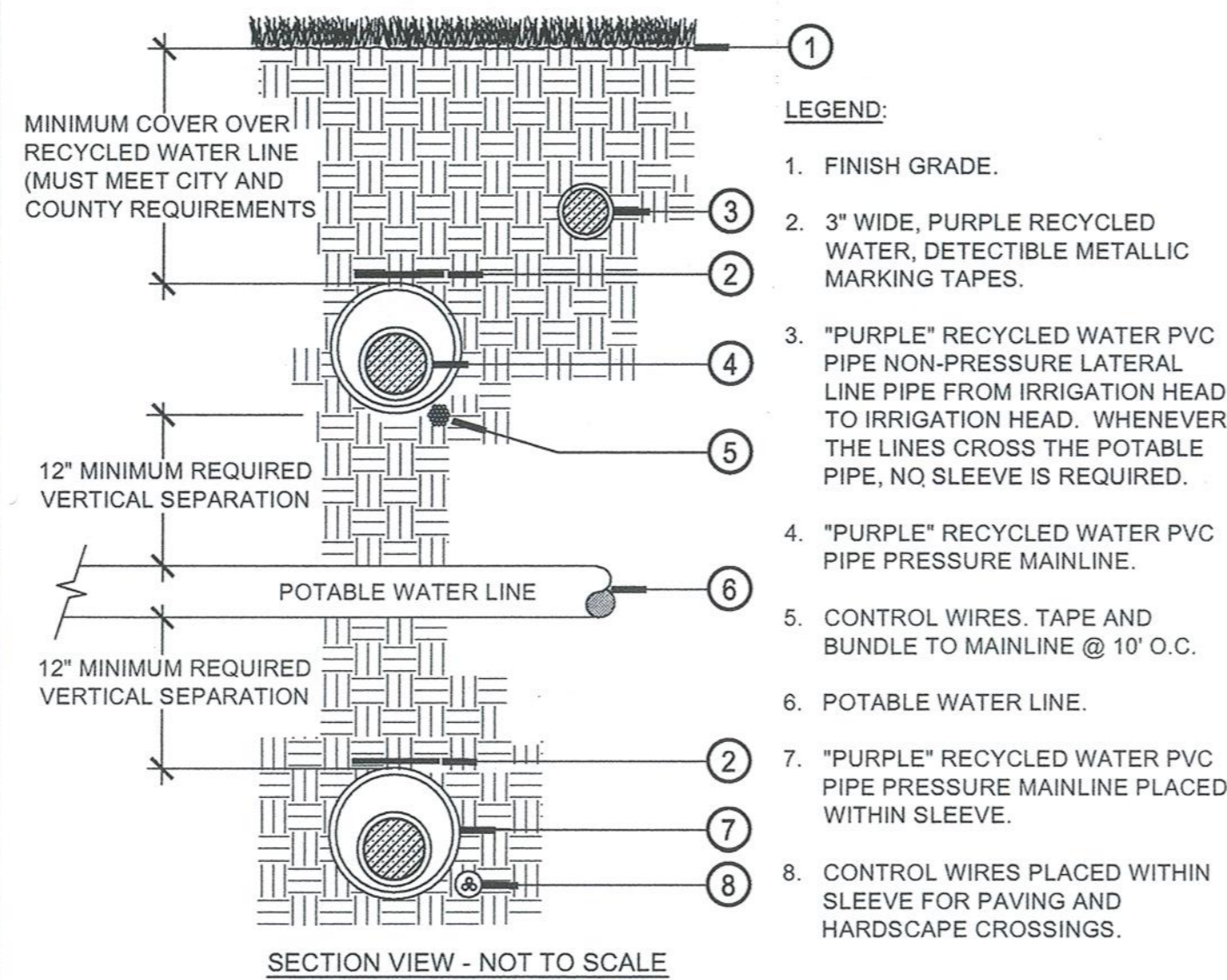
**LEGEND:**

1. BARK MULCH FOR SHRUB AREA PLANTING, SEE PLANTING PLAN FOR DEPTH AND TYPE.
2. FINISHED GRADE.
3. AMENDED SOIL INSTALLED AFTER TUBING.
4. DRIP TUBING INSTALLATION, 14"-16" ROW SPACING FOR SHRUB AREAS.
5. AMENDED SOIL AS PER LANDSCAPE DRAWINGS, BRING SOIL LEVEL 2"-3" BELOW FINISHED GRADE PRIOR TO DRIP TUBING INSTALLATION.
6. 6" WIRE STAKES FOUR (4) FEET ON CENTER.

**NOTES:**

- TO INSURE EVEN PARALLEL AND LEVEL TUBING ROWS IT IS RECOMMENDED THAT THE SOIL LEVEL IN THE PLANTER AREAS BE BROUGHT TO MINIMUM 3" - 4" BELOW FINISHED GRADE AND PROPERLY COMPACTED AS PER THE LANDSCAPE DRAWINGS PRIOR TO THE INSTALLATION OF THE TUBING.
- INSTALL TUBING ROWS A MAXIMUM 16" ROW SPACING, SECURE TO GRADE USING 6" GALVANIZED WIRE HOOP STAKES AT MAXIMUM 4 FEET ON CENTER SPACING.
- BACKFILL FINAL 2" OF SOIL AFTER INSTALLATION OF TUBING.
- DRIP TUBING SHALL BE INSTALLED WITH EMITTERS TRIANGULAR SPACED.
- INSTALL PERIMETER TUBING MAXIMUM 9" FROM PERIMETER EDGE FOR GROUND COVER AREAS OR AT FIRST LINE OF SHRUBS.
- INSTALL PARALLEL TO SLOPE AT ALL TIMES.
- CONTRACTOR SHALL DETERMINE MINIMUM ROW SPACING IN THE FIELD AFTER REVIEW OF PLANT SPACING FOR EACH PLANTER.
- EACH AND EVERY SHRUB SHALL RECEIVE WATER FROM A MINIMUM OF TWO INLINE EMITTERS.
- AREAS OF TIGHTLY SPACED GROUND COVER WILL REQUIRE 12" OR CLOSER ROW SPACING.
- FOR ANY SINGLE OR DOUBLE ROW TYPE PLANTINGS, INSTALL DRIP TUBING ON BOTH SIDES OF THE SHRUB ROW TO IRRIGATE SHRUBS ON EITHER SIDE.
- DUE TO SOIL STRATA DIFFERENCES AND POSSIBLE COMPACTION CONTRACTOR SHALL FIELD VERIFY PRIOR TO STARTING WORK AND BEFORE BACKFILLING THAT THE FINAL LAYOUT AND ROW SPACING WILL PROVIDE ADEQUATE WATER TO ALL PLANTS.

**(A) DRIPLINE LAYOUT (TYP)** NOT TO SCALE



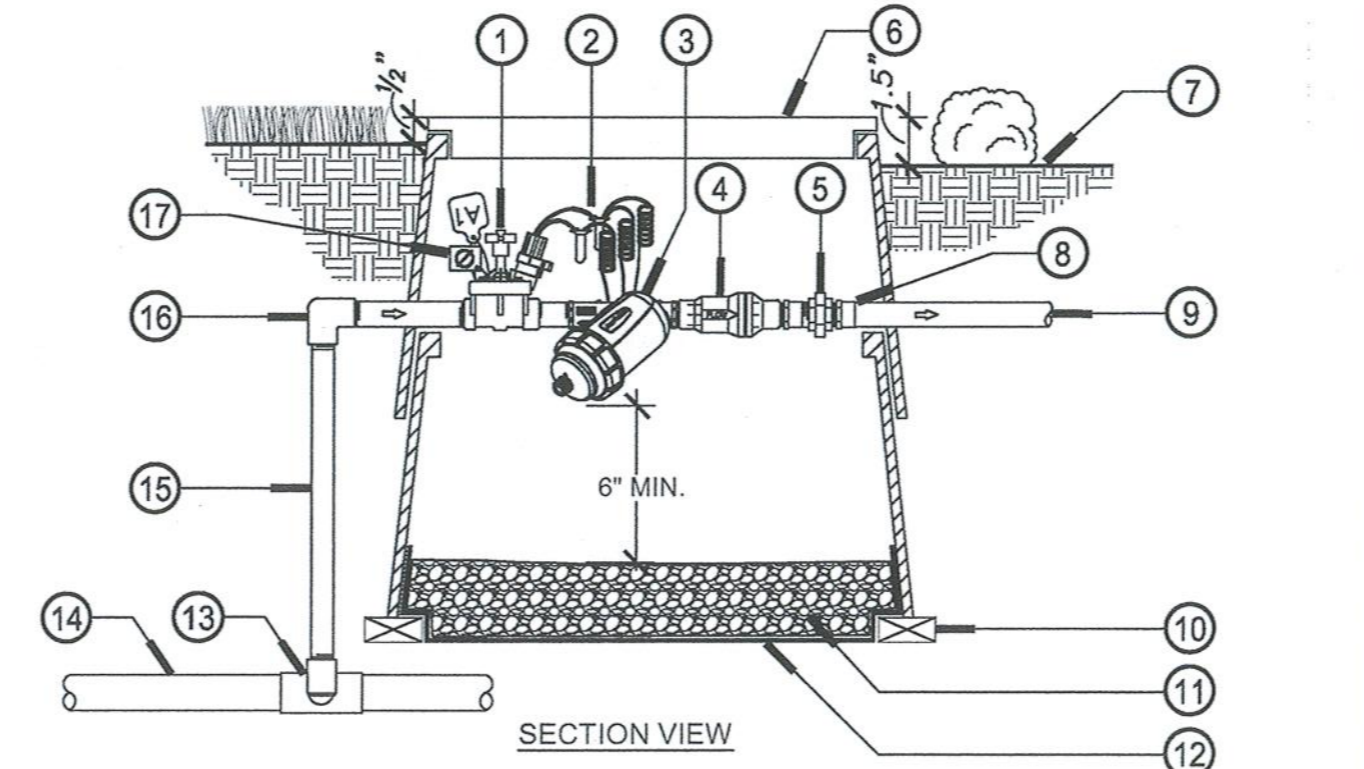
**LEGEND:**

1. FINISH GRADE.
2. 3" WIDE, PURPLE RECYCLED WATER, DETECTIBLE METALLIC MARKING TAPES.
3. "PURPLE" RECYCLED WATER PVC PIPE NON-PRESSURE LATERAL LINE PIPE FROM IRRIGATION HEAD TO IRRIGATION HEAD, WHENEVER THE LINES CROSS THE POTABLE PIPE, NO SLEEVE IS REQUIRED.
4. "PURPLE" RECYCLED WATER PVC PIPE PRESSURE MAINLINE.
5. CONTROL WIRES, TAPE AND BUNDLE TO MAINLINE @ 10' O.C.
6. POTABLE WATER LINE.
7. "PURPLE" RECYCLED WATER PVC PIPE PRESSURE MAINLINE PLACED WITHIN SLEEVE.
8. CONTROL WIRES PLACED WITHIN SLEEVE FOR PAVING AND HARDSCAPE CROSSINGS.

**NOTES:**

- WHERE POTABLE LINES AND CONSTANT PRESSURE RECYCLED WATER LINES CROSS, THE RECYCLED LINES SHALL BE INSTALLED IN A CLASS 200 PURPLE COLORED PVC SLEEVE. PVC SLEEVE SHALL EXTEND 10 FEET ON EITHER SIDE OF THE POTABLE LINE FOR A TOTAL OF 20 FEET.
- INSTALLATION OF RECYCLED WATER IRRIGATION MAINLINE 24" FROM FACE OF SIDEWALK WILL PROVIDE THE NECESSARY 10" HORIZONTAL CLEARANCE FROM POTABLE MAINLINE IN STREET.
- VERTICAL CLEARANCE OF 12" MINIMUM IS MANDATORY WHEN CROSSING PATH OF POTABLE WATER LINE.
- ALL RECYCLED WATER IRRIGATION PIPE AND SLEEVES SHALL BE PURPLE AND LABELED AS SPECIFIED.
- IF POTABLE WATER LINE HAS LESS THAN (36") COVER, RECYCLED WATER LINE MUST CROSS BELOW POTABLE WATER LINE REFER TO THE WATER AGENCIES' STANDARDS DESIGN GUIDE FOR PIPE SEPARATION REQUIREMENTS.

**(K) RECYCLED / POTABLE PIPE CROSSING** NOT TO SCALE



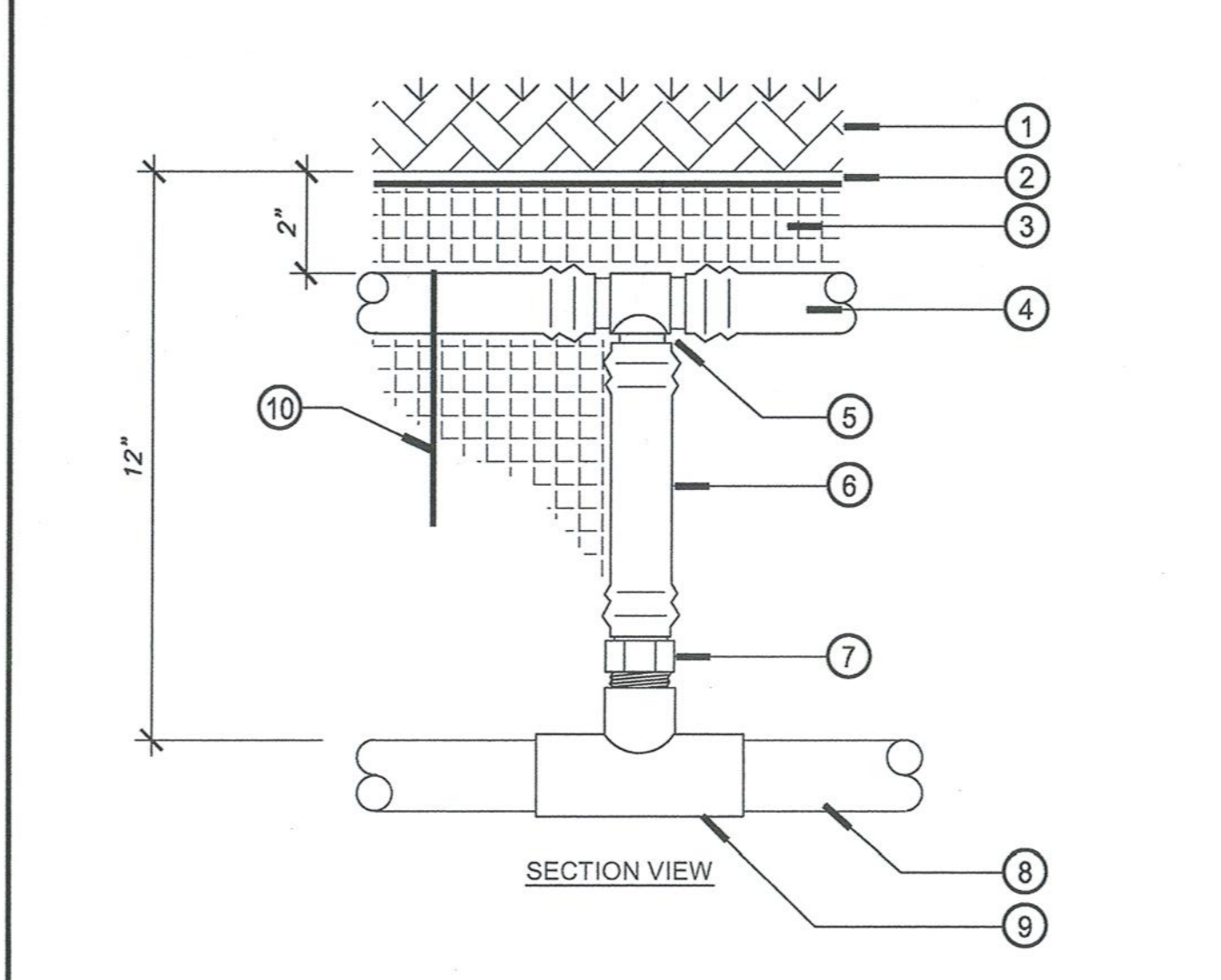
**LEGEND:**

1. REMOTE CONTROL VALVE - SEE LEGEND FOR TYPE.
- CONTROL WIRE CONNECTIONS, PRE-FILLED WITH WATER PROOF INSULATING GEL SEALANT - SEE LEGEND FOR TYPE - PROVIDE MINIMUM 24" COIL OF WIRE AT VALVE.
- DRIP FILTER - SEE LEGEND FOR TYPE.
- PRESSURE REGULATOR - SEE LEGEND FOR TYPE.
- PVC SCH 80 UNION, SIZE PER LINE.
- PLASTIC RECTANGULAR VALVE BOX (2 REQUIRED) WITH LOCKING "PURPLE" RECYCLED WATER COVER, USE STAINLESS BOLT, NUT, & WASHER. HEAT BRAND "RV" & CONTROLLER STATION NUMBER ONTO LID.
- FINISHED GRADE - SET TOP OF VALVE BOX 1/2" ABOVE GRADE IN TURF AREAS AND 2" ABOVE GRADE IN SHRUB / GROUND COVER AREAS.
- PVC SCH 40 MALE ADAPTER.
- PVC LATERAL LINE TO DRIP SYSTEM.
- NOMINAL SIZE SOLID BRICK - 4 REQUIRED, ONE AT EACH CORNER OF VALVE BOX.
- 1/2" ROUND WASHED PEA GRAVEL - MINIMUM 4" DEPTH.
- LANDSCAPE FABRIC.
- PVC SCH 80 NIPPLE (2" LENGTH, HIDDEN) AND PVC SCH 40 ELL.
- PVC MAINLINE - DEPTH PER SPECIFICATIONS.
- PVC SCH 80 NIPPLE (LENGTH 5" REQUIRED).
- PVC SCH 80 ELL.
- CHRISTY'S RECYCLED WATER WARNING TAG AND VALVE STATION # I.D. TAG ATTACHED TO VALVE BONNET BOLT.

**NOTES:**

- USE SCH 40 PVC 45 DEGREE ELLS TO TRANSITION TO DRIPLINE HEADER DEPTH.
- SET TOP OF VALVE BOX 1-1/2" ABOVE FINISHED GRADE IN GROUND COVER / SHRUB AREAS.
- USE TEFLON TAPE ON ALL THREADED FITTINGS, TYPICAL.
- INSTALL AIR RELIEF VALVE 18" FROM PAVING.

**(H) DRIP REMOTE CONTROL VALVE** NOT TO SCALE



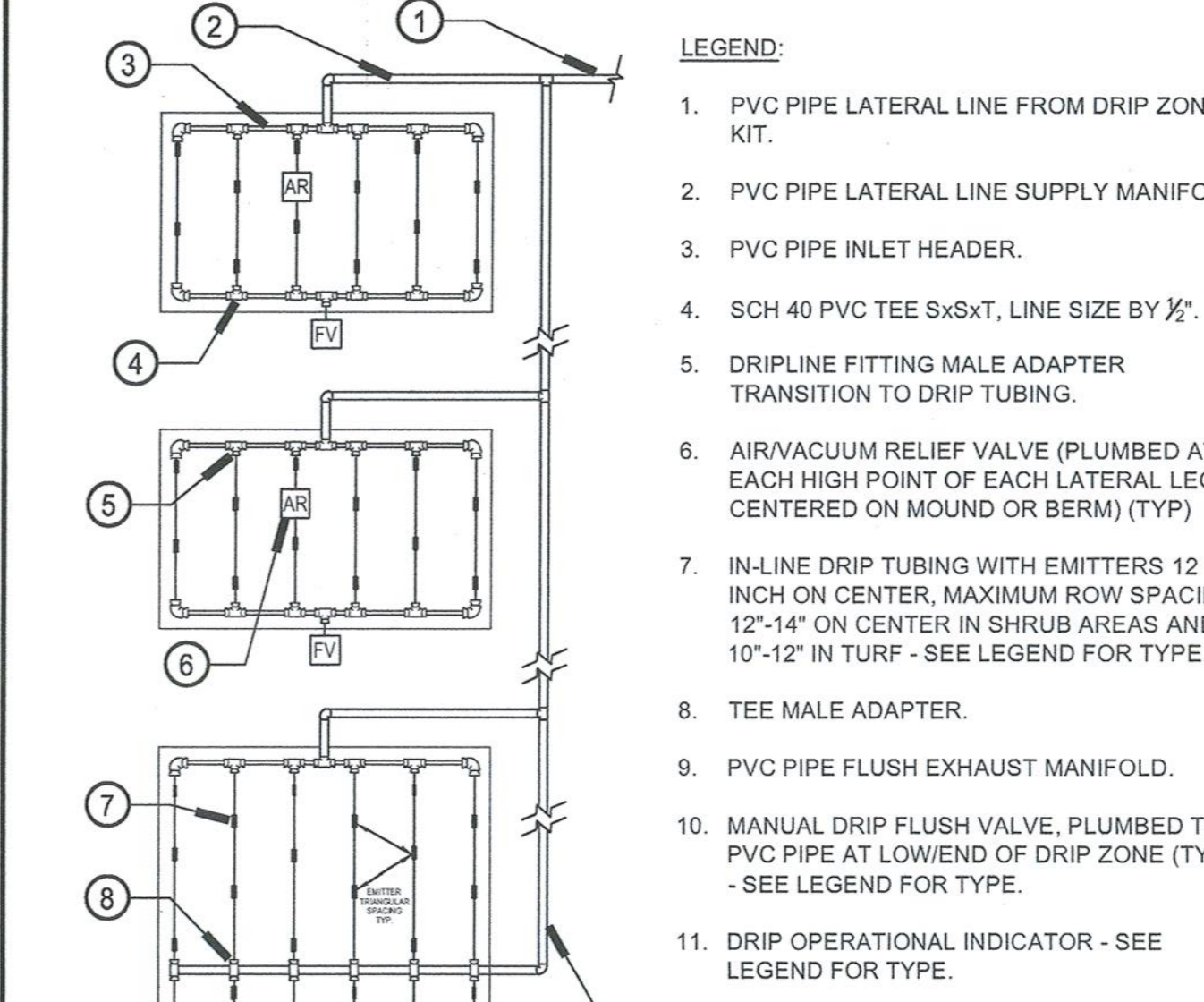
**LEGEND:**

1. BARK MULCH FOR SHRUB AREA PLANTING, SEE PLANTING PLAN FOR DEPTH AND TYPE.
2. FINISHED GRADE.
3. AMENDED SOIL.
4. DRIP TUBING - SEE LEGEND FOR TYPE.
- DRIPLINE BARB INSERT FITTINGS - SEE LEGEND FOR TYPE.
- BLANK POLY TUBING - LENGTH AS REQUIRED.
- DRIP TUBING MALE ADAPTER.
- PVC LATERAL LINE PIPING INLET OR EXHAUST MANIFOLD.
- SCH 40 PVC TEE SxSxT, LINE SIZE BY 1/2".
- 6" WIRE STAKES FIVE (5) FEET ON CENTER.

**NOTES:**

- AFTER COMPLETE SYSTEM FLUSH, INSTALL DRIP INDICATOR NOZZLE AND ADJUST TO FULLY CLOSED POSITION.
- FOR POTABLE WATER INSTALL "ORANGE" COLORED FLUSH NOZZLE. FOR RECYCLED WATER INSTALL "PURPLE" COLORED FLUSH NOZZLE.
- INSTALL POP-UP INDICATOR HEAD 10" FROM PERIMETER OF PLANTER / HARDSCAPE.
- DISCHARGE EXHAUST HEADER SHALL BE INSTALLED 12" BELOW FINISHED SOIL GRADE, TYPICAL.
- INSTALL MINIMUM ONE (1) DRIP INDICATOR / FLUSH ASSEMBLY PER DRIP ZONE.
- USE TEFLON TAPE ON ALL THREADED FITTINGS, TYPICAL (NO LIQUID TEFLON)

**(E) DRIPLINE CONNECTION** NOT TO SCALE



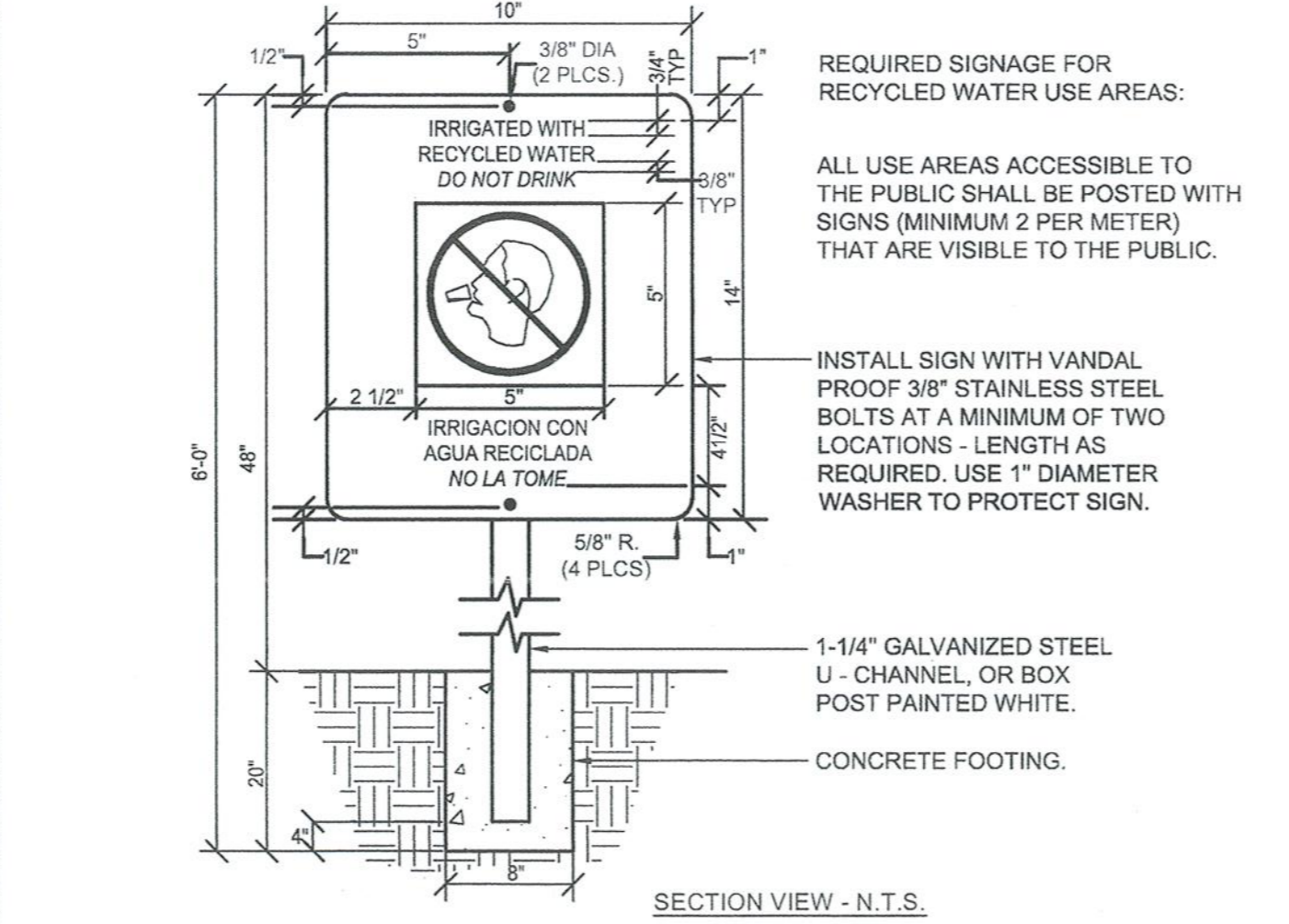
**LEGEND:**

1. PVC PIPE LATERAL LINE FROM DRIP ZONE KIT.
2. PVC PIPE LATERAL LINE SUPPLY MANIFOLD.
3. PVC PIPE INLET HEADER.
4. SCH 40 PVC TEE SxSxT, LINE SIZE BY 1/2".
5. DRIPLINE FITTING MALE ADAPTER TRANSITION TO DRIP TUBING.
- AIR/VACUUM RELIEF VALVE (PLUMBED AT EACH HIGH POINT OF EACH LATERAL LEG CENTERED ON MOUND OR BERM) (TYP)
- IN-LINE DRIP TUBING WITH EMITTERS 12 INCH ON CENTER, MAXIMUM ROW SPACING 12"-14" ON CENTER IN SHRUB AREAS AND 10"-12" IN TURF - SEE LEGEND FOR TYPE.
- TEE MALE ADAPTER.
- PVC PIPE FLUSH EXHAUST MANIFOLD.
- MANUAL DRIP FLUSH VALVE, PLUMBED TO PVC PIPE AT LOW END OF DRIP ZONE (TYP) - SEE LEGEND FOR TYPE.
- DRIP OPERATIONAL INDICATOR - SEE LEGEND FOR TYPE.
- PLANTER AREA PERIMETER.
- PERIMETER DRIPLINE LATERALS 18" FROM EDGE. REFER TO PIPE INSTALLATION DETAIL FOR DEPTH.
- PERIMETER DRIPLINE PIPE TO BE INSTALLED 4"-6" FROM PERIMETER OF PLANTER AREA, MINIMUM 12" DISTANCE FROM BUILDING.

**NOTES:**

- INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
- DRIP EMITTER LAYOUT SHALL BE TRIANGULAR SPACED.

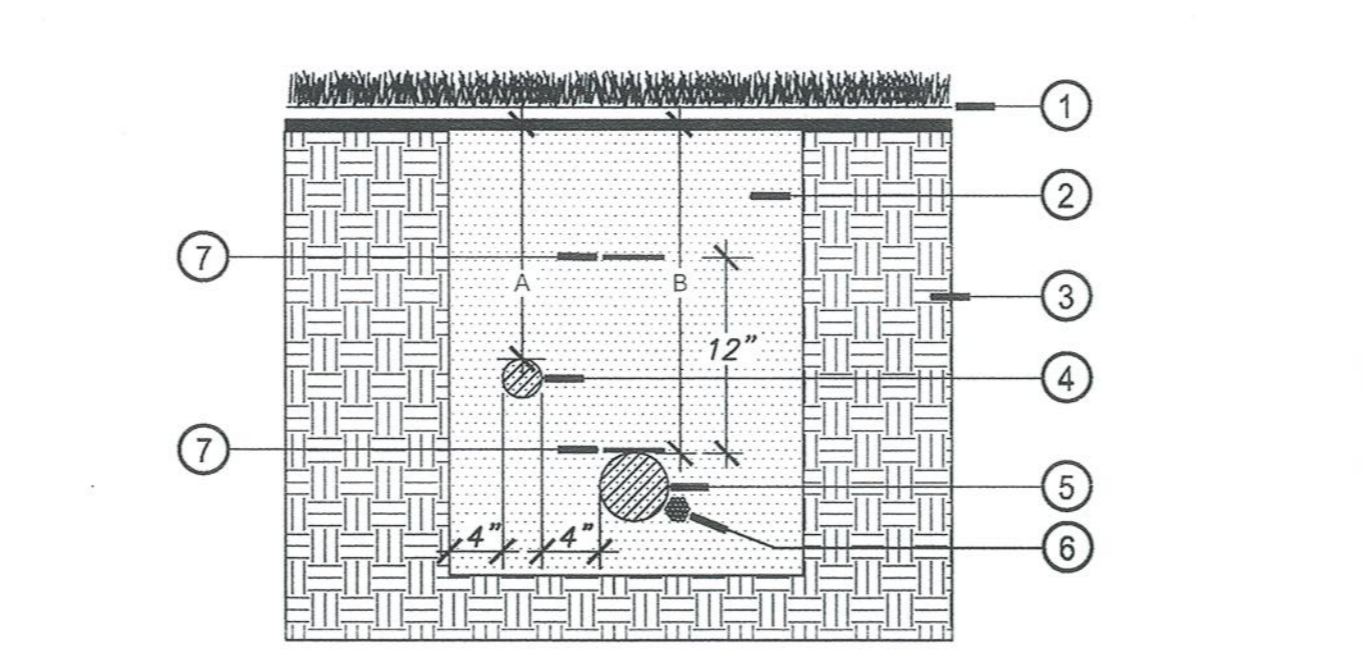
**(B) DRIPLINE LAYOUT (TYP)** NOT TO SCALE



**LEGEND:**

1. SIGN MATL: .063 THK ALUM (6063T-4)
- SIGN FACE: WHITE REFLECTIVE SHEETING 3M DIAMOND GRADE OR APPROVED EQUAL (PER CALIF. D.O.T. MAT'L'S SPECIFICATIONS) COLORS:  
-WHITE WILL BE USED FOR LETTERING AND THE PICTOGRAM BACKGROUND.  
-PURPLE (EQUAL TO SIGN 7) PERMANENT VIOLET 498) WILL BE USED FOR THE GENERAL BACKGROUND.  
-BLACK WILL BE USED FOR THE PICTOGRAM OUTLINE  
-RED WILL BE USED FOR THE "PROHIBIT" SYMBOL.
- SIGN POST INSTALLATION SHALL BE APPROVED BY THE WATER QUALITY TECHNICIAN.
- LOCATION OF SIGNS SHALL BE APPROVED BY THE CITY ENGINEER.
- VANDAL PROOF HARDWARE SHALL BE USED ON ALL CONNECTIONS FOR THE RECYCLED WATER SIGNAGE.

**(L) RECYCLED WATER SIGN** NOT TO SCALE



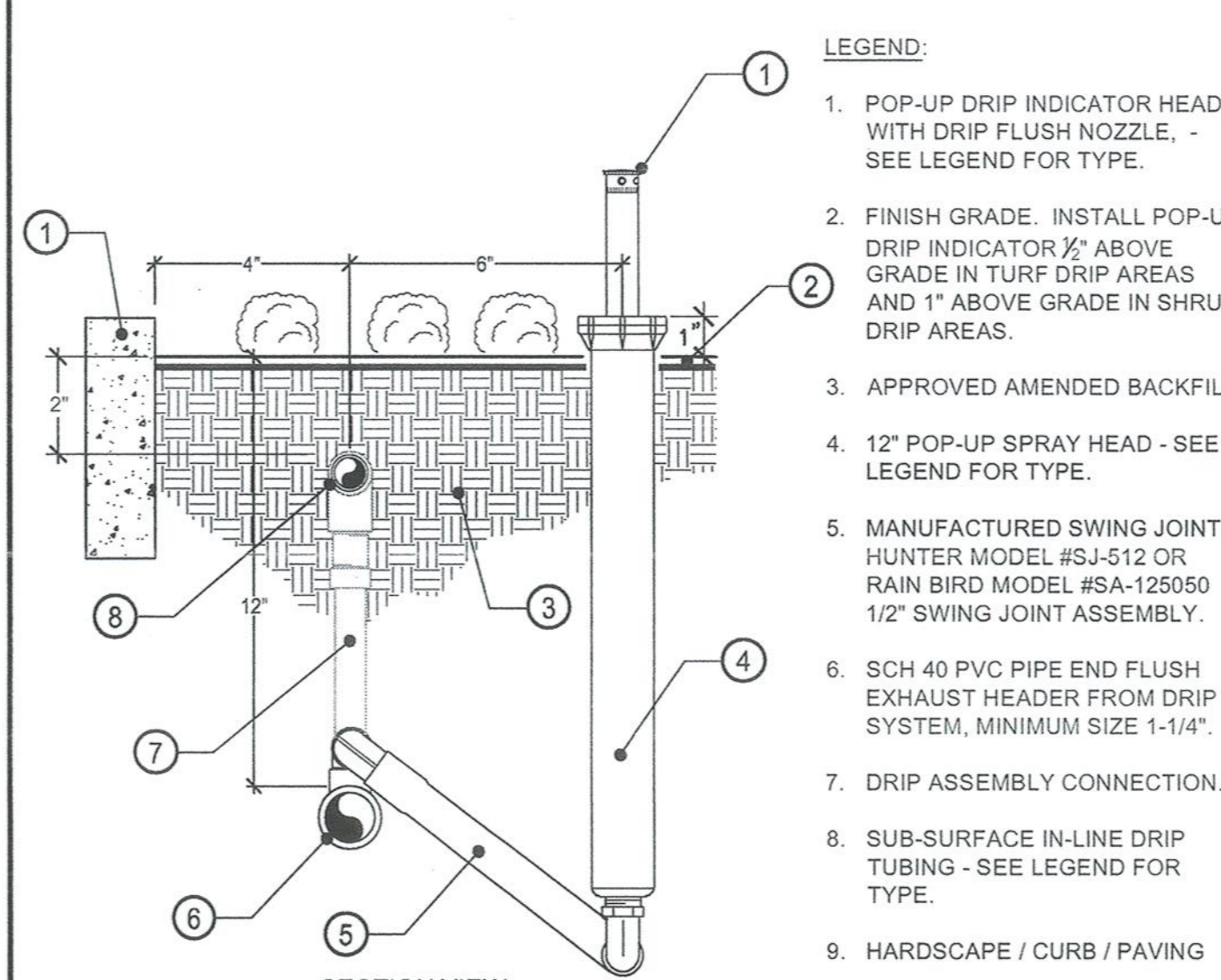
**LEGEND:**

1. FINISHED GRADE.
- CLEAN COMPACTED BACKFILL.
- UNDISTURBED SOIL.
- (PURPLE) "RECYCLED WATER" PVC LATERAL LINE PIPE, WITH WORDS "RECYCLED WATER-DO NOT DRINK" - SEE LEGEND FOR TYPE, SEE PLANS FOR SIZE.
- (PURPLE) "RECYCLED WATER" PVC MAINLINE PIPE, WITH WORDS "RECYCLED WATER-DO NOT DRINK" - SEE LEGEND FOR TYPE, SEE PLANS FOR SIZE.
- CONTROL WIRES, TAPE AND BUNDLE TO MAINLINE @ 10' O.C.
- TWO 3" WIDE, (PURPLE) "RECYCLED WATER", DETECTIBLE METALLIC MARKING TAPES CONTINUOUS ALONG MAINLINE ROUTING. ONE SHALL BE LOCATED IMMEDIATELY ON TOP OF MAINLINE AND ONE 12" ABOVE THE TOP OF MAINLINE.

**NOTES:**

- LINES MUST HAVE MINIMUM CLEARANCE OF 4" FROM EACH OTHER AND 24" FROM OTHER UTILITIES.
- RUN WIRING UNDER MAINLINE. TAPE AND BUNDLE @ 10' O.C.
- TIE A 24" WIRE LOOP IN ALL WIRING AT CHANGES IN DIRECTION.
- CONTRACTOR MUST ADJUST MAINLINE AROUND ALL STREET LIGHT LOCATIONS.

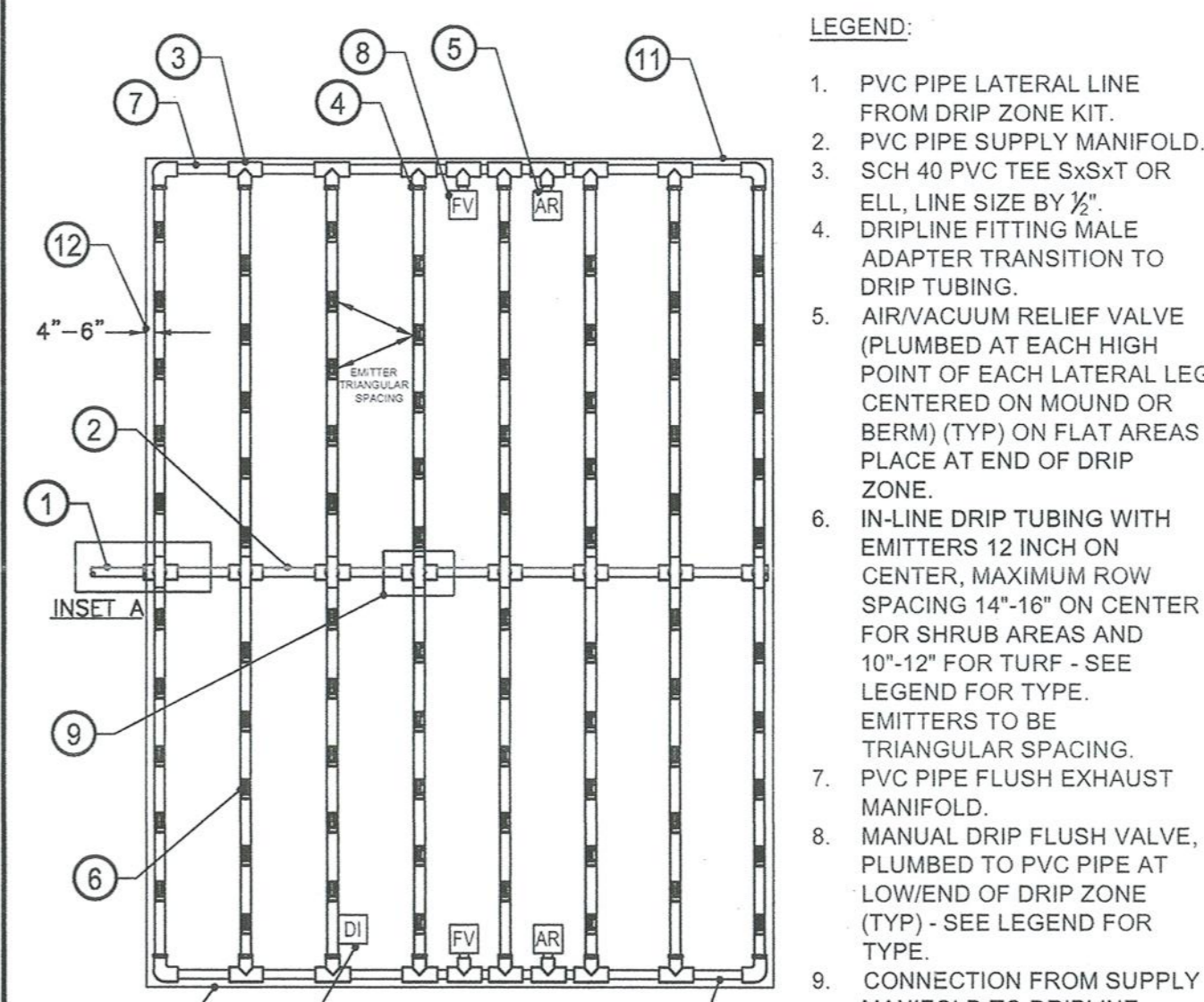
**(I) PIPE INSTALLATION** NOT TO SCALE



**LEGEND:**

1. POP-UP DRIP INDICATOR HEAD, WITH DRIP FLUSH NOZZLE, - SEE LEGEND FOR TYPE.
2. FINISH GRADE. INSTALL POP-UP DRIP INDICATOR 1/2" ABOVE GRADE IN TURF DRIP AREAS AND 1" ABOVE GRADE IN SHRUB DRIP AREAS.
3. APPROVED AMENDED BACKFILL.
- 12" POP-UP SPRAY HEAD - SEE LEGEND FOR TYPE.
- MANUFACTURED SWING JOINT-HUNTER MODEL #SJ-512 OR RAIN BIRD MODEL #SA-125050 1/2" SWING JOINT ASSEMBLY.
- SCH 40 PVC PIPE END FLUSH EXHAUST HEADER FROM DRIP SYSTEM, MINIMUM SIZE 1-1/4".
- DRIP ASSEMBLY CONNECTION.
- SUB-SURFACE IN-LINE DRIP TUBING - SEE LEGEND FOR TYPE.
- HARDSCAPE / CURB / PAVING

**(F) DRIP COMBINATION FLUSH VALVE / DRIP INDICATOR POP-UP HEAD** NOT TO SCALE



**LEGEND:**

1. PVC PIPE LATERAL LINE FROM DRIP ZONE KIT.
2. PVC PIPE SUPPLY MANIFOLD.
3. SCH 40 PVC TEE SxSxT OR ELL, LINE SIZE BY 1/2".
4. DRIPLINE FITTING MALE ADAPTER TRANSITION TO DRIP TUBING.
- AIR/VACUUM RELIEF VALVE (PLUMBED AT EACH HIGH POINT OF EACH LATERAL LEG CENTERED ON MOUND OR BERM) (TYP) ON FLAT AREAS PLACE AT END OF DRIP ZONE.
- IN-LINE DRIP TUBING WITH EMITTERS 12 INCH ON CENTER, MAXIMUM ROW SPACING 14"-16" ON CENTER FOR SHRUB AREAS AND 10"-12" FOR TURF - SEE LEGEND FOR TYPE.
- EMITTERS TO BE TRIANGULAR SPACING.
- PVC PIPE FLUSH EXHAUST MANIFOLD.
- MANUAL DRIP FLUSH VALVE, PLUMBED TO PVC PIPE AT LOW END OF DRIP ZONE (TYP) - SEE LEGEND FOR TYPE.
- CONNECTION FROM SUPPLY MANIFOLD TO DRIPLINE (TYPICAL) - SEE INSET "A"
- DRIP OPERATIONAL INDICATOR - SEE LEGEND FOR TYPE.
- PLANTER AREA PERIMETER.
- PERIMETER DRIPLINE PIPE TO BE INSTALLED 4"-6" FROM PERIMETER OF PLANTER AREA, AND MINIMUM 12" CLEARANCE FROM BUILDING.
- BARB X FEMALE FITTING (TYPICAL), SEE LEGEND FOR TYPE.
- 1/2" PVC NIPPLE, LENGTH AS NECESSARY.

**(C) DRIPLINE LAYOUT (TYP)** NOT TO SCALE

FOR IRRIGATION PLAN - SEE SHEET L1.1  
 FOR IRRIGATION LEGEND & CALCULATIONS - SEE SHEET L2.1  
 FOR IRRIGATION NOTES - SEE SHEET L2.2  
 FOR LANDSCAPE SPECIFICATIONS - SEE PROJECT MANUAL

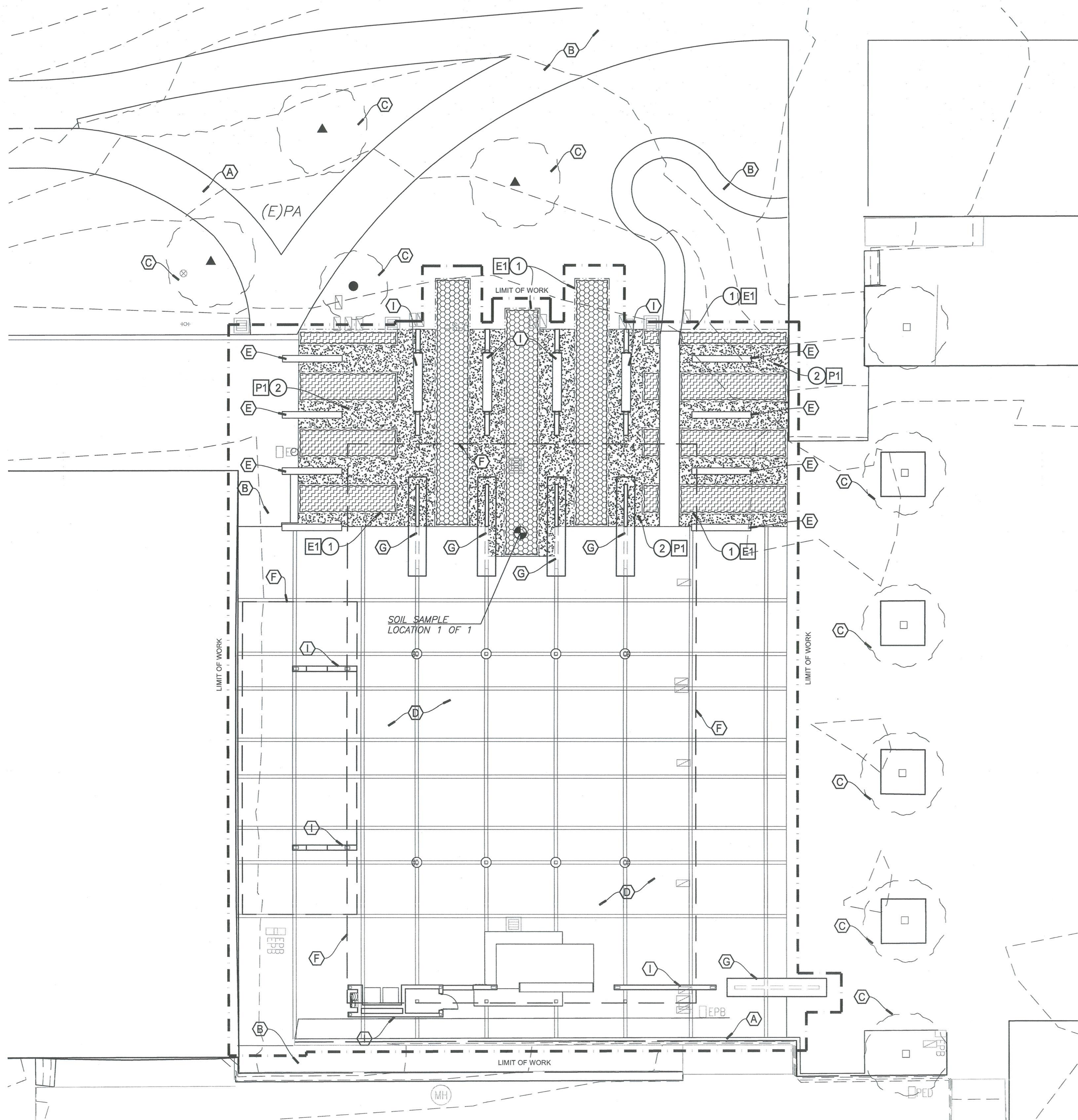
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**IRRIIGATION DETAILS**  
**CAMPUS CENTER SHADE STRUCTURE**  
**MEASURE L PROJECTS AT CHAFFEY COLLEGE**  
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**L3.1**  
 PROJECT NUMBER: 75-16001-10  
 ISSUE DATE: 07/26/2017





EXISTING PLANT LEGEND		
SYMBOL	BOTANICAL NAME	COMMON NAME
TREES:		
(E)	PYRUS C. 'BRADFORD'	BRADFORD PEAR
(E)	LIRIODENDRON	TULIP TREE
(E)	ROBINIA AMBIGUA	PURPLE ROBE
	EXISTING SHRUBS AND GROUNDCOVERS TO REMAIN	

SYMBOL LEGEND	
---	LIMIT OF WORK
(E)PA	EXISTING PLANTER AREA
(E)TURF	EXISTING TURF AREA
FOC	FACE OF CURB
AL	ALIGN

CONSTRUCTION LEGEND		
SYMBOL	DESCRIPTION	DETAIL REF.
①	FURNISH AND INSTALL ALUMINUM EDGING	C, L5.1
②	INSTALL CRUSHED GRAVEL	C, L5.1

THE FOLLOWING ITEMS ARE FOR REFERENCE ONLY.	
(A)	EXISTING CONCRETE WALL (PROTECT IN PLACE)
(B)	EXISTING CONCRETE PAVING (PROTECT IN PLACE)
(C)	EXISTING TREES TO BE PROTECTED IN PLACE. SEE TREE PROTECTION NOTES.
(D)	NEW CONCRETE PAVING PER ARCHITECT'S PLAN
(E)	NEW LOW CONCRETE SEATWALL PER ARCHITECT'S PLAN
(F)	SHADE STRUCTURE ROOF OUTLINE PER ARCHITECT'S PLAN
(G)	BUILT-IN WOOD PLANK/CONCRETE BENCH PER ARCHITECT'S PLAN
(H)	SITE FURNITURE PER ARCHITECT'S PLAN
(I)	SHADE STRUCTURE WALLS PER ARCHITECT'S PLAN

### TREE PROTECTION NOTES

- THE LIMITS OF ALL TREE PROTECTION ZONES SHALL BE STAKED IN THE FIELD. A 6'-0" HIGH CHAIN LINK FENCE WITH POSTS SUNK INTO THE GROUND SHALL BE ERRECTED TO ENCLOSE THE TREE PROTECTION ZONE.
- THE TREE PROTECTION ZONE (TPZ) IS DEFINED AS THE LARGER OF THE DRIP LINE OF THE TREE OR THE DISTANCE FROM THE TRUNK EQUAL TO ONE (1) FOOT FOR EACH INCH OF TRUNK DIAMETER MEASURED AT FOUR AND A HALF (4.5) FEET ABOVE EXISTING GRADE (AKA DBH; DIAMETER AT BREAST HEIGHT).
- FENCES ARE TO REMAIN UNTIL ALL SITE WORK HAS BEEN COMPLETED. FENCES MAY NOT BE RELOCATED OR MOVED WITHOUT THE WRITTEN PERMISSION OF THE LANDSCAPE ARCHITECT.
- STRUCTURES AND UNDERGROUND FEATURES TO BE REMOVED WITHIN THE TREE PROTECTION ZONE SHALL USE THE SMALLEST EQUIPMENT POSSIBLE, AND OPERATE FROM OUTSIDE THE TREE PROTECTION ZONE.
- IF TEMPORARY HAUL OR ACCESS ROADS MUST PASS OVER THE ROOT AREA OF TREES TO BE RETAINED, A ROAD BED OF 6" OF MULCH OR GRAVEL SHALL BE CREATED TO PROTECT THE SOIL. THE ROAD BED MATERIAL SHALL BE REPLENISHED AS NECESSARY TO MAINTAIN A 6" DEPTH.
- CONSTRUCTION TRAILERS AND TRAFFIC AND STORAGE AREAS MUST REMAIN OUTSIDE FENCED AREAS AT ALL TIMES.
- NO MATERIALS, EQUIPMENT, WASTE OR WASHOUT WATER MAY BE DEPOSITED, STORED, OR PARKED WITHIN THE TREE PROTECTION ZONE. NO DEBRIS OR GARBAGE MAY BE DUMPED OR BURIED WITHIN THE TREE PROTECTION ZONE.
- ANY GRADING, CONSTRUCTION, DEMOLITION OR OTHER WORK THAT IS EXPECTED TO ENCOUNTER TREE ROOTS, MUST BE MONITORED BY THE LANDSCAPE ARCHITECT.
- ALL UNDERGROUND UTILITIES AND DRAIN OR IRRIGATION LINES SHALL BE ROUTED OUTSIDE THE TREE PROTECTION ZONE. IF REROUTING IS NOT POSSIBLE, TRENCHING WITHIN THE TPZ IS TO BE PERFORMED BY AIRSPADE UNDER THE SUPERVISION AND DIRECTION OF A LICENSED ARBORIST. IF AT ANY TIME, TWENTY-FIVE (25) PERCENT OF THE AREA WITHIN THE ROOT PROTECTION ZONE WOULD BE SEPARATED FROM THE TREE BY A TRENCH, THE LINE SHALL BE LOCATED BY BORING.
- NO ROOTS LARGER THAN ONE INCH (1.5") DIAMETER SHALL BE CUT UNLESS REVIEWED AND APPROVED BY LICENSED ARBORIST. ALL SMALLER ROOTS THAT REQUIRE CUTTING SHALL BE CUT WITH PRUNING SAWS (NO TRENCHES OR BACKHOES). CUTS SHALL BE MADE FLUSH WITH THE SIDE OF THE EXCAVATION.
- MINOR ROOT DAMAGE DURING GRADING OR CONSTRUCTION SHALL BE PRUNED TO SOUND TISSUE AND CUT CLEANLY WITH A SAW. CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT IMMEDIATELY IN THE EVENT OF EXTENSIVE ROOT DAMAGE.
- ADDITIONAL TREE PRUNING REQUIRED FOR CLEARANCE DURING CONSTRUCTION MUST BE PERFORMED BY A QUALIFIED ARBORIST OR AT THE DIRECTION OF THE LANDSCAPE ARCHITECT AND NOT BY CONSTRUCTION PERSONNEL.
- EROSION CONTROL DEVICES SUCH AS SILT FENCING, DEBRIS BASINS, AND WATER DIVERSION STRUCTURES SHALL BE INSTALLED TO PREVENT SILTATION AND/OR EROSION WITHIN THE TREE PROTECTION ZONE.
- SPOIL FROM TRENCHES OR OTHER EXCAVATIONS SHALL NOT BE PLACED WITHIN THE TREE PROTECTION ZONE, EITHER TEMPORARILY OR PERMANENTLY.
- IF INJURY SHOULD OCCUR TO ANY TREE DURING CONSTRUCTION, THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY IN ORDER TO RECOMMEND EVALUATION BY A LICENSED ARBORIST. PROCUREMENT OF A LICENSED ARBORIST SHALL BE AT NO ADDITIONAL COST TO THE OWNER.

### ADDITIONAL PLANTING NOTES:

- ON-CENTER SPACINGS NOTED ON THE PLANT LEGEND TAKE PRECEDENCE PLANT COUNTS OVER OR SYMBOLS SHOWN ON THE DRAWING.
- CONTRACTOR TO SUBMIT SOIL PREPARATION AND BACKFILL SPECIFICATIONS TO LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL AT LEAST FOURTEEN (14) DAYS PRIOR TO INSTALLATION OF SOIL PREPARATION OR PLANT MATERIALS.
- SOIL PREPARATION AND BACKFILL AMENDMENTS PER SPECIFICATION AS RECOMMENDED BY AGRONOMIC SOIL TEST REPORT.
- MULCH ALL SHRUB AND GROUNDCOVER AREA WITH A 3" DEEP LAYER OF MEDIUM GRIND MULCH PER SPECIFICATION, AT THE CONCLUSION OF PLANTING OPERATIONS. SUBMIT SAMPLE TO LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.

PLANT LEGEND								
SYMBOL	ABBRV.	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	DESCRIPTION	QUANTITY	WATER USE
TREES								
SHRUBS, GROUNDCOVERS & VINES								
	HES PAR	HESPERALOE PARVIFLORA 'BRAKE LIGHTS'	RED YUCCA	15 GAL.	36" O.C.	STRAPPY ACCENT	40	L
	ALO L.G.	MUHLENBERGIA C. 'REGAL MIST'	PINK MUHLY	1 GAL.	36" O.C.	ORNAMENTAL GRASS	105	M

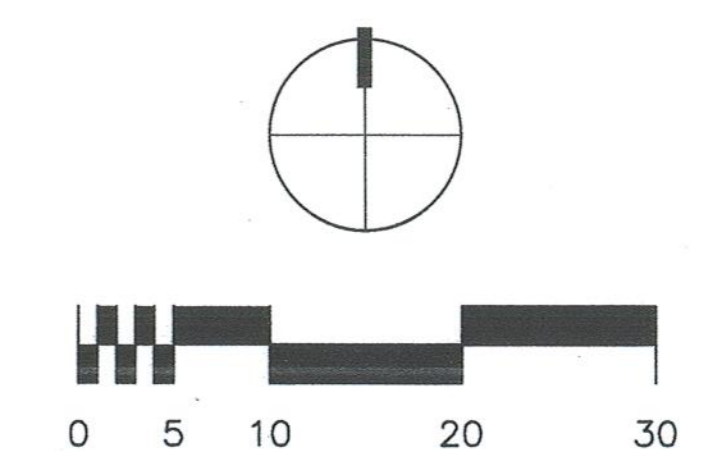
WATER USE KEY:  
 VL = VERY LOW WATER USE, L = LOW WATER USE, M = MODERATE WATER USE, H = HIGH WATER USE. WATER USE STATED IS PER A GUIDE TO ESTIMATING IRRIGATION WATER NEEDS OF LANDSCAPE PLANTINGS IN CALIFORNIA (ALSO REFERRED TO AS WUCOLS).

COLOR AND FINISH SCHEDULE					
SYMBOL	KEY	DESCRIPTION	MANUFACTURER	COLOR	COMMENTS
	P1	3/4" CRUSHED GRAVEL	SOUTHWEST BOULDER & STONE (877)792-7625	DESERT GOLD (MATCH EXIST)	
	E1	3/16" X 5.5" ALUMINUM EDGING	PERMALOC	BLACK DURAFLEX	

NOTES:  
 A. MOCK-UPS AND SAMPLES ARE REQUIRED ON THIS JOB. SEE MOCK-UP REQUIREMENTS BELOW.

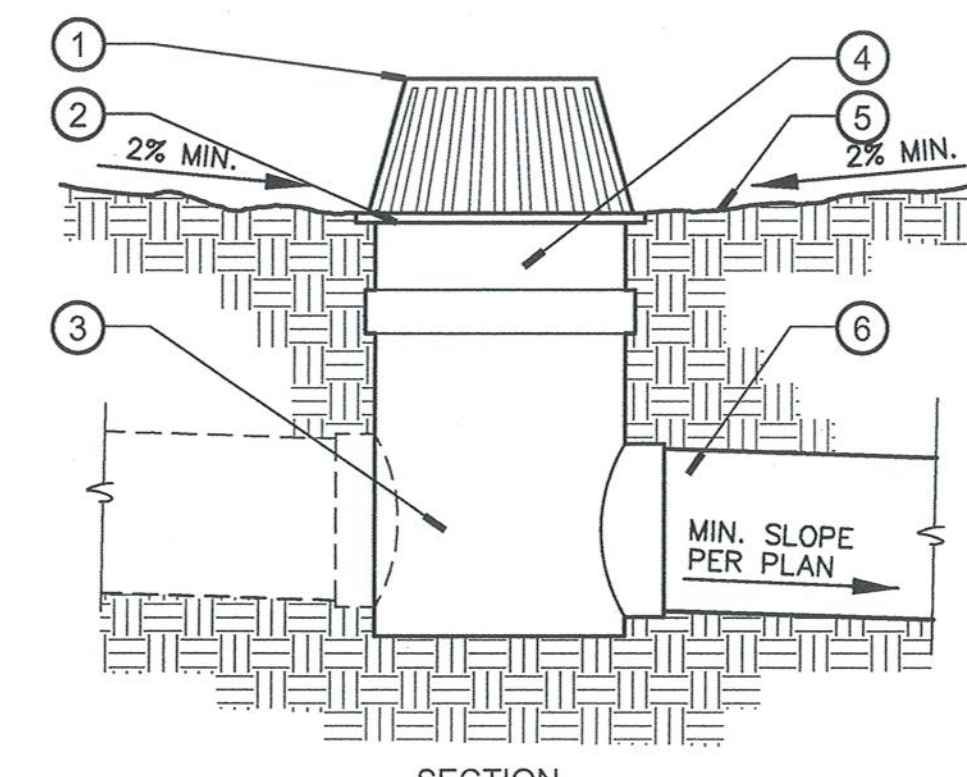
DENOTES SOIL SAMPLE LOCATION - REFER TO NOTE 'H' OF PLANTING NOTES, SHEET L5.1, FOR ADDITIONAL INFORMATION.

FOR PLANTING DETAILS & NOTES, SEE SHEET L5.1  
 FOR SPECIFICATIONS, SEE PROJECT MANUAL



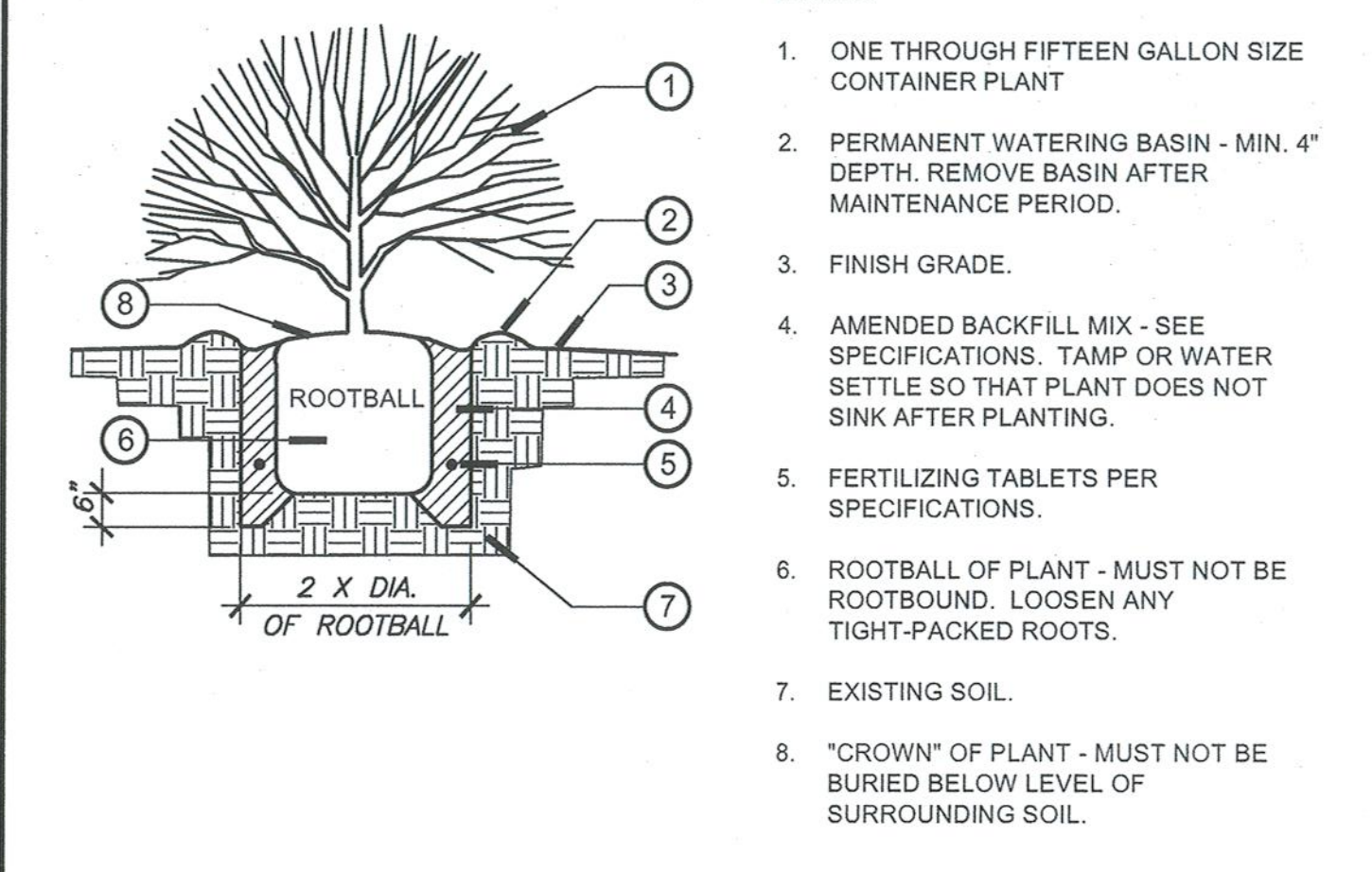
**PLANTING NOTES**

- A. REFER TO PLANTING SPECIFICATIONS AND DETAILS FOR SOIL PREPARATION, FERTILIZATION, MULCHING AND OTHER PLANTING INFORMATION.
- B. NOTIFY THE OWNER'S AUTHORIZED REPRESENTATIVE AND THE CITY INSPECTOR 48 HOURS PRIOR TO COMMENCEMENT OF WORK TO COORDINATE PROJECT INSPECTION SCHEDULES.
- C. VERIFY ALL EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS BEFORE PROCEEDING WITH THE WORK. NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY SHOULD FIELD CONDITIONS VARY FROM THOSE SHOWN ON PLAN.
- D. REPORT DISCREPANCIES IN THE DRAWINGS OR BETWEEN THE DRAWINGS AND ACTUAL FIELD CONDITIONS TO THE LANDSCAPE ARCHITECT. CORRECTED DRAWINGS OR INSTRUCTION SHALL BE ISSUED PRIOR TO THE CONTINUATION OF THIS WORK. ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY CORRECTIONS DUE TO FAILURE TO REPORT KNOWN DISCREPANCIES.
- E. LOCATE ALL EXISTING UTILITIES WHETHER SHOWN HEREON OR NOT AND PROTECT THEM FROM DAMAGE. NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY AND ASSUME FULL RESPONSIBILITY FOR EXPENSE OF REPAIR OR REPLACEMENT IN CONJUNCTION WITH DAMAGED UTILITIES.
- F. LOCATION OF N.I.C. CONSTRUCTION ELEMENTS SUCH AS LIGHTS, SIGNS, VENTS, HYDRANTS, TRANSFORMERS, ETC. ARE APPROXIMATE. NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY SHOULD THE LOCATION OF THESE ITEMS INTERFERE WITH THE PROPER EXECUTION OF WORK.
- G. OBTAIN ALL SOIL FOR LANDSCAPE PLANTING AREAS OR BERMS FROM ON-SITE EXCAVATIONS SHOULD IMPORT SOIL BE NECESSARY. SUBMIT IMPORT SOIL TESTING RESULTS FOR APPROVAL PRIOR TO IMPORTATION. SOIL SHALL BE SANDY LOAM CONTAINING NO TOXIC CHEMICALS OR ELEMENTS WHICH MAY INHIBIT OR RETARD NORMAL PLANT GROWTH.
- H. BEFORE BIDDING AND AFTER ROUGH GRADES HAVE BEEN ESTABLISHED IN PLANTING AREAS, HAVE SOIL SAMPLES TAKEN AT THE LOCATIONS INDICATED ON PLANTING PLAN. HAVE SAMPLES TESTED BY WAYPOINT ANALYTICAL, (714) 282-8777, FOR SOIL FERTILITY. TAKE TWO SAMPLES AT EACH LOCATION: (1) GROUND LEVEL TO 10" DEEP, (2) 24" TO 36" DEEP. EACH SAMPLE SHALL CONTAIN APPROXIMATELY 1 QUART OF SOIL TO BE LABELED PER LOCATION AND DEPTH. INSTALL SOIL PREPARATION AND BACK FILL MIX TO CONFORM TO THESE RECOMMENDATIONS ONLY UPON RECEIPT OF WRITTEN CHANGE ORDER FROM THE OWNER. SUBMIT SOIL REPORT TO LANDSCAPE ARCHITECT PRIOR TO PLANTING.
- I. KILL AND REMOVE ALL EXISTING WEEDS FROM SITE AREAS PER SPECIFICATIONS.
- J. ASSURE POSITIVE DRAINAGE IN ALL PLANTING AREAS, 2% MINIMUM.
- K. LOCATE AND TAG ALL PLANT MATERIAL. MATERIAL SHALL BE IN CONFORMANCE WITH PLANTING PLAN DESCRIPTIONS AND SPECIFICATIONS. ALL PLANT MATERIAL IS SUBJECT TO REVIEW AND APPROVAL PRIOR TO INSTALLATION. PROVIDE PHOTOS OF REPRESENTATIVE EXAMPLES OF EACH TAGGED BLOCK TO LANDSCAPE ARCHITECT MINIMUM 21 DAYS BEFORE ANTICIPATED DELIVERY. PHOTOS SHALL INCLUDE A PERSON FOR SCALE PURPOSES. LANDSCAPE ARCHITECT MAY OPT TO REVIEW MATERIAL AT GROWING NURSERY. MATERIAL DELIVERED TO THE SITE MAY BE REJECTED BASED ON UNHEALTHY APPEARANCE OR NON-CONFORMANCE WITH SPECIFICATIONS EVEN IF PREVIOUSLY REVIEWED BY THE LANDSCAPE ARCHITECT OR THE OWNER.
- L. ALL TREES WITHIN A SPECIES SHALL HAVE MATCHING FORM.
- M. FINAL LOCATION OF ALL PLANT MATERIALS SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER'S AUTHORIZED REPRESENTATIVE.
- N. PLANTING QUANTITIES ARE GIVEN FOR CONVENIENCE ONLY. PLANT SYMBOLS AND SPECIFIED SPACING SHALL TAKE PRECEDENCE.
- O. AT EDGES OF PLANTING AREAS, THE CENTER LINE OF THE LAST ROW OF SHRUBS AND/OR GROUND COVER SHALL BE LOCATED NO FARTHER FROM THE EDGE THAN ONE-HALF THE SPECIFIED ON CENTER SPACING.
- P. INSTALL GROUND COVER AND/OR SHRUB MASSES WITH TRIANGULAR SPACING UNLESS OTHERWISE INDICATED.
- Q. ALL CURVE TO CURVE AND CURVE TO TANGENT LINES SHALL BE NEAT, TRIM, SMOOTH AND UNIFORM.
- R. REMOVE ALL NURSERY STAKES AND ESPALIER RACKS IMMEDIATELY AFTER INSTALLATION UPON PROVIDING SUPPORT PER PLAN.
- S. DURING THE LENGTH OF THE GUARANTEE PERIOD, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER STAKING AND/OR GUYING OF TREES TO ENSURE STABILITY.
- T. MULCH ALL LANDSCAPE AREAS (EXCLUDING TURF) HAVING LESS THAN A 2:1 SLOPE WITH A 3" DEEP LAYER OF MEDIUM GRIND BARK MULCH, PER SPECIFICATIONS, AT THE CONCLUSION OF PLANTING OPERATIONS. SUBMIT SAMPLE TO LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
- U. ANNUAL COLOR TO BE SELECTED BY LANDSCAPE ARCHITECT AT TIME OF INSTALLATION. REQUEST RECOMMENDATION A MINIMUM OF 48 HOURS IN ADVANCE OF NEED FOR DELIVERY.
- V. CONTRACTOR SHALL REPLACE ANY EXISTING PLANT MATERIAL WHICH IS DAMAGED BY CONSTRUCTION OPERATIONS. REPLACEMENT PLANT MATERIAL MUST BE OF MATCHING SPECIES, INSTALLED FROM THE FOLLOWING MINIMUM SIZE: 15-GALLON TREE, 1-GALLON SHRUB, FLATTED GROUNDCOVER AND SODDED TURF.
- W. INSTALLATIONS THAT ARE ADJACENT OPEN SPACE, NATURALIZED SLOPES OR UNDEVELOPED LAND ARE SUBJECT TO DAMAGE BY RODENTS OR DEER AND SHALL BE TREATED WITH AN APPROPRIATE REPELLENT IN A SPRAY AND/OR TABLET FORM. REPELLENT BY GROPOWER OR APPROVED EQUAL, THAT PROVIDES IMMEDIATE AND LONG TERM PROTECTION, SHALL BE USED.
- X. ROOT BARRIERS SHALL BE INSTALLED AT ALL TREES WITHIN 5 FEET OF ANY HARDSCAPE PAVEMENT OR CURB. ROOT BARRIERS ARE TO BE UB24-2" BY DEEP ROOT CORPORATION, (800) 458-7668, INSTALLED PER MANUFACTURER'S SPECIFICATIONS. NOTE: ROOT BARRIERS SHALL NOT BE WRAPPED AROUND THE ROOTBALL. ROOT BARRIERS INSTALLED ADJACENT TO A BIOSWALE SHALL NOT INTERFERE WITH DRAINAGE TO OR FROM THE BIOSWALE SYSTEM.

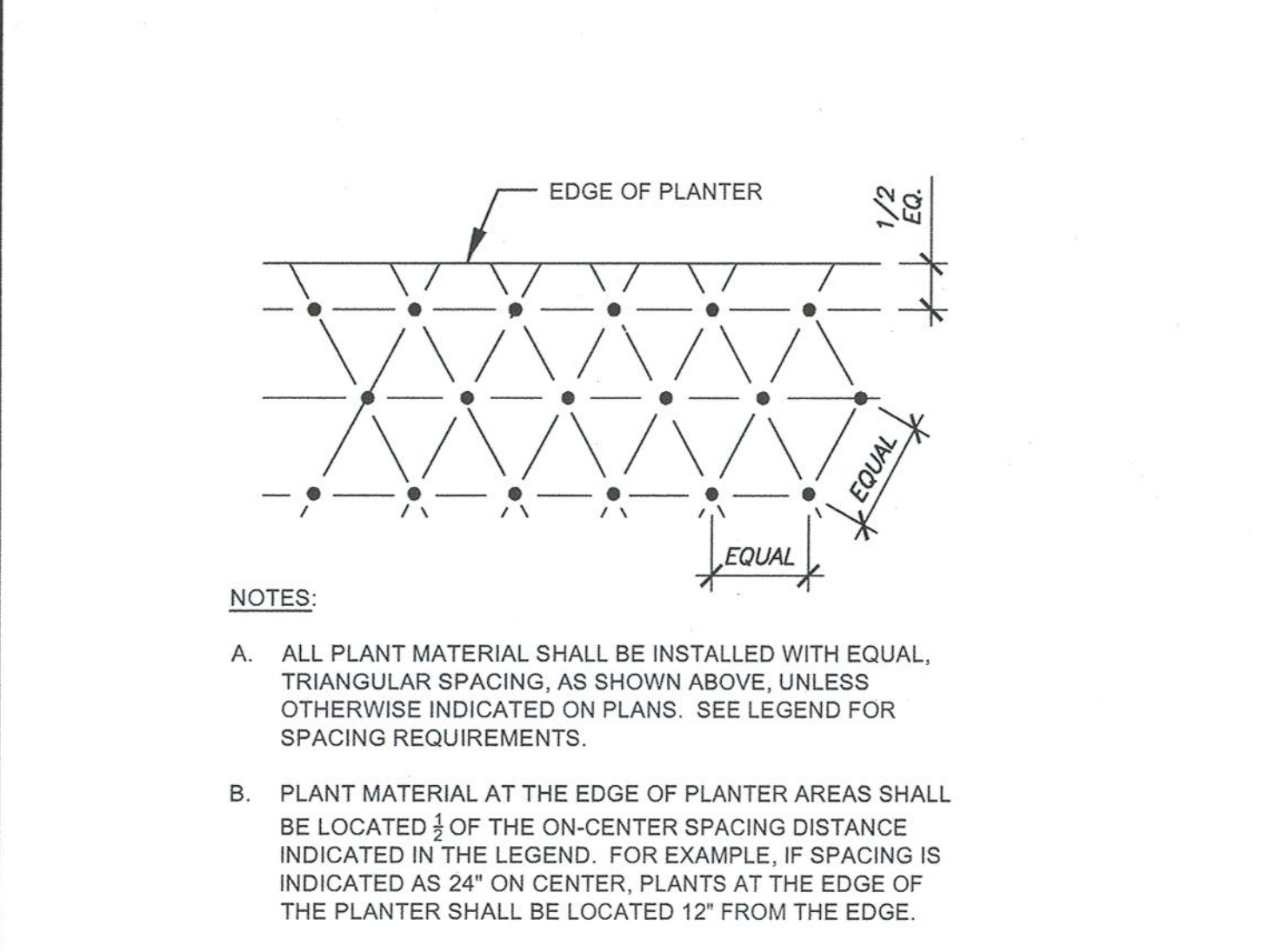


- LEGEND:**
- 1. 6" ATRIUM GRATE, MODEL NO. 80, IN ALL SHRUB AREAS
  - 2. 6" DRAIN GRATE, MODEL NO. NDS 50 (GREEN)
  - 3. 6" SPEED-BASIN
  - 4. DRAIN RISER PIPE
  - 5. FINISH GRADE
  - 6. SOLID PVC DRAINLINE, 4" DIAMETER OR AS SPECIFIED
- NOTE:**  
REFER TO CIVIL ENGINEER'S DRAWINGS FOR CONNECTION TO DRAINAGE SYSTEM.
- PRODUCTS LISTED ABOVE ARE MANUFACTURED BY NATIONAL DRAIN SUPPLIES, INC., (213) 896-0591, OR APPROVED EQUAL.
- REFER TO CONSTRUCTION LEGEND AND SCHEDULE.

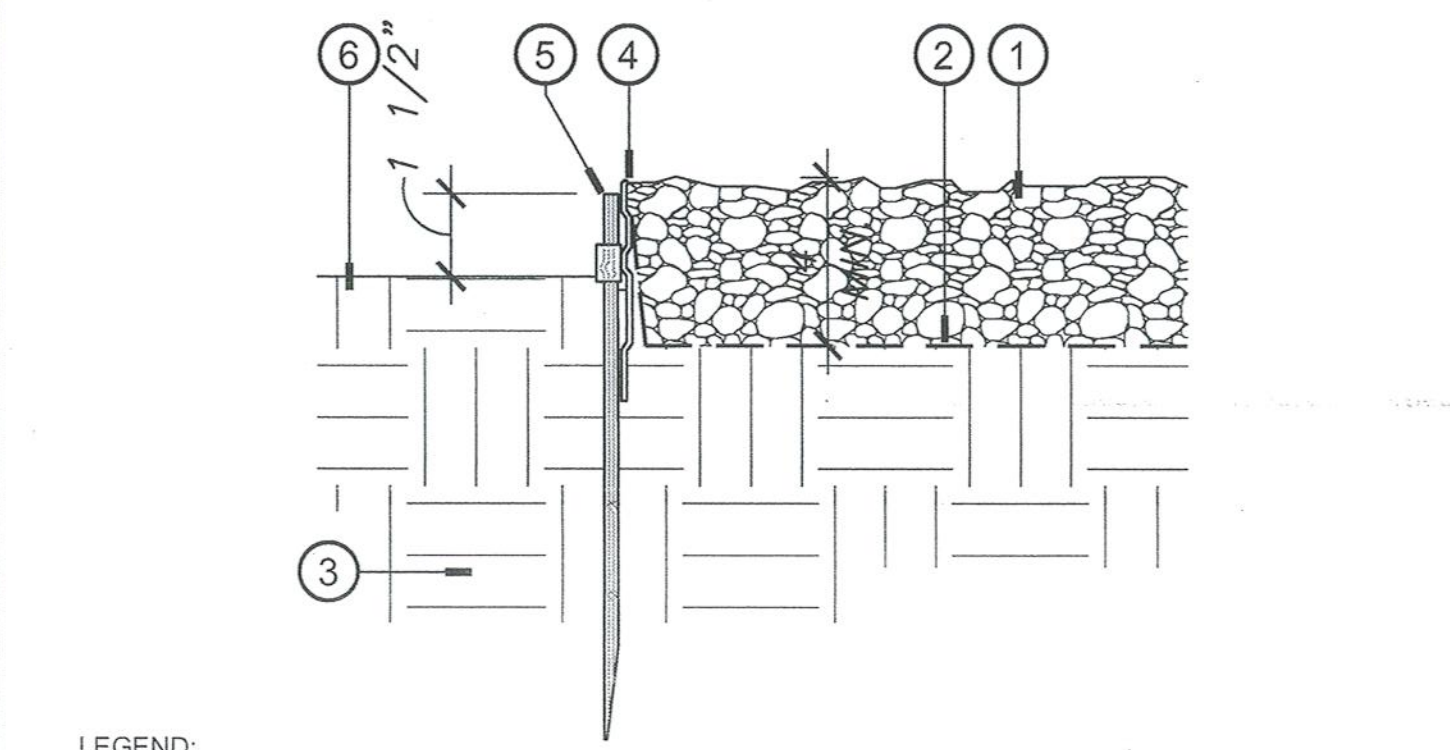
**D ATRIUM DRAIN IN RAISED PLANTER** SCALE: N.T.S.



**A SHRUB PLANTING** SCALE: N.T.S.

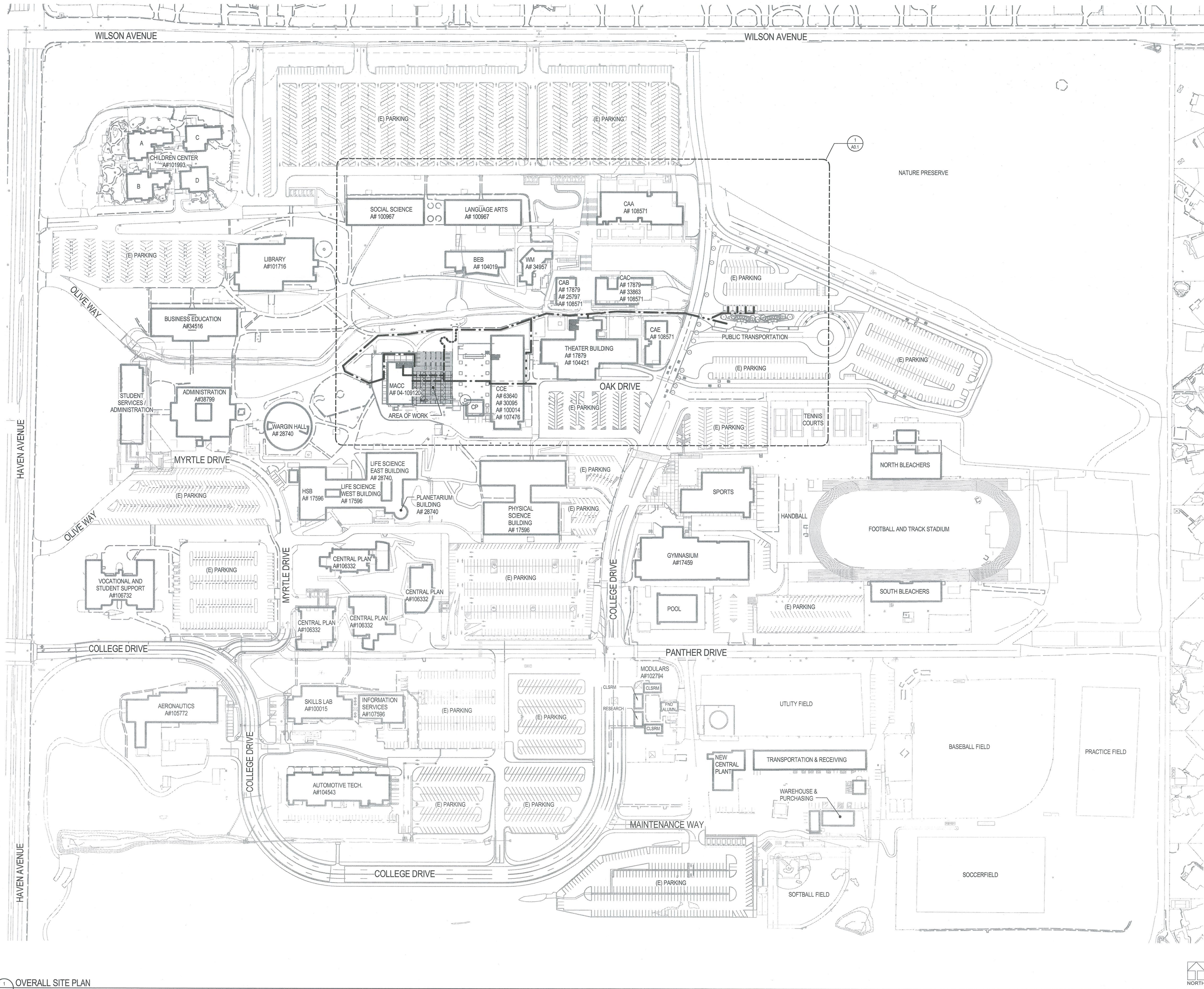


**B SHRUB AND GROUND COVER SPACING** SCALE: N.T.S.



- LEGEND:**
- 1. 4" THICK MIN. LAYER OF COBBLE ROCK - SEE HARDSCAPE SHEETS FOR COLOR & SUPPLIER.
  - 2. SINGLE LAYER OF MIRAFI 140N FILTER FABRIC SOIL SEPARATOR. WRAP FABRIC UP VERTICAL EDGES MINIMUM OF 2" AND SECURE WITH SOIL STAPLES AT 18" O.C. TO PREVENT VERTICAL MOVEMENT. OVERLAP SPLICES 12" MINIMUM.
  - 3. 90% COMPACTED SUBGRADE - VERIFY WITH REQUIREMENTS NOTED IN THE GEOTECHNICAL SOILS REPORT.
  - 4. ALUMINUM EDGING - "CLEANLINE" 3/16"x5" MILL FINISH LANDSCAPE EDGING AVAILABLE THROUGH PERMALOC AT (800) 356-9660. INSTALL PER MANUFACTURER'S SPECIFICATIONS.
  - 5. 12" STAKES PER MANUFACTURER. PLACE STAKES ON SHRUB / GROUND COVER SIDE AND SET BELOW TOP OF EDGING.
  - 6. FINISH GRADE OF PLANTER AREA.

**C CRUSHED STONE PAVING W/ EDGING** SCALE: 3" = 1'-0"



**LEGEND NOTES**

LEGEND NOTES ARE COMMON TO ALL SHEETS. SOME NOTES MAY NOT APPLY TO THIS SHEET.

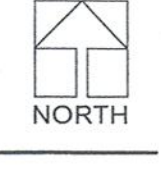
APPL. # 04-18807

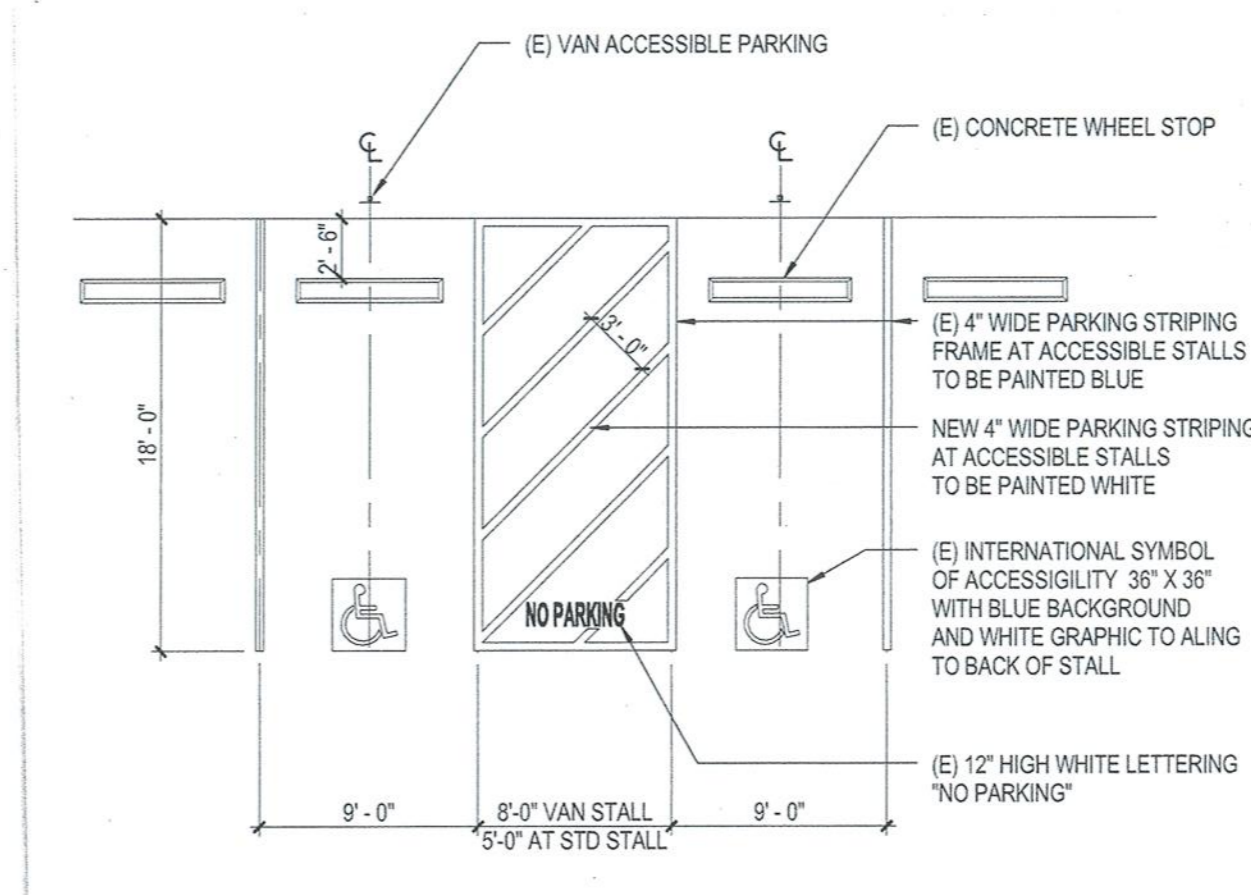
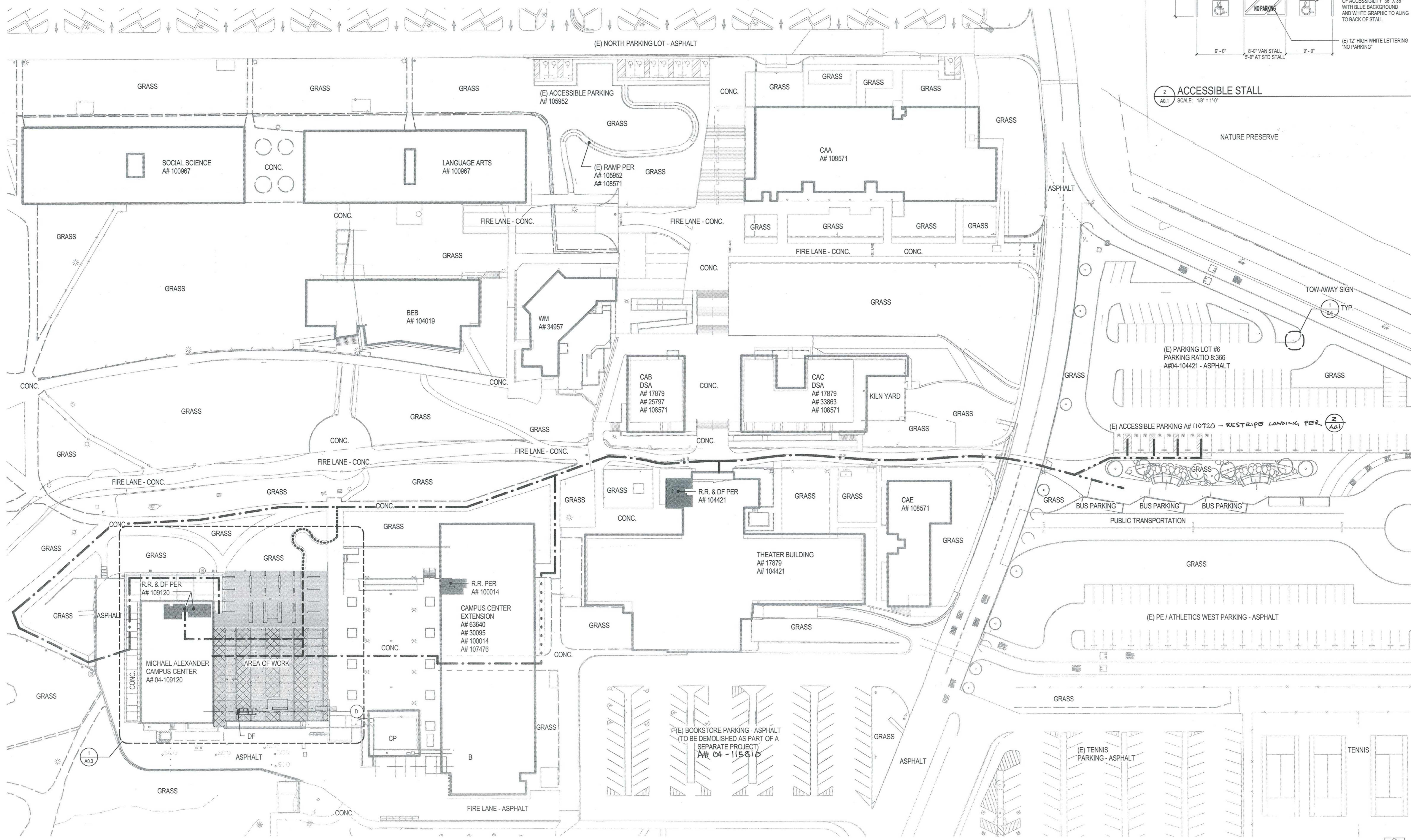
DATE AUG 08 2017

FILE NO: 16-21

**GENERAL NOTES:**

- (E) ACCESSIBLE PATH OF TRAVEL, A# 108505
- (E) ACCESSIBLE PATH OF TRAVEL, A# 110920
- (E) ACCESSIBLE PATH OF TRAVEL, A# 11230
- (E) ACCESSIBLE PATH OF TRAVEL, A# 109120
- ACCESSIBLE PATH OF TRAVEL
- DF DRINKING FOUNTAINS
- R.R. RESTROOMS





2 ACCESSIBLE STALL  
SCALE: 1/8" = 1'-0"

**LEGEND NOTES**

LEGEND NOTES ARE COMMON TO ALL SHEETS. SOME NOTES MAY NOT APPLY TO THIS SHEET.

**GENERAL NOTES:**

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT: THE NOT IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS IS COMPLIANT WITH THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS, AS PART OF THE DESIGN OF THIS PROJECT. THE POT WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WERE DETERMINED TO BE NONCOMPLIANT 1, HAVE BEEN IDENTIFIED AND 2, THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NONCOMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE SO INDICATED IN THESE CONSTRUCTION DOCUMENTS.

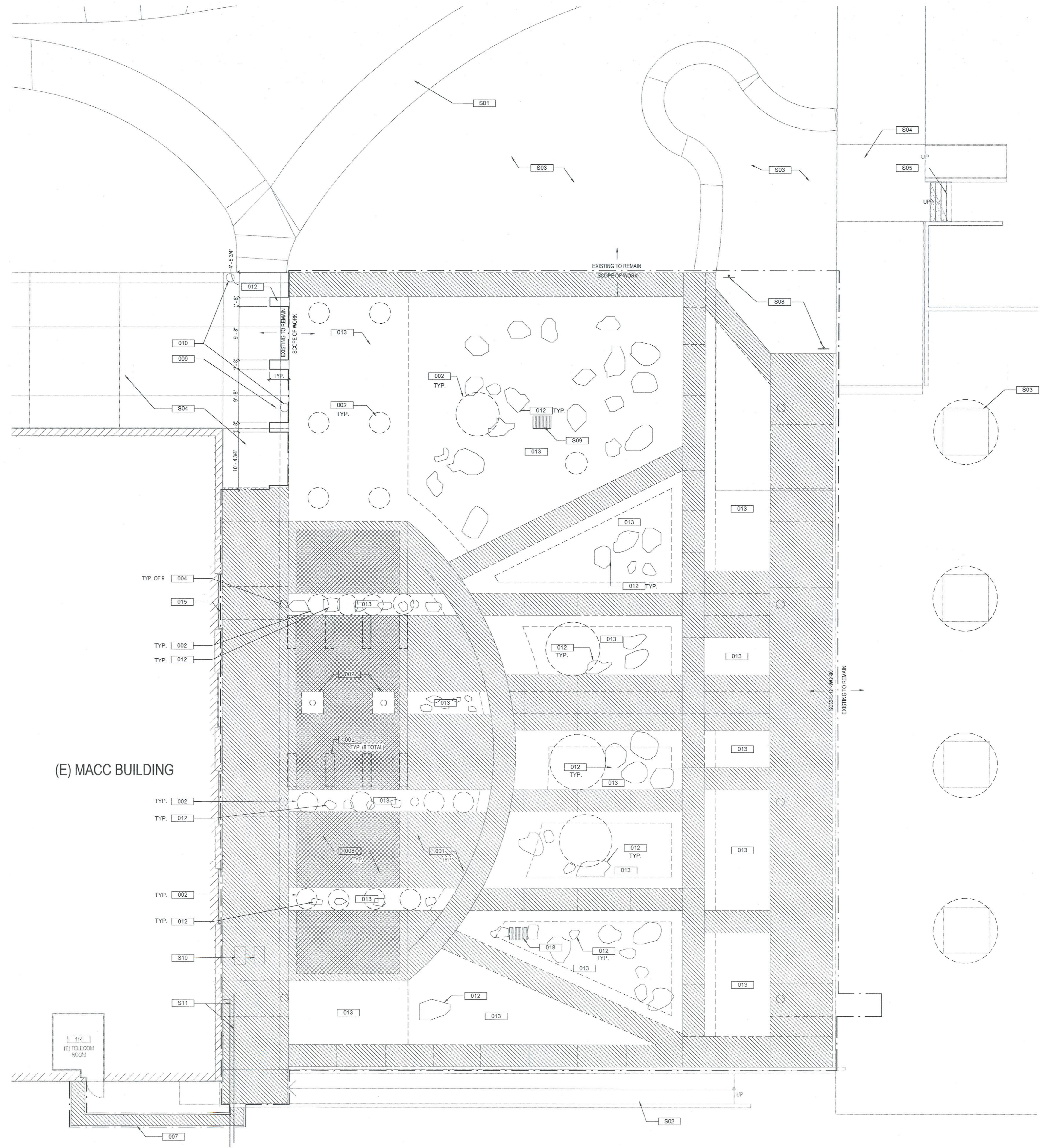
DURING CONSTRUCTION, IF POT ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CODE COMPLIANT ARE FOUND TO BE NONCOMPLYING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THEY SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.

- GENERAL NOTES:**
- (E) ACCESSIBLE PATH OF TRAVEL, A# 108505
  - (E) ACCESSIBLE PATH OF TRAVEL, A# 110920
  - (E) ACCESSIBLE PATH OF TRAVEL, A# 111200
  - (E) ACCESSIBLE PATH OF TRAVEL, A# 109120
  - ACCESSIBLE PATH OF TRAVEL
  - DF DRINKING FOUNTAINS
  - R.R. RESTROOMS

1 ACCESSIBILITY SITE PLAN  
SCALE: 1" = 40'-0"

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1 GROUND LEVEL  
SCALE: 1/8" = 1'-0"



**LEGEND NOTES**

LEGEND NOTES ARE COMMON TO ALL SHEETS. SOME NOTES MAY NOT APPLY TO THIS SHEET.

KEY VALUE	KEYNOTE TEXT
001	REMOVE PORTION OF (E) CONCRETE SITE PAVING REQUIRED FOR NEW WORK.
002	(E) TREE & TREE GRATE TO BE REMOVED.
004	(E) LIGHT POLE AND BASE. REMOVE & STORE IN OWNER-APPROVED STAGING AREA FOR RE-INSTALLATION ON A FUTURE PROJECT.
005	(E) BENCH. REMOVE & STORE IN OWNER-APPROVED STAGING AREA. RE-INSTALL PER NEW SITE PLAN.
007	SAWCUT (E) ASPHALT & CONCRETE FOR ELECTRICAL TRENCHING.
008	(E) PAVERS TO BE REMOVED.
009	(E) SURVEILLANCE CAMERA TO REMAIN. RELOCATE CONDUIT AS NEEDED FOR NEW CONSTRUCTION. SEE ELECTRICAL SITE PLAN E1.1.
010	(E) LIGHT POLE TO REMAIN. RELOCATE CONDUIT AS REQUIRED FOR NEW SCOPE OF WORK. SEE ELECTRICAL SITE PLAN E1.1.
012	(E) BOULDER TO BE REMOVED. SALVAGE AND TURN OVER TO DISTRICT FOR RE-USE.
013	(E) LANDSCAPING TO BE REMOVED. RELOCATE/ADJ. IRRIGATION LINES AS REQUIRED FOR NEW SCOPE OF WORK.
015	DEMO SITE WORK UP TO ENTRY SLIDING DOORS. UNINSTALL DOORS & THRESHOLD SADDLES AS REQUIRED. STORE IN OWNER-APPROVED STAGING AREA FOR REINSTALLATION.
018	REMOVE (E) STORM DRAIN INLET.

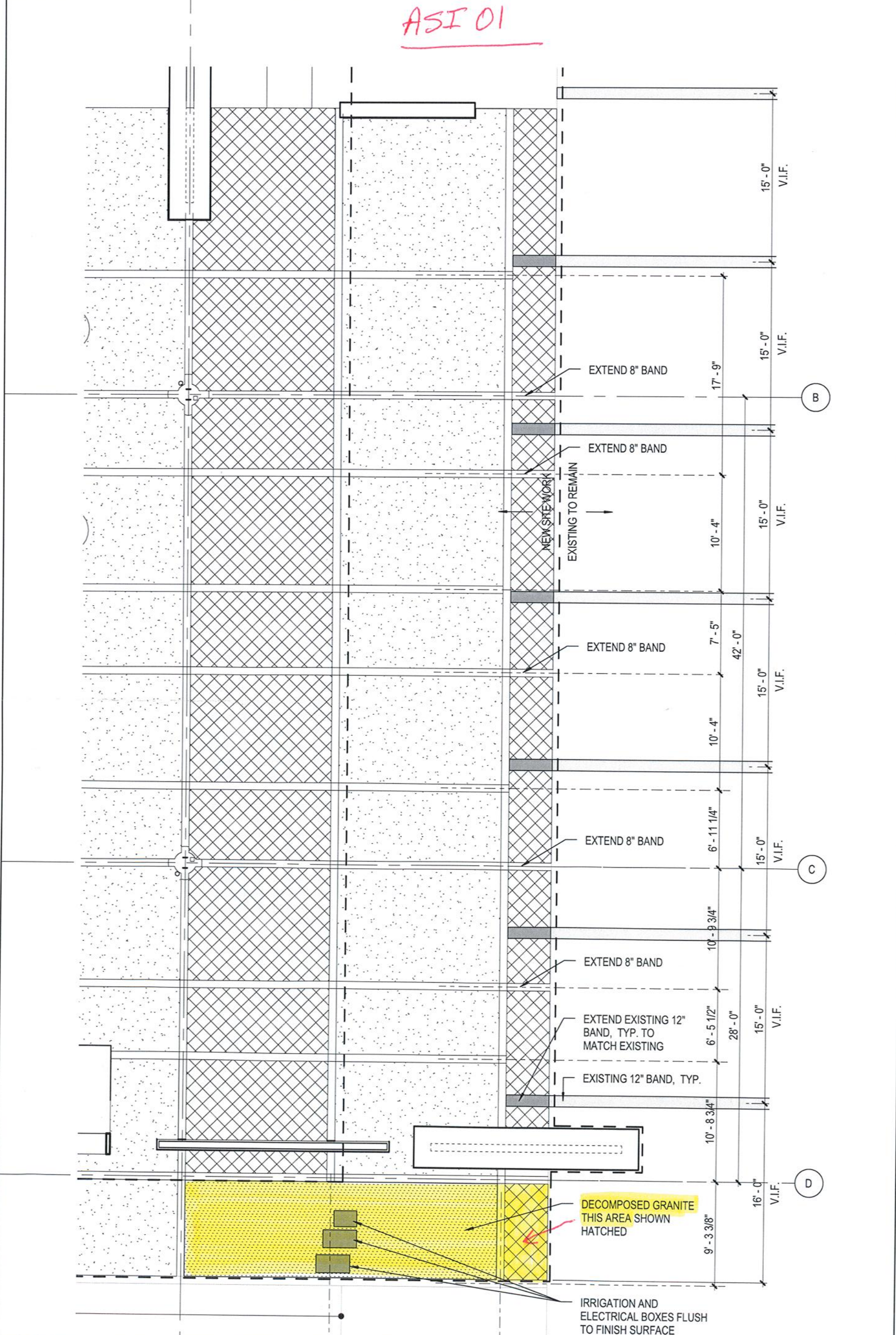
KEY VALUE	KEYNOTE TEXT
S01	(E) CONCRETE SIDEWALK. TO REMAIN.
S02	(E) ACCESSIBLE RAMP. TO REMAIN.
S03	(E) PLANTERS. TO REMAIN.
S04	(E) SITE PAVING. TO REMAIN.
S05	(E) CONCRETE STAIRS. TO REMAIN.
S08	(E) PATH OF TRAVEL SIGNAGE TO REMAIN.
S09	(E) STORM DRAIN INLET TO REMAIN.
S10	(E) UTILITY BOXES TO REMAIN. ADJUST TO NEW GRADE.
S11	(E) HOT AND COLD WATER LINES.

**DEMO LEGEND**

- BRICK PAVERS TO BE REMOVED
- CONCRETE PAVING TO BE REMOVED



ASI 01



Drawing References: A0.3

SUMMARY OF RFI # 19

Specification References:

RE: Site concrete colors and pattern CC1, CC2, & CC3

Can you confirm the stamp patterns and the 3 colors of the site concrete at Shade Structure?

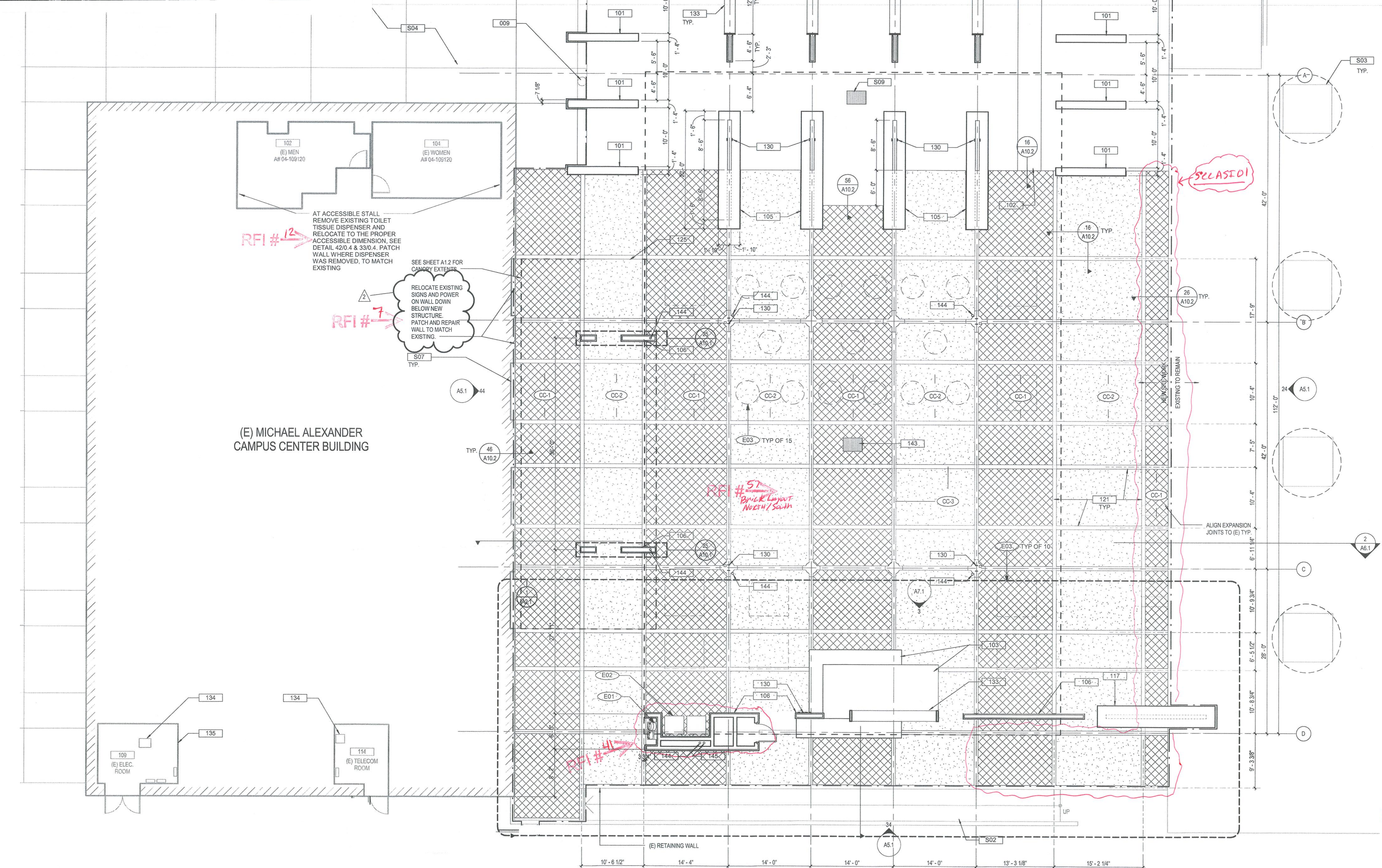
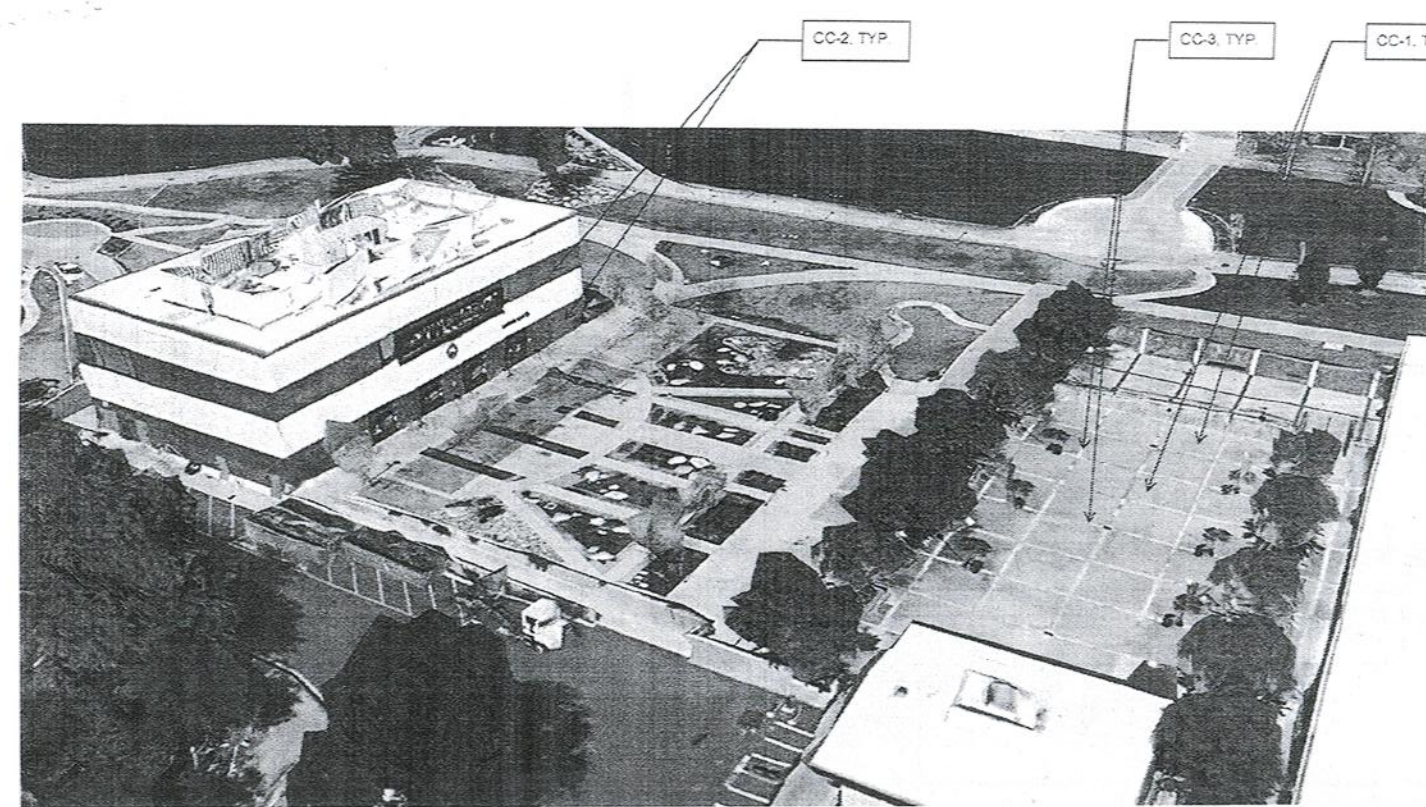
We would like to get away from the stamped concrete if we could.

We can offer sawcut diamonds instead of Stamped Concrete.

Please advise

Information Supplied:

- 1. CC1 & CC3 TO MATCH WITH EXISTING CONCRETE. CC2 TO BE STAMPED CONCRETE
- 2. PER BRIEF #23 AND PAGE ATTACHED
- 3. CC1 - CONCRETE, COLOR AND PATTERN SHALL MATCH WITH EXISTING CONCRETE ON SITE. PROVIDE CREDIT FOR STAMPED CONCRETE
- 4. CC2 - BRICK TERN, COLOR AND PATTERN TO MATCH WITH ADJACENT EXISTING MICHAEL ALEXANDER BUILDING'S EXTERIOR WALL FACADE'S BRICK PATTERN
- 5. CC3 - CONCRETE, COLOR AND PATTERN SHALL MATCH WITH EXISTING CONCRETE BANDS ON SITE. PROVIDE CREDIT FOR INTEGRAL COLOR
- 6. Detail: DLR Group 04/20/2019



(E) MICHAEL ALEXANDER CAMPUS CENTER BUILDING

1 GROUND LEVEL  
A0.3 SCALE: 1/8" = 1'-0"

### LEGEND NOTES

LEGEND NOTES ARE COMMON TO ALL SOME NOTES MAY NOT APPLY TO THIS SHEET

KEY VALUE	KEYNOTE TEXT
008	(E) SURVEILLANCE CAMERA TO REMAIN. RELOCATE (CONDUIT AS NEEDED FOR NEW CONSTRUCTION. SEE ELECTRICAL SITE PLAN E1.1
101	SITE BENCH, TYPE 1, SEE S2/A10.2
102	CONCRETE SIDEWALK
103	SEAT WALL
105	SITE BENCH, TYPE 2, SEE 15/A10.2
106	RAINSCREEN PANEL, SITE WALL
117	SITE BENCH, TYPE 3, SEE 14/A10.2
121	CONCRETE PAVING EXPANSION JOINT
122	EXTENTS OF COVERED WALK
129	TRENCHING PER ELECTRICAL SITE PLAN SHEET E1.1. AC PAVING TO MATCH (E)
130	ELECTRICAL & DATA RECEPTACLES. SEE ELECTRICAL SITE PLAN SHEET E1.1
133	INTEGRAL SEAT FRAME IN SITE WALL
134	(E) ELECTRICAL POWER & DATA INTO (E) PANELS & CABINETS. SEE ELECTRICAL SITE PLAN E1.1
135	EXISTING 1-HOUR RATED INTERIOR PARTITION WALL
143	STORM DRAIN INLET
144	ROOF DRAIN DOWNSPOUT
145	OVERFLOW DRAIN DOWNSPOUT, SPILL AT BASE OF WALL

KEY VALUE	KEYNOTE TEXT
S01	(E) CONCRETE SIDEWALK, TO REMAIN
S02	(E) ACCESSIBLE RAMP, TO REMAIN
S03	(E) PLANTERS, TO REMAIN
S04	(E) SITE FURNITURE, TO REMAIN
S05	(E) CONCRETE STAIRS, TO REMAIN
S07	REUSE (E) ENTRY DOORS & ENTRY SADDLES AS REQUIRED
S09	(E) STORM DRAIN INLET TO REMAIN

KEY VALUE	KEYNOTE TEXT
E01	DF-1, HI-LOW DRINKING FOUNTAIN W/ BOTTLE FILLER (FCO), SEE 440.4
E02	VENDING MACHINE (OFO)
E03	DINING TABLES & SEATING (OFO)

KEY VALUE	KEYNOTE TEXT
CC1	STAMPED CONCRETE PAVING
CC2	STAMPED CONCRETE PAVING INTEGRAL COLOR
CC3	INTEGRAL COLOR CONCRETE BAND
SC	STEEL COLUMN

APPROVED  
DIVISION OF THE STATE ARCHITECT  
ACS, PMA, RLS, RFP, SS, GL  
115807  
A 804- DATE DEC - 8 2017

RFI #19  
RFI #58  
Concrete Cure/Sealer

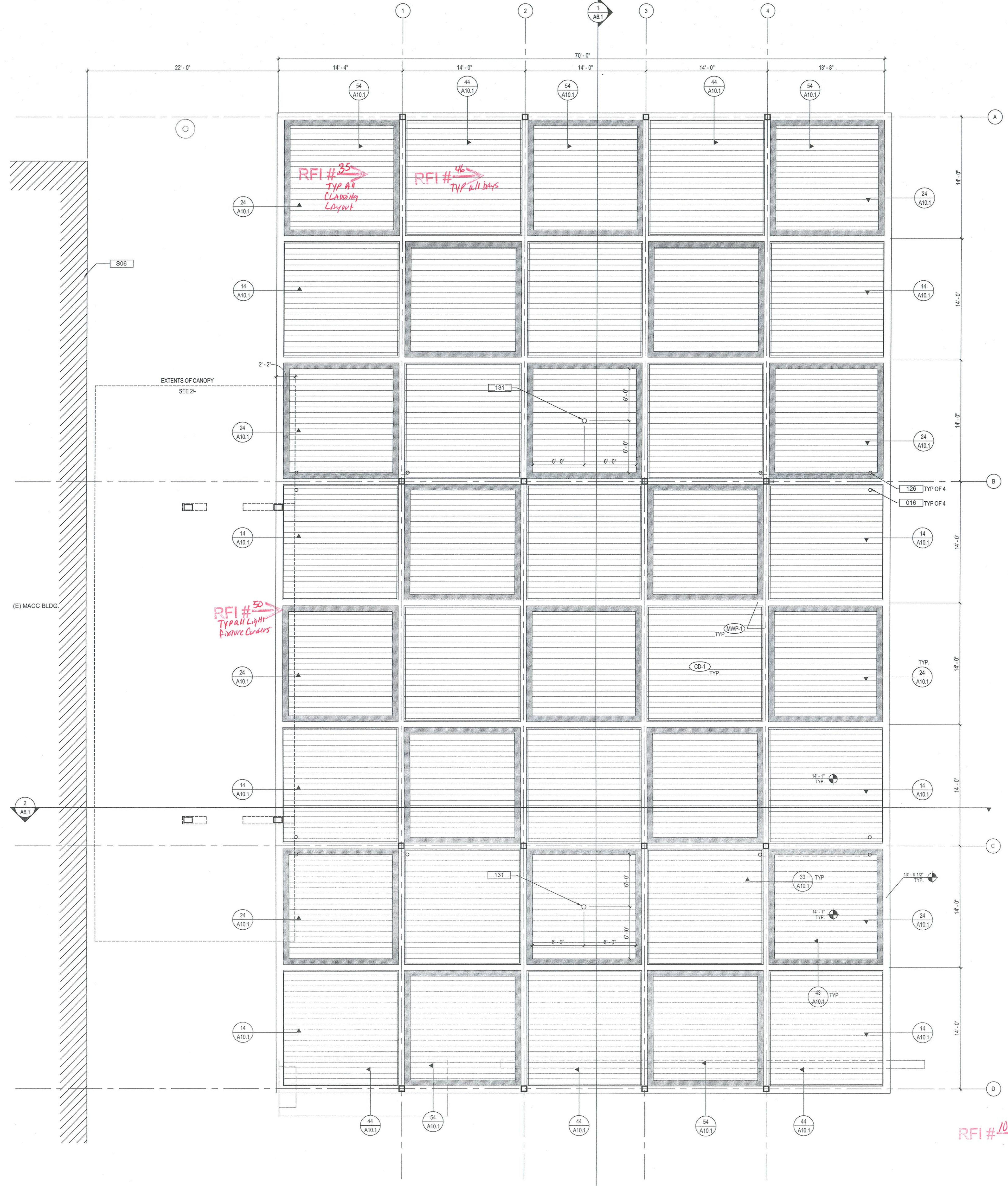
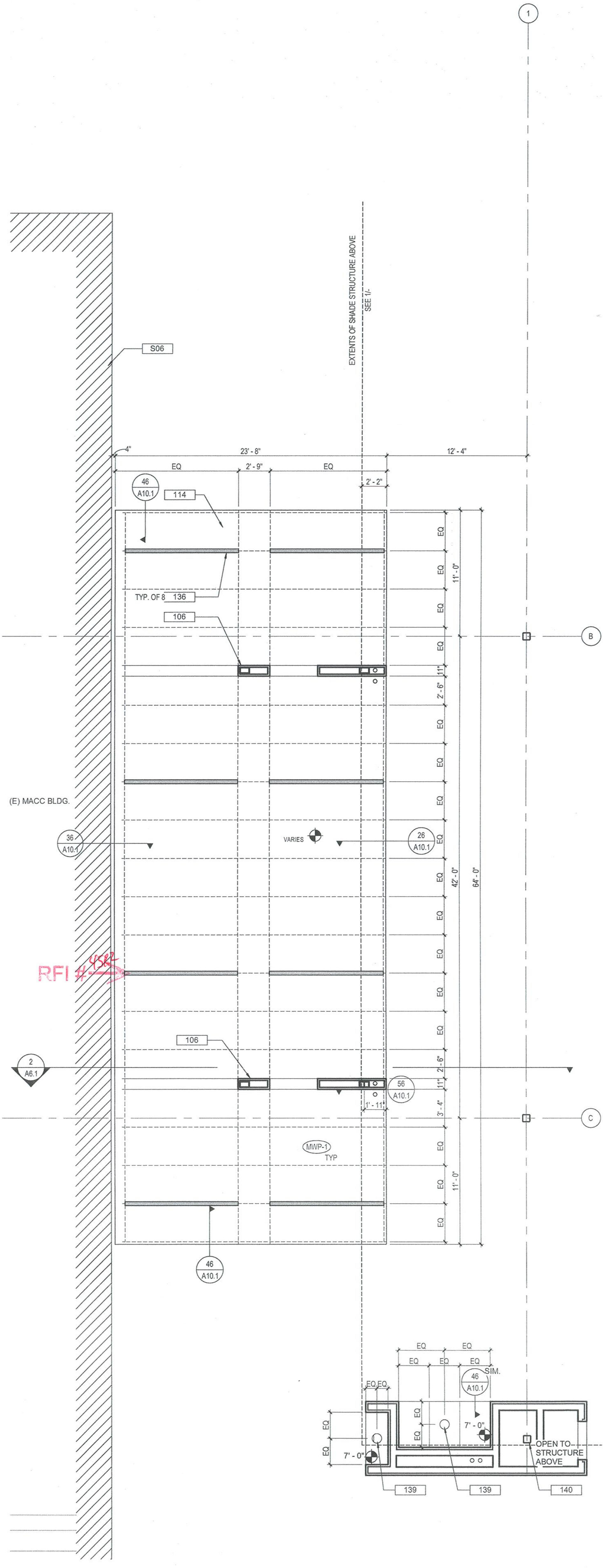
RFI #12  
RFI #7

RFI #58  
Concrete Cure/Sealer

RFI #19

RFI #58  
Concrete Cure/Sealer

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**LEGEND NOTES**  
LEGEND NOTES ARE COMMON TO ALL SHEETS. SOME NOTES MAY NOT APPLY TO THIS SHEET.

KEY VALUE	KEYNOTE TEXT
016	OVERFLOW ROOF DRAIN TO DAYLIGHT AT UNDERSIDE OF SOFFIT
106	RAINSCREEN PANEL, SITE WALL
114	RAINSCREEN PANEL SOFFIT SYSTEM
126	ROOF DRAIN
131	WIRELESS ACCESS POINT, CEILING MOUNTED. SEE ELECTRICAL SITE PLAN SHEET E1.1
136	RECESSED LIGHT FIXTURE. SEE ELECTRICAL SITE PLAN E1.1
139	DOWNLIGHT
140	STEEL COLUMN

**KEYNOTE LEGEND**

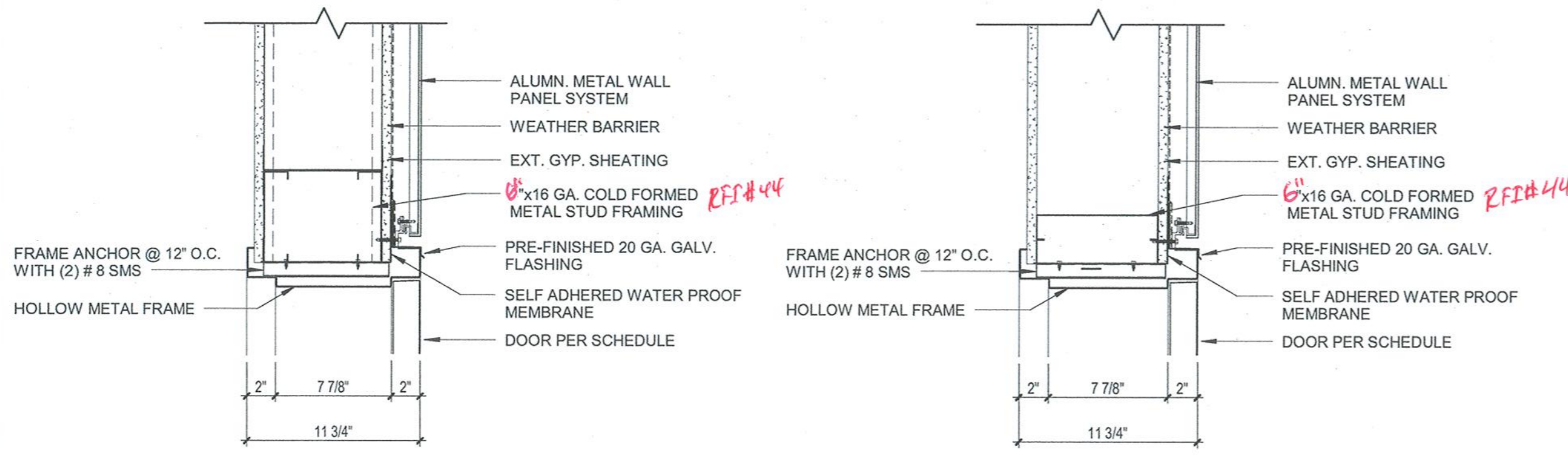
KEY VALUE	KEYNOTE TEXT
016	OVERFLOW ROOF DRAIN TO DAYLIGHT AT UNDERSIDE OF SOFFIT
106	RAINSCREEN PANEL, SITE WALL
114	RAINSCREEN PANEL SOFFIT SYSTEM
126	ROOF DRAIN
131	WIRELESS ACCESS POINT, CEILING MOUNTED. SEE ELECTRICAL SITE PLAN SHEET E1.1
136	RECESSED LIGHT FIXTURE. SEE ELECTRICAL SITE PLAN E1.1
139	DOWNLIGHT
140	STEEL COLUMN

**LEGEND**

	CD-1 COMPOSITE DECKING SOFFIT SEE RFI # 35 for Layout
	MMP-1 RAINSCREEN PANEL SYSTEM
	LINEAR LIGHT SEE ELECTRICAL LIGHTING PLAN, E1.2
	STEEL COLUMN SEE FOUNDATION PLAN S1.1

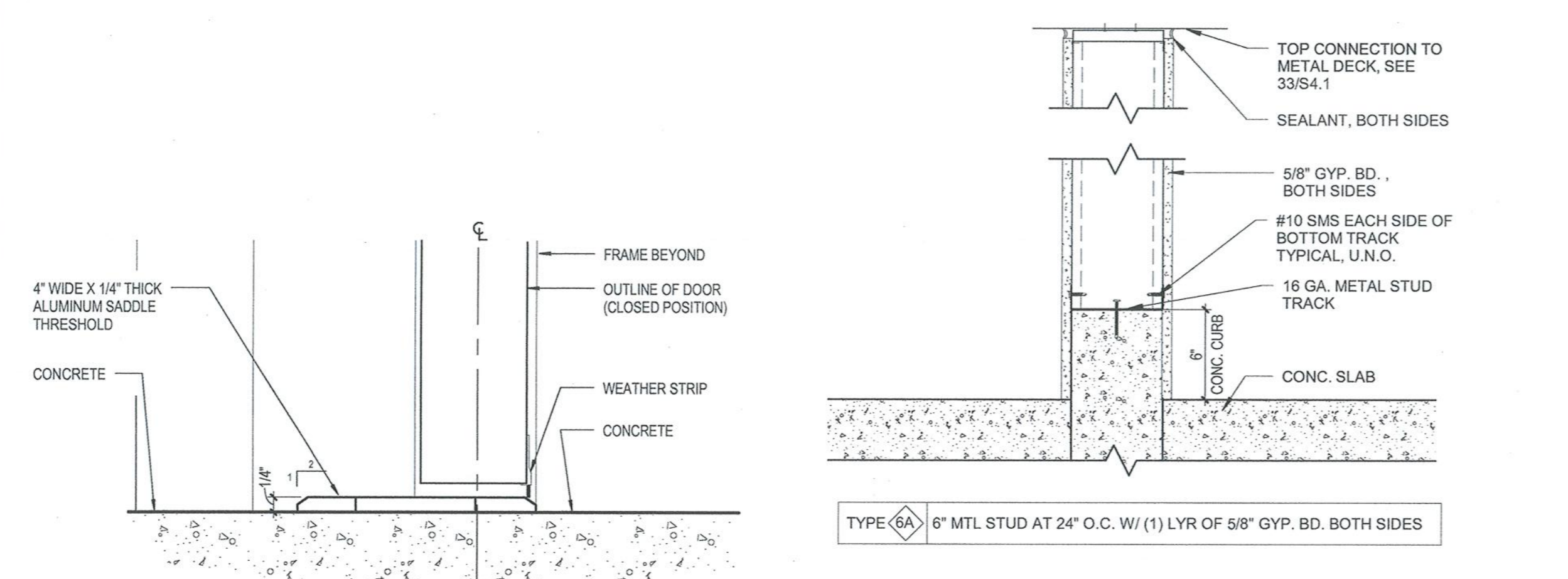






**11 DOOR HEAD**  
SCALE: 1/12" = 1'-0"

**12 DOOR JAMB**  
SCALE: 1/12" = 1'-0"

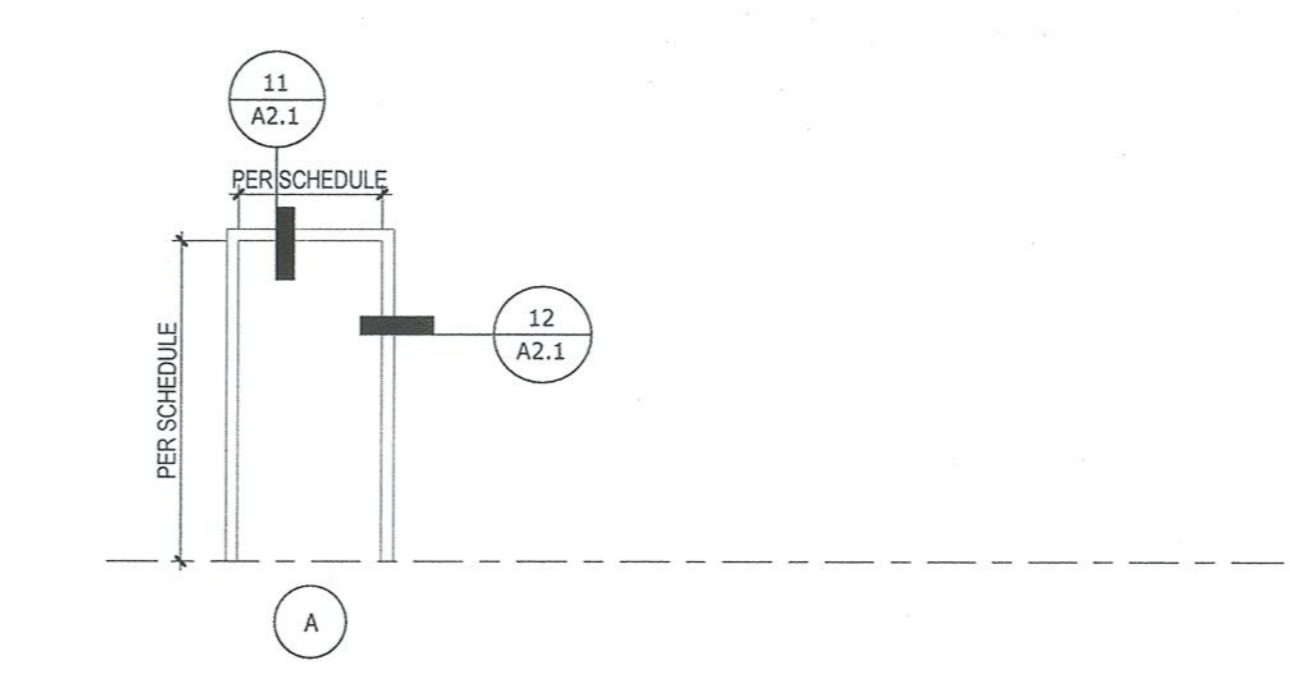


**21 THRESHOLD - CONC TO CONC EXTERIOR (SC/SC)**  
SCALE: 5/8" = 1'-0"

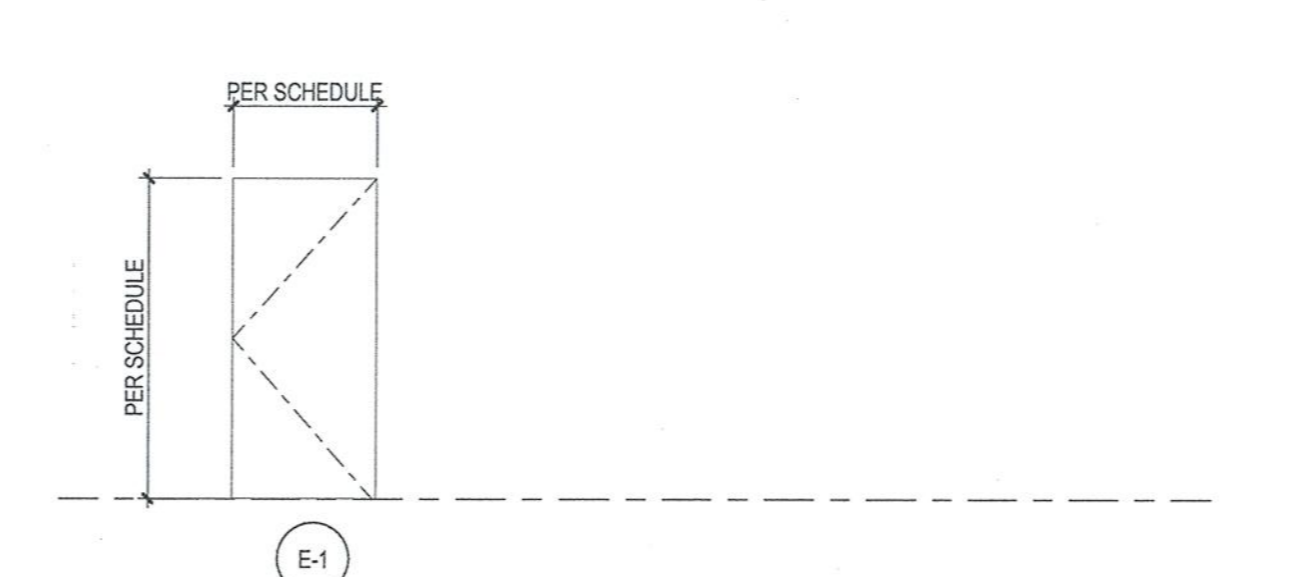
**22 WALL TYPE A**  
SCALE: 1/12" = 1'-0"

DOOR AND FRAME SCHEDULE

NUMBER	Room Name	Room Number	DOOR PANEL				FRAME			DETAILS				COMMENTS			
			NO. OF PANELS	WIDTH	HEIGHT	THICKNESS	MATERIAL	TYPE	DEPTH	MATERIAL	TYPE	FIRE RATING	HARDWARE SET		HEAD	JAMB LEFT	JAMB RIGHT
100	STORAGE	100	1	3'-0"	7'-0"	1 3/4"	HM	E-1	5 3/4"	HM	A	37	11A2.1	12A2.1	12A2.1	21A2.1	



**FRAME TYPES**  
SCALE: 1/4" = 1'-0"



**DOOR TYPES**  
SCALE: 1/4" = 1'-0"

**LEGEND NOTES**

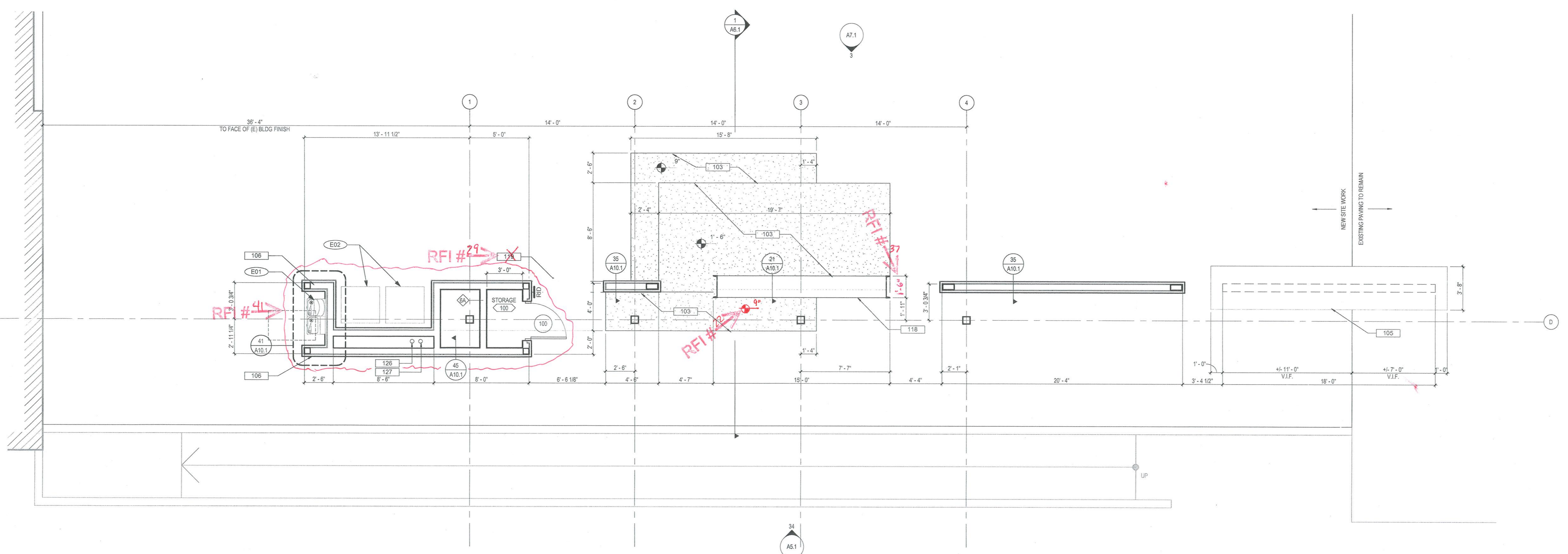
LEGEND NOTES ARE COMMON TO ALL SOME NOTES MAY NOT APPLY TO THIS SHEET

KEY VALUE	KEYNOTE TEXT
103	SEAT WALL
105	SITE BENCH TYPE 2, SEE 13A10.2
108	RAINSCREEN PANEL SITE WALL
118	METAL FRAMED WALL OPENING
119	RAINSCREEN PANEL PONY WALL
126	ROOF DRAIN
127	OVERFLOW DRAIN

KEY VALUE	KEYNOTE TEXT
E01	DF-1, H-Low DRINKING FOUNTAIN W/ BOTTLE FILLER (CFO), SEE 44B.4
E02	VENDING MACHINE (CFO)

**TYPICAL ROOM SIGNAGE**

RID ROOM ID NAME SEE 12 & 13/0.4

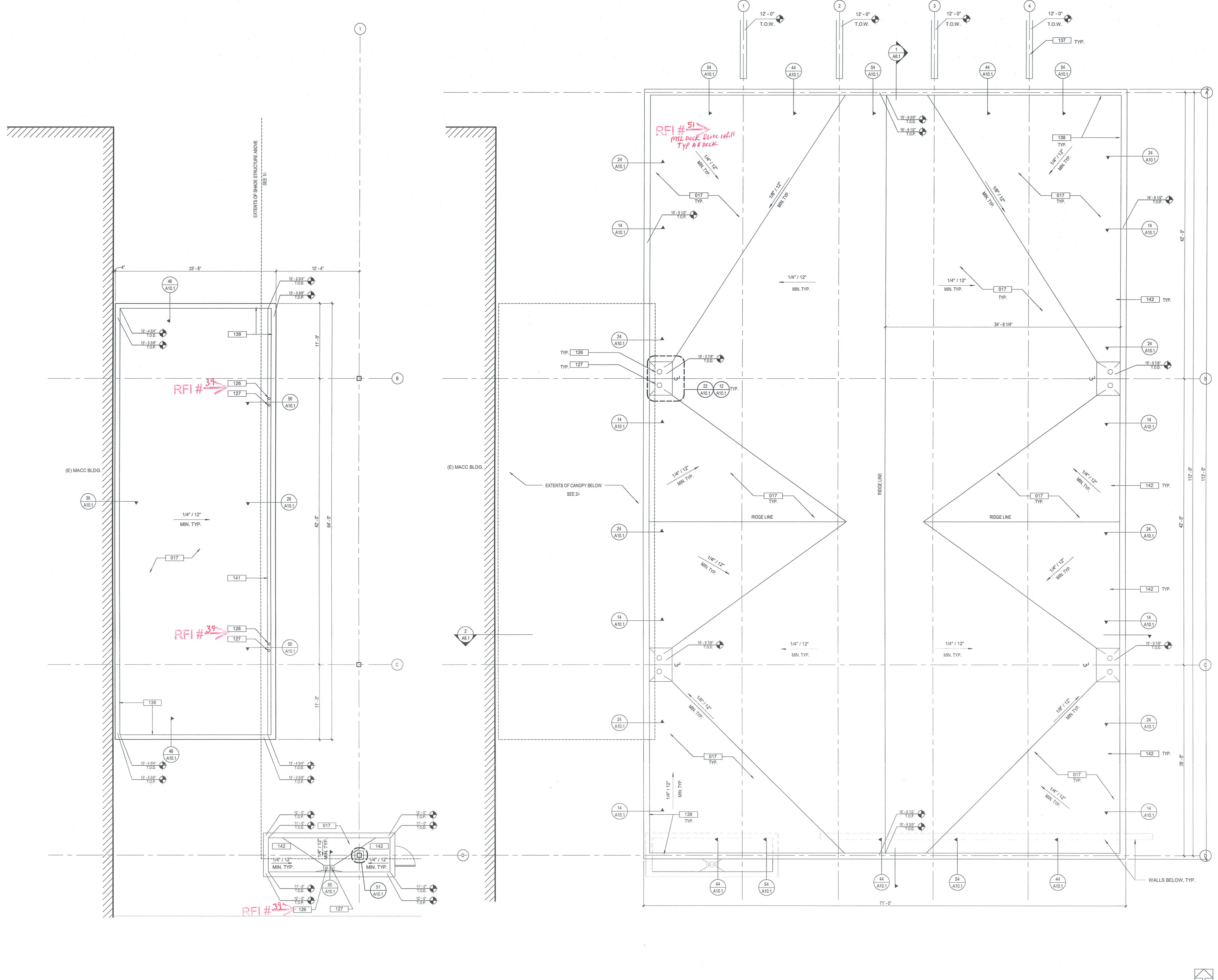


**1 ENLARGED PLAN - SEAT WALL**  
SCALE: 1/4" = 1'-0"

**LEGEND NOTES**

LEGEND NOTES ARE COMMON TO ALL SHEETS. SOME NOTES MAY NOT APPLY TO THIS SHEET.

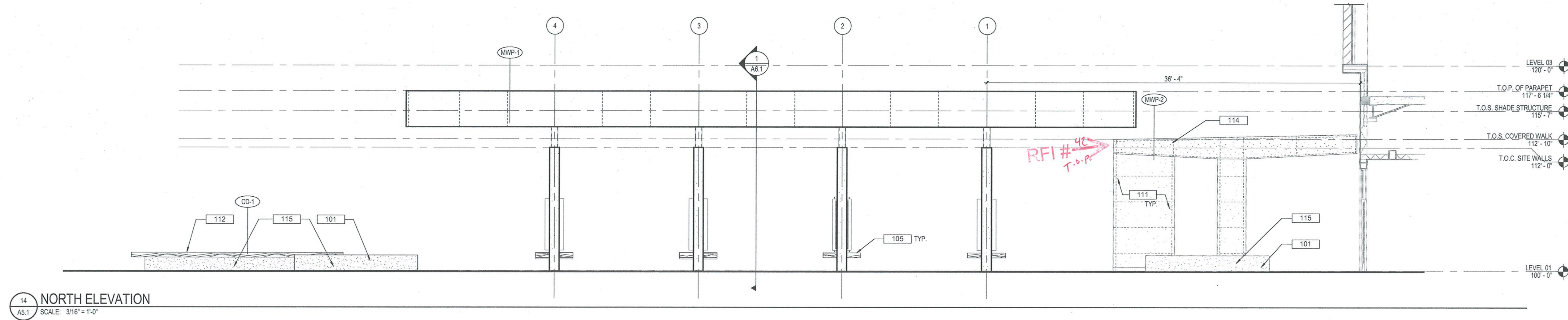
KEYNOTE LEGEND	
KEY VALUE	KEYNOTE TEXT
017	THERMOPLASTIC MEMBRANE ROOFING (CLASS 'A')
126	ROOF DRAIN
127	OVERFLOW DRAIN
137	TOP OF WALL PARAPET
138	PARAPET COPING
141	GUTTER
142	ROOF CRICKETS



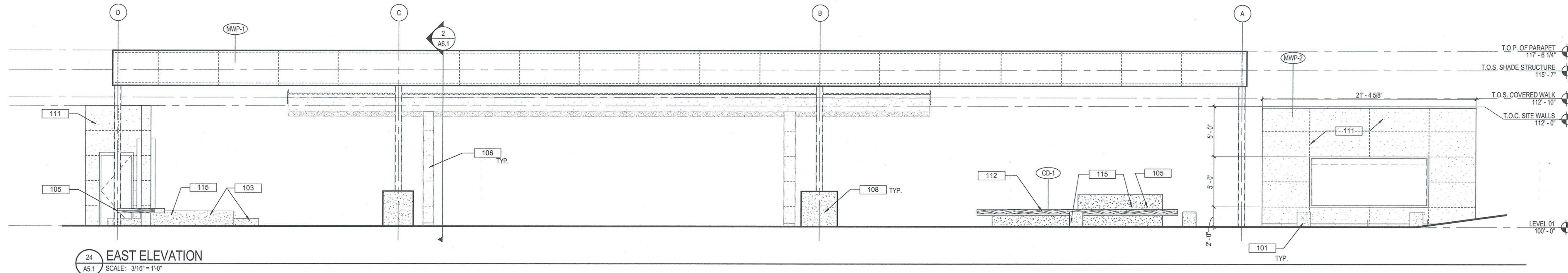
**2** ROOF PLAN - CANOPY  
 SCALE: 3/16" = 1'-0"

**1** ROOF PLAN - SHADE STRUCTURE  
 SCALE: 3/16" = 1'-0"

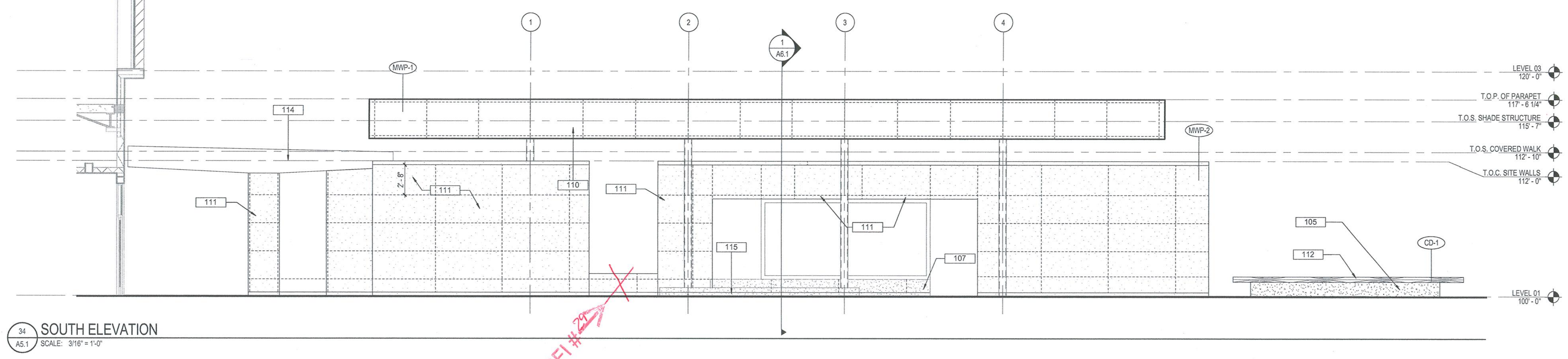
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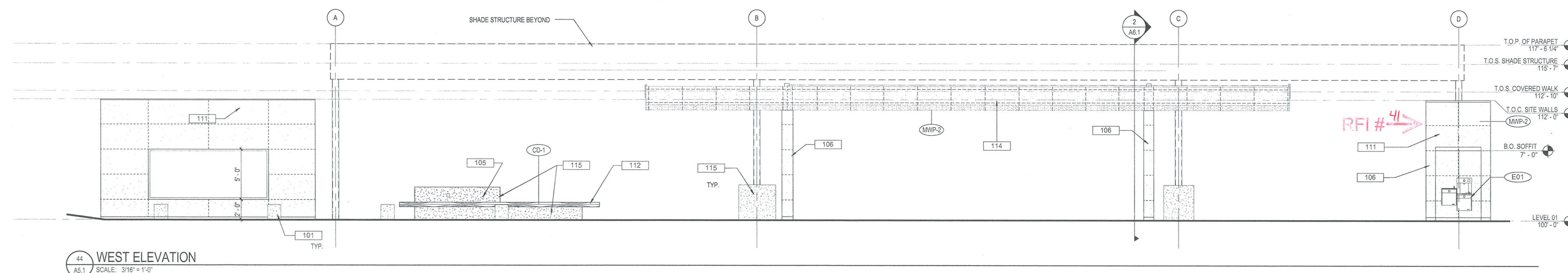
14 NORTH ELEVATION  
AS.1 SCALE: 3/16" = 1'-0"



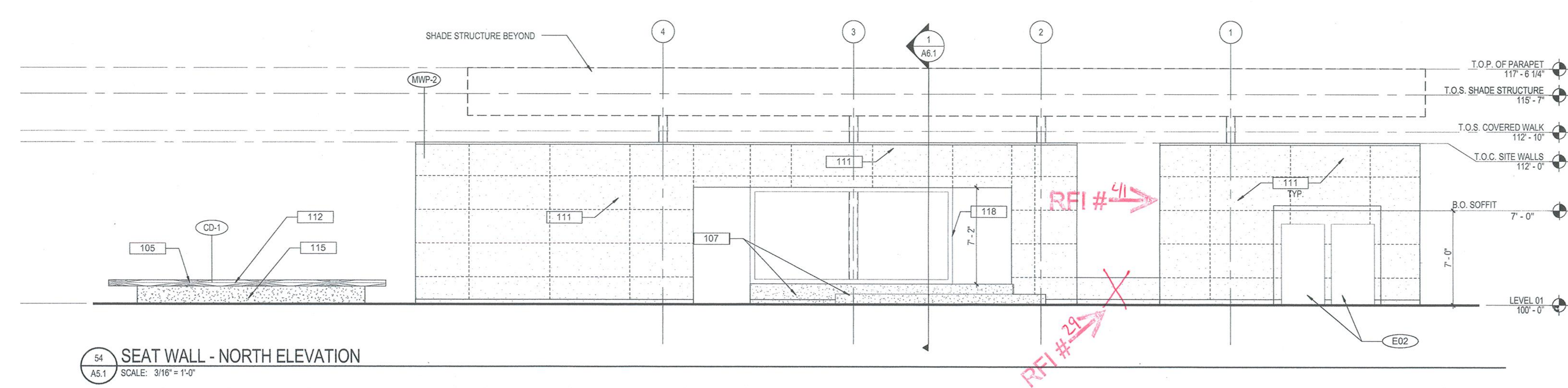
24 EAST ELEVATION  
AS.1 SCALE: 3/16" = 1'-0"



34 SOUTH ELEVATION  
AS.1 SCALE: 3/16" = 1'-0"



44 WEST ELEVATION  
AS.1 SCALE: 3/16" = 1'-0"



54 SEAT WALL - NORTH ELEVATION  
AS.1 SCALE: 3/16" = 1'-0"

**LEGEND NOTES**

LEGEND NOTES ARE COMMON TO ALL SHEETS. SOME NOTES MAY NOT APPLY TO THIS SHEET.

KEYNOTE LEGEND	
KEY VALUE	KEYNOTE TEXT
101	SITE BENCH, TYPE 1, SEE S20A10.2
103	SEAT WALL
105	SITE BENCH, TYPE 2, SEE 150A10.2
106	RAINSREEN PANEL SITE WALL
107	SEAT WALL
108	COLUMN CASING
110	RAINSREEN PANEL SYSTEM
111	RAINSREEN PANEL SYSTEM
112	PRESSURE TREATED WOOD
114	RAINSREEN PANEL SOFFIT SYSTEM
115	CAST-IN-PLACE CONCRETE
118	METAL FRAMED WALL OPENING

**EQUIPMENT KEYNOTES**

KEY VALUE	KEYNOTE TEXT
E01	DF-1, HI-LOW DRINKING FOUNTAIN W/ BOTTLE FILLER (CFC), SEE 440.4
E02	VENDING MACHINE (CFC)

**FINISH LEGEND**

- MWP-1**  
METAL WALL PANEL  
MFG: RETIOMBOND  
STYLE: COLORWILD  
FINISH: CADET GRAY
- MWP-2**  
METAL WALL PANEL  
MFG: RETIOMBOND  
STYLE: APOLLO STONE  
FINISH: APOLLO STONE
- CD-1**  
COMPOSITE DECKING  
MFG: TREX  
STYLE: TRANSCEND  
FINISH: FIRE PIT

**LEGEND**

- MWP-1  
RAINSREEN PANEL SYSTEM  
FINISH: CADET GRAY
- MWP-2  
RAINSREEN PANEL SYSTEM  
FINISH: APOLLO STONE
- CAST-IN-PLACE CONCRETE
- STEEL COLUMN  
FINISH: P-15 SILVER POLISH
- CD-1  
COMPOSITE DECKING

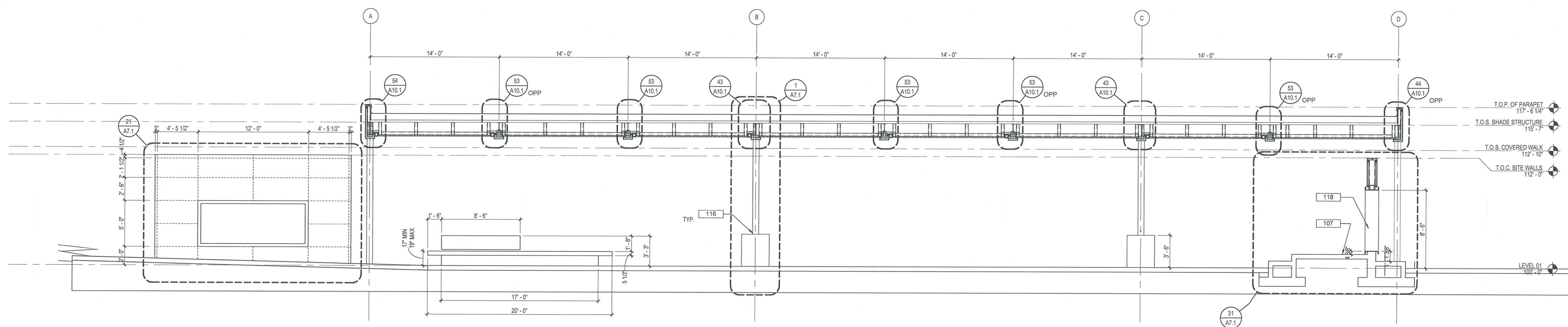
**LEGEND NOTES**

LEGEND NOTES ARE COMMON TO ALL SHEETS. SOME NOTES MAY NOT APPLY TO THIS SHEET.

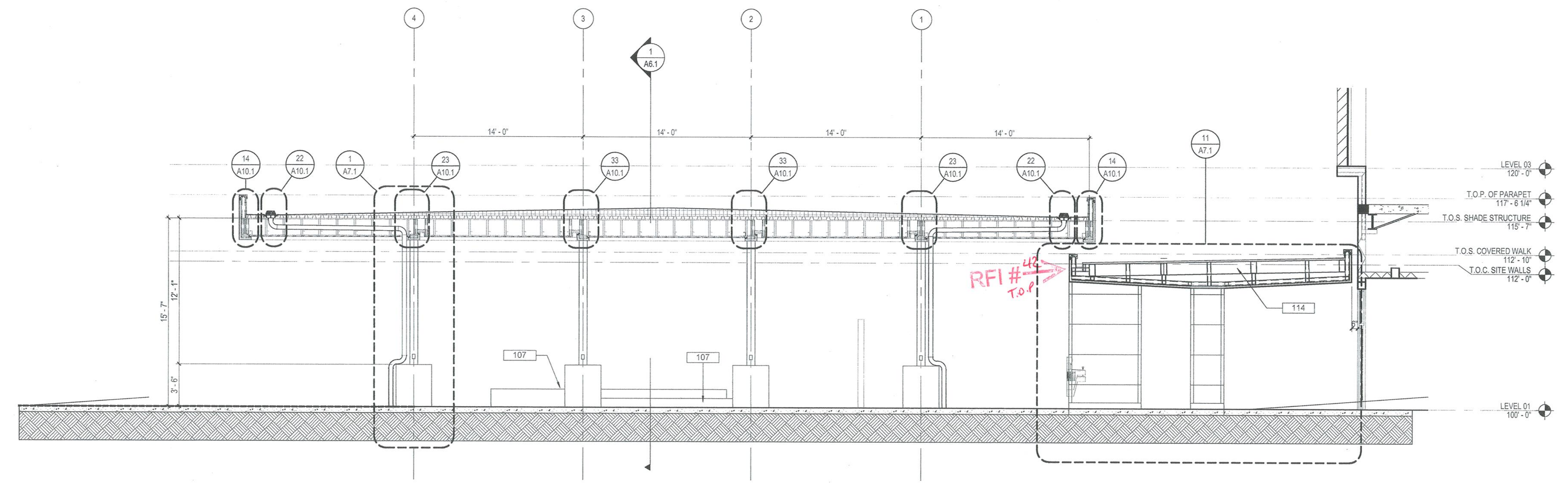
KEY VALUE	KEYNOTE TEXT
105	SITE BENCH, TYPE 2, SEE 15A102
106	RAINSCREEN PANEL SITE WALL
107	SEAT WALL
114	RAINSCREEN PANEL SOFFIT SYSTEM
116	STEEL COLUMN AND 42" CONCRETE CASING
118	METAL FRAMED WALL OPENING

**Chaffey College**  
 5885 Haven Avenue  
 Pomona, CA 91768  
 Telephone: 909.869.1321  
 www.chaffey.edu

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 OFFICE OF REGULATION SERVICES  
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 AC: FL RLS: LF SS: Gu  
 DATE: AUG 08 2017  
 FILE NO.: 35-C1



**1 Longitudinal Section**  
 A6.1 SCALE: 3/16" = 1'-0"



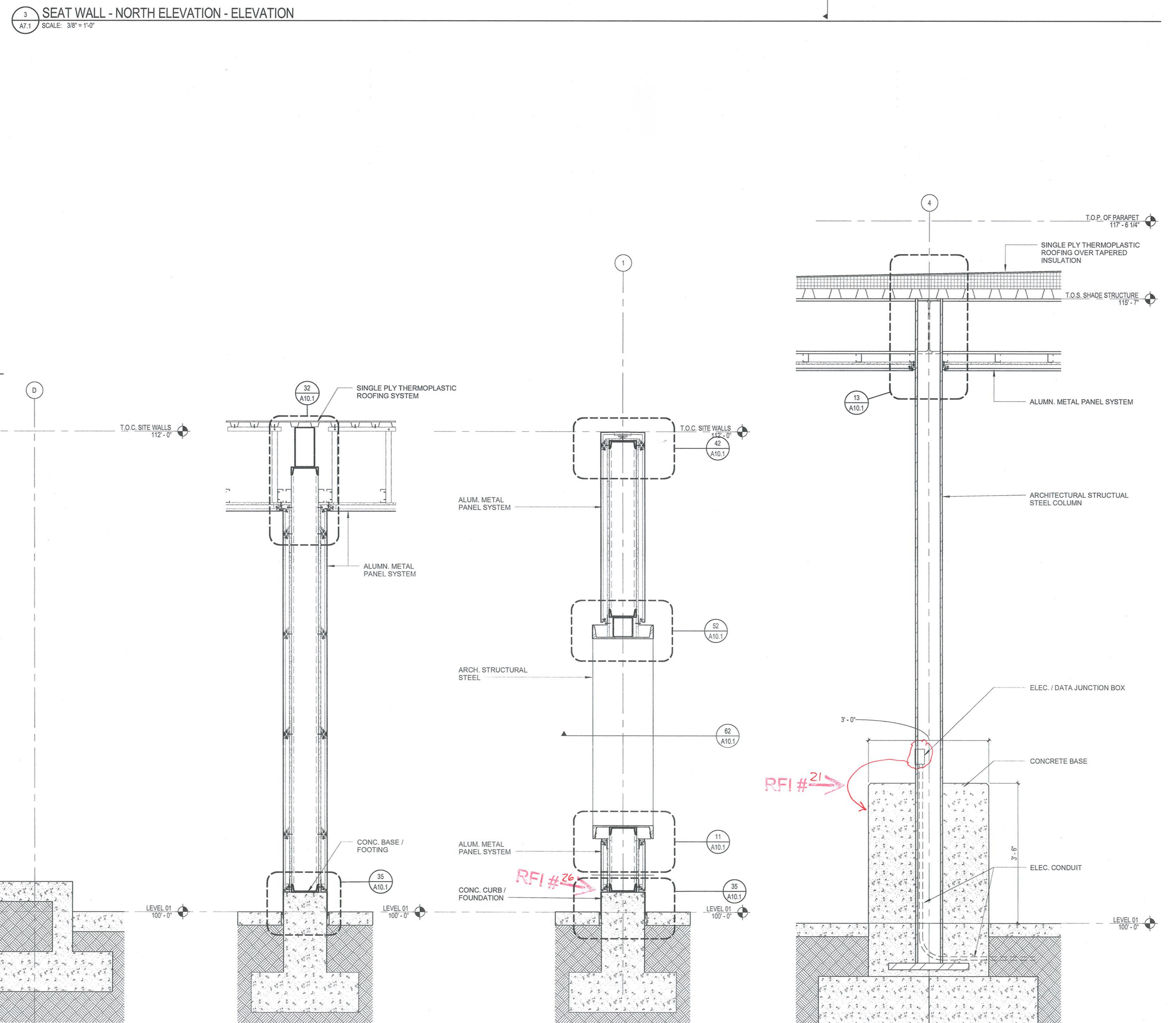
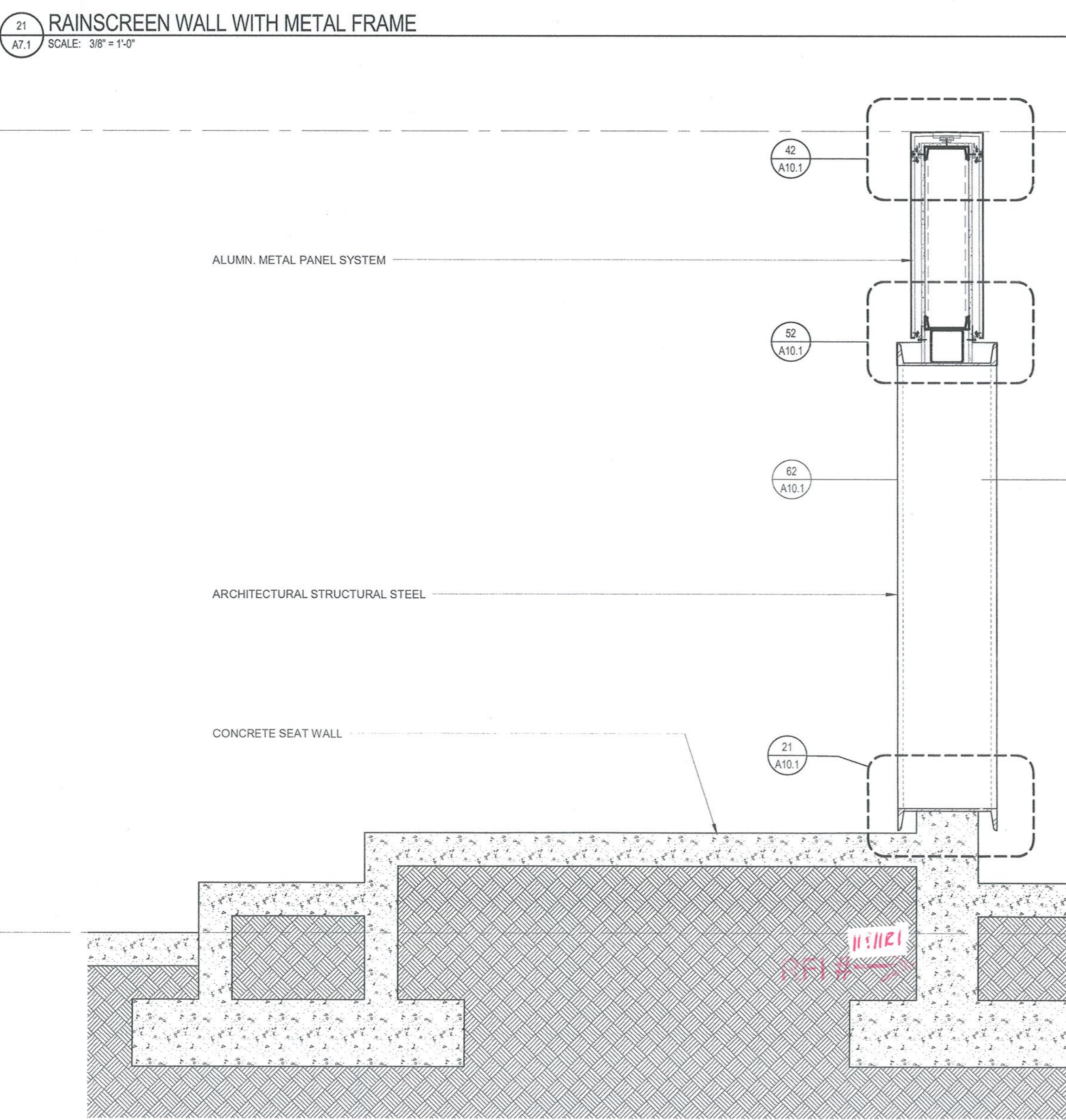
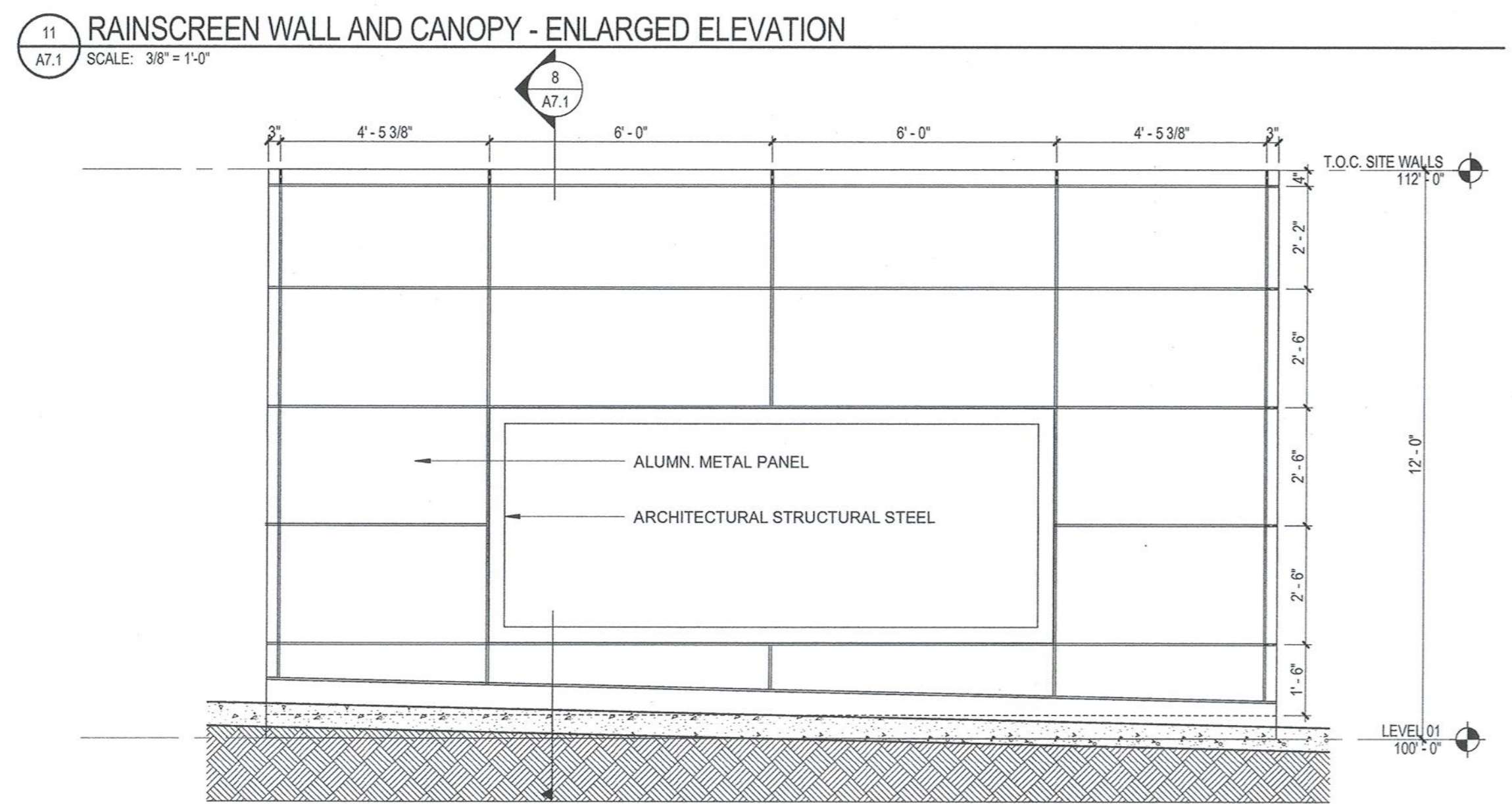
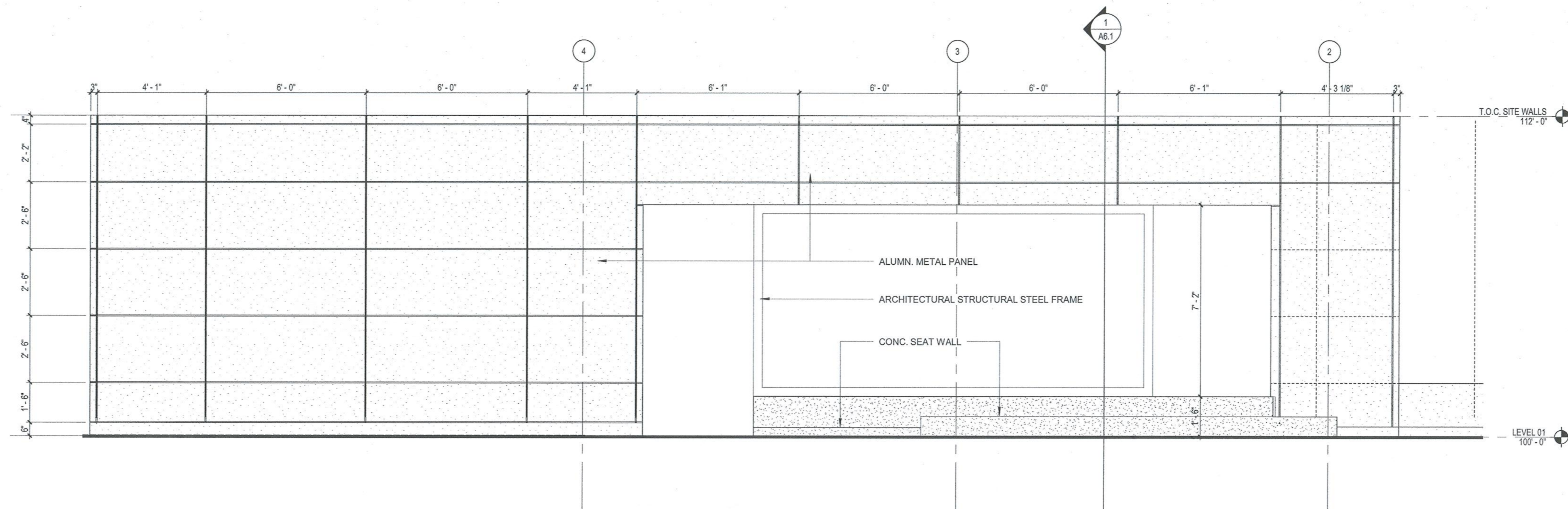
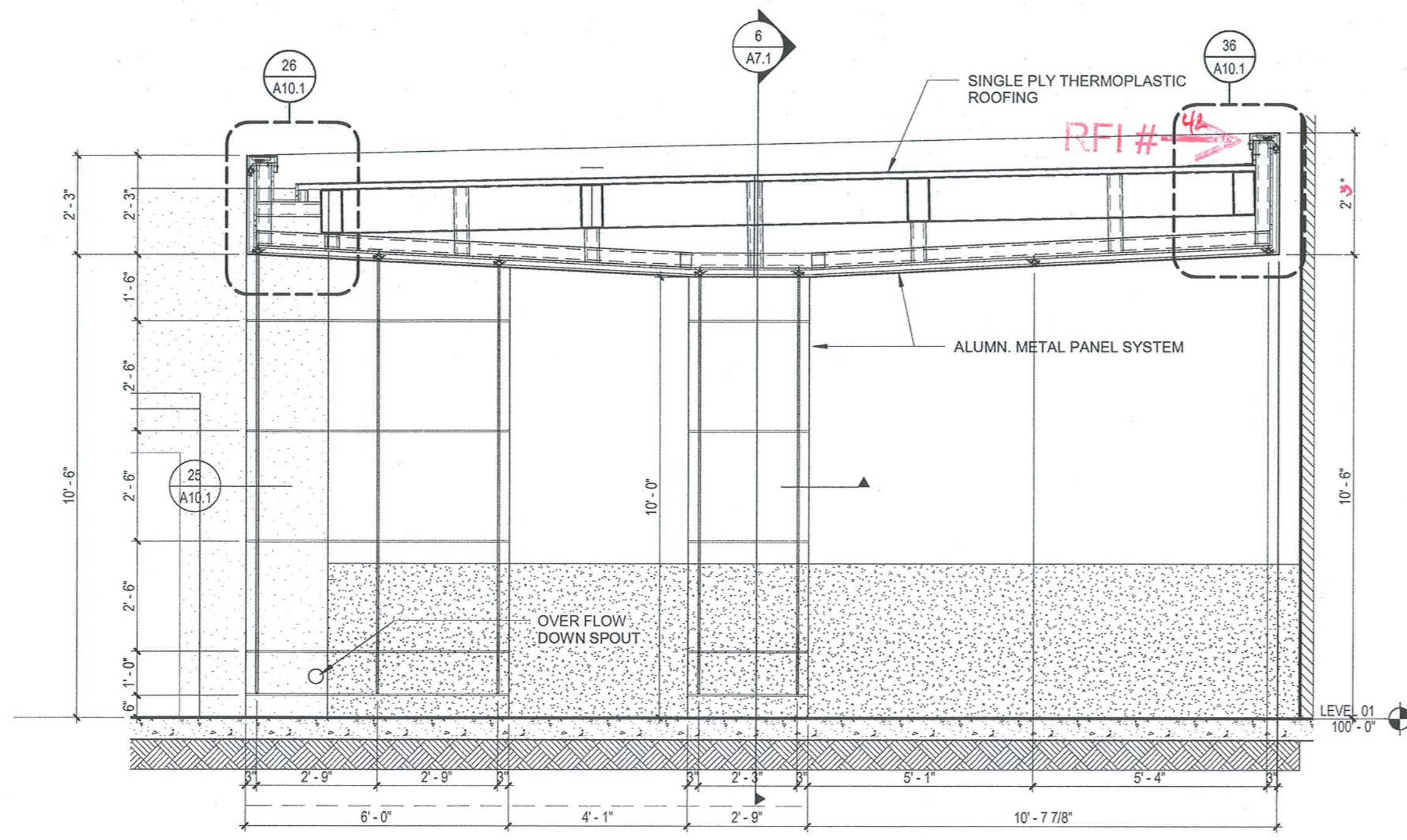
**2 Cross Section**  
 A6.1 SCALE: 3/16" = 1'-0"

**BUILDING SECTIONS**  
 CAMPUS CENTER SHADE STRUCTURE  
 MEASURE L PROJECTS AT CHAFFEY COLLEGE  
 5885 HAVEN AVENUE  
 RANCHO CUCAMONGA, CA 91727



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 Architecture Engineering Planning Interiors  
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**A6.1**  
 PROJECT NUMBER: 75-16601-30  
 ISSUE DATE: 07/26/2017



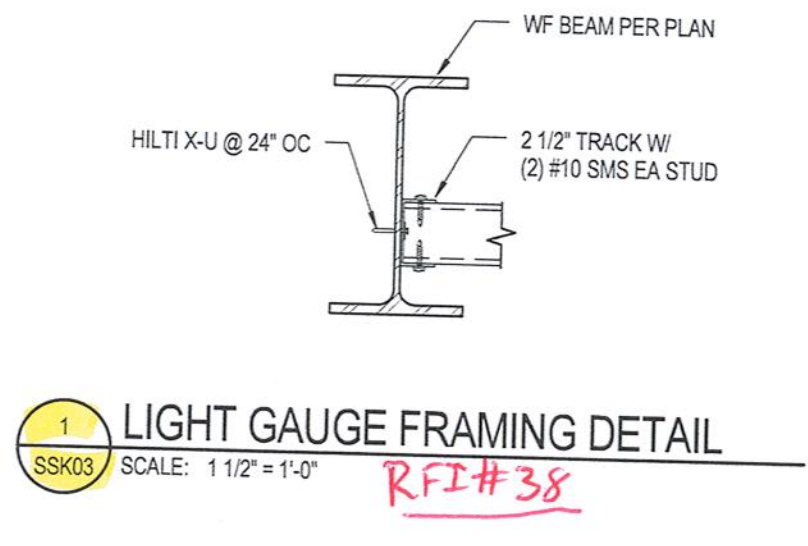
**LEGEND NOTES**  
LEGEND NOTES ARE COMMON TO ALL SHEETS  
SOME NOTES MAY NOT APPLY TO THIS SHEET



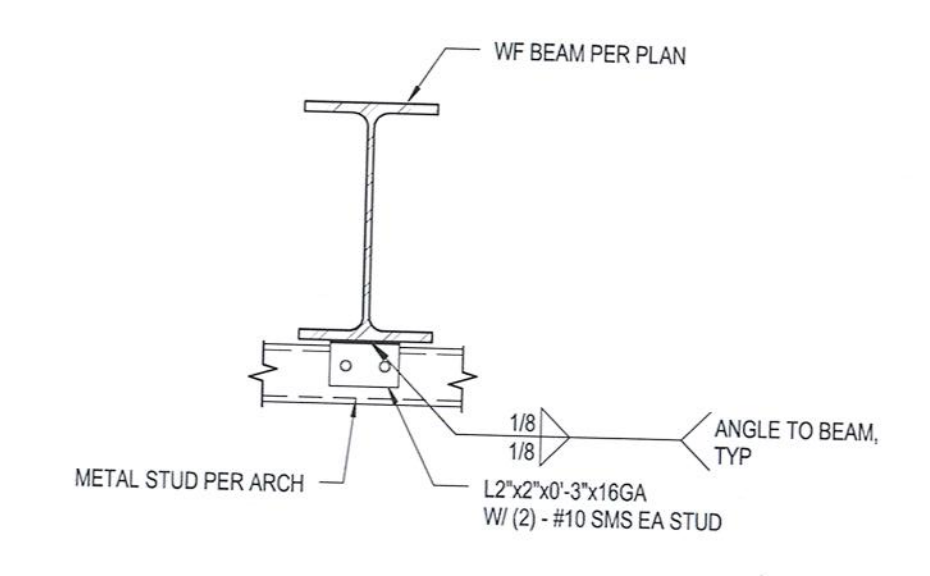
APPROVED  
DIVISION OF THE STATE ARCHITECT  
ACS -- FLS RF SSR CNg  
A# 04- 115807 DATE: 08.07.18  
CCD#3



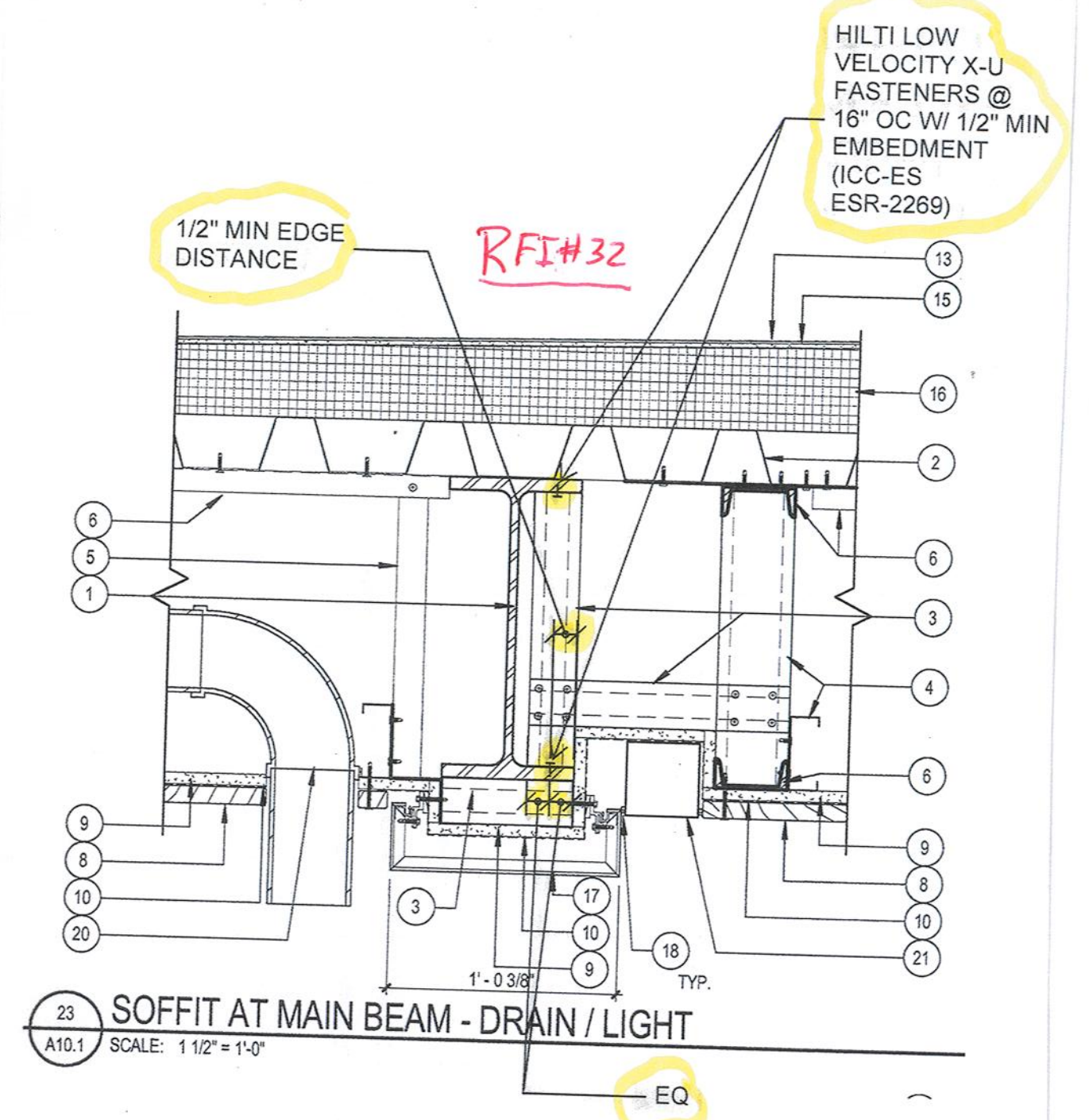
RFI#36 R1



1 LIGHT GAUGE FRAMING DETAIL  
SSK06 SCALE: 1 1/2" = 1'-0"  
RFI#38

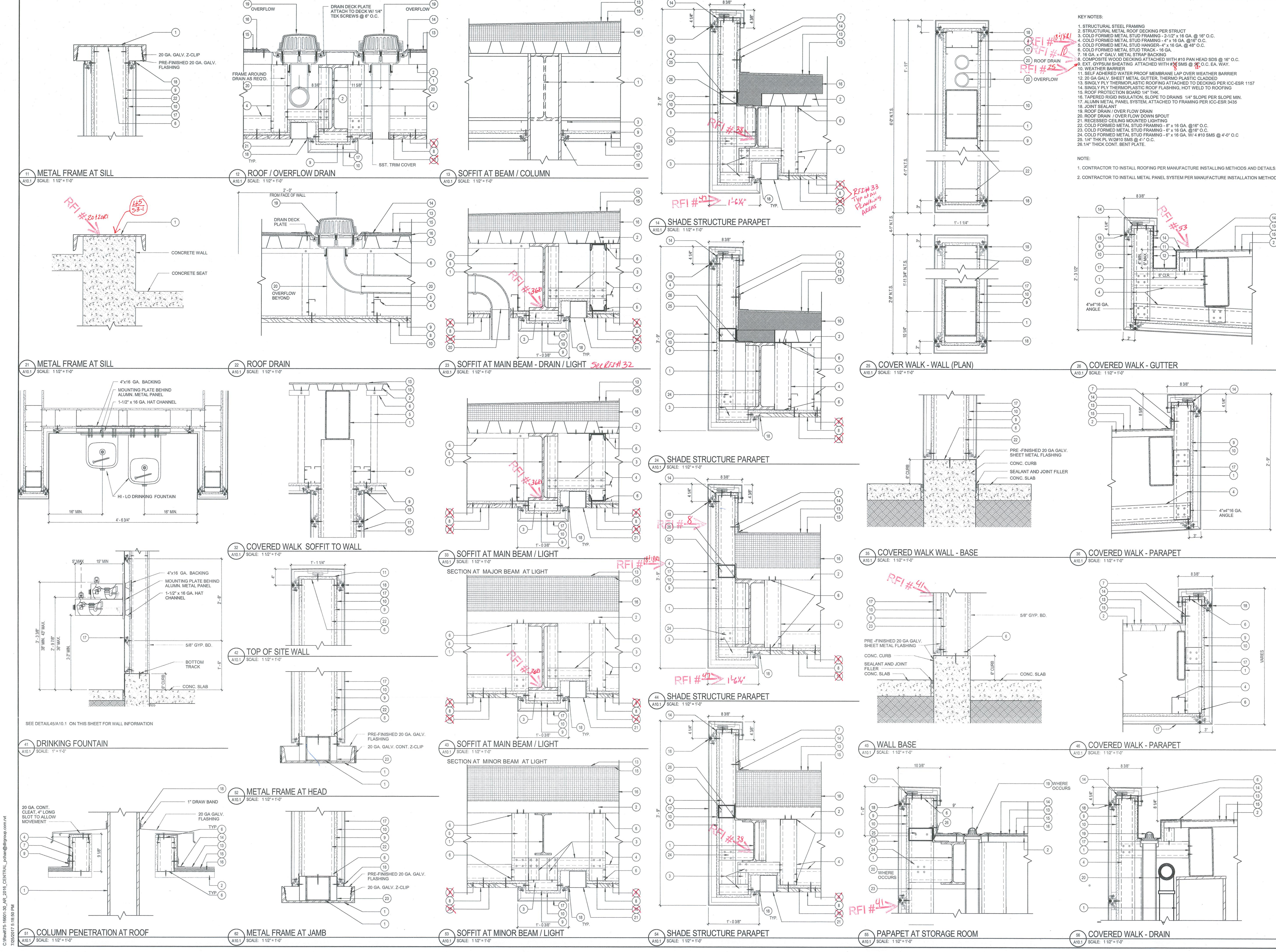


1 LIGHT GAUGE FRAMING DETAIL  
SSK07 SCALE: 1 1/2" = 1'-0"  
SSK07



23 SOFFIT AT MAIN BEAM - DRAIN / LIGHT  
A10.1 SCALE: 1 1/2" = 1'-0"  
EQ

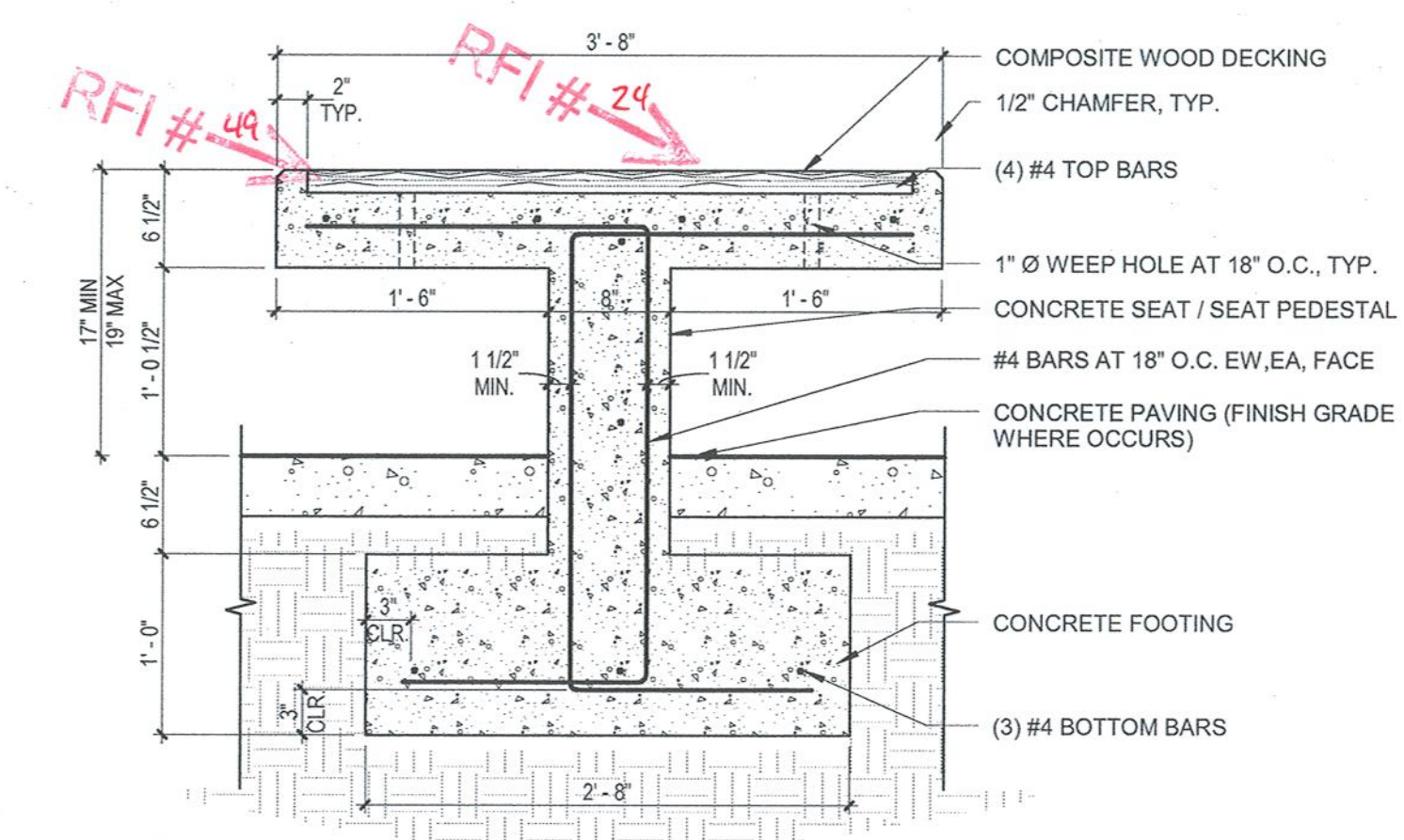
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DLR GROUP, INC  
2018/04/23



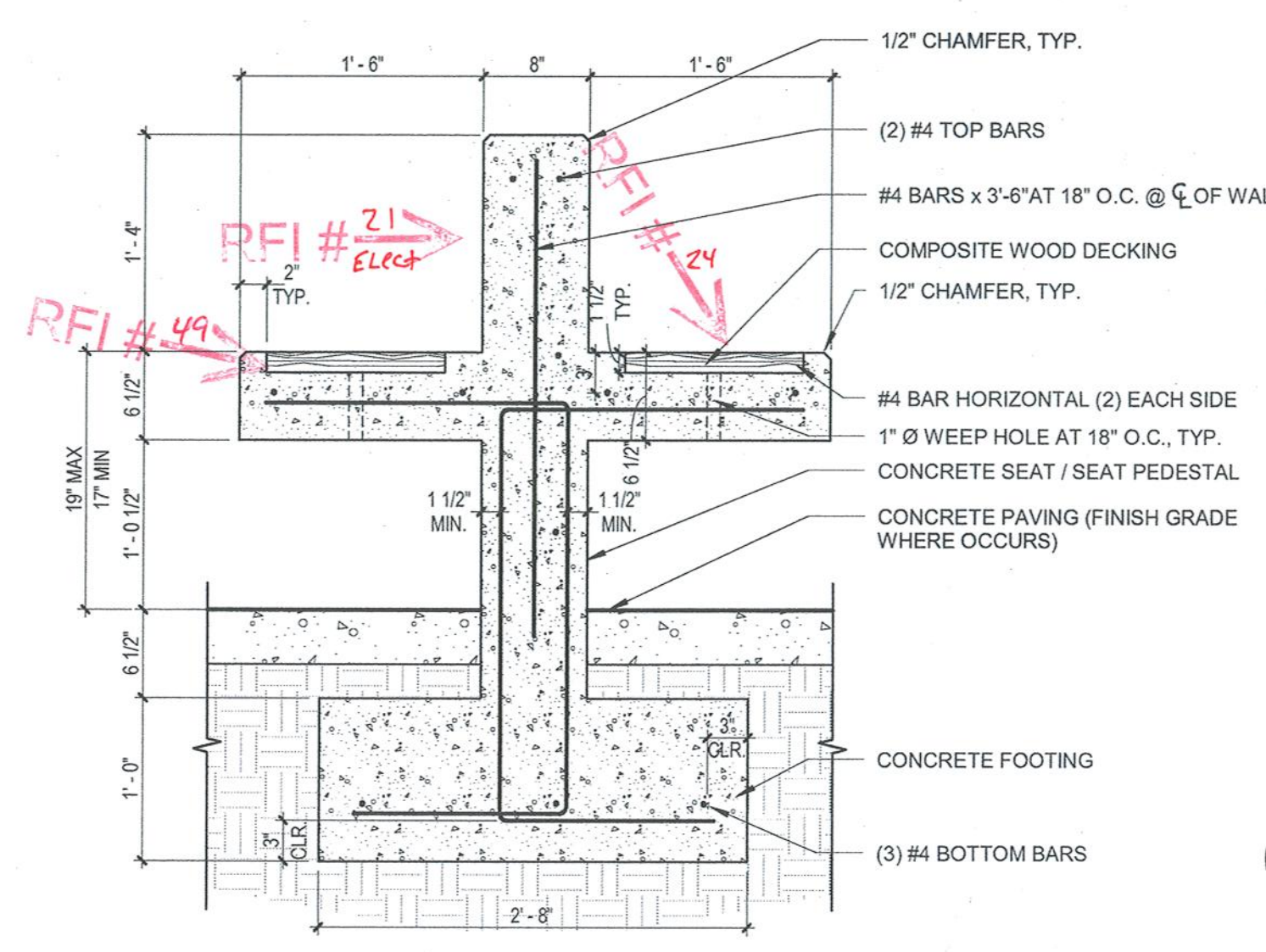
- KEY NOTES:**
1. STRUCTURAL METAL ROOF DECKING PER STRUCT
  2. STRUCTURAL METAL STUD FRAMING - 2-1/2" x 16 GA. @ 16" O.C.
  3. COLD FORMED METAL STUD FRAMING - 4" x 16 GA. @ 16" O.C.
  4. COLD FORMED METAL STUD HANGER - 4" x 16 GA. @ 48" O.C.
  5. COLD FORMED METAL STUD TRACK - 16 GA.
  6. 16 GA. x 4" GALV. METAL STRAP BACKING
  7. 16 GA. x 4" GALV. METAL STRAP BACKING
  8. COMPOSITE WOOD DECKING ATTACHED WITH #10 PAN HEAD SDS @ 16" O.C.
  9. EXT. GYPSUM SHEATHING ATTACHED WITH #8 SMS @ 16" O.C. EA. WAY.
  10. WEATHER BARRIER
  11. SELF ADHERED WATER PROOF MEMBRANE LAP OVER WEATHER BARRIER
  12. 20 GA. GALV. SHEET METAL GUTTER, THERMO PLASTIC CLADDED
  13. SINGLY PLY THERMOPLASTIC ROOFING ATTACHED TO DECKING PER ICC-ESR 1157
  14. SINGLY PLY THERMOPLASTIC ROOF FLASHING, HOT WELD TO ROOFING
  15. ROOF PROTECTION BOARD 1/4" THK
  16. TAPERED RIGID INSULATION, SLOPE TO DRAINS, 1/4" SLOPE PER SLOPE MIN.
  17. ALUMINUM METAL PANEL SYSTEM, ATTACHED TO FRAMING PER ICC-ESR 3435
  18. JOINT SEALANT
  19. ROOF DRAIN / OVER FLOW DRAIN
  20. ROOF DRAIN / OVER FLOW DOWN SPOUT
  21. RECESSED CEILING MOUNTED LIGHTING
  22. COLD FORMED METAL STUD FRAMING - 8" x 16 GA. @ 16" O.C.
  23. COLD FORMED METAL STUD FRAMING - 8" x 16 GA. @ 16" O.C.
  24. COLD FORMED METAL STUD FRAMING - 8" x 16 GA. W/ 4 #10 SMS @ 4'-0" O.C.
  25. 1/4" THK PL. W/ #10 SMS @ 4'-0" O.C.
  26. 1/4" THK CONT. BENT PLATE.
- NOTE:**
1. CONTRACTOR TO INSTALL ROOFING PER MANUFACTURE INSTALLING METHODS AND DETAILS.
  2. CONTRACTOR TO INSTALL METAL PANEL SYSTEM PER MANUFACTURE INSTALLATION METHODS.

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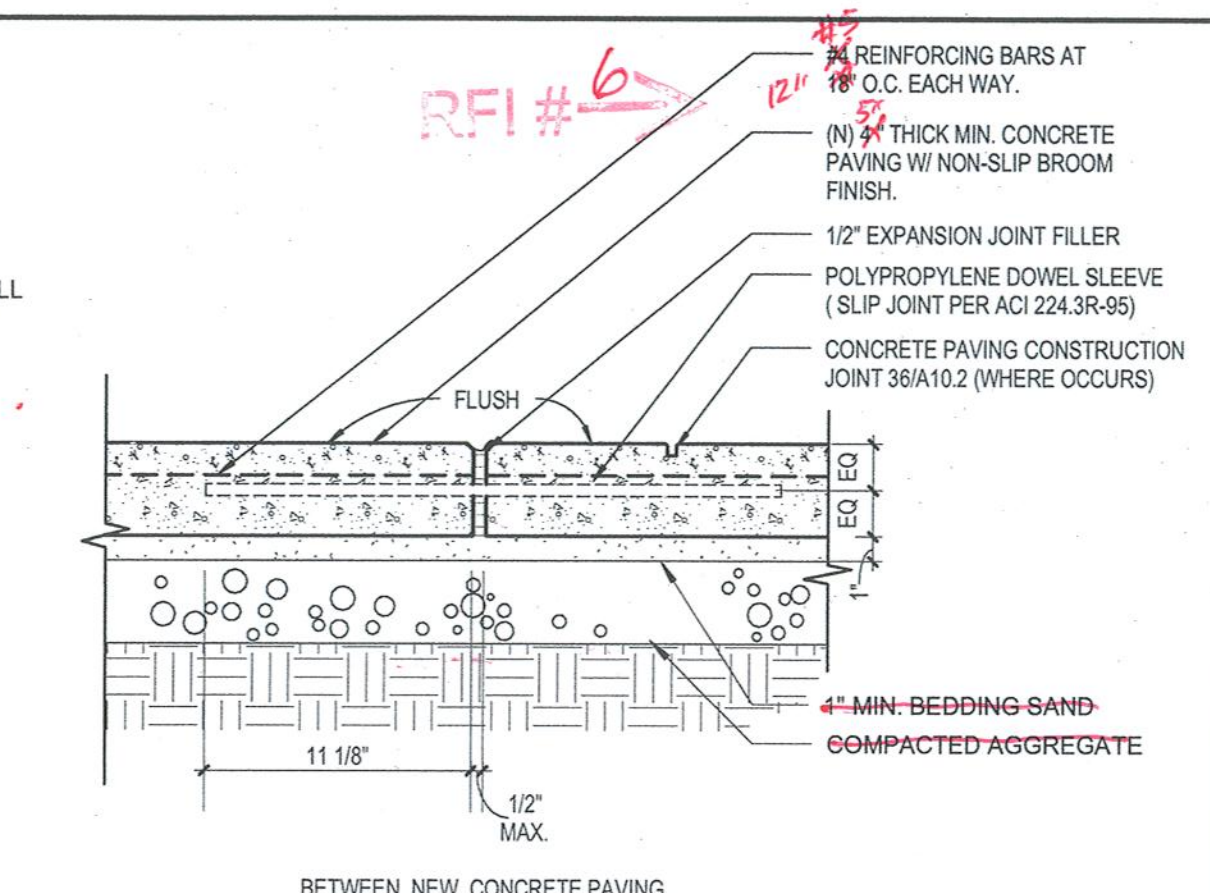


14 TYPE 3 SEAT WALL  
SCALE: 1" = 1'-0"

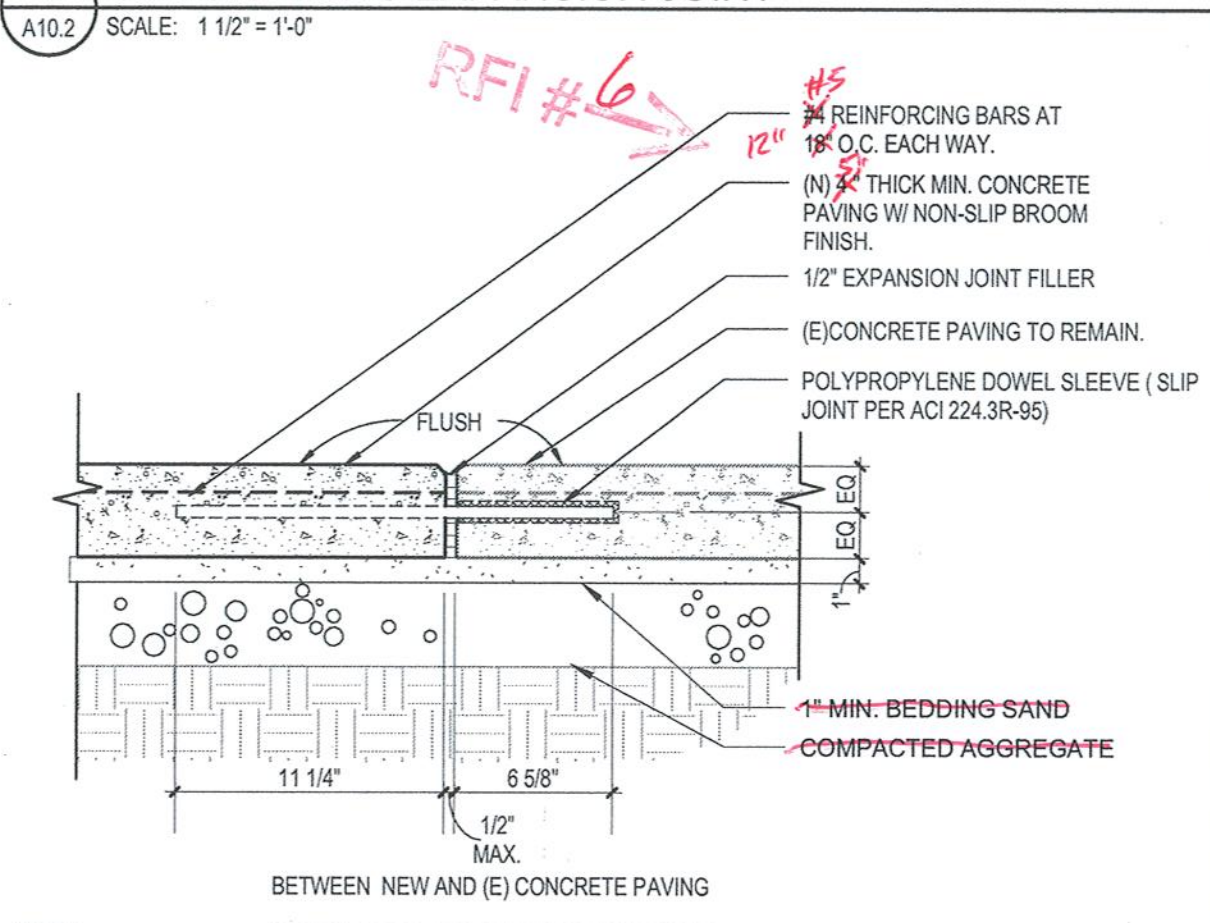


15 TYPE 2 SEAT WALL  
SCALE: 1" = 1'-0"

NOTE:  
PLEASE REFERENCE DETAIL 4103.1 FOR ALL REINFORCEMENT AND FOOTING SIZES.

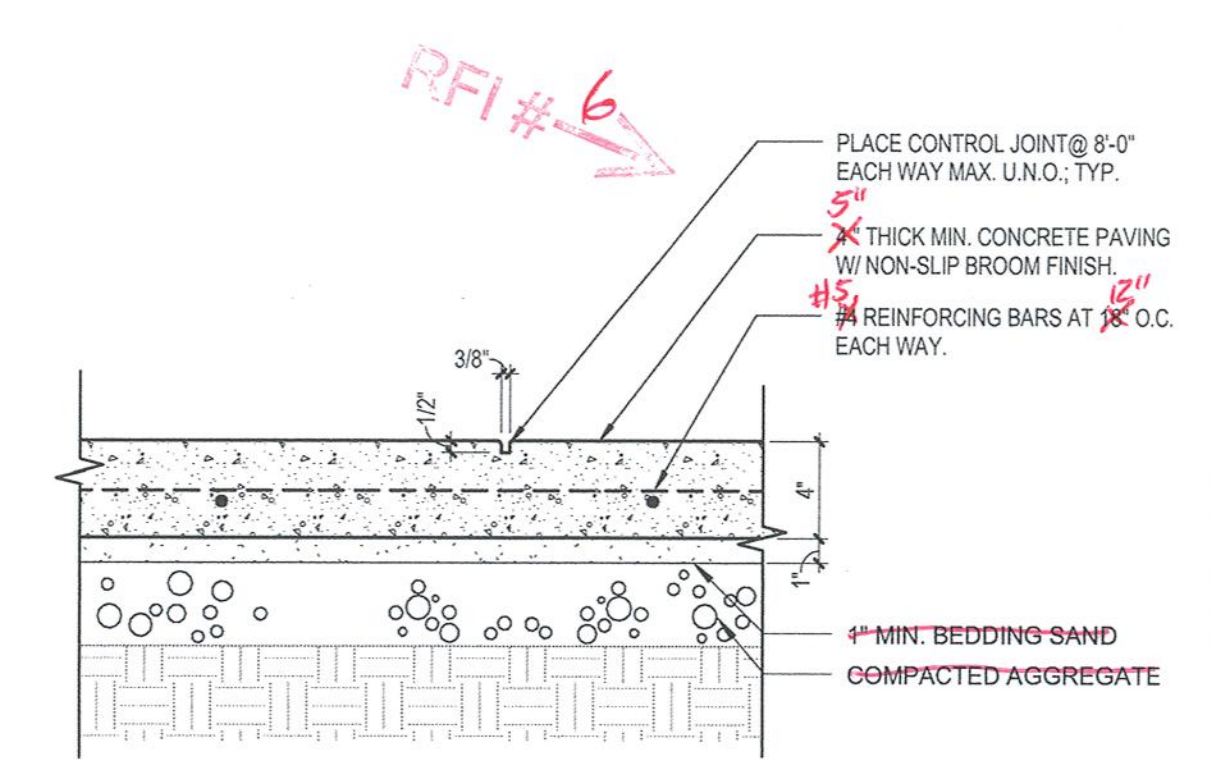


16 CONC. PAVING EXPANSION JOINT  
SCALE: 1 1/2" = 1'-0"

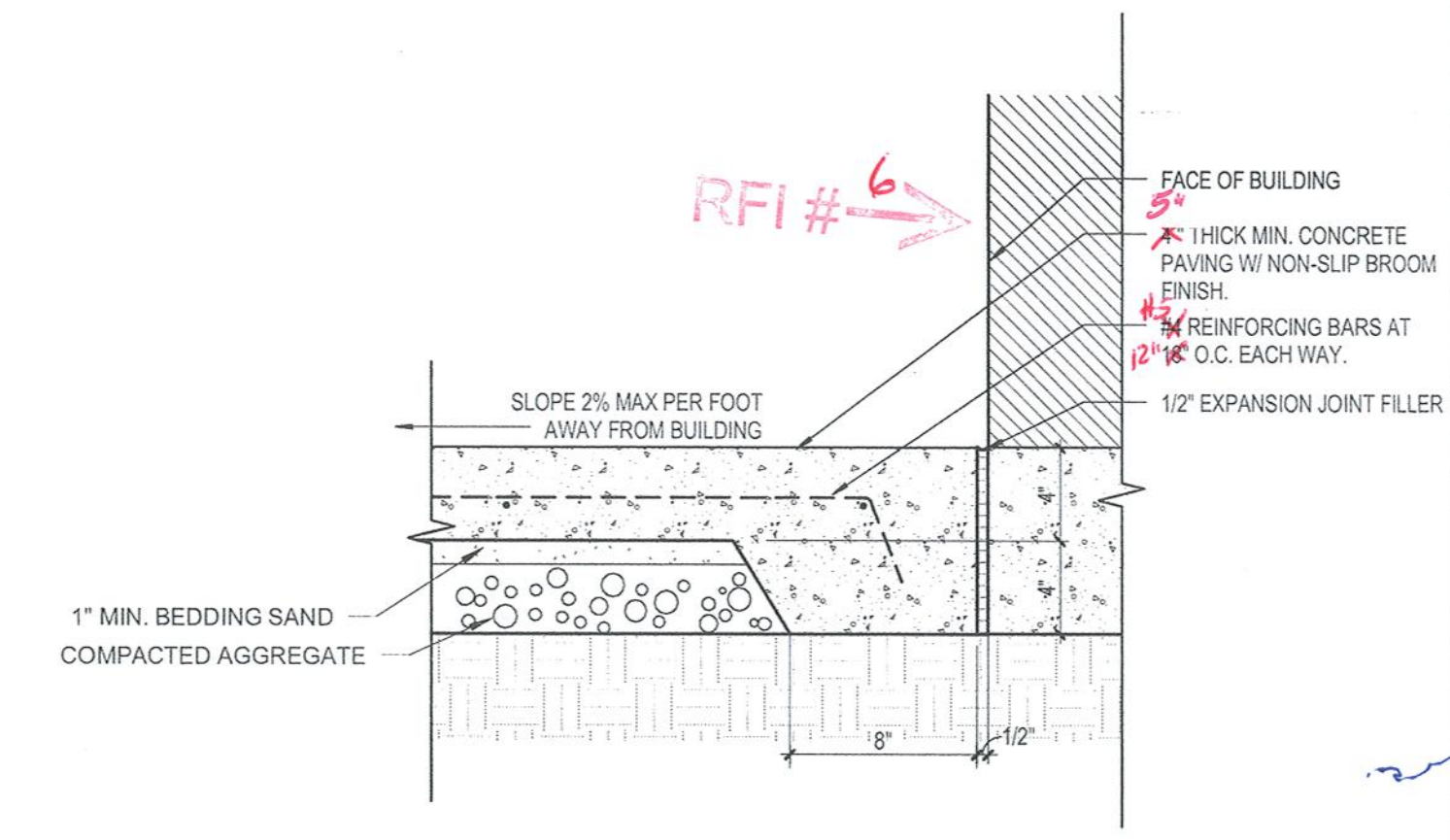


17 CONCRETE PAVING EXPANSION JOINT AT EXISTING  
SCALE: 1 1/2" = 1'-0"

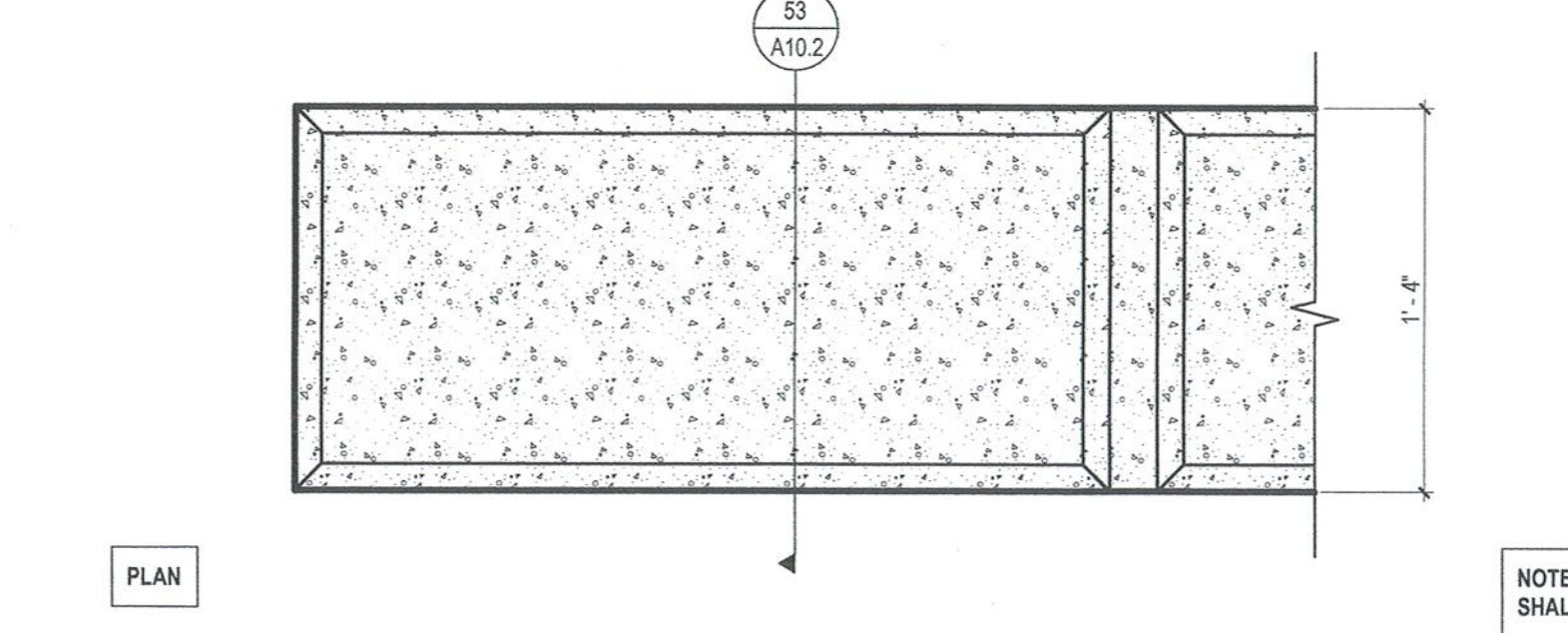
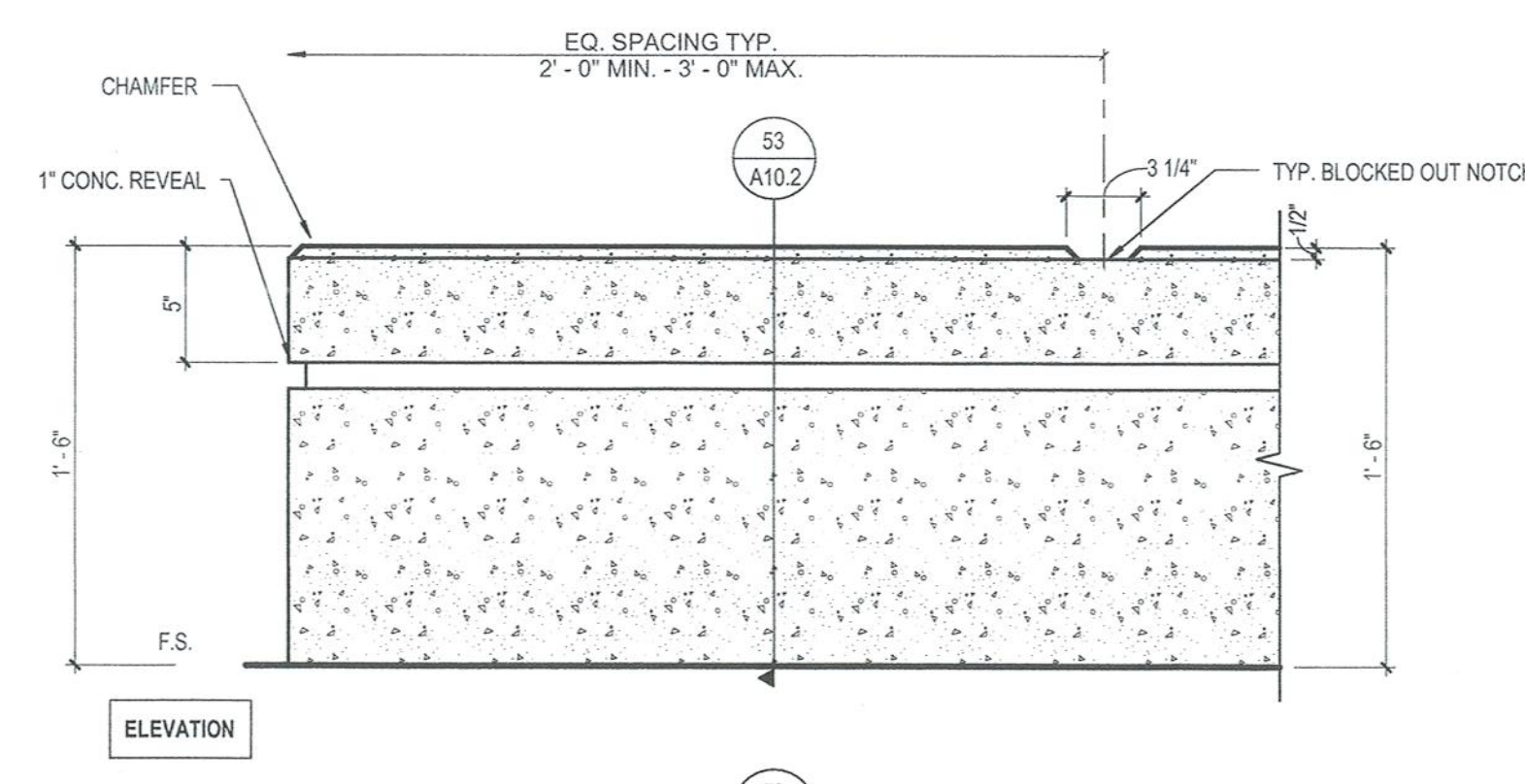
NOTE:  
1. VERTICAL CHANGE IN ELEVATION ALONG ACCESSIBLE PATH OF TRAVEL CANNOT EXCEED 1/4" PER CBC 11B-303.2.  
2. LEVEL CHANGE BETWEEN 1/4"-1/2" MUST BEVELLED @ 1:2 MAX PER CBC 11B-303.3.



18 CONCRETE PAVING CONTROL JOINT  
SCALE: 1 1/2" = 1'-0"



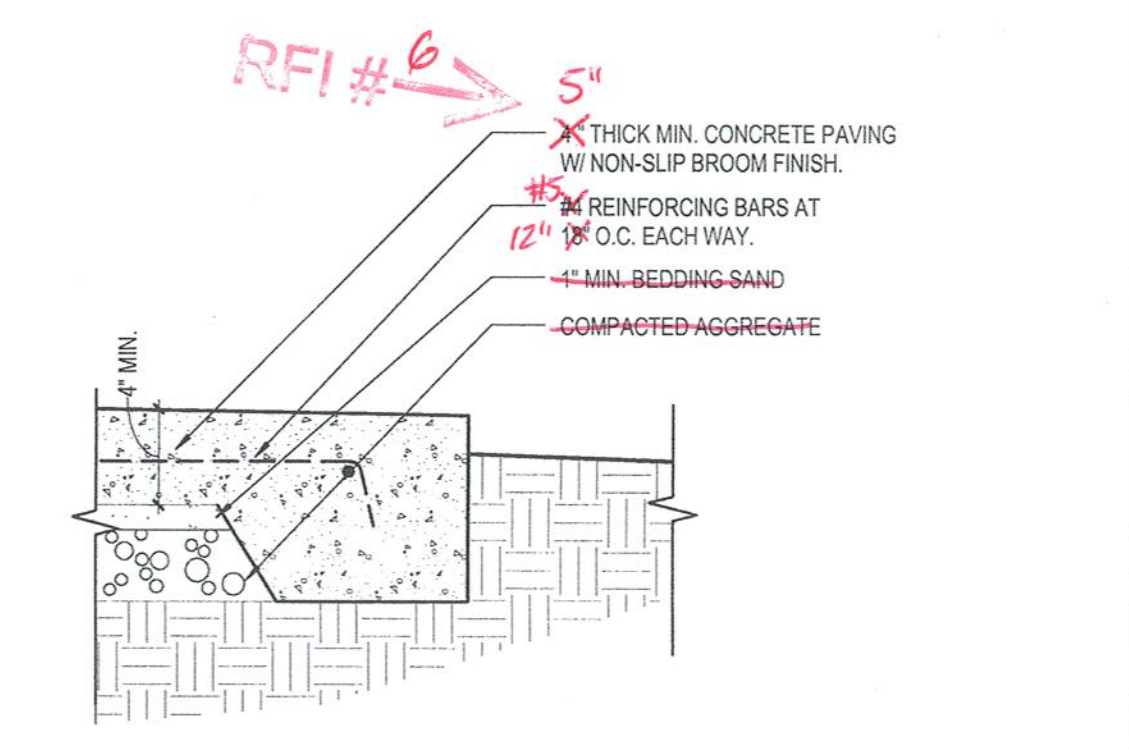
19 CONCRETE PAVING JOINT TO BLDG EXTERIOR WALL  
SCALE: 1 1/2" = 1'-0"



52 CONCRETE BENCH PLAN / ELEVATION  
SCALE: 1 1/2" = 1'-0"

53 CONCRETE BENCH SECTION  
SCALE: 1 1/2" = 1'-0"

NOTE: ALL EXPOSED SURFACES OF SEATING WALL SHALL HAVE SMOOTH SACKED CONCRETE FINISH



58 CONCRETE PAVING EDGE @ SIDEWALK  
SCALE: 1 1/2" = 1'-0"



GENERAL NOTES

CODE:

CALIFORNIA BUILDING CODE, 2013 EDITION

GENERAL NOTES:

- 1. THE DRAWINGS REPRESENT THE FINISHED STRUCTURE, NOT THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, BRACING, SHORING FOR CONSTRUCTION LOADS AND EQUIPMENT, ETC. THE ARCHITECT-ENGINEER IS NOT RESPONSIBLE FOR THE CONTRACTOR'S MEANS AND METHODS, SEQUENCES OF CONSTRUCTION, OR THE SAFETY PROGRAM. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT-ENGINEER WILL NOT INVOLVE REVIEW OF THESE ITEMS.
2. CONTRACTOR IS TO ESTABLISH AND VERIFY OPENINGS AND INSERTS FOR ITEMS TO BE INSTALLED BY OTHER TRADES PRIOR TO SUBMITTAL OF SHOP DRAWINGS AND CONSTRUCTION.
3. CONSTRUCTION MATERIAL AND EQUIPMENT PLACED ON FRAMED CONSTRUCTIONS SHALL BE SUCH THAT THE LOAD DOES NOT EXCEED THE DESIGN LIVE LOAD OF THE CONSTRUCTION. PROVIDE SHORING OF CONSTRUCTIONS WHERE NECESSARY FOR LOADS.
4. DETAILS THAT ARE NOTED AS "TYP." ON DETAIL TITLES ARE TO BE APPLIED TO THE PROJECT CONSTRUCTION AS GENERAL CONSTRUCTION METHODS UNLESS NOTED OTHERWISE. THESE DETAILS ARE NOT CUT AT ALL LOCATIONS THEY OCCUR AND MAY NOT BE CUT AT ALL. WHERE NO SPECIFIC DETAILS ARE SHOWN CONSTRUCTION SHALL CONFORM TO SIMILAR CONDITIONS ELSEWHERE ON THE PROJECT.
5. DO NOT SCALE DRAWINGS.
6. THESE NOTES SHALL SUPPLEMENT THE PROJECT SPECIFICATIONS, WHICH SHALL BE REFERRED TO FOR ADDITIONAL REQUIREMENTS.
7. WHERE DISCREPANCIES OCCUR BETWEEN GENERAL NOTES, PLANS, DETAILS, AND SPECIFICATIONS, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN, UNLESS VERIFIED OTHERWISE BY THE ARCHITECT AND ENGINEER.
8. THESE DOCUMENTS SHALL NOT BE CONSTRUED AS STAND-ALONE DOCUMENTS. CONTRACTOR SHALL COORDINATE WITH ALL OTHER CONSULTANTS WORK.
9. CONSTRUCTION DOCUMENTS SHALL NOT BE REPRODUCED FOR USE OF SHOP DRAWINGS SUBMITTALS OR ANY OTHER PROJECT WITHOUT WRITTEN CONSENT BY DLR GROUP.
10. IF THE STRUCTURAL ENGINEER'S SEAL AND SIGNATURE IS NOT AFFIXED TO THESE DRAWINGS, THESE DRAWINGS ARE INTENDED FOR PRELIMINARY PURPOSES ONLY AND SHALL NOT BE USED FOR CONSTRUCTION.

DESIGN DEAD LOADS:

NOTE: SELF WEIGHTS OF STRUCTURAL MEMBERS NOT INCLUDED.

SHADE STRUCTURE ROOF: 15 PSF

DESIGN LIVE LOADS:

ROOF: 20 PSF (REDUCIBLE IN ACCORD WITH CBC 1607A.12.2.1)

WIND LOAD:

FOR STRUCTURE WITH RISK CATEGORY II
ULTIMATE WIND SPEED, V = 110 MPH
FOR STRUCTURE WITH RISK CATEGORY III
ULTIMATE WIND SPEED, V = 115 MPH
EXPOSURE: 'C'
INTERNAL PRESSURE COEFFICIENT: CPI = 0.0

SEISMIC LOAD:

SITE LATITUDE = 34.14664
SITE LONGITUDE = -117.57483
S1 = 0.87 S2 = 2.03
SM1 = 1.032 SM2 = 2.210
SD1 = 1.488 SD2 = 1.473
SITE CLASS: D

RISK CATEGORY PER TABLE 1604.5:

SEISMIC DESIGN CATEGORY: III
SEISMIC IMPORTANCE FACTOR: Ie = 1.25
COMPONENT IMPORTANCE FACTOR: Ie = 1.0
ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE
SEISMIC FORCE-RESISTING SYSTEM: SPECIAL STEEL CANTILEVER COLUMN SYSTEM
RESPONSE MODIFICATION COEFFICIENT: R = 2.5
SYSTEM OVERSTRENGTH FACTOR: Oo = 1.25
DEFLECTION AMPLIFICATION FACTOR: Cd = 2.5
REDUNDANCY FACTOR: p = 1.0
SEISMIC RESPONSE COEFFICIENT: Cs = 0.727

SEISMIC FORCE-RESISTING SYSTEM:

RESPONSE MODIFICATION COEFFICIENT: R = 3.5
SYSTEM OVERSTRENGTH FACTOR: Oo = 3
DEFLECTION AMPLIFICATION FACTOR: Cd = 2.5
REDUNDANCY FACTOR: p = 1.0
SEISMIC RESPONSE COEFFICIENT: Cs = 0.519

LATERAL LOAD RESISTANCE SYSTEM:

LATERAL LOAD SYSTEM FOR SHADE STRUCTURE CONSISTS OF METAL DECK TRANSFERRING LATERAL LOADS TO MOMENT FRAME BEAMS TO MOMENT FRAME COLUMNS
LATERAL LOAD SYSTEM FOR COVERED WALK CANOPY CONSISTS OF METAL DECK TRANSFERRING LATERAL LOADS TO CANTILEVER COLUMNS.

FOUNDATIONS:

1. THE FOUNDATION SYSTEM CONSISTS OF SPREAD AND CONTINUOUS FOOTINGS.

THE FOLLOWING DESIGN PARAMETERS ARE ASSUMED FOR THE FOUNDATION PER THE GEOTECHNICAL REPORT BY GECCON, PROJECT NO. 12746-99-03, DATED NOVEMBER 28, 2016:

- ALLOWABLE SOIL BEARING PRESSURE = 2000 PSF (DEAD PLUS LIVE LOADS)
- ACTIVE (UNRESTRAINED) EQUIVALENT FLUID PRESSURE = 30 PCF
- AT-REST (RESTRAINED) EQUIVALENT FLUID PRESSURE = 50 PCF
- PASSIVE EQUIVALENT FLUID PRESSURE = 30 PCF
- COEFFICIENT OF FRICTION = 0.45

A. ONE-THIRD INCREASE FOR SEISMIC LOADS SHALL BE PERMITTED PER GEOTECHNICAL REPORT.

2. WALLS ARE NOT DESIGNED TO WITHSTAND TEMPORARY CONSTRUCTION LOADS, INCLUDING WIND AND SEISMIC. CONTRACTOR'S ENGINEER IS RESPONSIBLE FOR DESIGN OF TEMPORARY SHORING.

3. BACKFILLING AGAINST FOUNDATION WALLS WHERE GRADE IS PRESENT ON BOTH SIDES SHALL BE PERFORMED SUCH THAT THE DIFFERENCE IN SOIL HEIGHT ON EACH SIDE DOES NOT EXCEED 2 FEET.

4. ALL CONCRETE SHALL BE PROPORTIONED FOR A MAXIMUM ALLOWABLE UNIT SHRINKAGE OF 0.04% MEASURED AT 28 DAYS AFTER CURING IN LIME WATER AS DETERMINED BY ASTM C157 USING AIR STORAGE. PROVIDE TEST RESULTS WITH MIXTURE DESIGN.

SITE PREPARATION

- 1. SITE PREPARATION SHALL FOLLOW PROVISIONS SPECIFIED BY THE GEOTECHNICAL REPORT.
2. THE GEOTECHNICAL ENGINEER SHALL BE SUMMONED TO THE SITE TO REVIEW THE CONDITION OF THE FINAL EXCAVATION PRIOR TO BACKFILLING TO ENSURE THAT ADDITIONAL EXCAVATION IS NOT NECESSARY.

FIRE RATINGS:

- 1. FOR FIRE-RATING REQUIREMENTS AND METHODS, SEE ARCHITECTURAL DRAWINGS.

CONCRETE CONSTRUCTION:

- 1. CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF ACI 301 AND ACI 318.
2. PROVIDE A FORMED CONSTRUCTION KEYWAY BETWEEN ALL HORIZONTAL AND VERTICAL POUR EDGES EXCEPT CONCRETE TOPPING SLABS. PROVIDE WATERSTOPS FOR ALL CONSTRUCTION JOINTS BELOW WATER TABLE AND WHERE INTERIOR SLAB-ON-GRADE IS BELOW EXTERIOR GRADE.
3. CONCRETE SHALL BE MECHANICALLY CONSOLIDATED IN ACCORD WITH ACI 308.
4. CONTROL (CONTRACTION OR CONSTRUCTION) JOINTS SHALL BOUND ALL CONCRETE SLABS ON GRADE AS SHOWN ON THE DRAWINGS. WHERE NOT SHOWN ON THE DRAWINGS, CONTROL JOINTS SHALL BE LOCATED SUCH THAT THE ENCLOSED AREA IS RELATIVELY SQUARE AND DOES NOT EXCEED 225 SQUARE FEET. KEVED JOINTS NEED ONLY OCCUR AT CONSTRUCTION JOINTS. ALL CONSTRUCTION JOINTS MAY BE SAWCUT.

CONCRETE REINFORCEMENT:

- 1. REINFORCING STEEL SHALL BE ASTM A615, GRADE 60. REINFORCING STEEL TO BE WELDED SHALL BE ASTM A706, GRADE 60.
2. CONCRETE COVER REQUIREMENTS FOR CAST-IN-PLACE, NON-PRESTRESSED CONCRETE UNLESS OTHERWISE NOTED ON DETAILS:
a. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
b. BEAMS AND LARGER: 2"
c. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH EARTH: 1 1/2"
d. BEAMS, COLUMNS: 1 1/2"
e. PRIMARY REINFORCEMENT: 2"
f. TIES, STIRRUPS, SPIRALS: 1 1/2"
3. REINFORCING BAR SPLICES SHALL BE IN ACCORD WITH THE REQUIREMENTS OF ACI 318-11 AND THE REINFORCING SPLICE LENGTH TABLE SHOWN ON THE DRAWINGS. PROVIDE CLASS 'B' LAP SPLICE, UNO.
4. ALL REINFORCING SHALL BE PROPERLY CHAIRED BY THE CONTRACTOR.
5. MECHANICAL COUPLERS SHALL BE TYPE 2 COUPLERS CAPABLE OF SUSTAINING 125% Fy.

CAST-IN-PLACE CONCRETE:

- 1. PROPORTION EACH INDIVIDUAL CONCRETE MIX TO HAVE THE FOLLOWING PROPERTIES:

Table with 5 columns: CLASS, LOCATION, 28 DAY Fc, W/C RATIO, MAX SLUMP, MAX AGG. Rows include WALLS AND COLUMNS, ELEVATED SLABS AND BEAMS, CAST-IN-TENSORED SLAB, SLABS-ON-GRADE, FOUNDATIONS, and ALL OTHER.

- 2. CONCRETE CONTAINING SUPERPLASTICIZING ADMIXTURE SHALL HAVE A SLUMP NOT EXCEEDING 3" PRIOR TO ADDING ADMIXTURE AND NOT EXCEEDING 8" AT PLACEMENT

- 3. THE ADDITION OF WATER TO A CONCRETE BATCH WITH INSUFFICIENT SLUMP SHALL NOT BE PERMITTED

- 4. WITH EXCEPTION OF DRILLED PIERS AND COLUMNS, ALL CONCRETE SHALL BE PROPORTIONED FOR A MAXIMUM ALLOWABLE UNIT SHRINKAGE OF 0.04% MEASURED AT 28 DAYS AFTER CURING IN LIME WATER AS DETERMINED BY ASTM C157 USING AIR STORAGE. PROVIDE TEST RESULTS WITH MIXTURE DESIGN.

POST-INSTALLED ANCHORS:

- 1. ALL POST-INSTALLED ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND ICC EVALUATION REPORTS CORRESPONDING TO THAT ANCHOR.
2. CONCRETE:
EXPANSION ANCHORS: SIMPSON STRONG-TIE STRONG-BOLT WEDGE ANCHORS (ICC ESR-1396)
ADHESIVE ANCHORS: SIMPSON STRONG-TIE SET-XP ADHESIVE ANCHORS (ICC ESR-2508)
SCREW ANCHORS: SIMPSON STRONG-TIE TITEN HD ANCHORS (ICC ESR-2713)
3. MASONRY:
EXPANSION ANCHORS: HILTI KWIK BOLT 3 MASONRY ANCHORS (ICC ESR-1385)
ADHESIVE ANCHORS: HILTI HY-70 FAST CURE ADHESIVE ANCHORS (ICC ESR-3342)
SCREW ANCHORS: SIMPSON STRONG-TIE TITEN HD ANCHORS (ICC ESR-1056)
4. POWER/POWDER ACTUATED FASTENERS (SHOT PINS):
ANCHORAGE INTO CONCRETE: HILTI X-U (ESR-2289) W/ 1" EMBEDMENT UNO
ANCHORAGE INTO STEEL: HILTI X-U (ESR-2289)
5. EMBEDMENT OF POST-INSTALLED ANCHORS SHALL BE PER TYP ANCHOR, EXPANSION, AND ADHESIVE BOLT SCHEDULE "ON THE DRAWINGS OR EMBEDMENT AS RECOMMENDED BY MANUFACTURER WHERE NO EMBEDMENT IS SHOWN.
6. MASONRY CELLS SHALL BE FULLY GROUTED FOR INSTALLATION OF POST-INSTALLED ANCHORS.
7. POST-INSTALLED ANCHORS ARE NOT TO BE INSTALLED UNTIL CONCRETE OR GROUT HAS REACHED ITS DESIGN STRENGTH.

STRUCTURAL STEEL:

- 1. FABRICATOR SHALL BE AN 'APPROVED FABRICATOR' IN ACCORDANCE WITH CBC SECTION 1704A.2.5.1, REGISTERED AND APPROVED BY OSA. IN LIEU OF THE PREVIOUS, FABRICATOR SHALL INCLUDE IN THEIR BID THE SERVICES OF THE OWNER'S SPECIAL INSPECTION AND TESTING AGENCY TO PROVIDE INSPECTION/TESTING SERVICES FOR IN-SHOP WORK TO MEET THE REQUIREMENTS OF CBC SECTION 1704A. FINAL COSTS OF THESE SERVICES WILL BE AS REQUIRED BY THE OWNER'S SPECIAL INSPECTION AND TESTING AGENCY, WHO MAY OR MAY NOT BE HIRED AT THE TIME OF BIDDING THE PROJECT. COSTS WILL BE WITHHELD FROM THE CONTRACTOR TO PAY FOR THESE SERVICES. ANY STEEL FABRICATOR NOT MEETING THE REQUIREMENTS OF THE CONTRACT DOCUMENTS OR SPECIFICATIONS WILL BE REJECTED.
2. ALL COMPLETE JOINT PENETRATION WELDS SHALL BE ULTRASONIC TESTED BY THE INSPECTION AGENCY.
3. STRUCTURAL STEEL SHALL MEET ASTM A36 UNLESS NOTED OTHERWISE. STRUCTURAL STEEL WIDE FLANGE SHAPES SHALL MEET ASTM A992 (GRADE 50).
4. STEEL TUBE SHALL MEET ASTM A500, GRADE B.
5. STEEL PIPE SHALL MEET ASTM A53, TYPE E OR S.
6. BOLTS AT STEEL TO STEEL CONNECTIONS SHALL BE 3/4-INCH DIAMETER, ASTM A325-N, AND TIGHTENED TO THE SNUG TIGHT CONDITION AS DEFINED BY AISC UNLESS OTHERWISE NOTED. WHERE CONNECTIONS ARE NOTED TO BE ASTM A325-SC BOLTS SHALL BE TIGHTENED TO THE MINIMUM PRETENSION FOR FULLY TIGHTENED BOLTS BY ONE OF THE AISC APPROVED METHODS.
7. ANCHOR BOLTS IN CONCRETE OR MASONRY SHALL BE 3/4-INCH DIAMETER ASTM F1554 GRADE 55, WELDABLE, UNLESS NOTED OTHERWISE.
8. FIELD BOLTING INSTALLATION SHALL BE INSPECTED IN ACCORD WITH THE BUILDING CODE AND THE AISC MANUAL.
9. ALL WELDING SHALL CONFORM TO THE PROVISIONS OF THE AMERICAN WELDING SOCIETY CODE AWS D1.1. ELECTRODES SHALL MATCH BASE METALS AS SPECIFIED IN THE CBC. ALL WELDING OF ASTM A706 REINFORCING STEEL TO STRUCTURAL STEEL SHALL BE IN ACCORD WITH AWS D1.4 USING E70 ELECTRODES.
10. THE TESTING LABORATORY SHALL VISUALLY INSPECT ALL FIELD WELDING. ALL COMPLETE PENETRATION WELDS SHALL BE TESTED AND CERTIFIED BY AN INDEPENDENT TESTING LABORATORY.
11. ALL BOLTS HIGH STRENGTH, ANCHOR BOLTS, EXPANSION BOLTS, ADHESIVE ANCHORS, ETC.) SHALL BE INSTALLED WITH STEEL WASHERS.
12. ALL WELDS SHOWN ON THE DRAWINGS SHALL BE SHOP WELDS UNLESS NOTED OTHERWISE. CONTRACTOR MAY SUBSTITUTE FIELD WELDS FOR SHOP WELDS AT HIS DISCRETION. SHOP DRAWINGS SHALL CLEARLY NOTE SHOP AND FIELD WELDS.
13. CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE BUILDING SYSTEM AT ALL TIMES DURING THE ERECTION PROCESS. CONTRACTOR SHALL CONSIDER EFFECTS FROM WIND, SEISMIC, AND OTHER LOADING DURING CONSTRUCTION.

COLD-FORMED STEEL FRAMING:

- 1. FABRICATE AND ERECT COLD-FORMED STEEL STRUCTURAL MEMBERS PER THE REQUIREMENTS OF THE LATEST EDITION OF THE SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS BY THE AMERICAN IRON AND STEEL INSTITUTE.
2. PROVIDE SHOP DRAWINGS AND CALCULATIONS SIGNED AND SEALED BY THE ENGINEER, LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED, RESPONSIBLE FOR THE WORK.
3. PROVIDE COLD-FORMED METAL FRAMING MEMBERS WITH SECTION PROPERTIES AS MANUFACTURED BY MEMBERS OF THE STEEL STUD MANUFACTURERS ASSOCIATION (SSMA) COMPLYING WITH ICC REPORT 3084P AND THE CALIFORNIA BUILDING CODE.
4. WELDERS EXPERIENCED IN WELDING LIGHT GAGE STEEL SHALL PERFORM ALL WELDING.

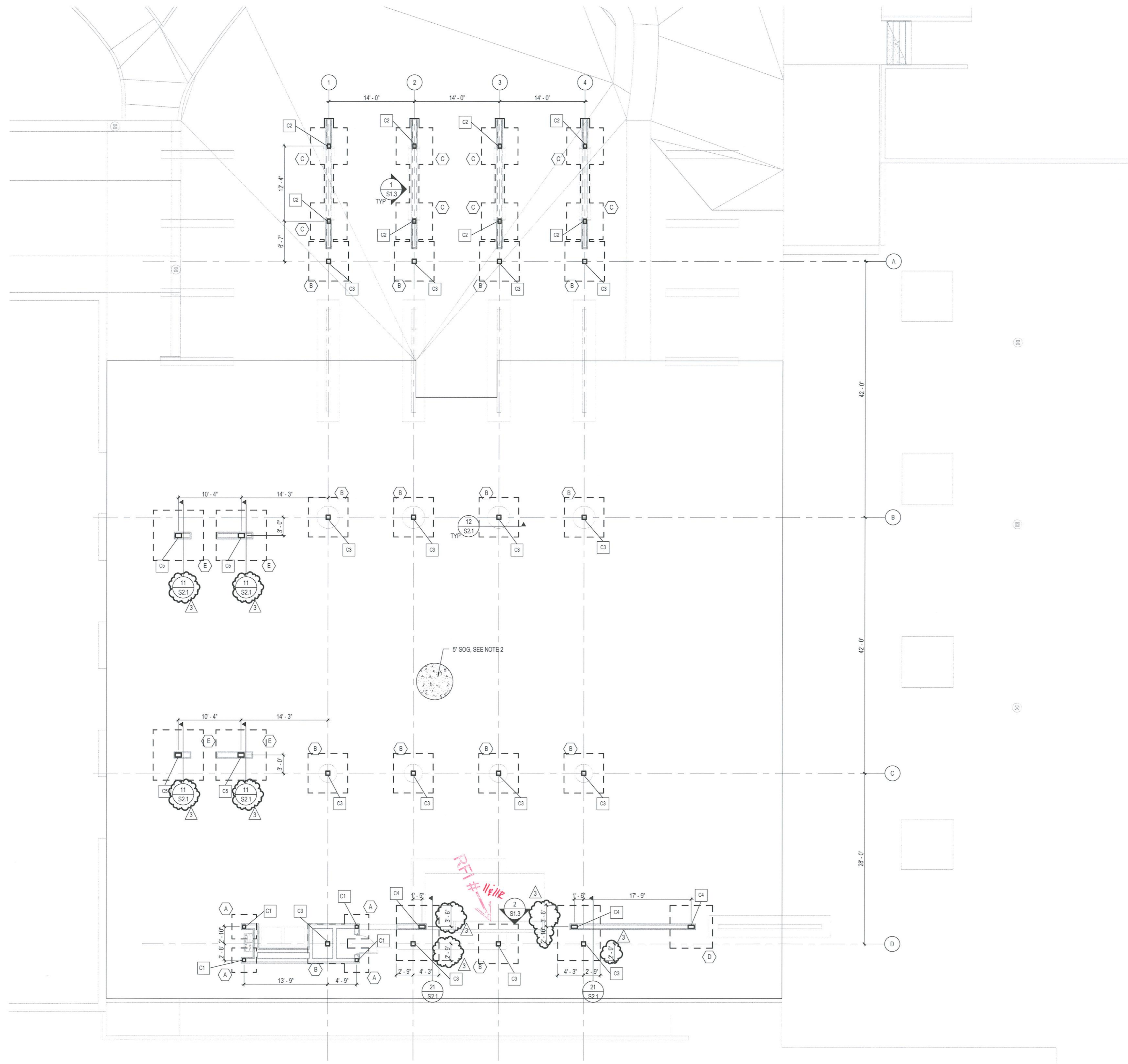
SUBMITTALS GENERAL:

- 1. THE CONTRACTOR SHALL DEVELOP AND SUBMIT A SUBMITTAL SCHEDULE CLEARLY INDICATING THE NUMBER OF STEEL SHOP DRAWINGS, CONCRETE REINFORCING DRAWINGS, AND OTHER SHOP DRAWINGS TO BE SUBMITTED EACH WEEK OVER THE DURATION OF THE PROJECT.
2. THE SUBMITTAL SCHEDULE PROVIDED BY THE CONTRACTOR IS NECESSARY TO PROVIDE REASONABLE TIME TO STAFF APPROPRIATELY FOR THE SCHEDULED SUBMITTALS. THE SUBMITTAL ENGINEER'S REVIEW SCHEDULE IS SUBJECT STRICTLY TO THE SUBMITTAL SCHEDULE PROVIDED BY THE CONTRACTOR.
3. REVIEW OF SHOP DRAWINGS DOES NOT RELIEVE THE CONTRACTOR FROM CONFORMANCE WITH THE INTENT OF THE DRAWINGS. REVIEW DOES NOT IMPLY OR STATE THAT THE FABRICATOR HAS CORRECTLY INTERPRETED THE CONSTRUCTION DOCUMENTS.
4. CONTRACTOR SHALL SUBMIT CALCULATIONS WITH THE SHOP DRAWING SUBMITTALS, SIGNED AND SEALED BY THE ENGINEER, LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED, RESPONSIBLE FOR THEIR PREPARATION WHEN REQUIRED IN THE SPECIFICATIONS (SEE ALSO DEFERRED SUBMITTALS).
5. COPIES OF THE CONTRACT DOCUMENTS SHALL NOT BE SUBMITTED AS SHOP DRAWINGS. CONTRACT DRAWINGS SHOW ONLY GENERAL DESIGN INTENT. FINAL SHOP DRAWING SECTIONS SHALL SHOW SIZES, LAYOUT, EXACT DIMENSIONS, ELEVATIONS, GRADES OF MATERIALS, ETC., SPECIFIC TO EACH LOCATION.

ABBREVIATIONS:

Table listing abbreviations and their meanings, such as # DIAMETER, (E) EXISTING, @ (AT SPACING), and various construction terms like ANCHOR, APPROX, ARCH, BLDG, etc.





RFI # 6

**LEGEND NOTES**

**FOUNDATION NOTES**

1. FINISHED FLOOR ELEVATION PER ARCHITECTURAL.
2. SLAB-ON-GRADE SHALL BE REINFORCED WITH #5 @ 12" OC. SEE 34S2.1 FOR TYPICAL SLAB DETAIL.
3. TOP ELEVATION FOR SPREAD FOOTINGS SHALL BE -1'-4" UNLESS NOTED OTHERWISE.
4. SEE ARCH DRAWINGS FOR ADDITIONAL DIMENSIONS AND ELEVATIONS.
5. PROVIDE CONTROL JOINTS IN SOG SPACED @ 15'-0" MAX. SEE DETAIL 31S2.1 FOR CONTROL JOINT DETAIL. FINAL LOCATIONS OF CONTROL JOINTS IN SOG SUBJECT TO ARCHITECT'S APPROVAL.

**FOUNDATION SCHEDULE**

MARK	SIZE	TOP REINF	BOTTOM REINF	ANCHOR REINF (64 SIDE)
A	4'-0" SQ x 1'-6" THK	#5@12" OC EW	#5@12" OC EW	(6) #5
B	6'-6" SQ x 1'-6" THK	#5@12" OC EW	#5@12" OC EW	(10) #5
C	6'-0" SQ x 1'-6" THK	#5@12" OC EW	#5@12" OC EW	(6) #5
D	7'-0" SQ x 1'-6" THK	#5@12" OC EW	#5@12" OC EW	(6) #5
E	8'-3" SQ x 1'-6" THK	#5@12" OC EW	#5@12" OC EW	(10) #5

NOTE: FOR TYPICAL SPREAD FOOTING DETAIL, SEE 12S2.1.

**COLUMN AND BASE PLATE SCHEDULE**

COLUMN MARK	COLUMN SIZE	BASE PL.	ANCHORS
C1	HSS66x14	14" x 14" x 1"	(4) 7/8" Ø SQUARE HEAD GR. 36 10" EMBEDMENT
C2	HSS66x12	16" x 12" x 1"	(6) 5/8" Ø SQUARE HEAD GR. 55 10" EMBEDMENT
C3	HSS66x8	24" x 24" x 2"	(8) 1 1/8" Ø HEAVY HEX GR. 55 12" EMBEDMENT
C4	HSS126x12	20" x 15" x 1 1/4"	(6) 3/4" Ø SQUARE HEAD GR. 36 10" EMBEDMENT
C5	HSS126x8	24" x 24" x 2"	(8) 1 1/2" Ø HEAVY SQUARE HEAD GR. 36 10" EMBEDMENT

**FOUNDATION PLAN**  
SCALE: 1/8" = 1'-0"

**APPROVED**  
DIVISION OF THE STATE ARCHITECT

ACS .. FLS .. SSR CNg

A# 04- **115807** DATE: **05.03.18**



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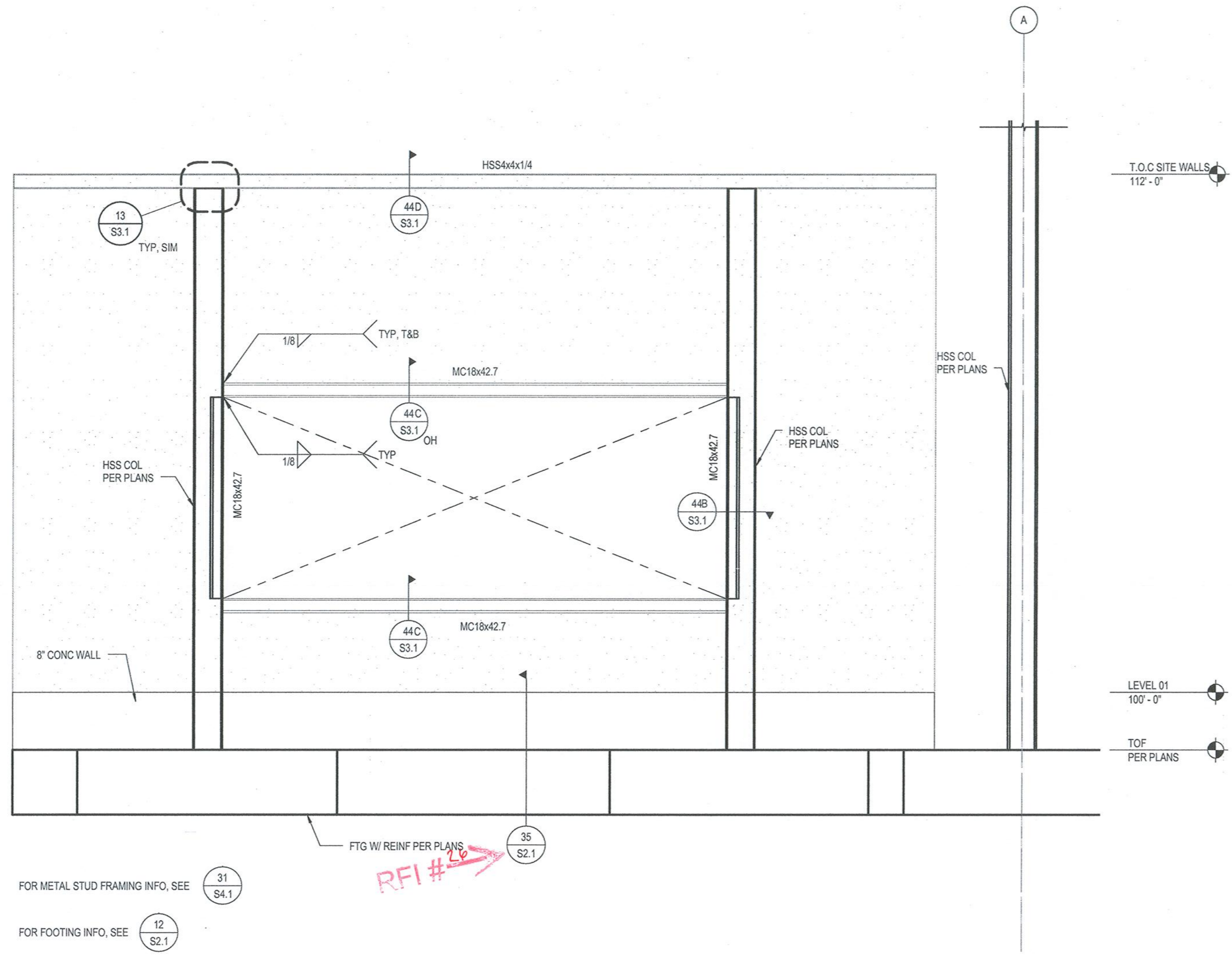


**LEGEND NOTES**

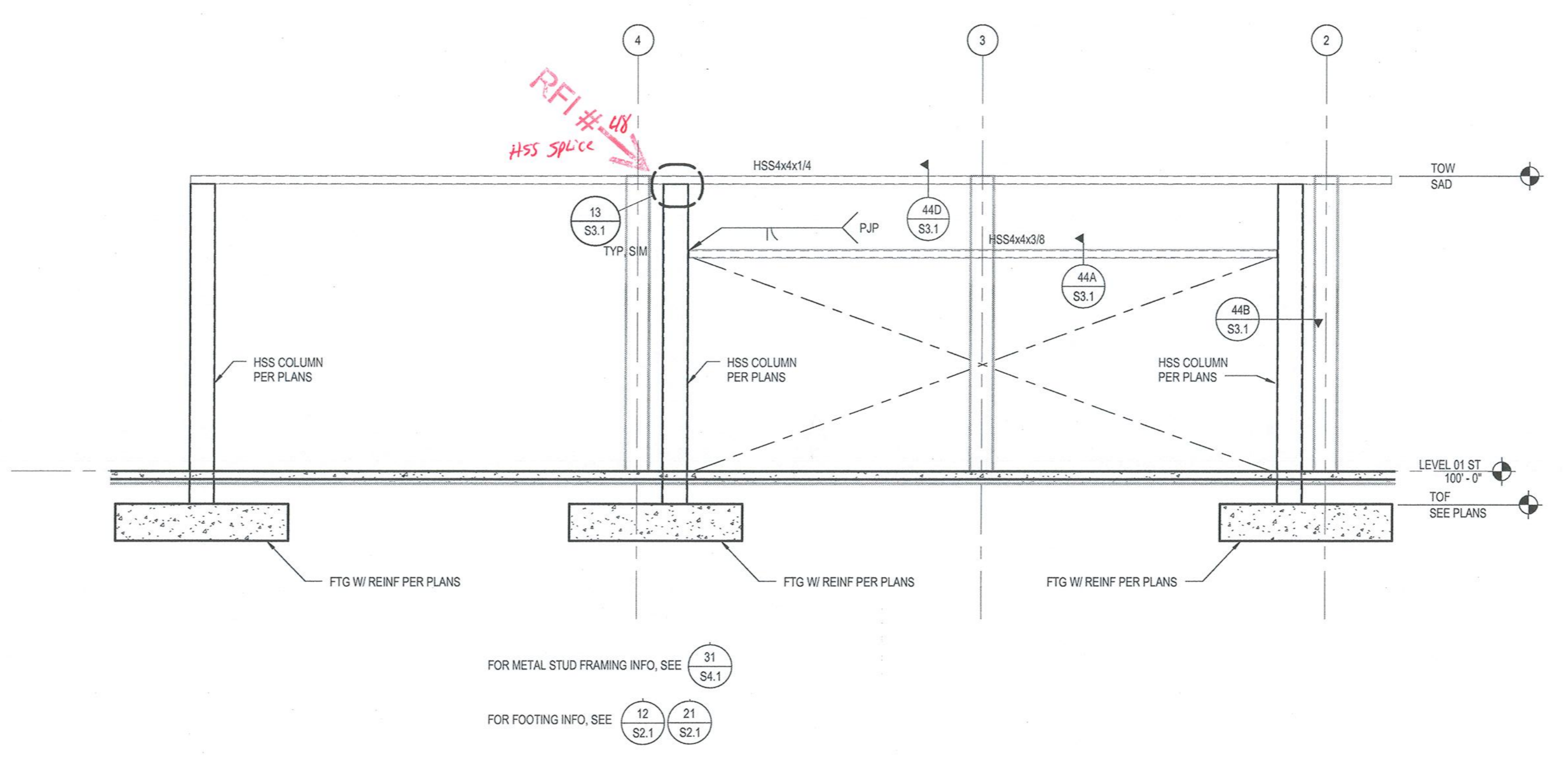
- FRAMING NOTES**
- D-1 INDICATES 3" VERCO 18 GA METAL DECK.
  - D-2 INDICATES 1/2" VERCO 18 GA METAL DECK.
  - FOR ANY DIMENSION INFORMATION NOT SHOWN, SEE ARCH DRAWINGS.
  - SEE ARCH DRAWINGS FOR FINISH FLOOR ELEVATION.
  - TOP OF STRUCTURAL STEEL ELEVATION SHALL BE SHADE STRUCTURE = 0' - 0" BELOW STRUCTURAL DECK, TYP UNDO. COVERED WALK = 0' - 1 1/2" BELOW STRUCTURAL DECK, TYP, UNDO. ENCLOSED ROOM = 0' - 1 1/2" BELOW STRUCTURAL DECK, TYP, UNDO.
  - ALL BEAMS SHALL EQUALLY SPACED BETWEEN COLUMNS, UNDO.

**LEGEND**

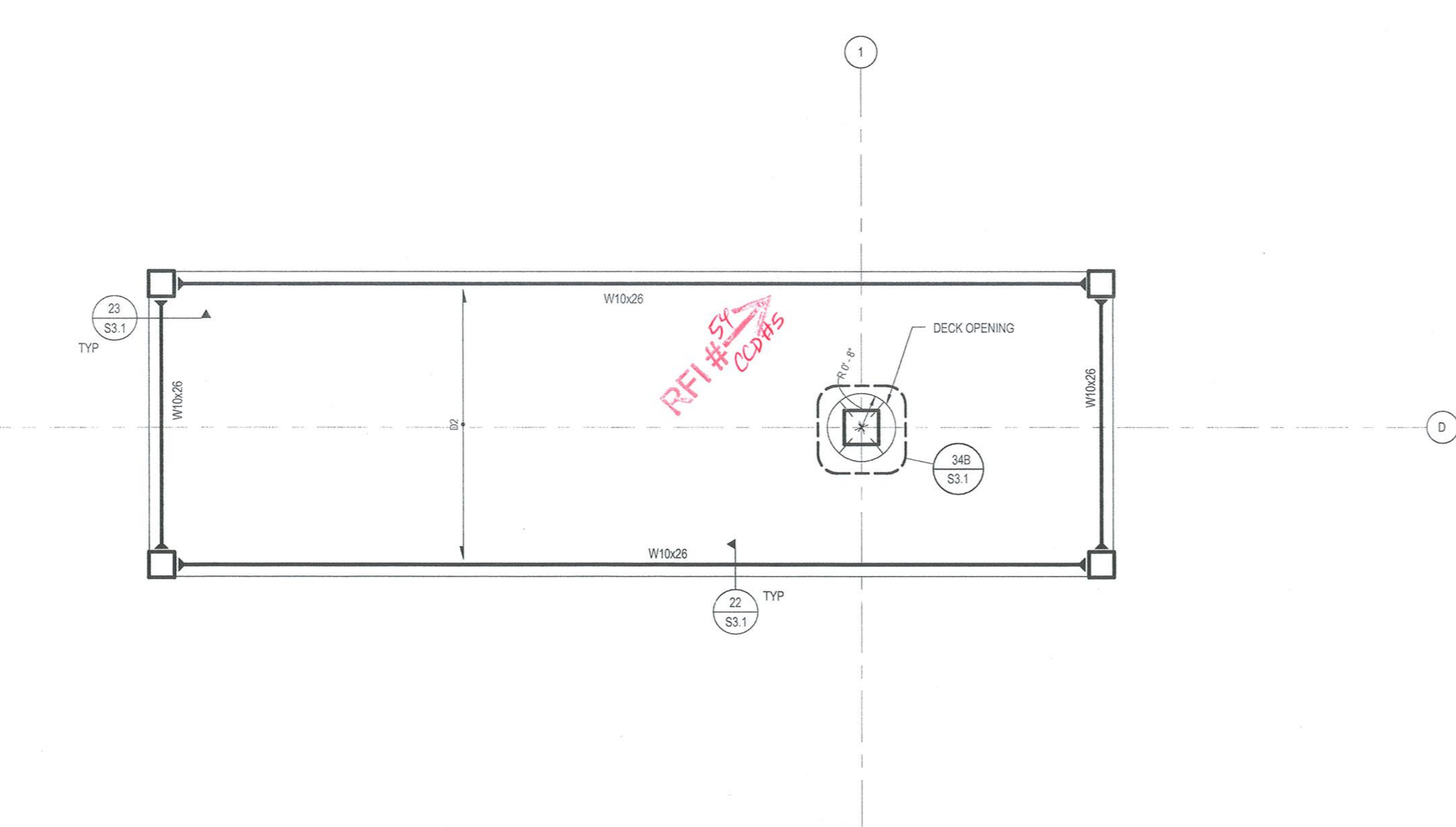
- INDICATES CANTILEVER CONNECTION
- INDICATES MOMENT FRAME CONNECTION
- INDICATES DECK SPAN DIRECTION



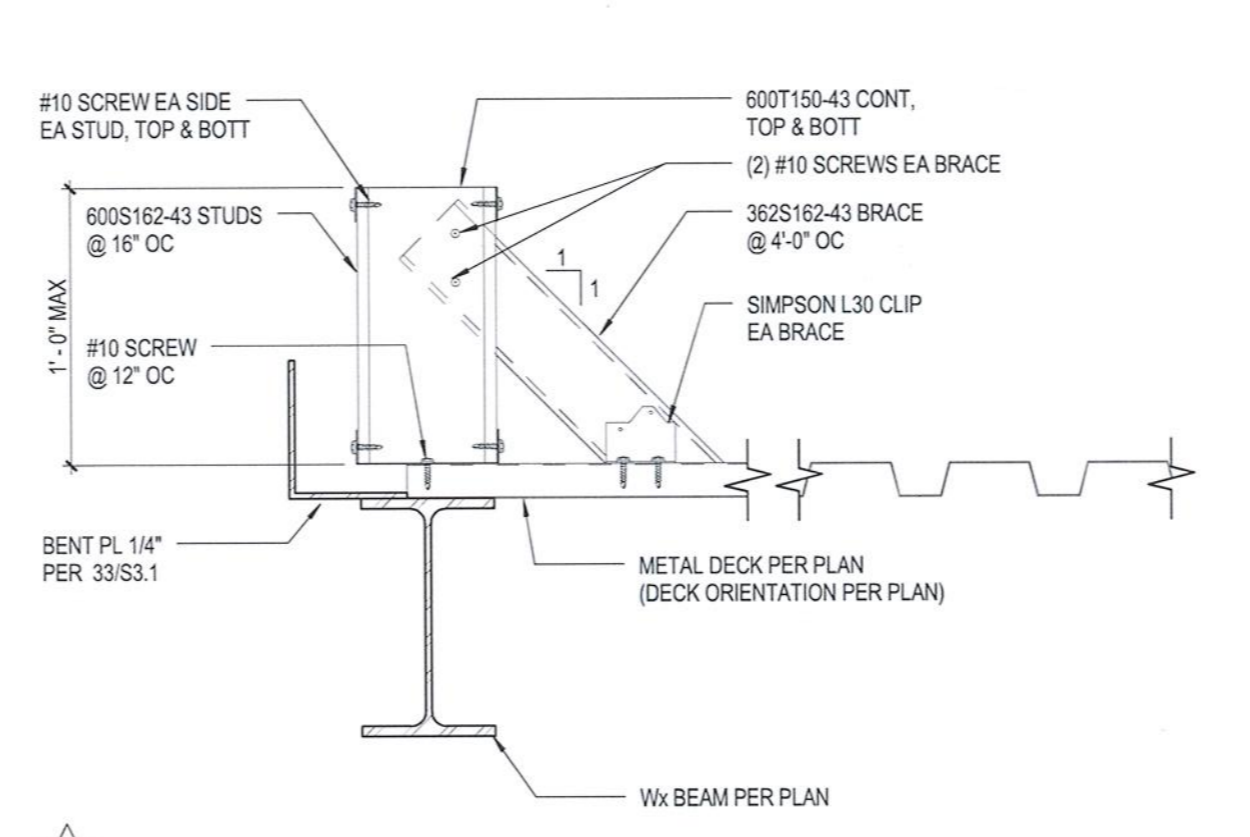
**1 RAIN SCREEN ELEVATION**  
 SCALE: 1/2" = 1'-0"



**2 WALL ELEVATION**  
 SCALE: 1/4" = 1'-0"



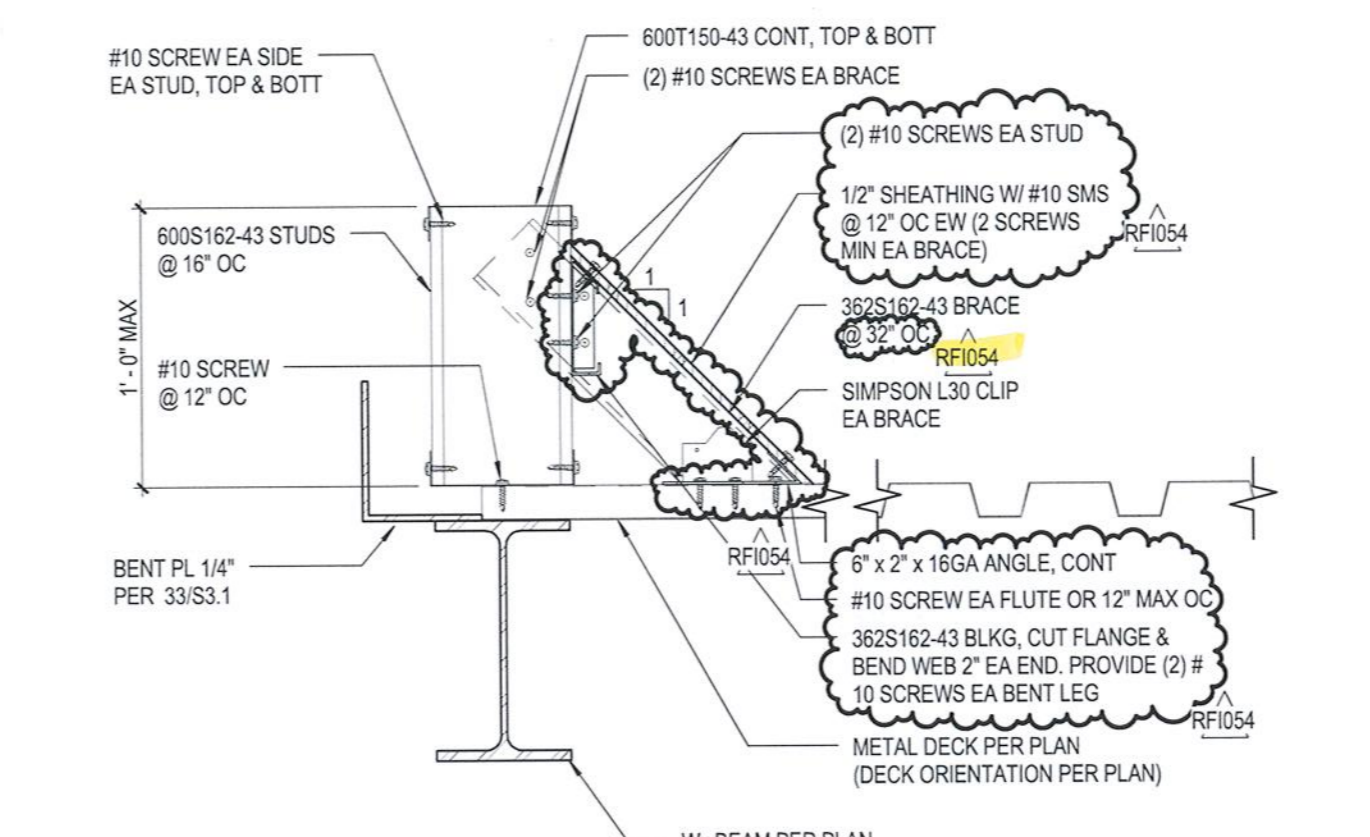
**3 ENCLOSED ROOM FRAMING PLAN**  
 SCALE: 1/2" = 1'-0"



**DETAIL SSK05**  
 SCALE: 1 1/2" = 1'-0"  
 APPROVED  
 DIVISION OF THE STATE ARCHITECT  
 ACS FLS RF SSR CNg  
 Attachment No. to Dated:  
 Approved Professional Engineer  
 FENG YU  
 STATE OF CALIFORNIA  
 ARCHITECTURE  
 Attachment No. to Dated:  
 Approved Professional Engineer  
 FENG YU  
 STATE OF CALIFORNIA  
 ARCHITECTURE  
 Attachment No. to Dated:

**DLR Group**  
 Architecture Engineering Planning Interiors

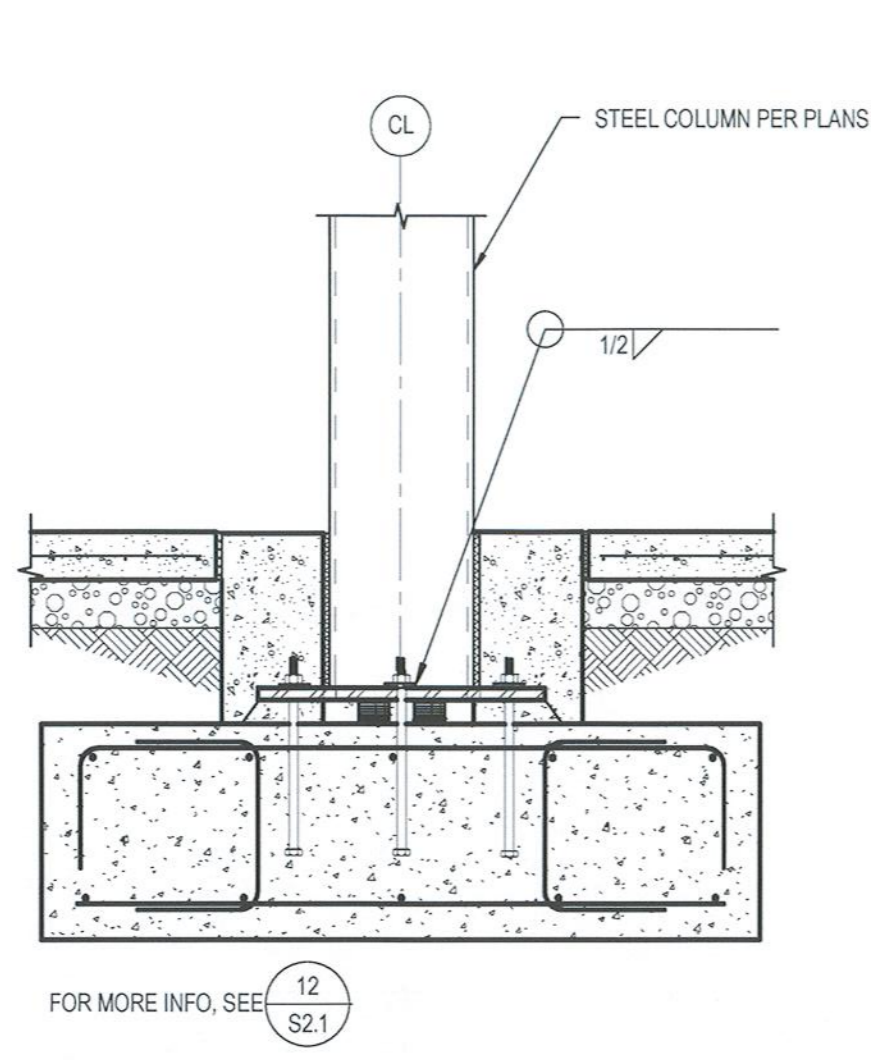
**SSK05 DETAIL**  
 CAMPUS CENTER SHADE STRUCTURE  
 MEASURE L PROJECTS AT CHAFFEY COLLEGE



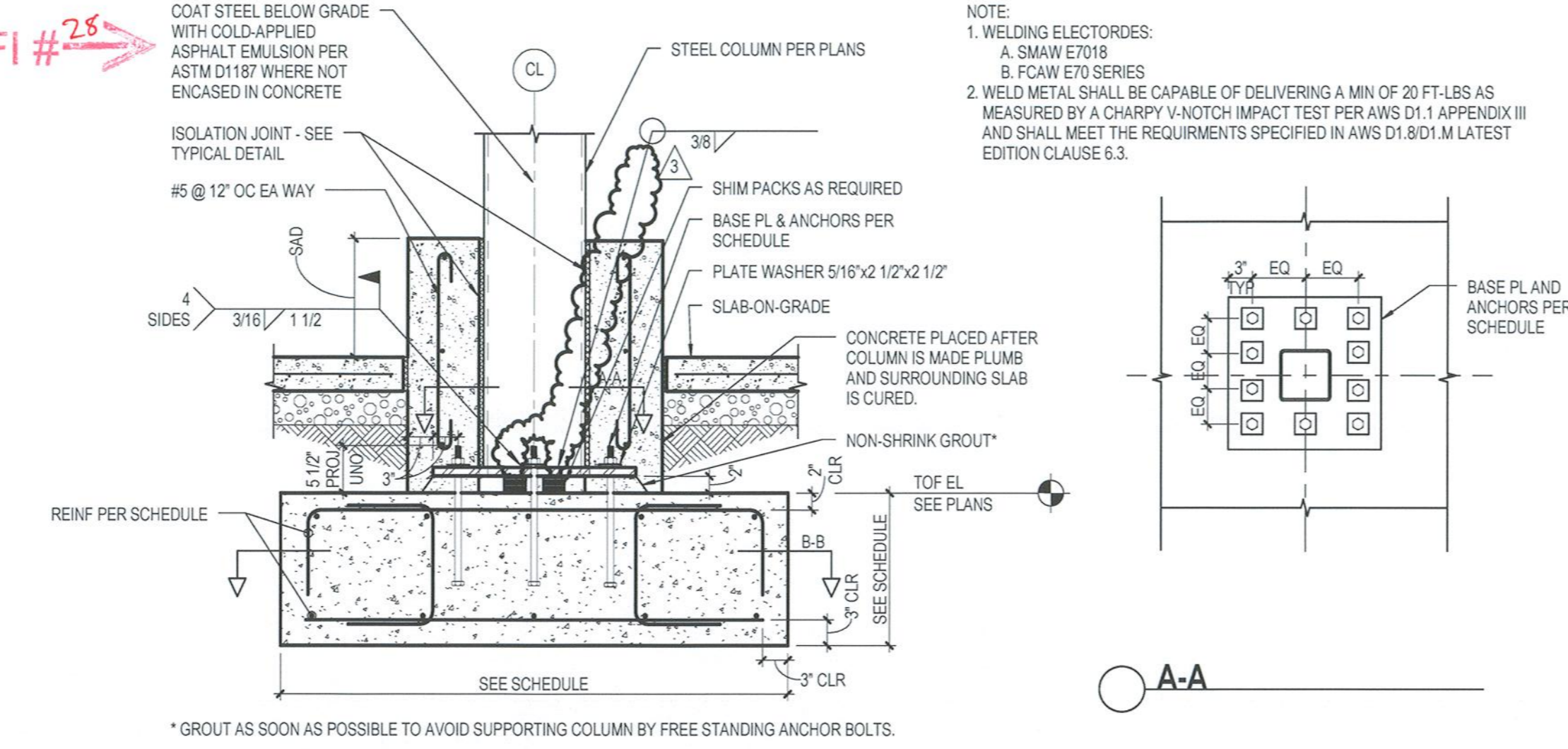
**DETAIL SSK11**  
 SCALE: 1 1/2" = 1'-0"  
 APPROVED  
 DIVISION OF THE STATE ARCHITECT  
 ACS FLS SSR CNg  
 Attachment No. to Dated:  
 Approved Professional Engineer  
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 ARCHITECTURE  
 Attachment No. to Dated:

**DLR Group**  
 Architecture Engineering Planning Interiors

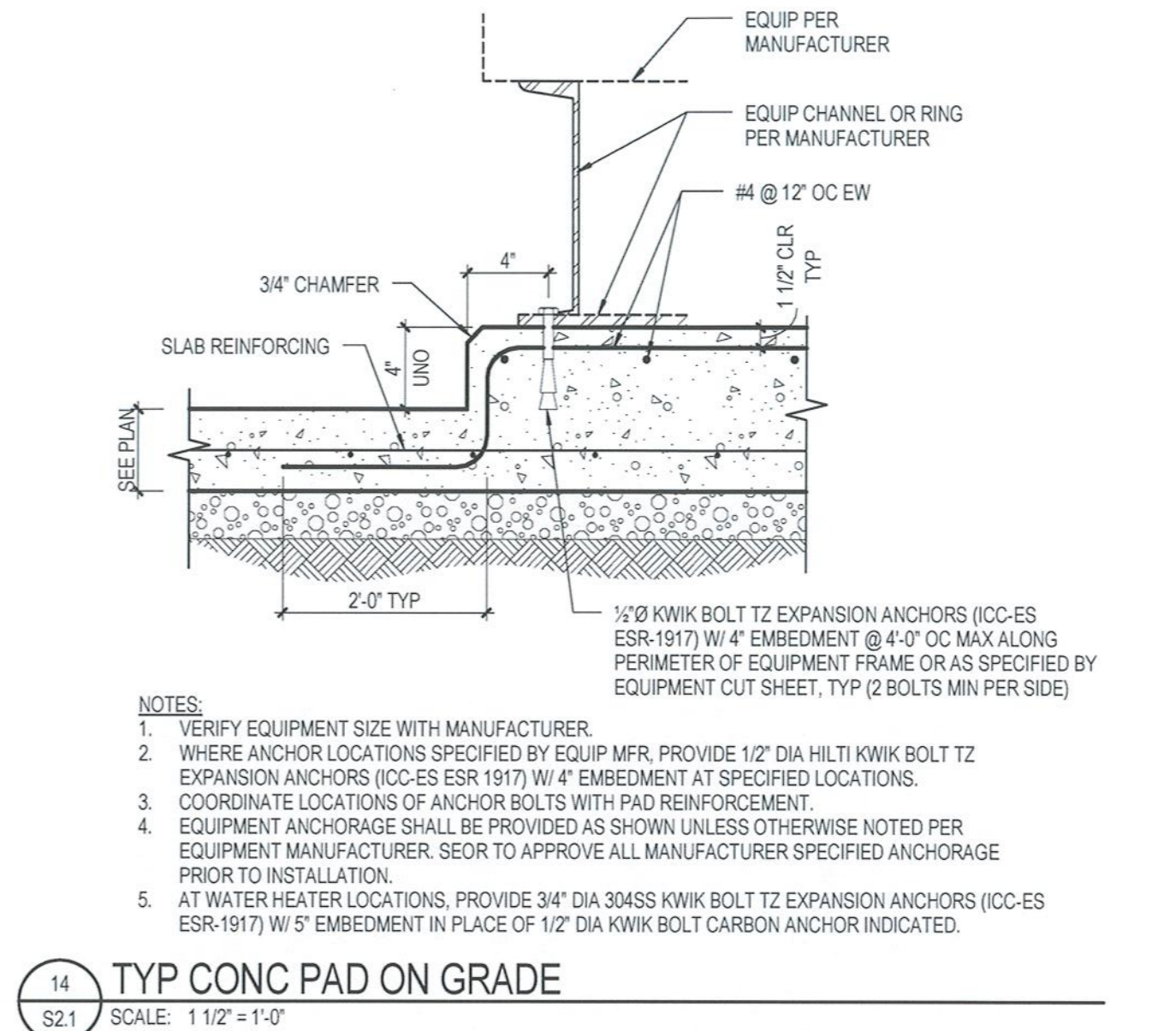
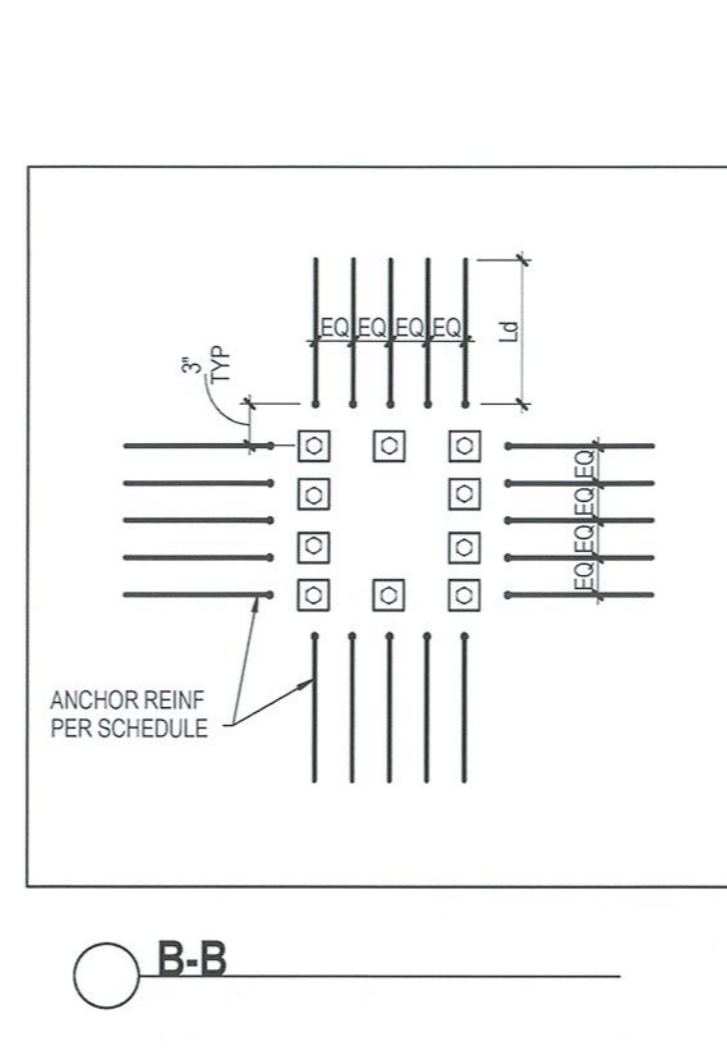
**SSK11 DETAIL**  
 CAMPUS CENTER SHADE STRUCTURE  
 MEASURE L PROJECTS AT CHAFFEY COLLEGE



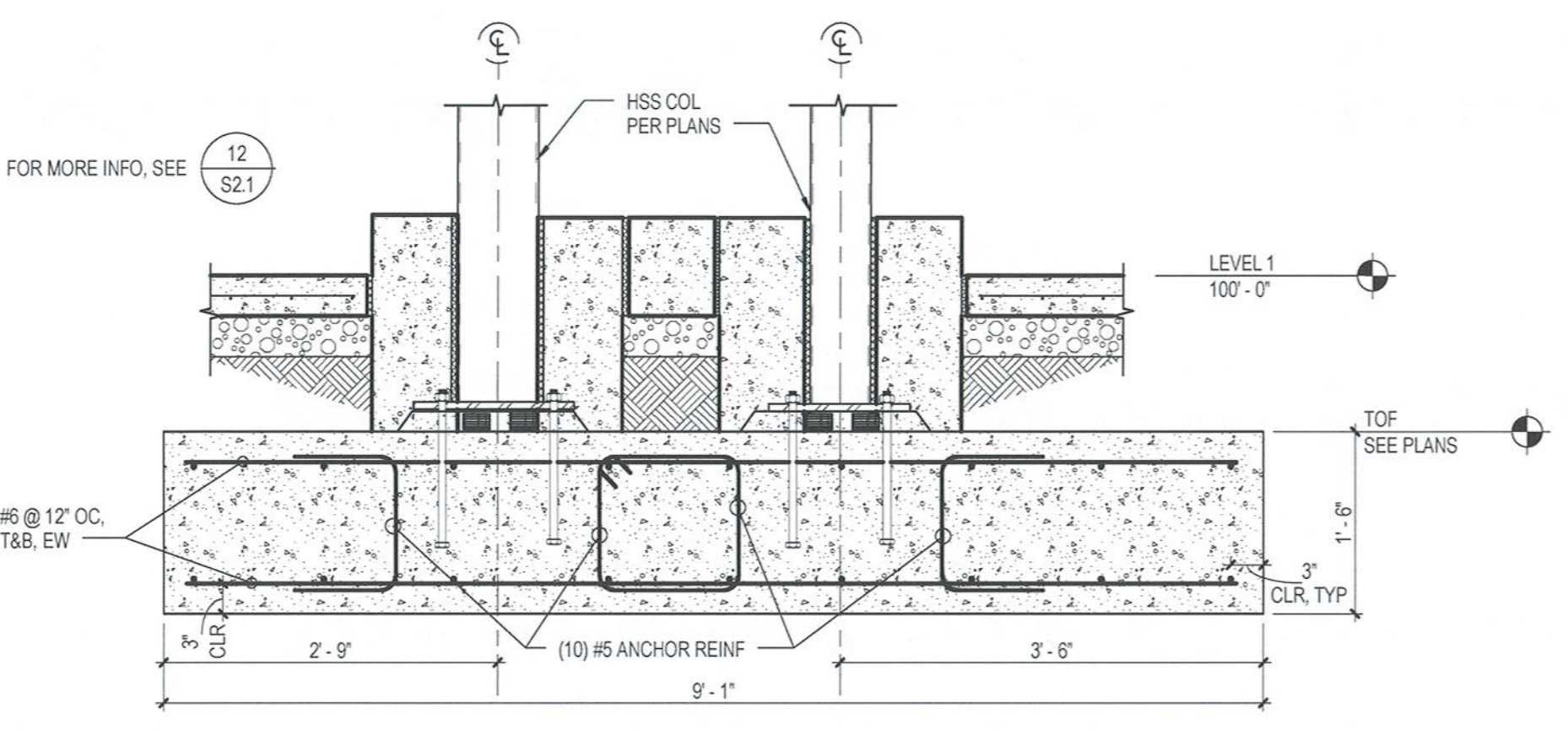
11 TYP FOOTING AT CANTILEVER COLUMN  
SCALE: 3/4" = 1'-0"



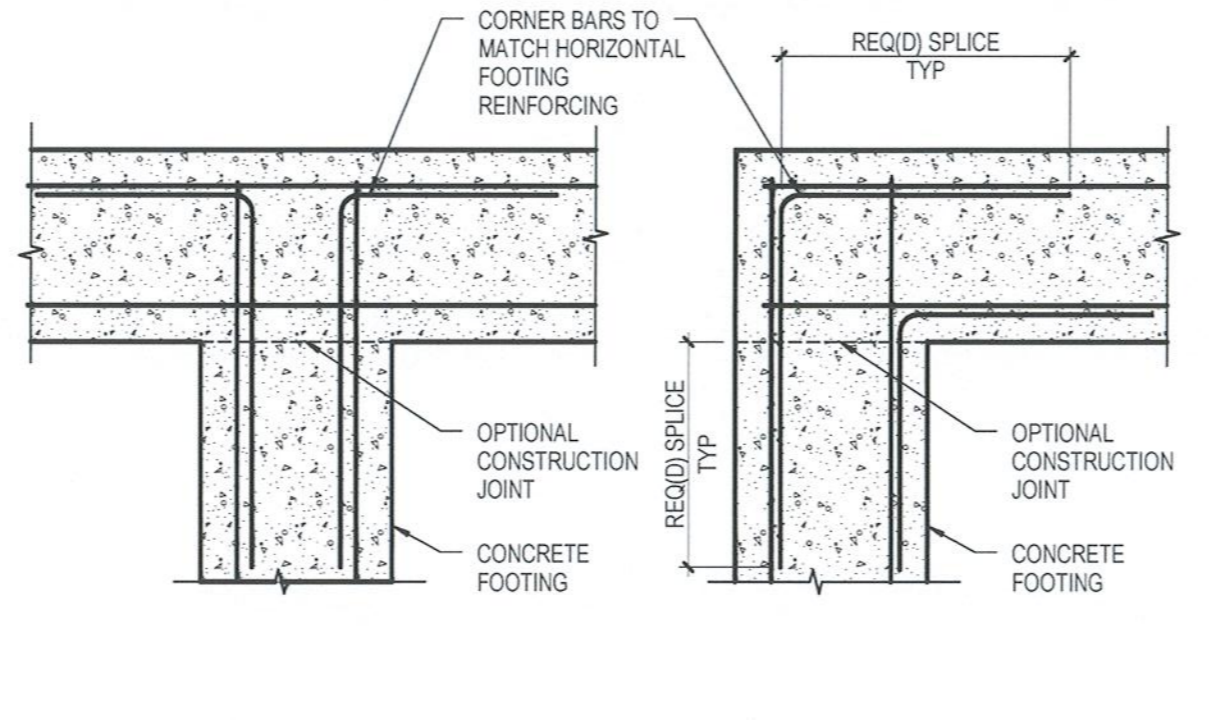
12 TYP SPREAD FOOTING DETAIL  
SCALE: 3/4" = 1'-0"



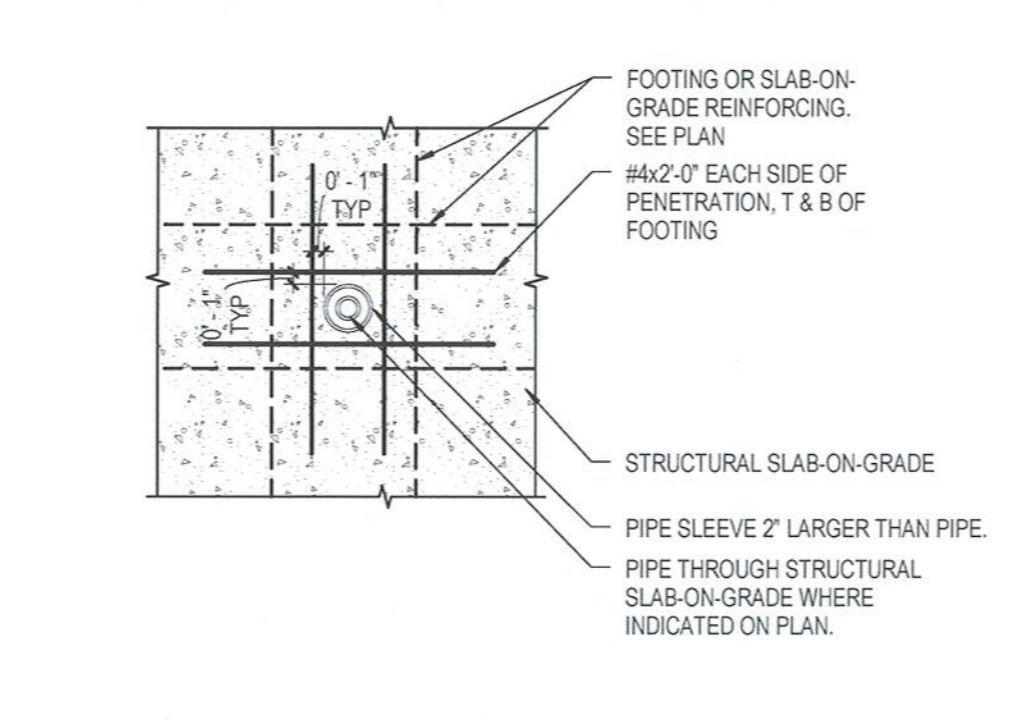
14 TYP CONC PAD ON GRADE  
SCALE: 1 1/2" = 1'-0"



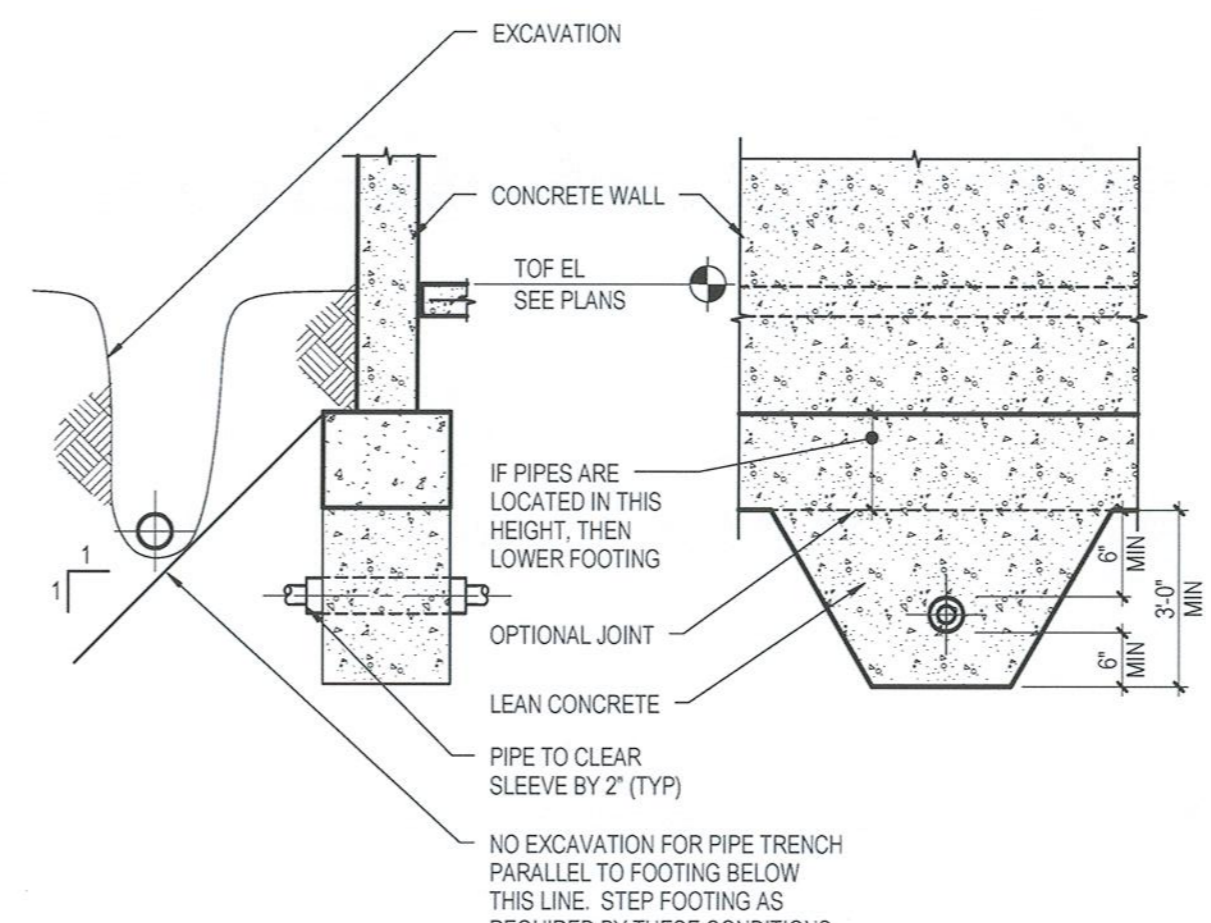
21 COMBINED FTG  
SCALE: 3/4" = 1'-0"



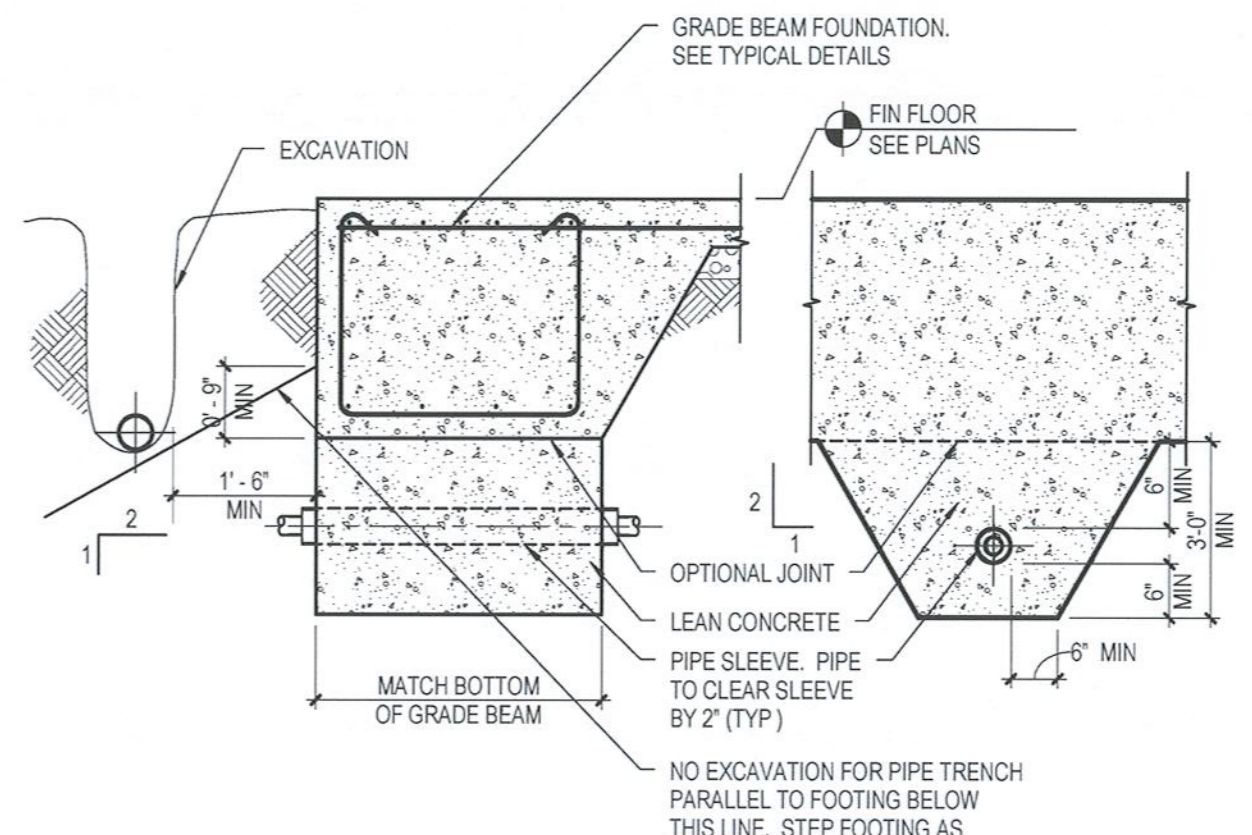
22 TYP FOOTING REINFORCING DETAIL  
SCALE: 3/4" = 1'-0"



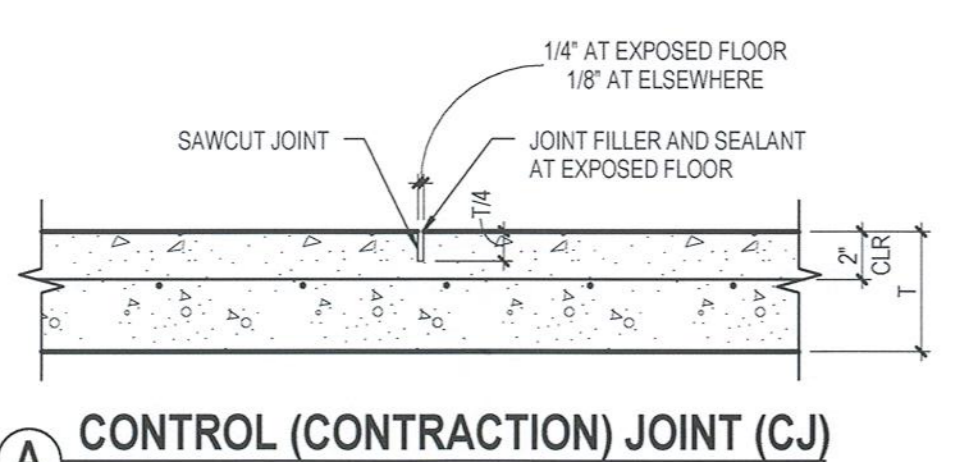
23 TYP REINFORCING AT PIPE PENETRATION  
SCALE: 3/4" = 1'-0"



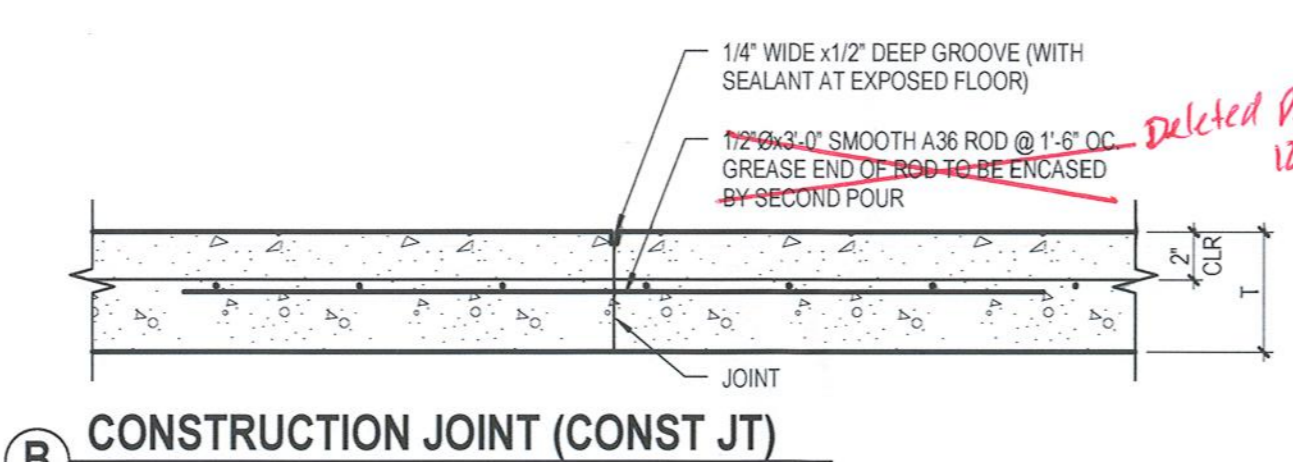
24 TYP PIPE AT CONCRETE WALL FOOTINGS  
SCALE: 1/2" = 1'-0"



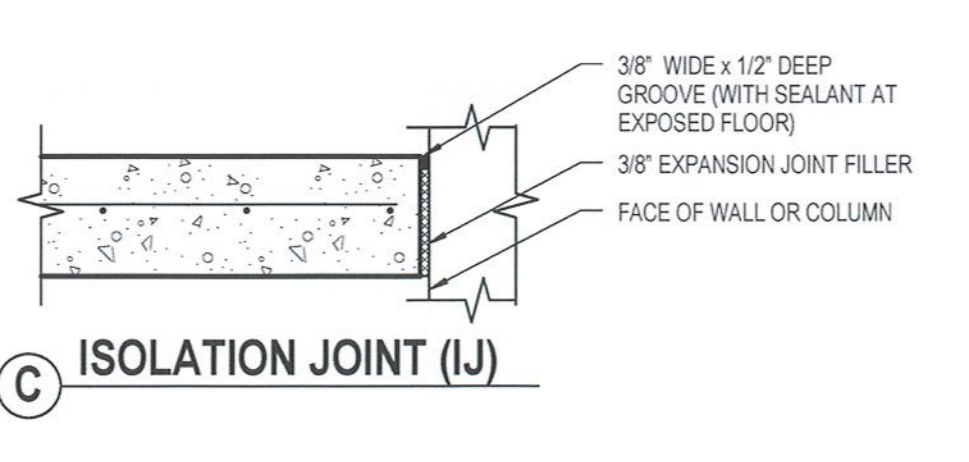
25 TYP INSTALLATION OF PIPES  
SCALE: 1/2" = 1'-0"



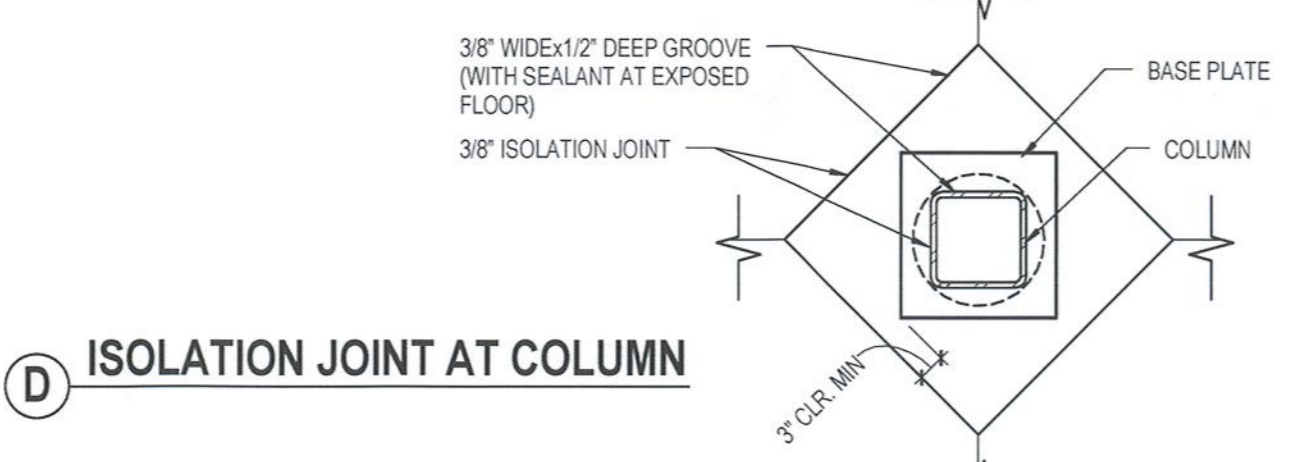
A CONTROL (CONTRACTION) JOINT (CJ)



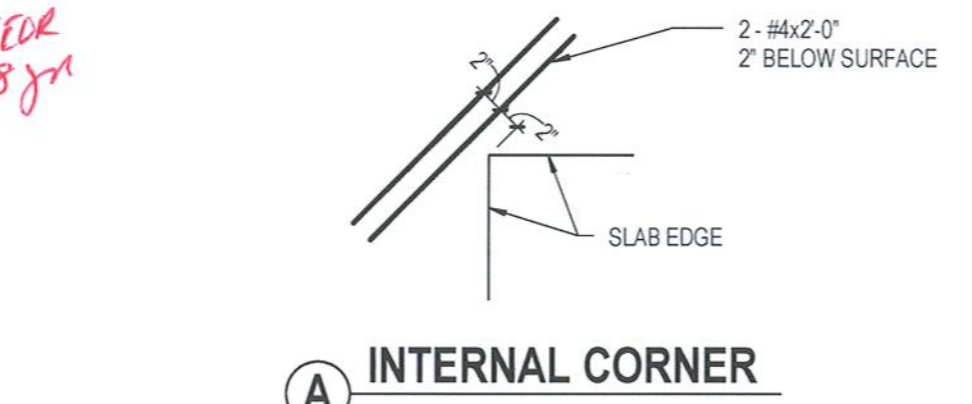
B CONSTRUCTION JOINT (CONST JT)



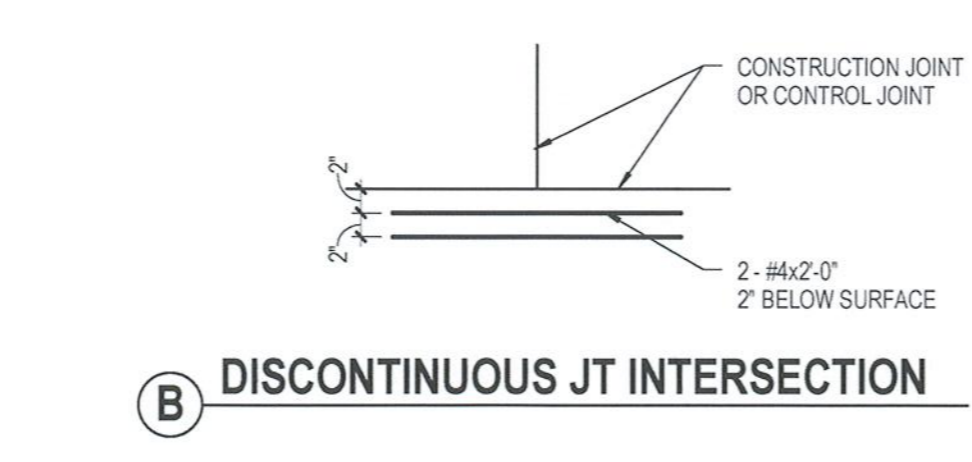
C ISOLATION JOINT (IJ)



D ISOLATION JOINT AT COLUMN



A INTERNAL CORNER



B DISCONTINUOUS JT INTERSECTION



31 TYP SLAB-ON-GRADE JOINTS  
SCALE: 1 1/2" = 1'-0"



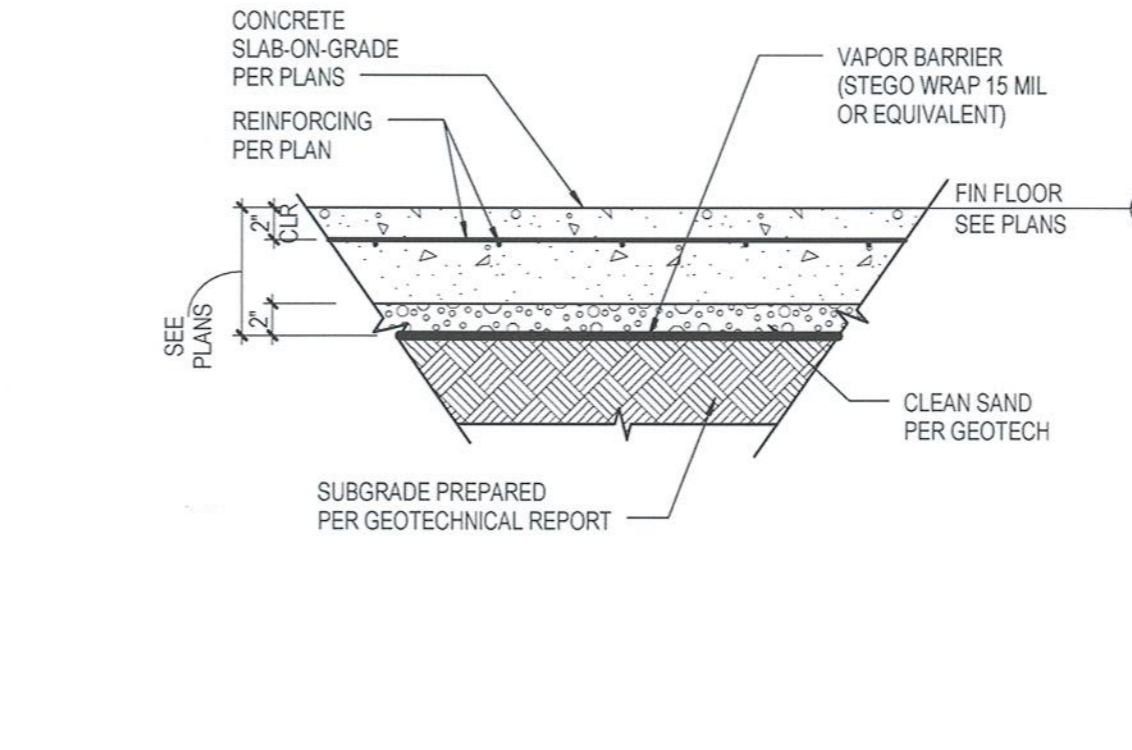
32 TYP SLAB-ON-GRADE  
SCALE: 3/4" = 1'-0"



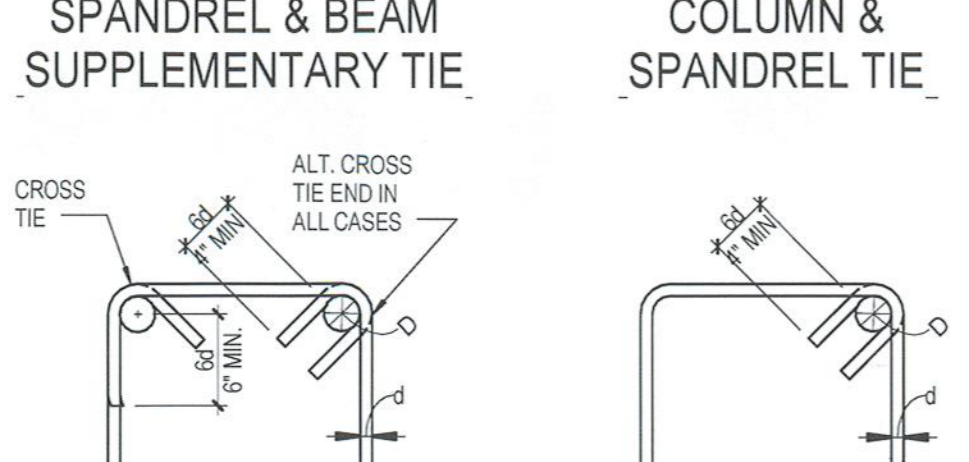
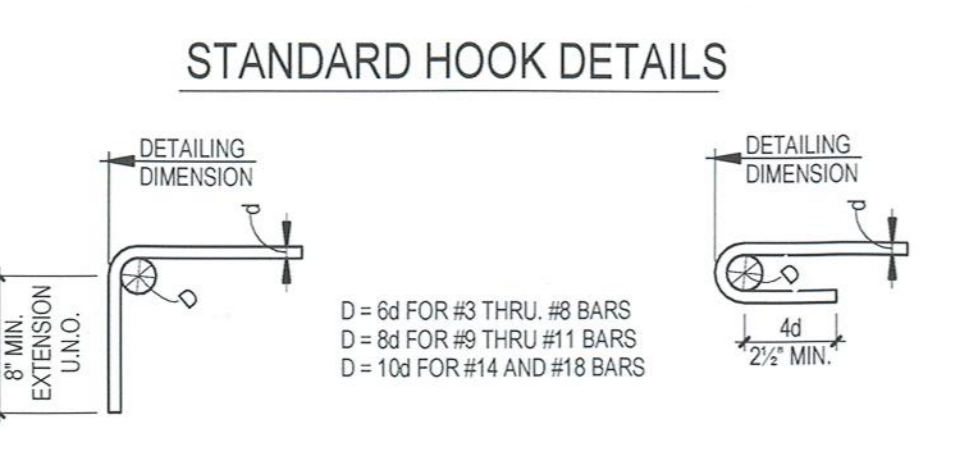
33 TYP FLOOR SLAB RECESS  
SCALE: 1 1/2" = 1'-0"



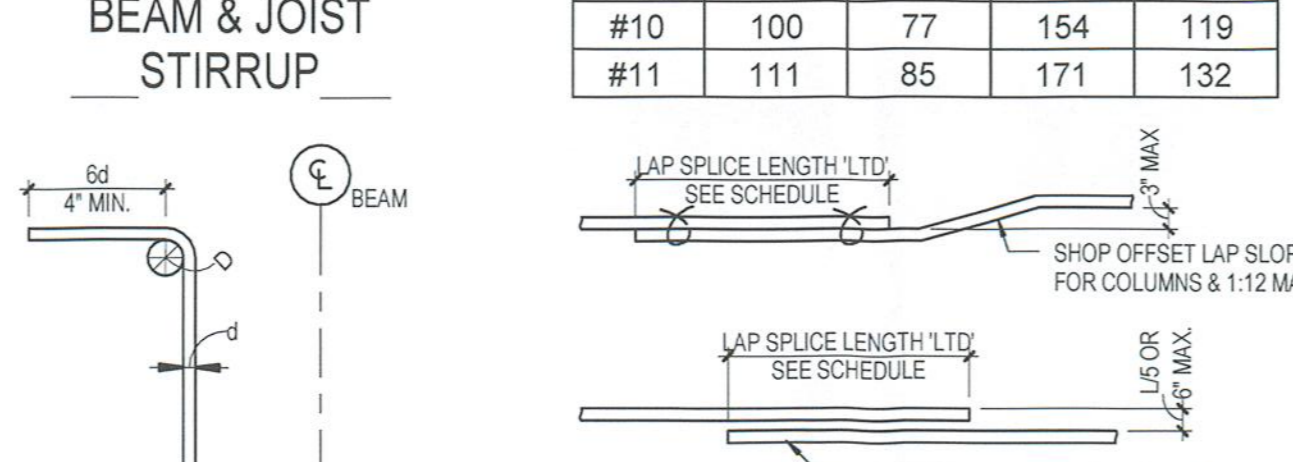
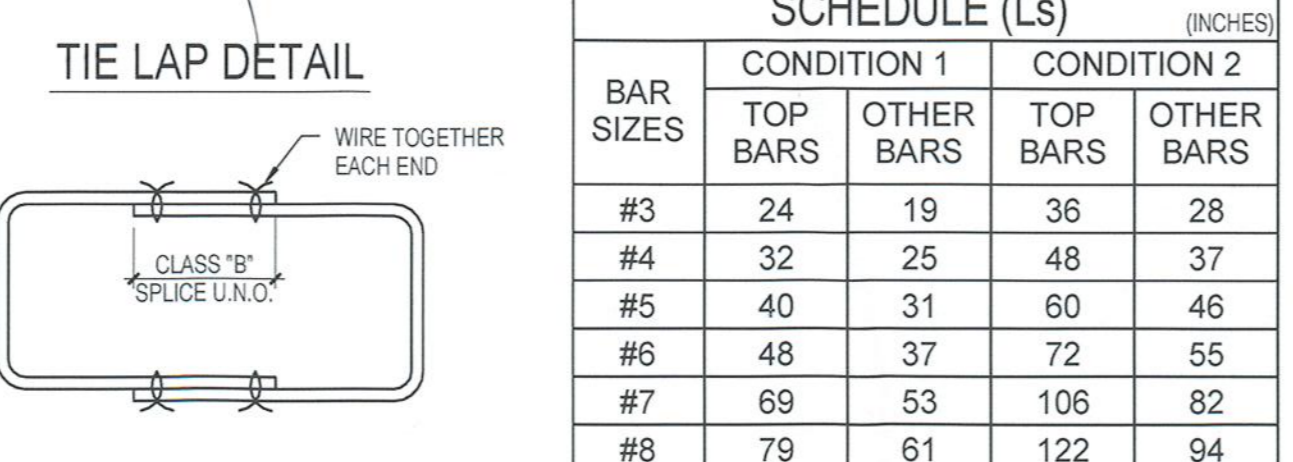
34 TYP SLAB-ON-GRADE DETAIL  
SCALE: 1'-0" = 1'-0"



35 STUD BEARING ON CONCR WALL  
SCALE: 1" = 1'-0"



41 TYP BAR BENDING  
SCALE: 1 1/2" = 1'-0"



42 TYP REINFORCING LAP SPlice AND SCHEDULE  
SCALE: 3/4" = 1'-0"

CLASS "B" LAP SPlice SCHEDULE (Ls) (INCHES)

BAR SIZES	CONDITION 1		CONDITION 2	
	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS
#3	24	19	36	28
#4	32	25	48	37
#5	40	31	60	46
#6	48	37	72	55
#7	56	43	84	64
#8	64	50	96	73
#9	72	56	108	82
#10	80	62	120	91
#11	88	68	132	100
#12	96	74	144	109

NOTES:  
1. ALL VALUES ARE FOR CONCRETE WITH Fc = 4000 psi.  
2. REFERENCE CODE ACI 318-11.  
3. Ls SHALL NOT BE LESS THAN 12 INCHES.  
4. Ø INDICATES DIAMETER OF BAR.  
5. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST IN THE MEMBER BELOW THE REINFORCEMENT.  
6. DEFINITIONS OF "CONDITION 1" AND "CONDITION 2" SHALL BE AS FOLLOWS:  
CONDITION 1: WHEN EITHER ONE OF THE FOLLOWING SET IS SATISFIED:  
SET A: CLEAR BAR SPACING GREATER THAN OR EQUAL TO 4Ø.  
SET B: TIES OR STIRRUPS THROUGHOUT Ld NOT LESS THAN THE CODE MINIMUM.  
CONDITION 2: USED WHERE CONDITION 1 IS NOT SATISFIED.  
7. THE ABOVE BAR DEVELOPMENT LENGTHS APPLY TO NORMAL WEIGHT CONCRETE. DIVIDE BY 0.75 FOR LIGHTWEIGHT CONCRETE.  
8. THE ABOVE BAR DEVELOPMENT LENGTHS ARE FOR UNCOATED REINFORCEMENT. FOR EPOXY COATED BARS, MODIFY THE LISTED VALUES PER FOLLOWING:  
- CLEAR BAR COVER LESS THAN 3Ø OR CLEAR BAR SPACING LESS THAN 6Ø, MULTIPLY Ld VALUES OF "OTHER BARS" BY 1.5 AND Ld VALUES OF "TOP BARS" BY 1.31  
- ALL OTHER CONDITIONS, MULTIPLY Ld BY 1.2  
9. USE CLASS "B" SPICES UNLESS CLASS "A" LAP SPICES ARE PERMITTED WHEN THE AREA OF REINFORCEMENT PROVIDED IS AT LEAST TWICE THAT REQUIRED BY ANALYSIS OVER THE ENTIRE LENGTH OF THE SPICE AND ONE HALF OR LESS OF THE TOTAL REINFORCEMENT IS SPICED WITHIN THE REQUIRED LAP SPICE. USE CLASS "A" WHERE SPECIFICALLY NOTED ON DRAWINGS.  
10. FOR CLASS "A" SPICES, USE SAME VALUES AS PER L4.  
11. WHEN SPICING DIFFERENT SIZE BARS, SPICE LENGTH SHALL BE THE LARGER OF THE Ld OF LARGER BAR OR LAP SPICE LENGTH OF SMALLER BAR.  
12. AT CONCRETE WALLS, SPICES IN HORIZONTAL REINFORCEMENTS SHALL BE STAGGERED, MINIMUM 24 INCHES APART AT ALTERNATING BARS.  
13. AT CONCRETE WALLS WITH TWO CURTAINS OF REINFORCEMENTS, SPICES IN THE CURTAINS SHALL NOT OCCUR IN THE SAME LOCATION. STAGGER LAP SPICES MINIMUM 24 INCHES APART.  
14. ALL WALL AND COLUMN TO FOOTING DOWNLAYS SHALL HAVE CLASS "B" LAP SPICES.  
15. LAP SPICES SHALL NOT BE USED FOR BARS LARGER THAN #11.  
16. LAP SPICES OF BARS IN A BUNDLE SHALL BE BASED ON THE LAP SPICE LENGTH REQUIRED FOR INDIVIDUAL BARS WITHIN A BUNDLE. INCREASE 20 PERCENT FOR THREE-BAR BUNDLE AND 33 PERCENT FOR FOUR-BAR BUNDLE. INDIVIDUAL BAR SPICES WITHIN A BUNDLE SHALL NOT OVERLAP. ENTIRE BUNDLES SHALL NOT BE LAP SPICED.  
17. THE ABOVE LAP SPICE LENGTHS ARE FOR REBAR Fy=60 KSI. FOR OTHER REBAR GRADES, MULTIPLY THE SPECIFIED DEVELOPMENT LENGTHS BY Fy/60 KSI.  
18. THE ABOVE LAP SPICE LENGTHS ARE CALCULATED USING THE 28-DAY CONCRETE COMPRESSIVE STRENGTH BASED ON CYLINDER SPECIMEN.

BAR DEVELOPMENT LENGTH (Ld) SCHEDULE (INCHES)

BAR SIZES	CONDITION 1		CONDITION 2	
	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS
#3	19	15	28	22
#4	25	19	37	29
#5	31	24	46	36
#6	37	29	55	43
#7	43	34	64	50
#8	50	40	73	57
#9	56	46	82	64
#10	62	52	91	71
#11	68	58	100	78
#12	74	64	109	85
#14	102	79	158	122
#18	136	105	211	162

NOTES:  
1. ALL VALUES ARE FOR CONCRETE WITH Fc = 4000 psi.  
2. REFERENCE CODE ACI 318-11.  
3. Ls SHALL NOT BE LESS THAN 12 INCHES.  
4. Ø INDICATES DIAMETER OF BAR.  
5. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST IN THE MEMBER BELOW THE REINFORCEMENT.  
6. DEFINITIONS OF "CONDITION 1" AND "CONDITION 2" SHALL BE AS FOLLOWS:  
CONDITION 1: WHEN EITHER ONE OF THE FOLLOWING SET IS SATISFIED:  
SET A: CLEAR BAR SPACING GREATER THAN OR EQUAL TO 4Ø.  
SET B: TIES OR STIRRUPS THROUGHOUT Ld NOT LESS THAN THE CODE MINIMUM.  
CONDITION 2: USED WHERE CONDITION 1 IS NOT SATISFIED.  
7. THE ABOVE BAR DEVELOPMENT LENGTHS APPLY TO NORMAL WEIGHT CONCRETE. DIVIDE BY 0.75 FOR LIGHTWEIGHT CONCRETE.  
8. THE ABOVE BAR DEVELOPMENT LENGTHS ARE FOR UNCOATED REINFORCEMENT. FOR EPOXY COATED BARS, MODIFY THE LISTED VALUES PER FOLLOWING:  
- CLEAR BAR COVER LESS THAN 3Ø OR CLEAR BAR SPACING LESS THAN 6Ø, MULTIPLY Ld VALUES OF "OTHER BARS" BY 1.5 AND Ld VALUES OF "TOP BARS" BY 1.31  
- ALL OTHER CONDITIONS, MULTIPLY Ld BY 1.2  
9. THE ABOVE BAR DEVELOPMENT LENGTHS ARE FOR REBAR Fy=60 KSI. FOR OTHER REBAR GRADES, MULTIPLY THE SPECIFIED DEVELOPMENT LENGTHS BY Fy/60 KSI.  
10. THE ABOVE BAR DEVELOPMENT LENGTHS ARE CALCULATED USING THE 28-DAY CONCRETE COMPRESSIVE STRENGTH BASED ON CYLINDER SPECIMEN.

HOOKE BAR DEVELOPMENT LENGTH (Ldh) SCHEDULE (INCHES)

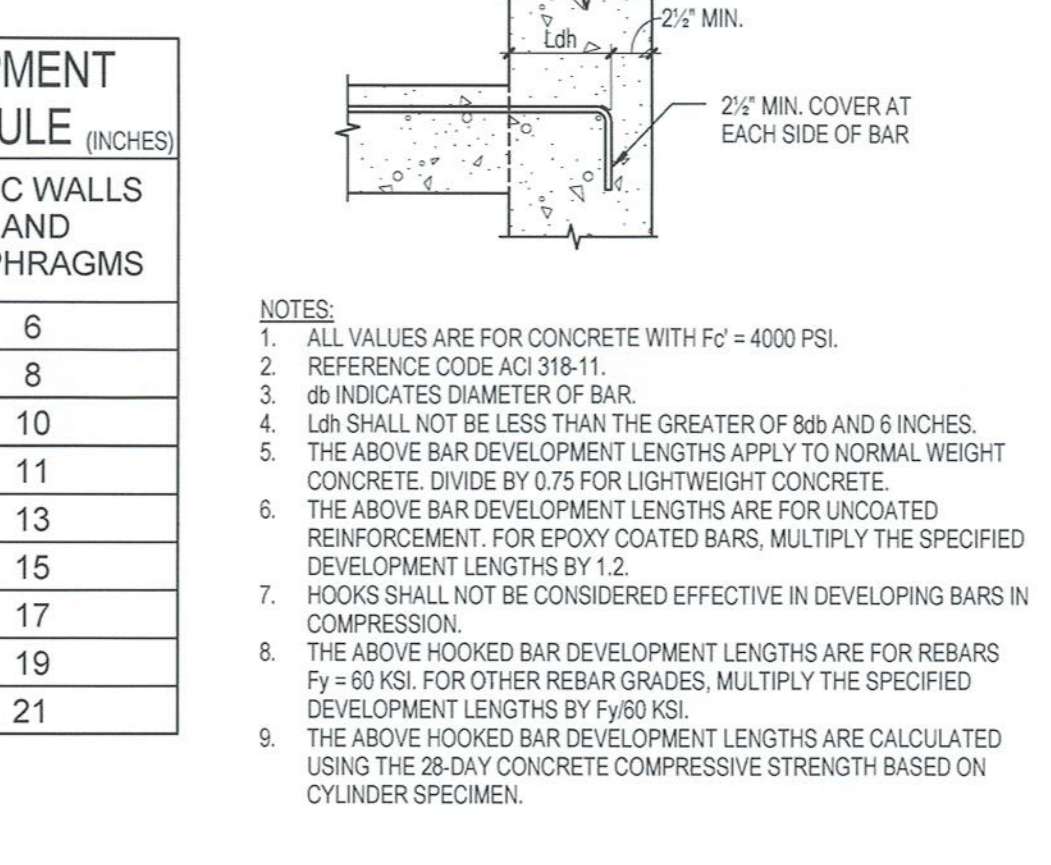
BAR SIZES	ALL ELEMENTS UNO	CONC WALLS AND DIAPHRAGMS
#3	6	6
#4	7	8
#5	9	10
#6	10	11
#7	12	13
#8	14	15
#9	15	17
#10	17	19
#11	19	21

NOTES:  
1. ALL VALUES ARE FOR CONCRETE WITH Fc = 4000 PSI.  
2. REFERENCE CODE ACI 318-11.  
3. Ø INDICATES DIAMETER OF BAR.  
4. Ldh SHALL NOT BE LESS THAN THE GREATER OF 8Ø AND 6 INCHES.  
5. THE ABOVE BAR DEVELOPMENT LENGTHS APPLY TO NORMAL WEIGHT CONCRETE. DIVIDE BY 0.75 FOR LIGHTWEIGHT CONCRETE.  
6. THE ABOVE BAR DEVELOPMENT LENGTHS ARE FOR UNCOATED REINFORCEMENT. FOR EPOXY COATED BARS, MULTIPLY THE SPECIFIED DEVELOPMENT LENGTHS BY 1.2.  
7. HOOKS SHALL NOT BE CONSIDERED EFFECTIVE IN DEVELOPING BARS IN COMPRESSION.  
8. THE ABOVE HOOKED BAR DEVELOPMENT LENGTHS ARE FOR REBAR Fy=60 KSI. FOR OTHER REBAR GRADES, MULTIPLY THE SPECIFIED DEVELOPMENT LENGTHS BY Fy/60 KSI.  
9. THE ABOVE HOOKED BAR DEVELOPMENT LENGTHS ARE CALCULATED USING THE 28-DAY CONCRETE COMPRESSIVE STRENGTH BASED ON CYLINDER SPECIMEN.

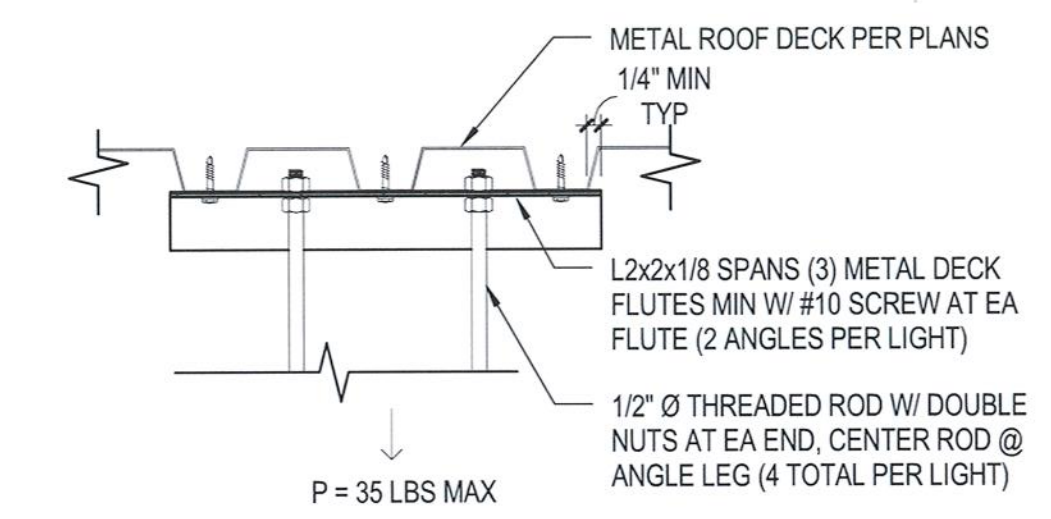
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A# 04- 115807 DATE: 05.03.18



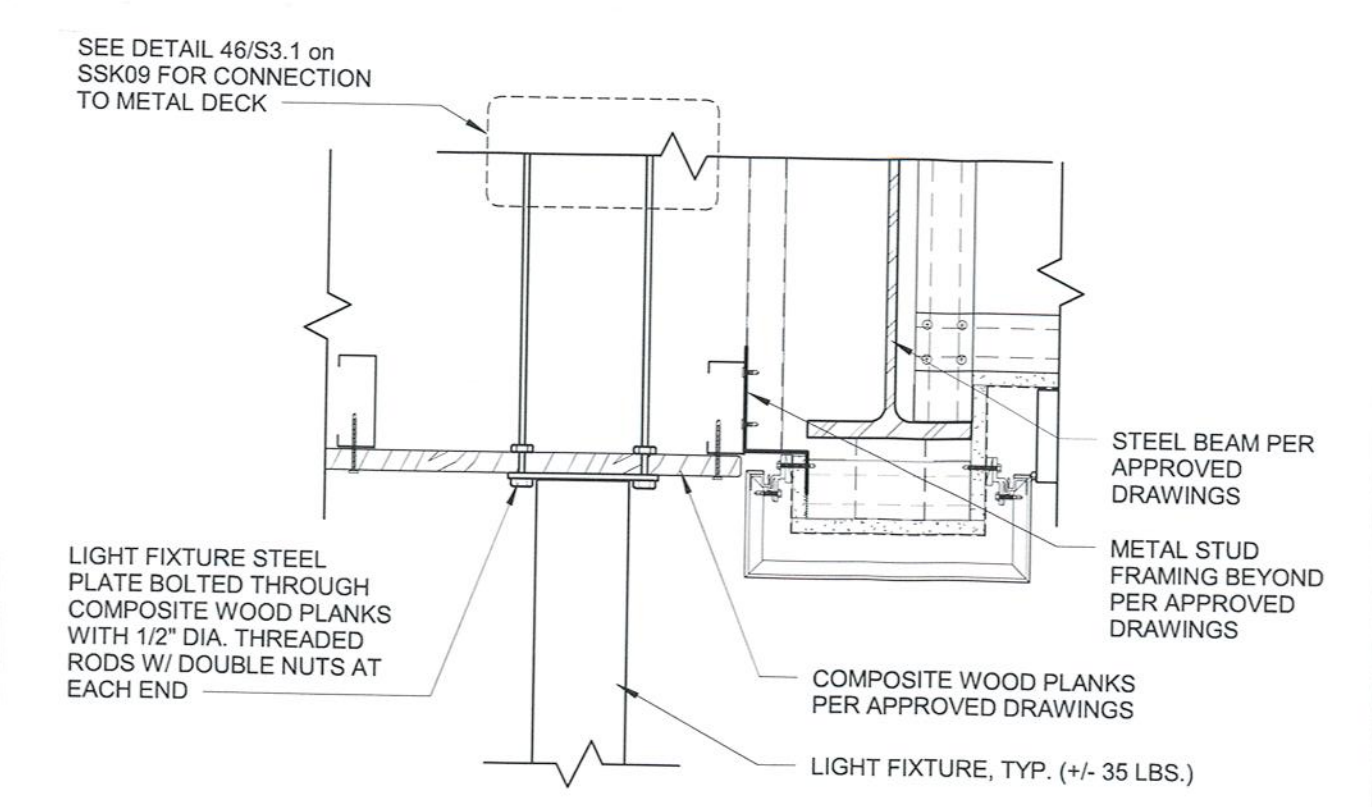
44 TYP HOOKED BAR DEVELOPMENT LENGTH (Ldh) SCHEDULE  
SCALE: 3/4" = 1'-0"



46 ARCH LIGHT ATTACHMENT  
S3.1 SCALE: 1 1/2" = 1'-0"

APPROVED  
DIVISION OF THE STATE ARCHITECT  
ACS -- FLS -- SSR **CNg** *CCD#4*  
A# 04- **115807** DATE: **09.10.18**  
Attachment No. to Date:

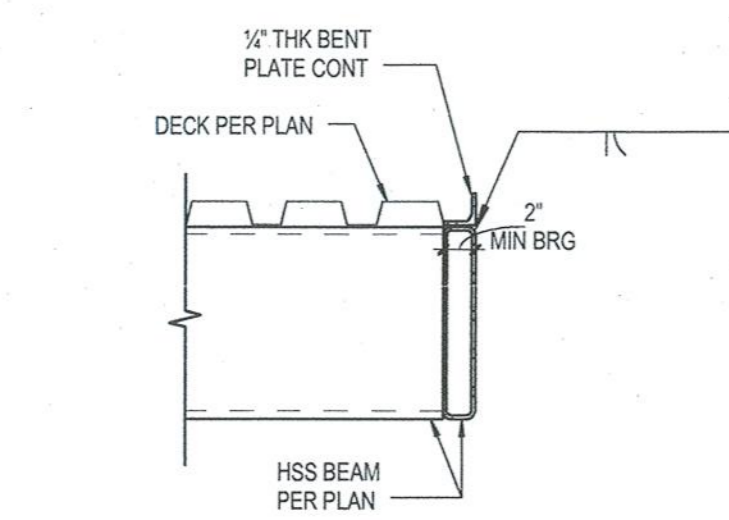
**DLR Group** Architecture Engineering Planning Interiors  
**SSK09 DETAIL**  
CAMPUS CENTER SHADE STRUCTURE  
MEASURE L PROJECTS AT CHAFFEE COLLEGE



LIGHT FIXTURE ATTACHMENT DETAIL

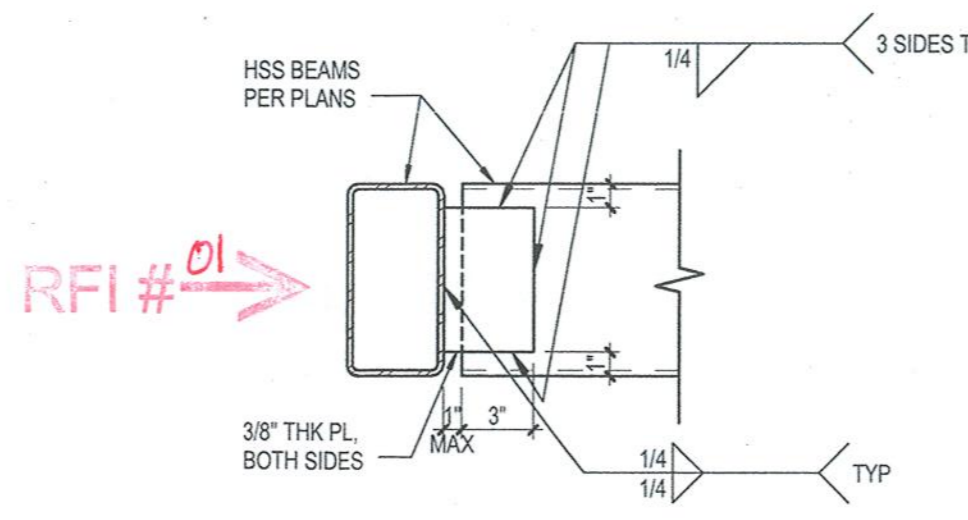
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APPROVED  
DIVISION OF THE STATE ARCHITECT  
ACS -- FLS -- SSR **CNg**  
A# 04- **115807** DATE: **09.10.18**

**DLR Group** RFI **43.1** **DETAIL**  
Architecture Engineering Planning Interiors  
CAMPUS CENTER SHADE STRUCTURE  
MEASURE L PROJECTS AT CHAFFEE COLLEGE

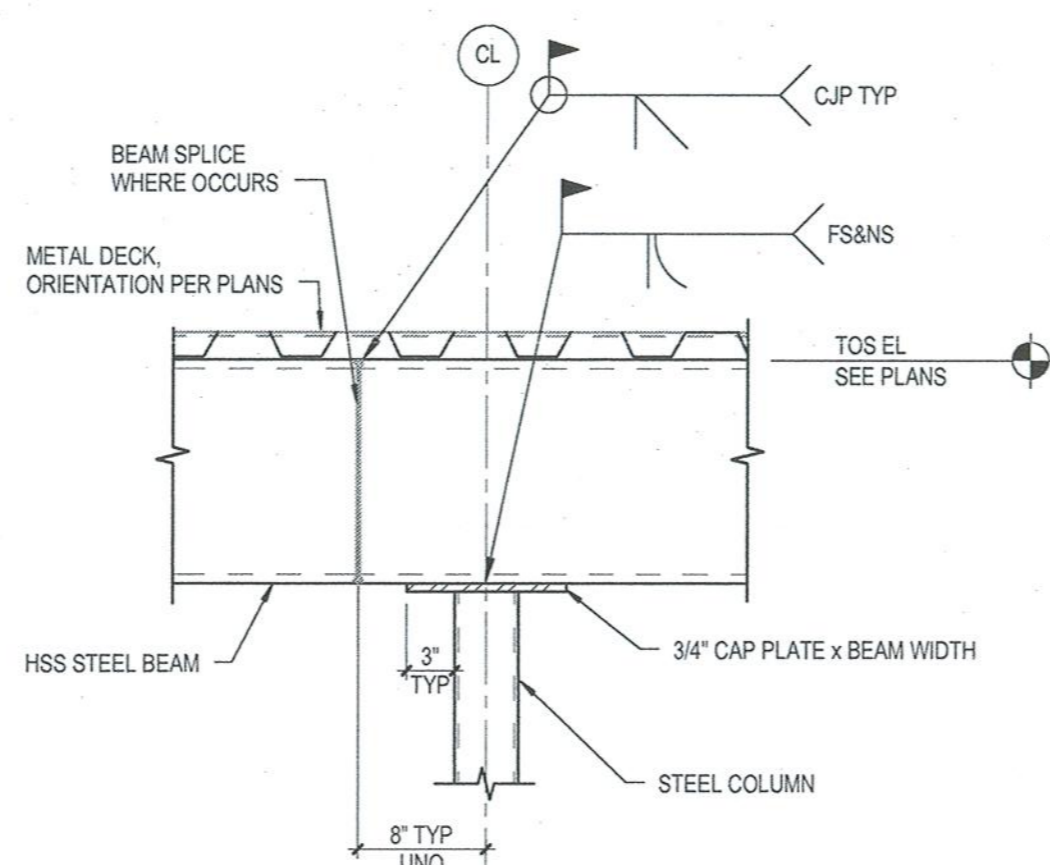


NOTES:  
 1. REFER TO GENERAL NOTES FOR DECK ATTACHMENT.  
 2. SEE PLAN FOR ROOF DECK TYPE AND THICKNESS.  
 3. DETAIL IS APPLICABLE REGARDLESS OF DECK ORIENTATION.

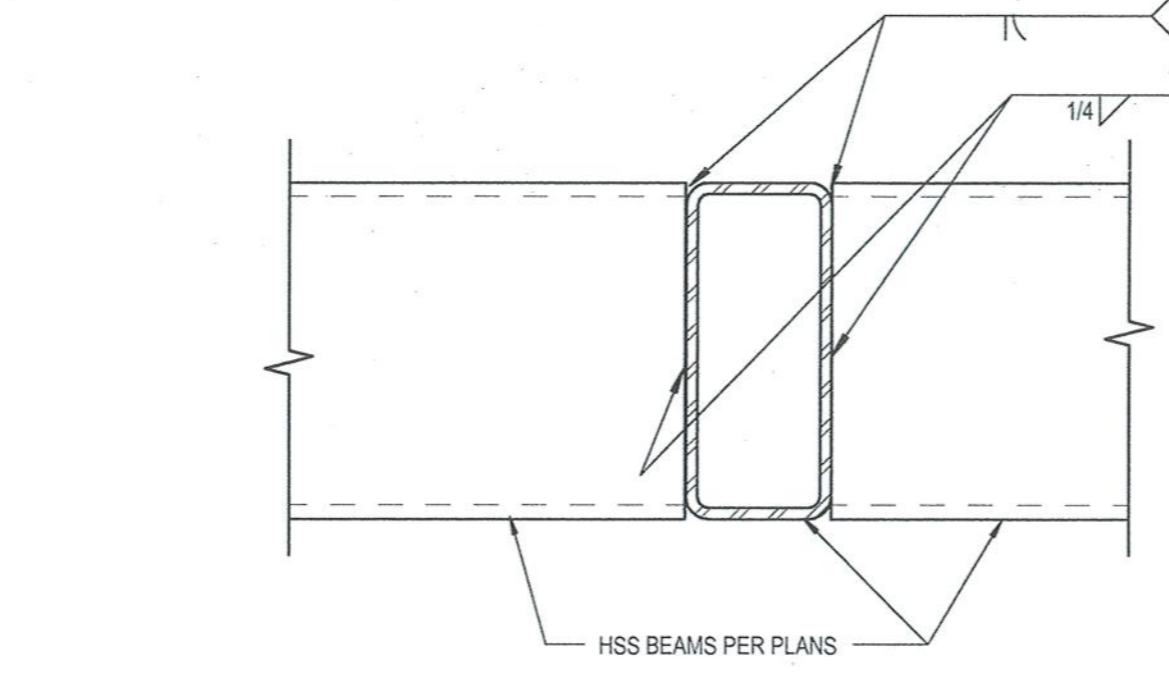
11 DECK EDGE AT HSS  
 S3.1 SCALE: 1" = 1'-0"



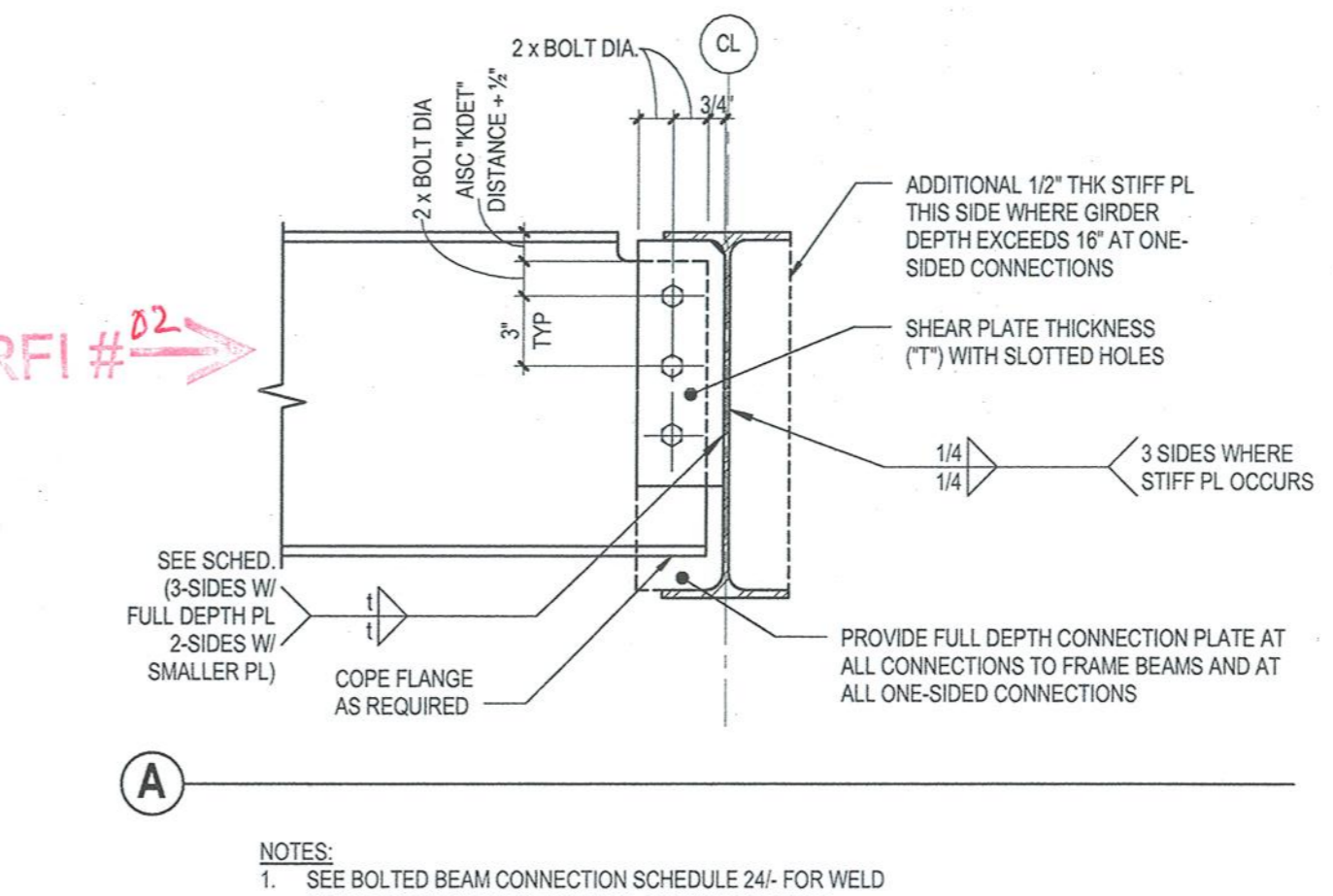
12 HSS BEAM TO HSS BEAM DETAIL  
 S3.1 SCALE: 1 1/2" = 1'-0"



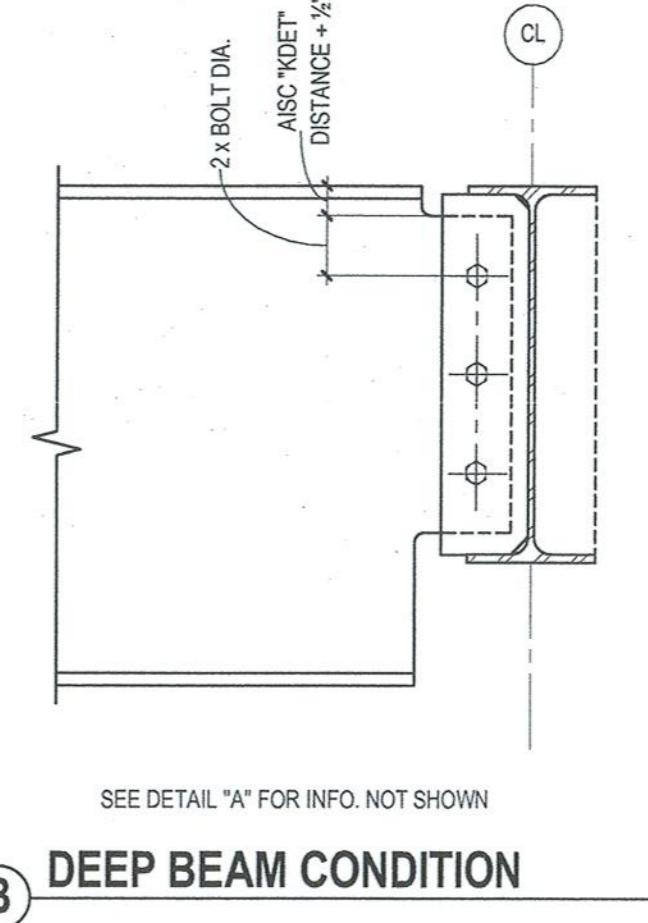
13 HSS COL TO HSS BEAM DETAIL  
 S3.1 SCALE: 1" = 1'-0"



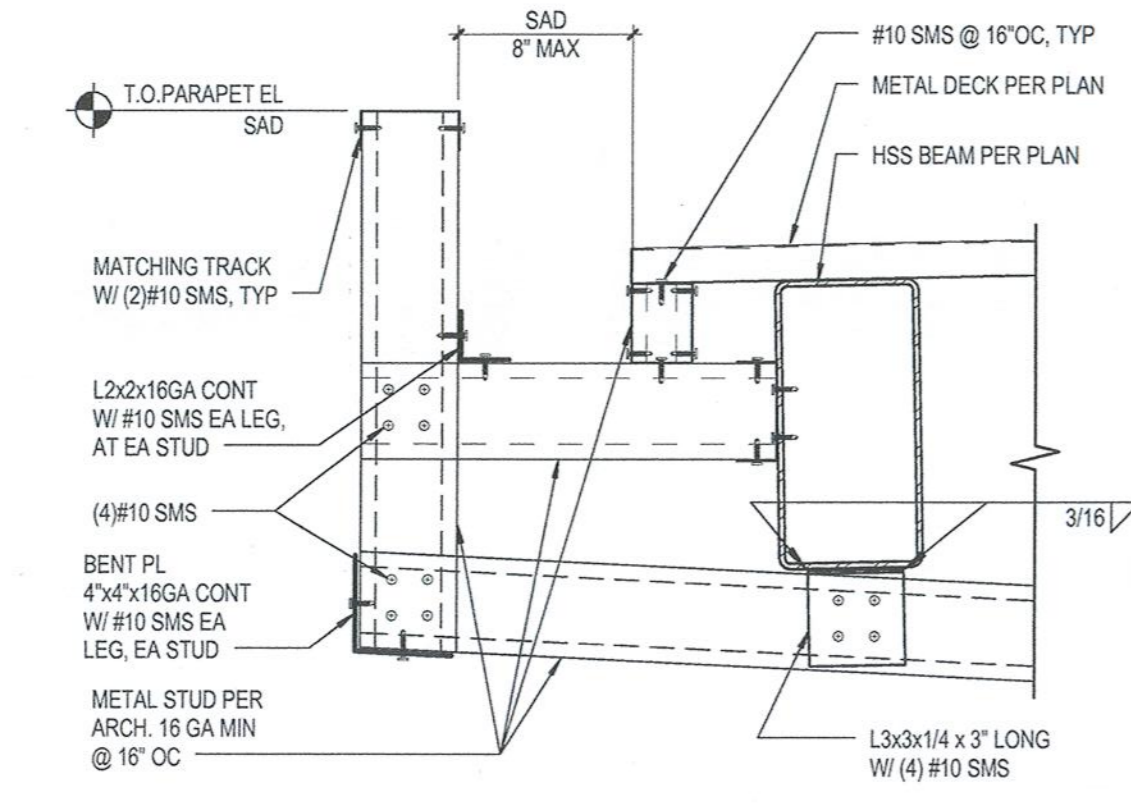
14 BEAM TO BEAM MOMENT CONNECTION (HSS)  
 S3.1 SCALE: 1 1/2" = 1'-0"



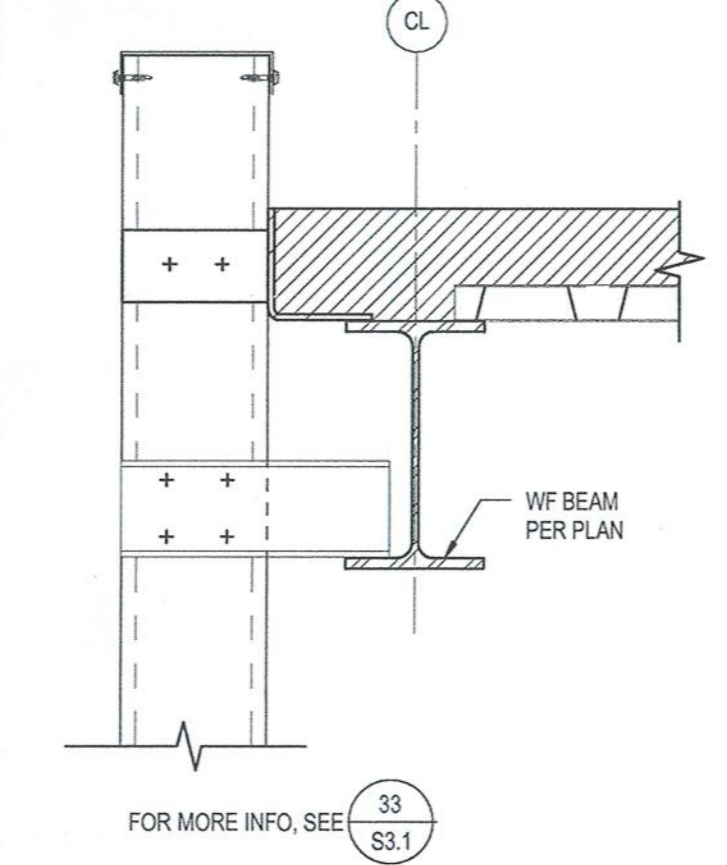
15 TYP BOLTED BEAM TO BEAM CONNECTION  
 S3.1 SCALE: 1 1/2" = 1'-0"



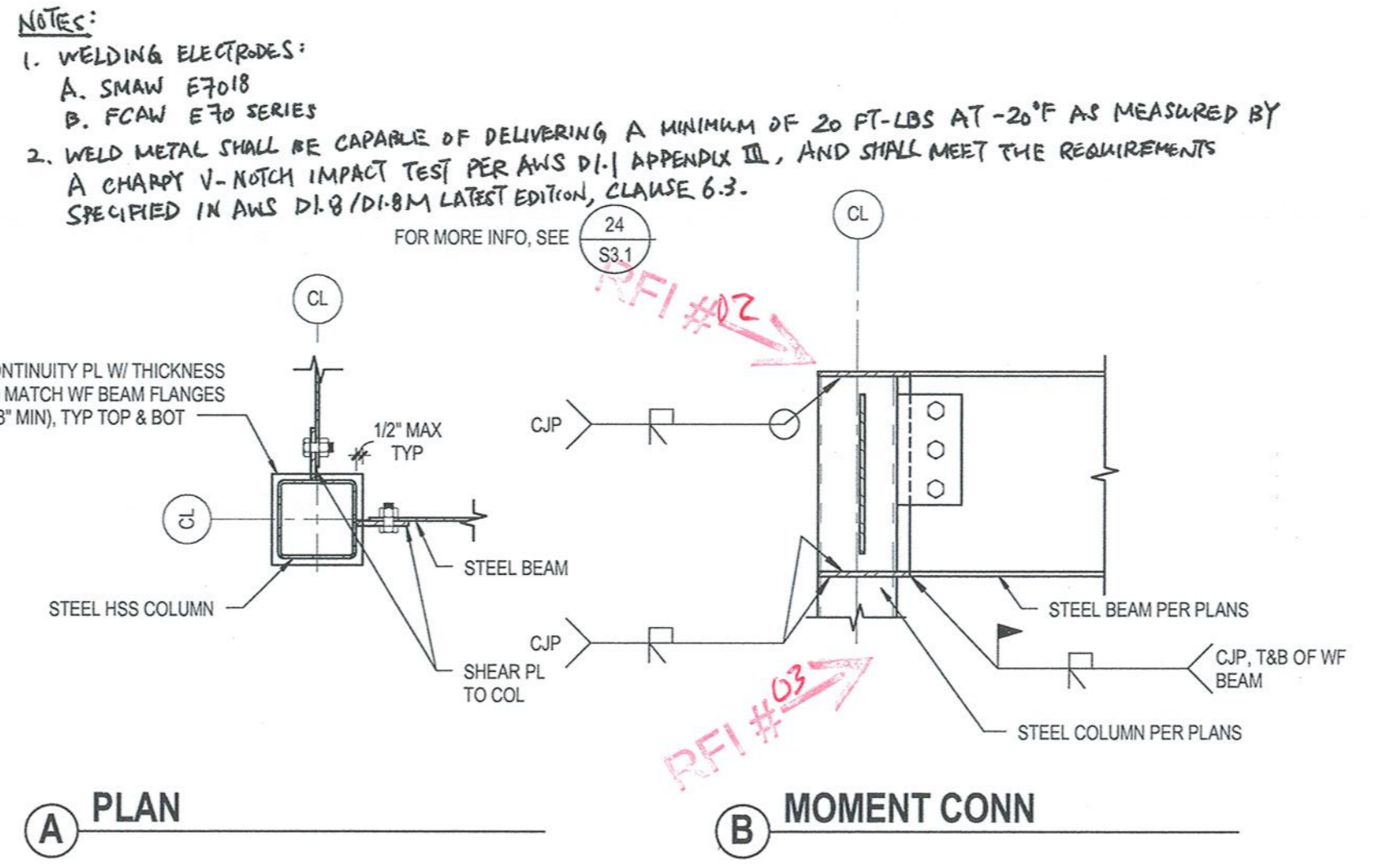
B DEEP BEAM CONDITION



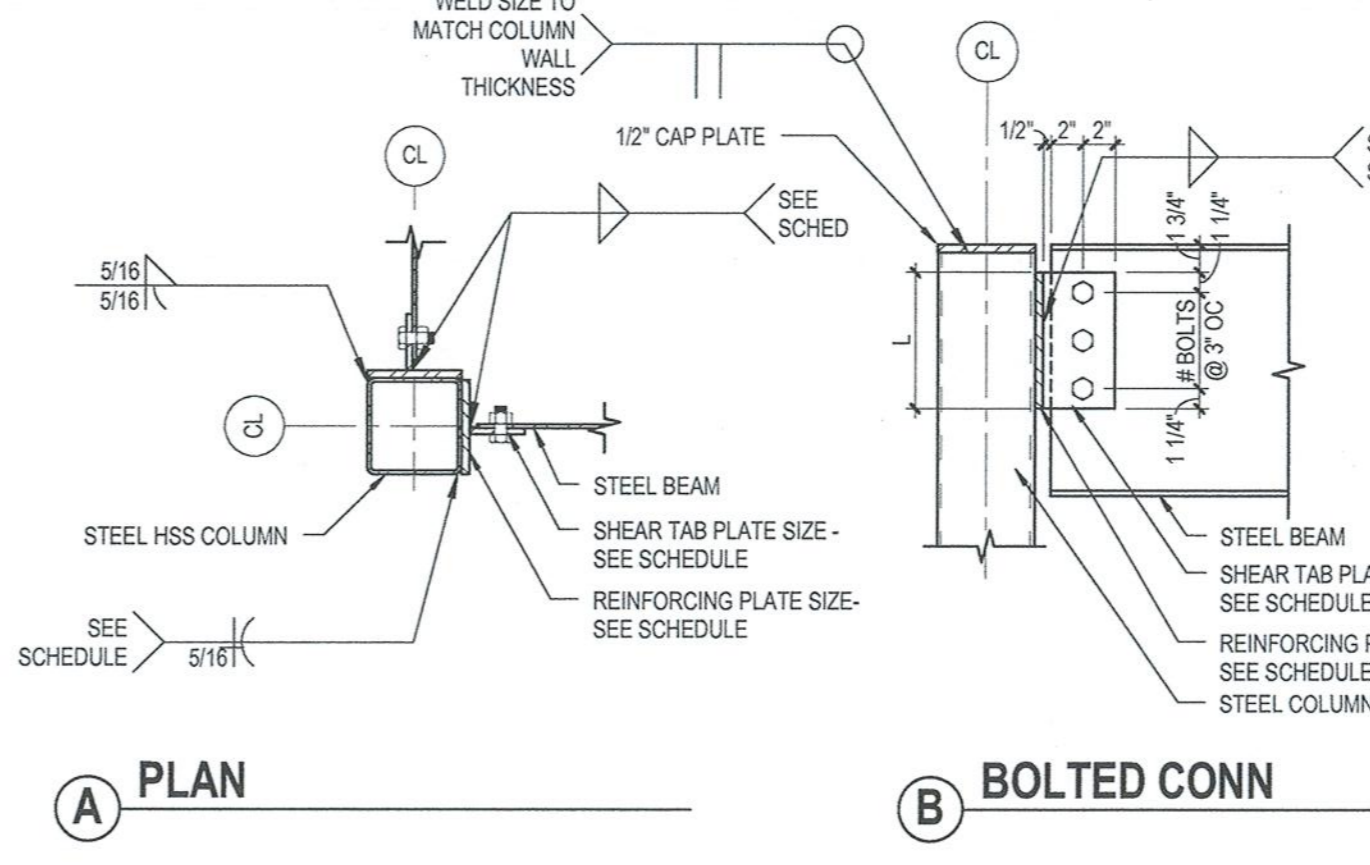
21 COVERED WALK PARAPET DETAIL  
 S3.1 SCALE: 1 1/2" = 1'-0"



22 PARAPET DETAIL AT ENCLOSED ROOM  
 S3.1 SCALE: 1 1/2" = 1'-0"



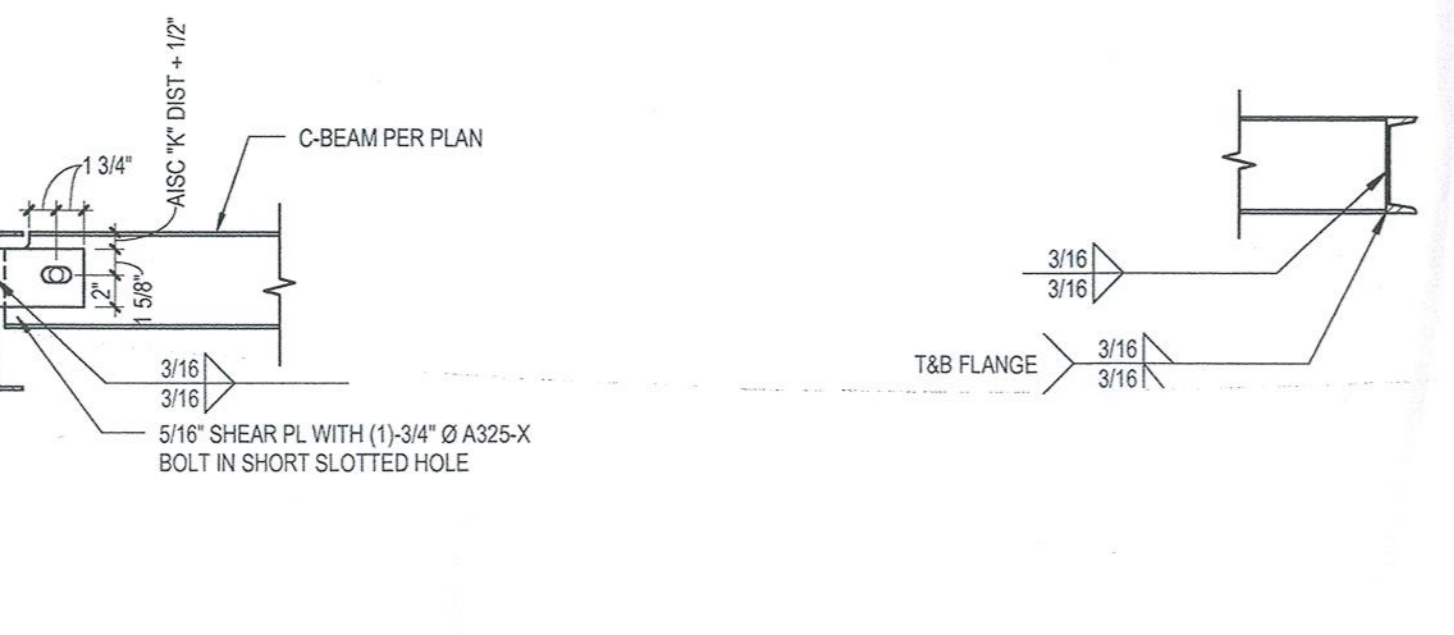
23 ORDINARY MOMENT CONNECTION WF BEAM TO HSS COLUMN  
 S3.1 SCALE: 1" = 1'-0"



24 SHEAR TAB CONNECTION  
 S3.1 SCALE: 1" = 1'-0"

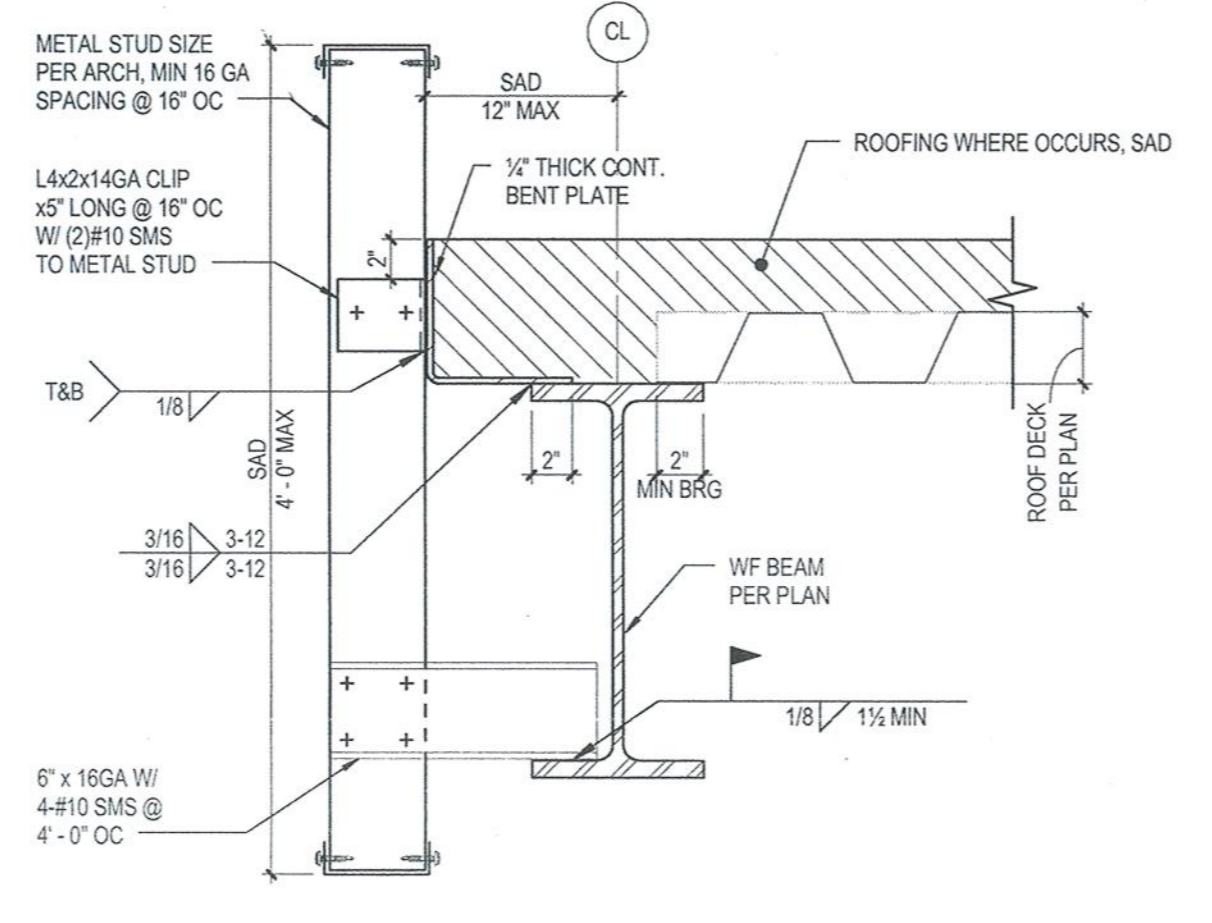
CONNECTION SCHEDULE				
EACH BM SIZE	NO OF BOLTS	SHEAR TAB PLATE SIZE	WELD SIZE, I	REINFORCING PLATE SIZE, I
W8, W10	2	1/4"	5/16"	3/8
W12, W14	3	1/4"	5/16"	3/8
W16, W18	4	5/16"	3/8"	3/8
W21	5	5/16"	3/8"	3/8
W24	6	5/16"	3/8"	1/2
W27	7	5/16"	3/8"	1/2

NOTES:  
 1. BOLTS ARE 3/4" A325-N. HOLES ARE 13/16" STANDARD HOLES.

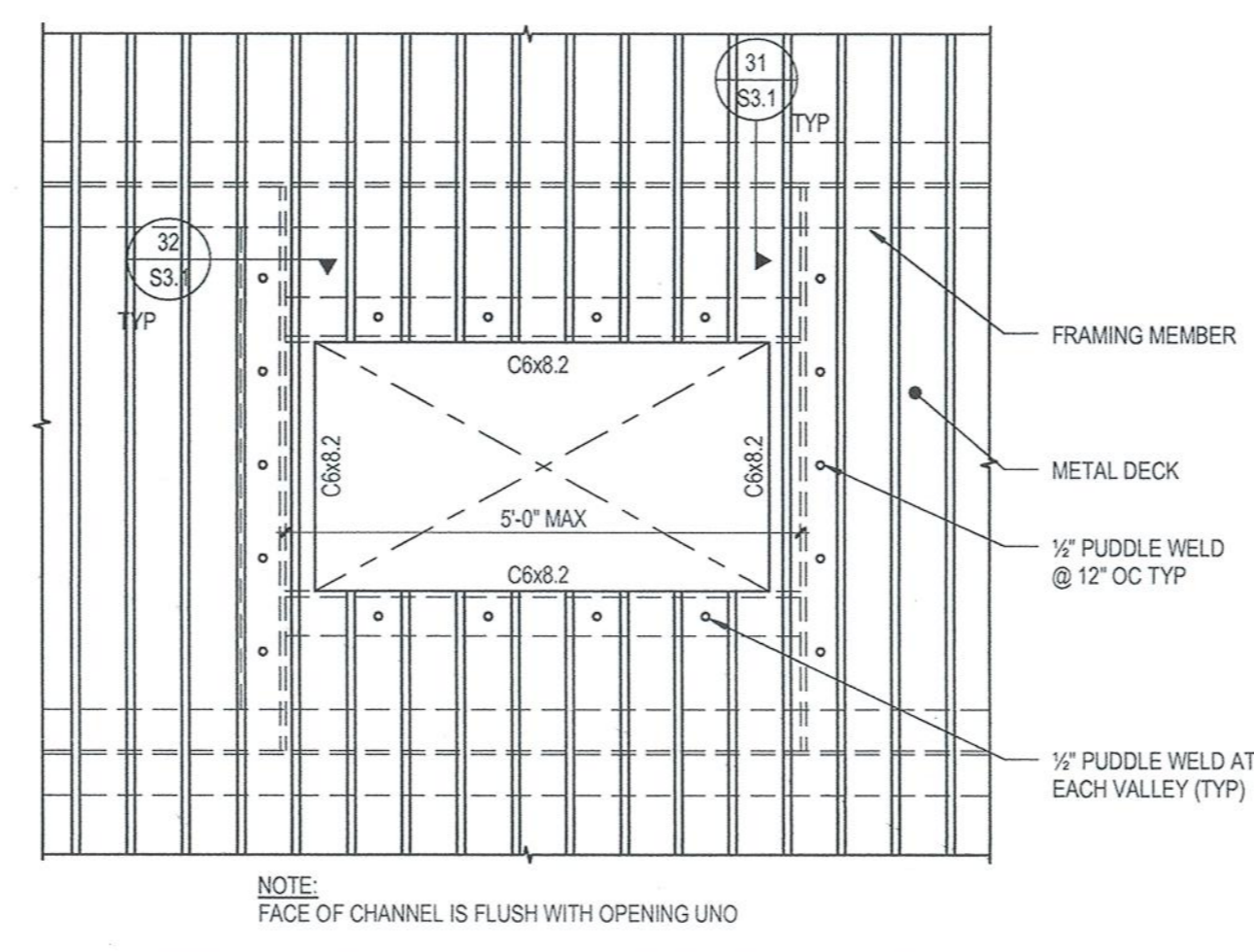


31 WF BEAM TO CHANNEL CONNECTION  
 S3.1 SCALE: 1" = 1'-0"

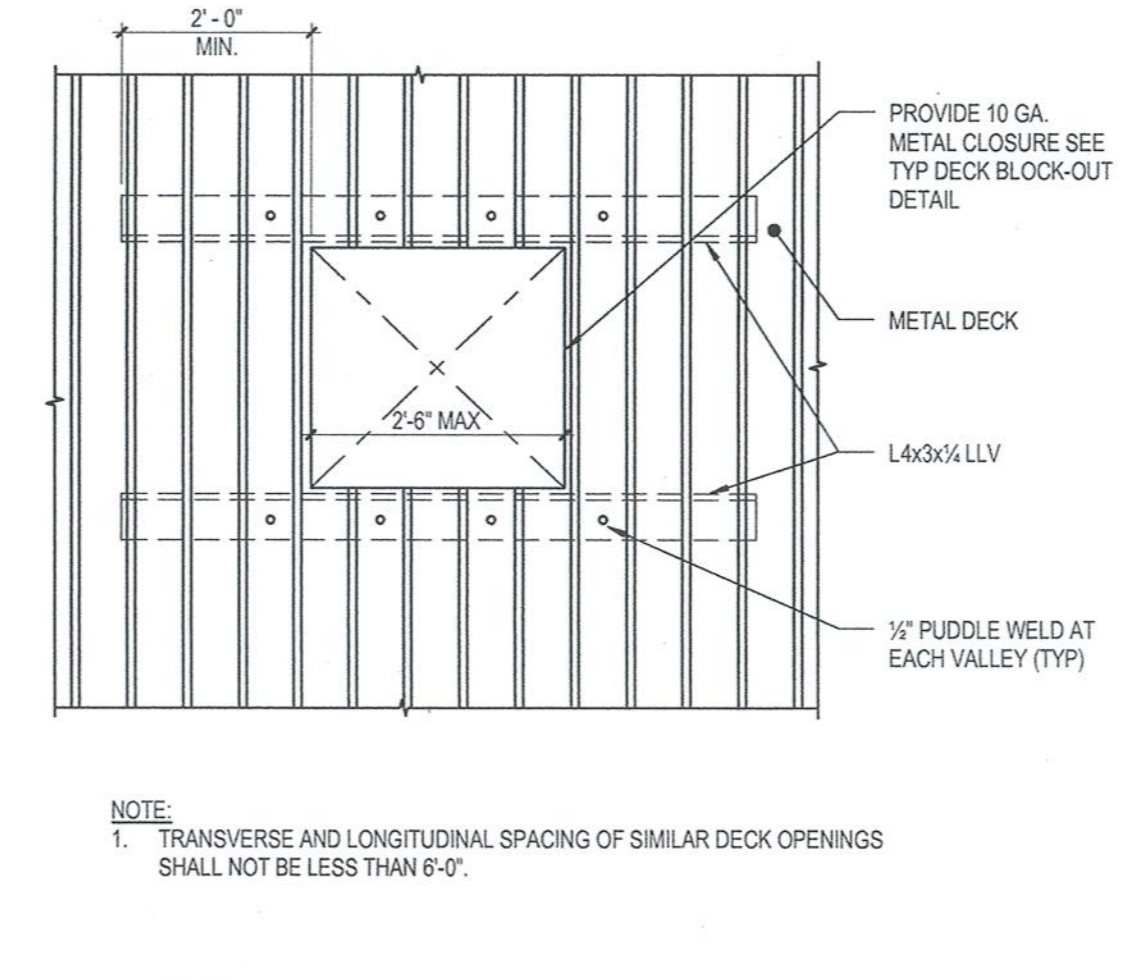
32 DECK OPENING TRIM CHANNEL  
 S3.1 SCALE: 1" = 1'-0"



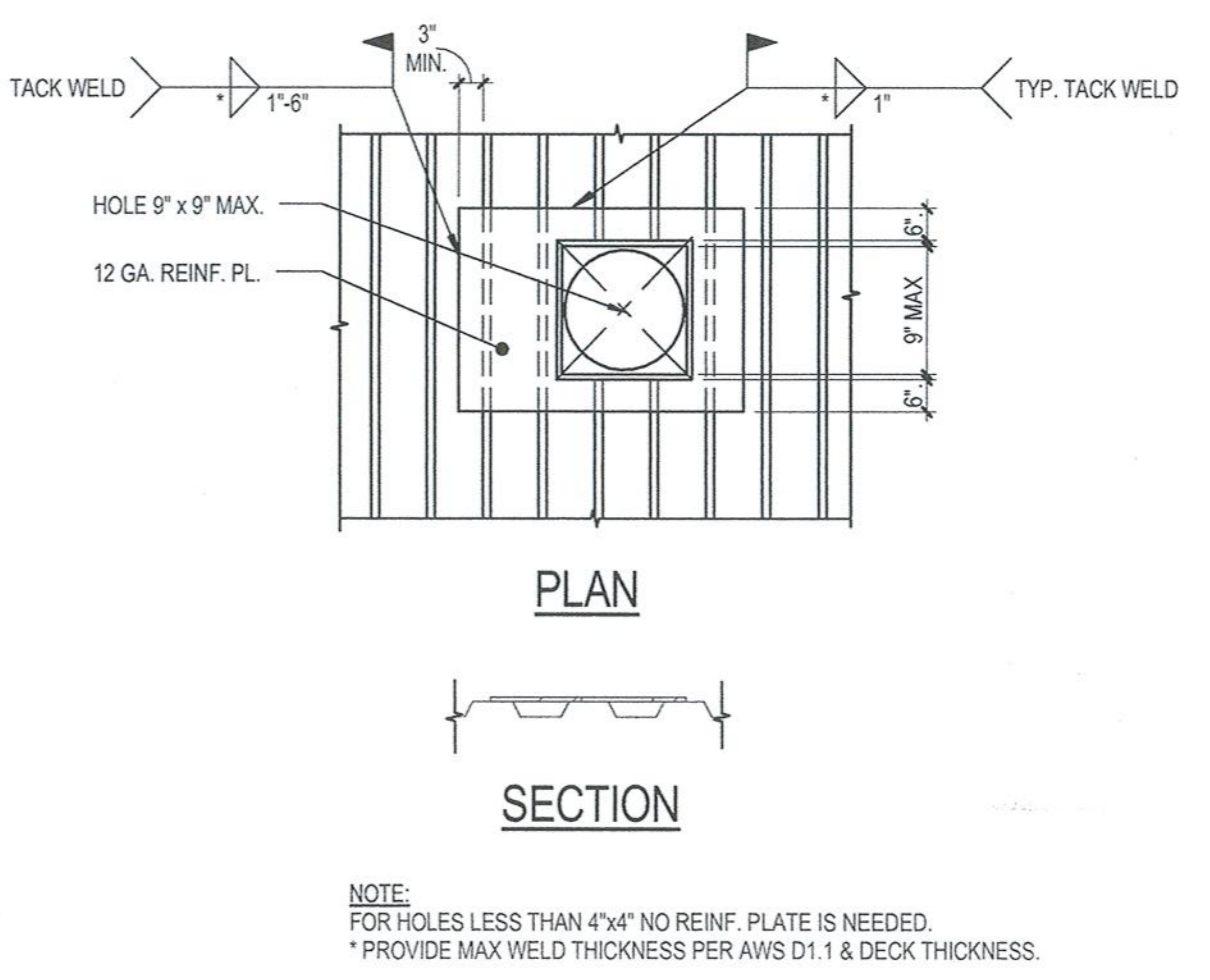
33 DECK EDGE DETAIL  
 S3.1 SCALE: 1 1/2" = 1'-0"



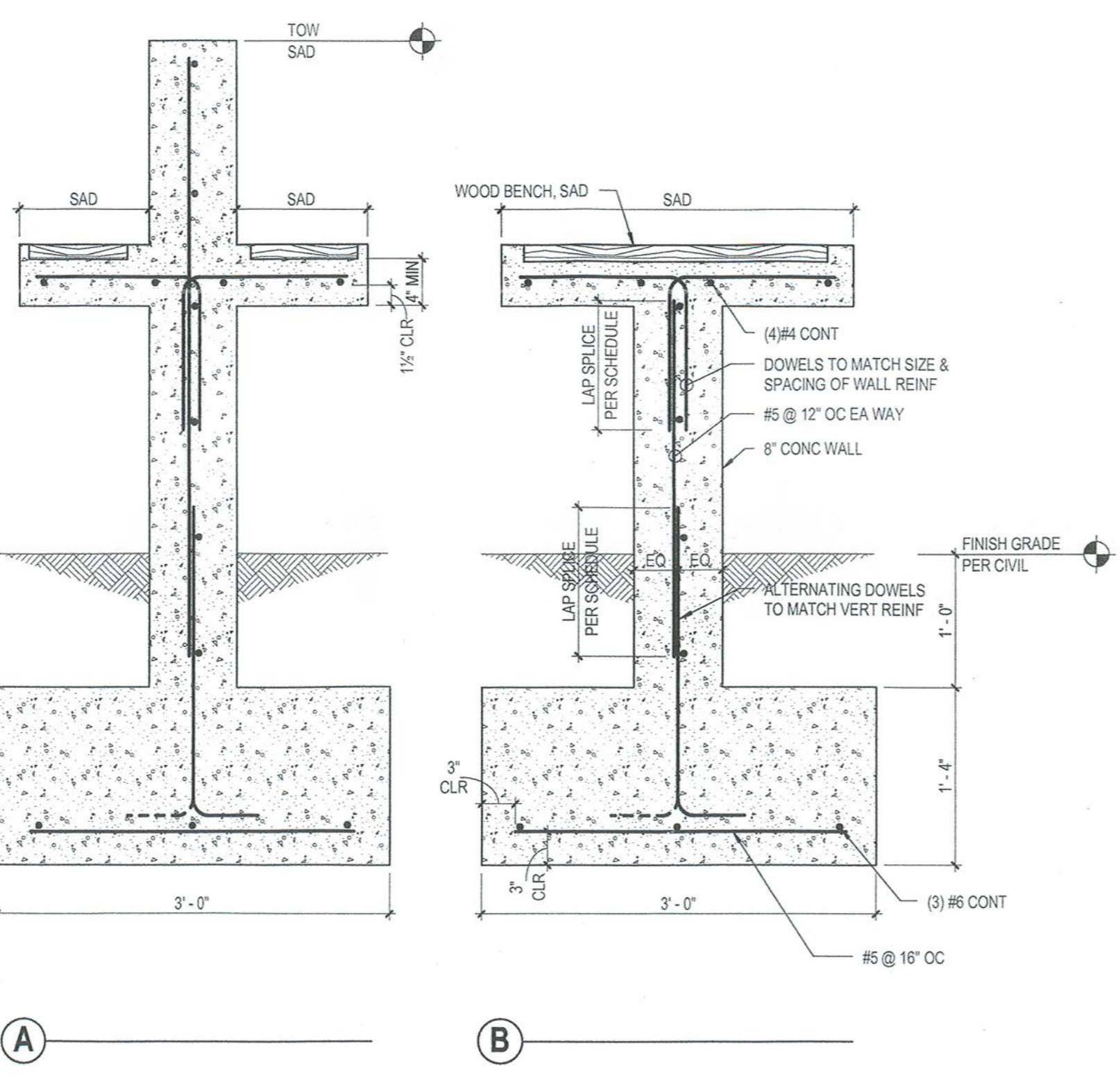
A OPENINGS WITH ANY SIDE GREATER THAN 30" AND LESS THAN OR EQUAL TO 5'-0"



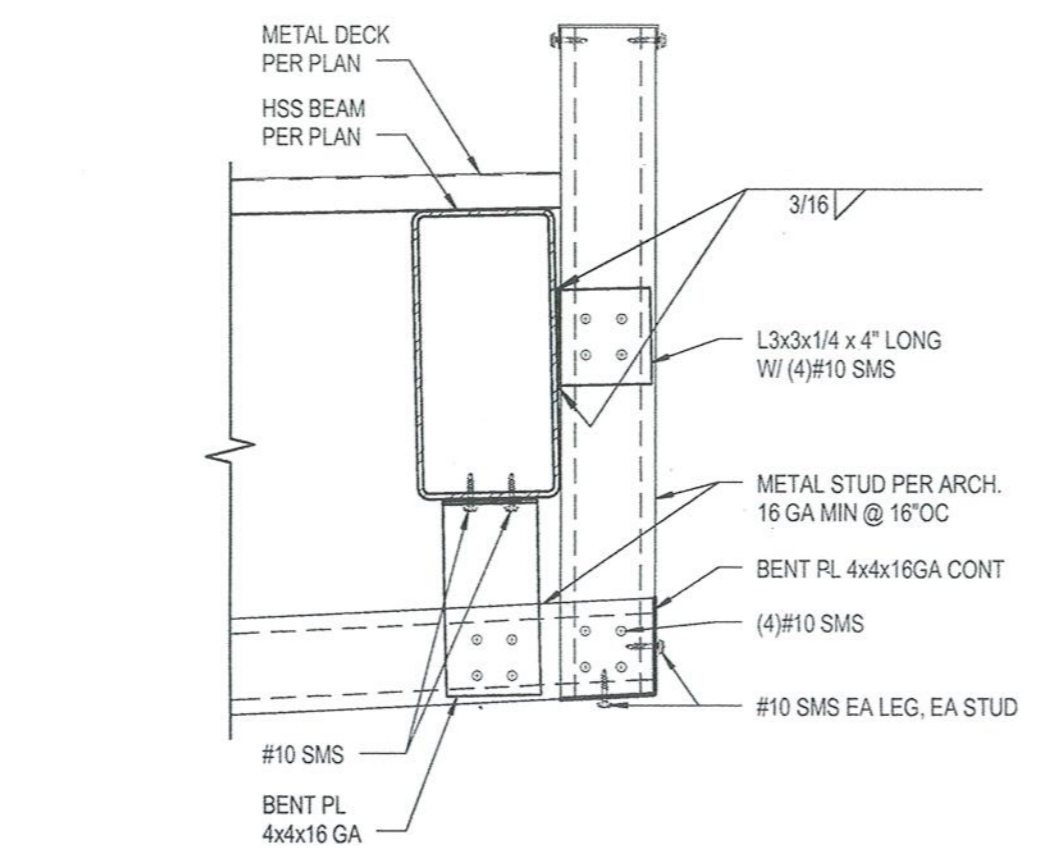
B OPENINGS WITH ANY SIDE GREATER THAN 9" AND LESS THAN OR EQUAL TO 30"



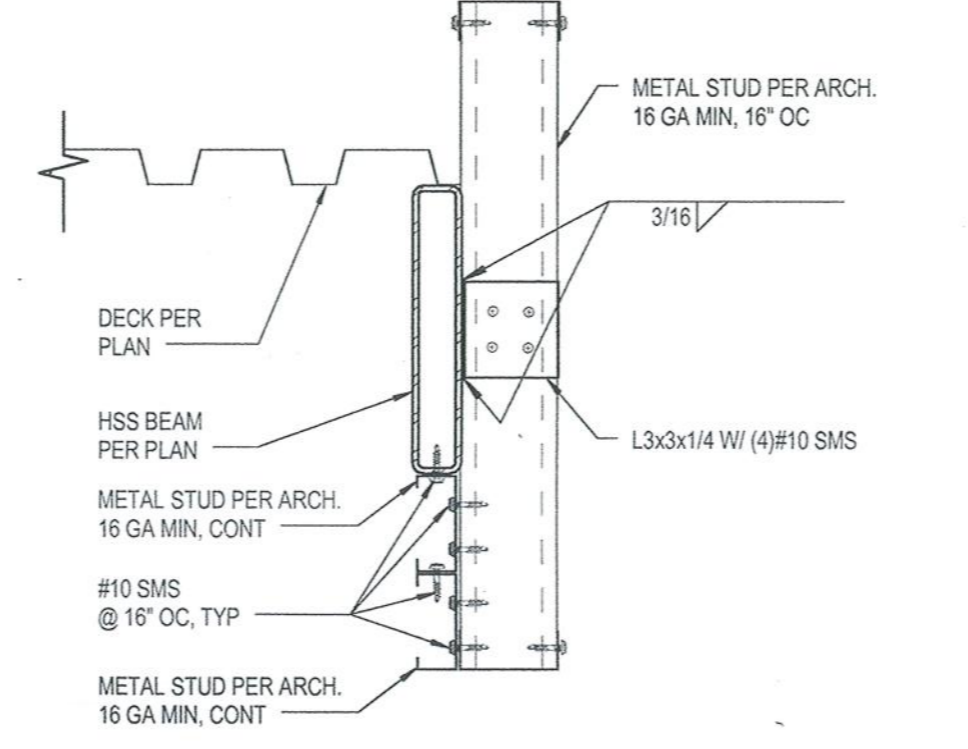
C OPENINGS EQUAL OR LESS THAN 9" x 9"



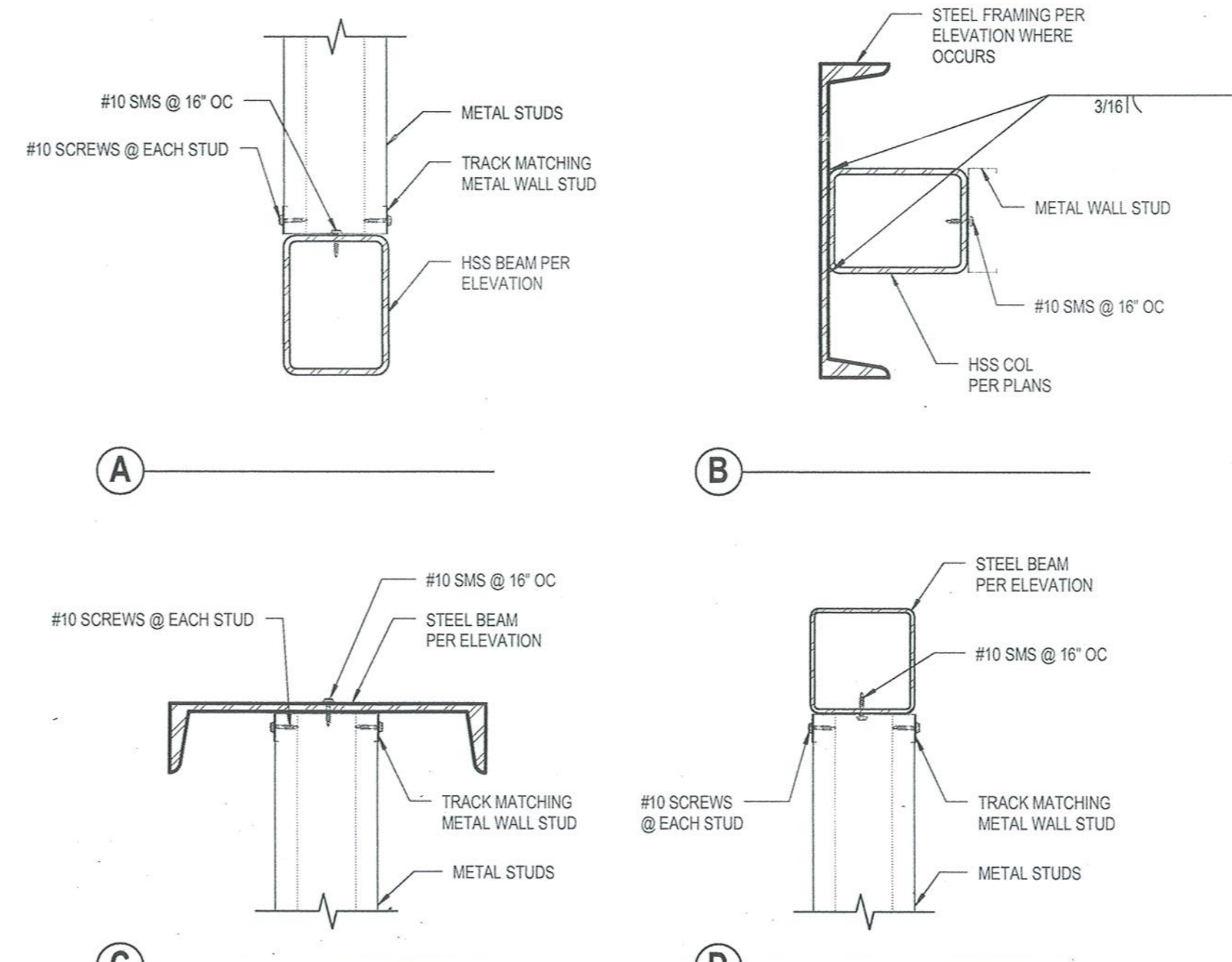
41 SITE BENCH DETAIL  
 S3.1 SCALE: 1" = 1'-0"



42 PARAPET DETAIL AT COVERED WALK  
 S3.1 SCALE: 1 1/2" = 1'-0"



43 PARAPET DETAIL AT COVERED WALK  
 S3.1 SCALE: 1 1/2" = 1'-0"



44 STEEL TO LIGHT GAUGE DETAIL  
 S3.1 SCALE: 1 1/2" = 1'-0"

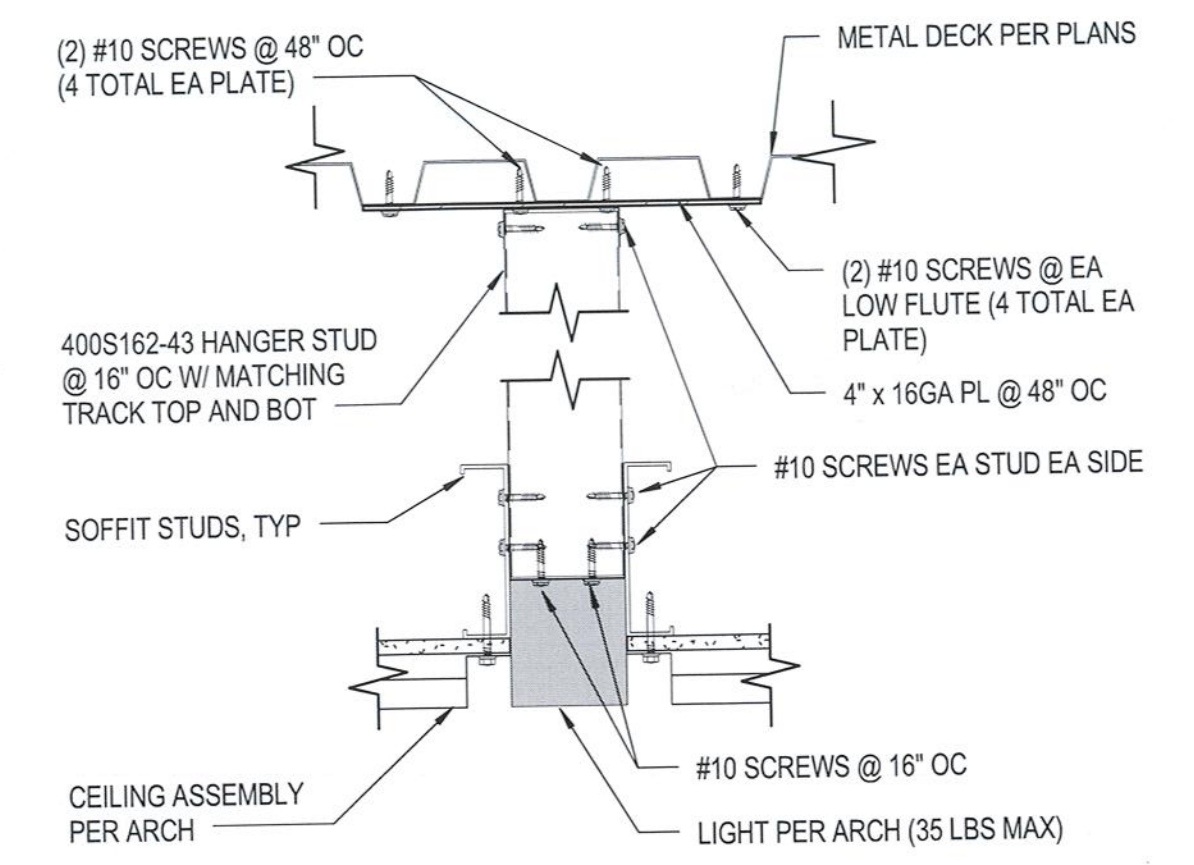
APPROVED  
 DIVISION OF THE STATE ARCHITECT  
 ACS: FLS: SSR: CN: CCD#2  
 A# 04: 115807 DATE: 06.25.18

NOTE: ANCHORS SHALL PROTRUDE ABOVE BASEPLATE SUCH THAT PULL TEST EQUIPMENT CAN BE ATTACHED AFTER TESTING. ANCHORS SHALL BE CUT TO THE CORRECT LENGTH AND WELDED AS SHOWN.

45 CHANNEL AT CONCRETE WALL  
 S3.1 SCALE: 1 1/2" = 1'-0"

SSK-001-RFI-020-R1  
 DLR Group, Inc.  
 2018/04/26

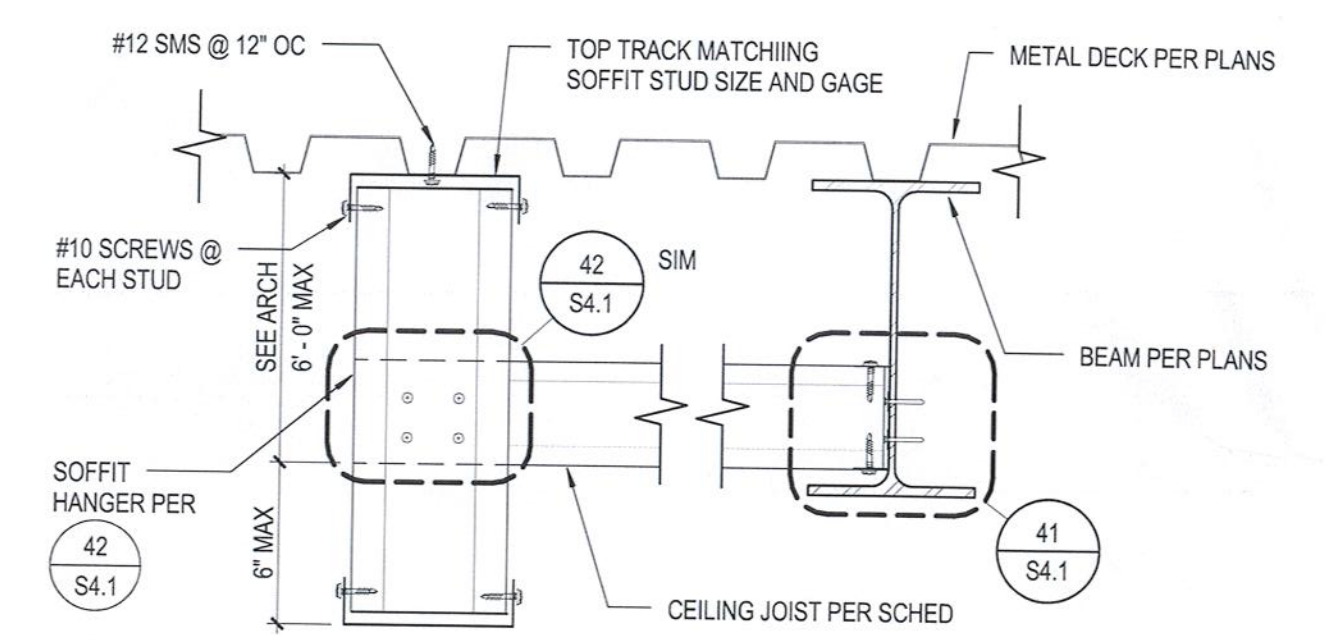
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**34 LIGHT SUPPORT DETAIL** CCDH4 RFI4SR2  
 SCALE: 1 1/2" = 1'-0"

APPROVED  
 DIVISION OF THE STATE ARCHITECT  
 ACS -- FLS -- SSR **CNg**  
 Attachment No. 115807 DATE: 09.10.18  
 to: [Signature]  
 Dated: [Signature]

**DLR Group** Architecture Engineering Planning Interiors  
**SSK10 DETAIL** CAMPUS CENTER SHADE STRUCTURE  
 MEASURE L PROJECTS AT CHAFFEY COLLEGE

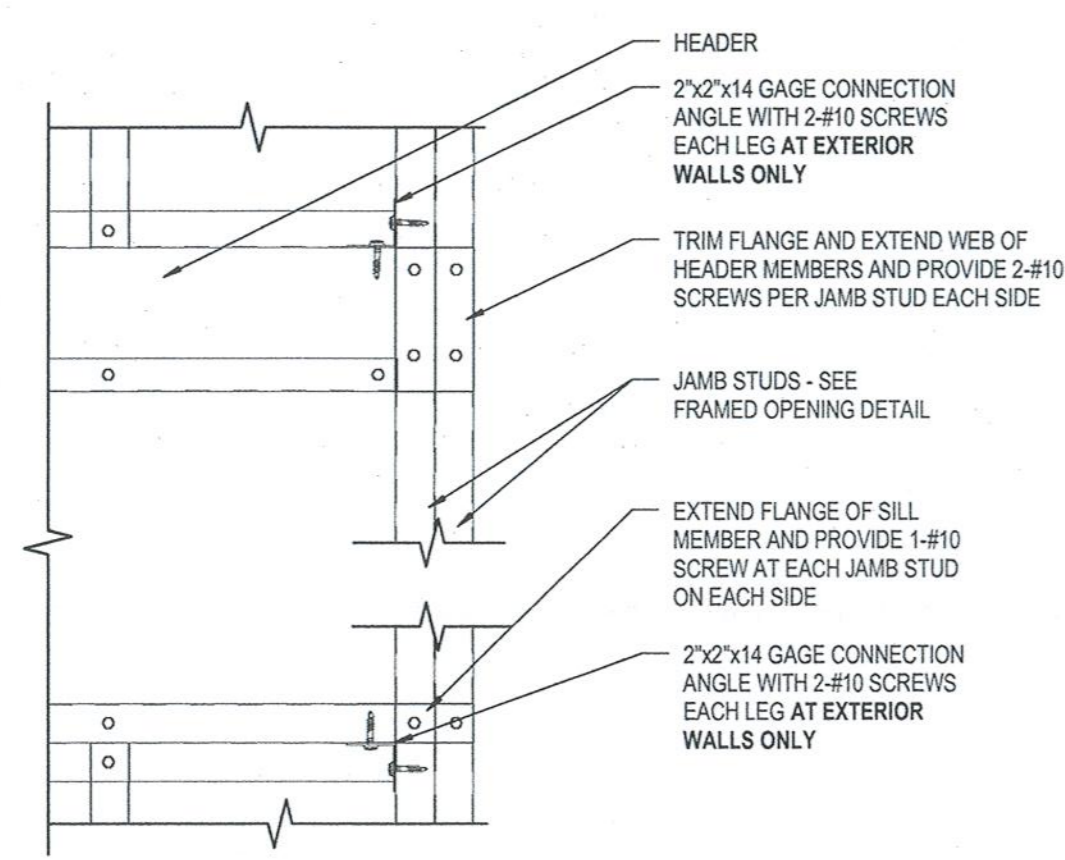


**28 SOFFIT STUD ATTACHMENT @ LOW FLUTE** CCDH5  
 SCALE: 1 1/2" = 1'-0"

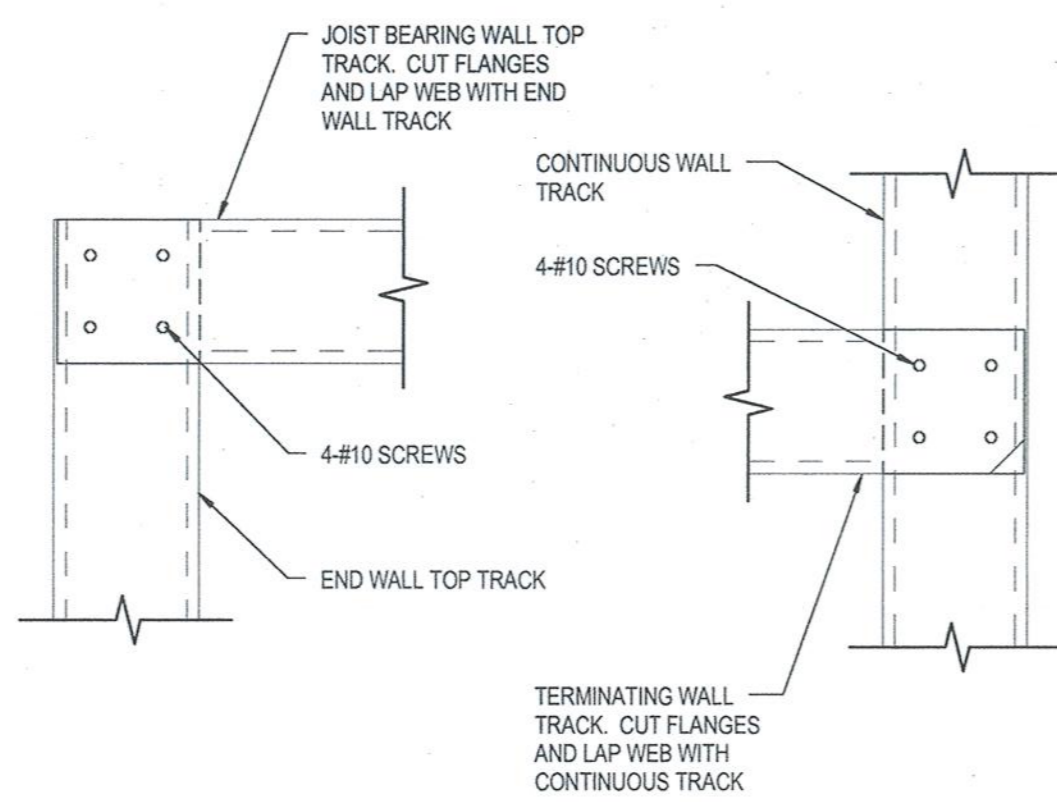
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 ACS -- FLS -- SSR **CNg**  
 Attachment No. 115807 DATE: 09.27.18  
 to: [Signature]  
 Dated: [Signature]

**DLR Group** Architecture Engineering Planning Interiors  
**SSK12 DETAIL** CAMPUS CENTER SHADE STRUCTURE  
 MEASURE L PROJECTS AT CHAFFEY COLLEGE

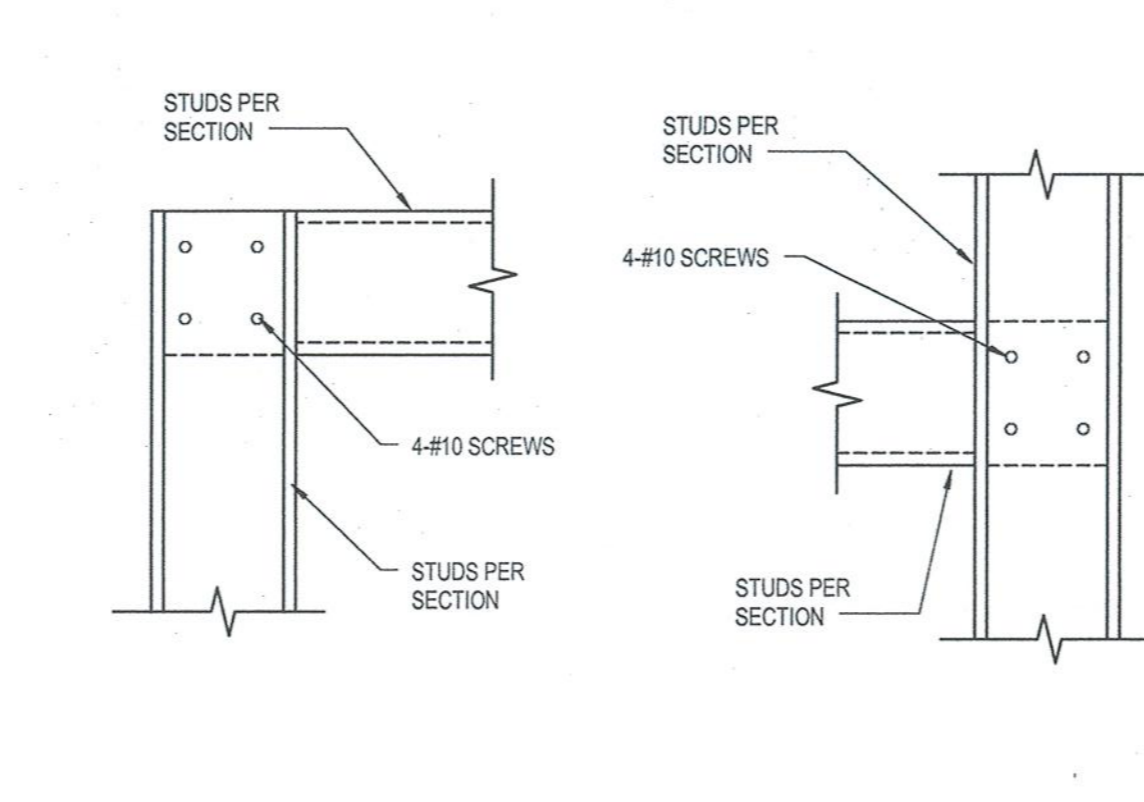




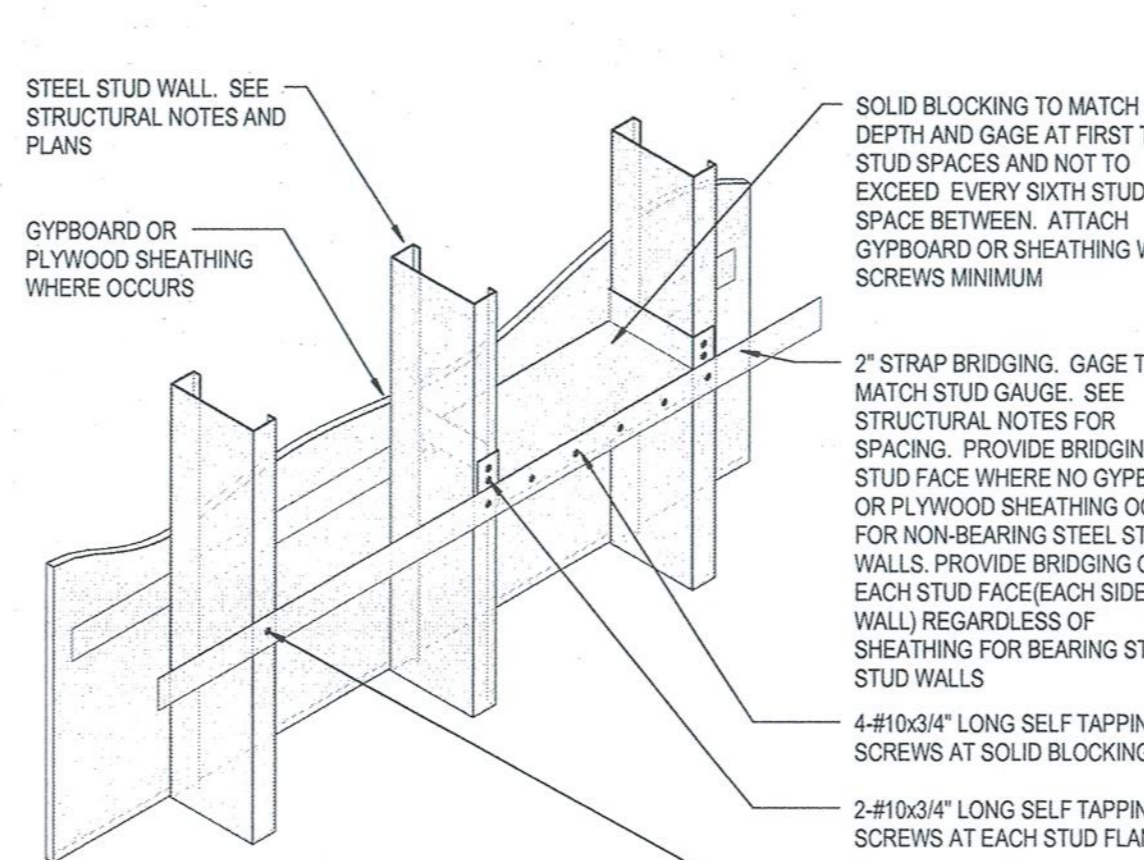
11 HEADER, SILL, AND JAMB ELEVATION  
SCALE: 1 1/2" = 1'-0"



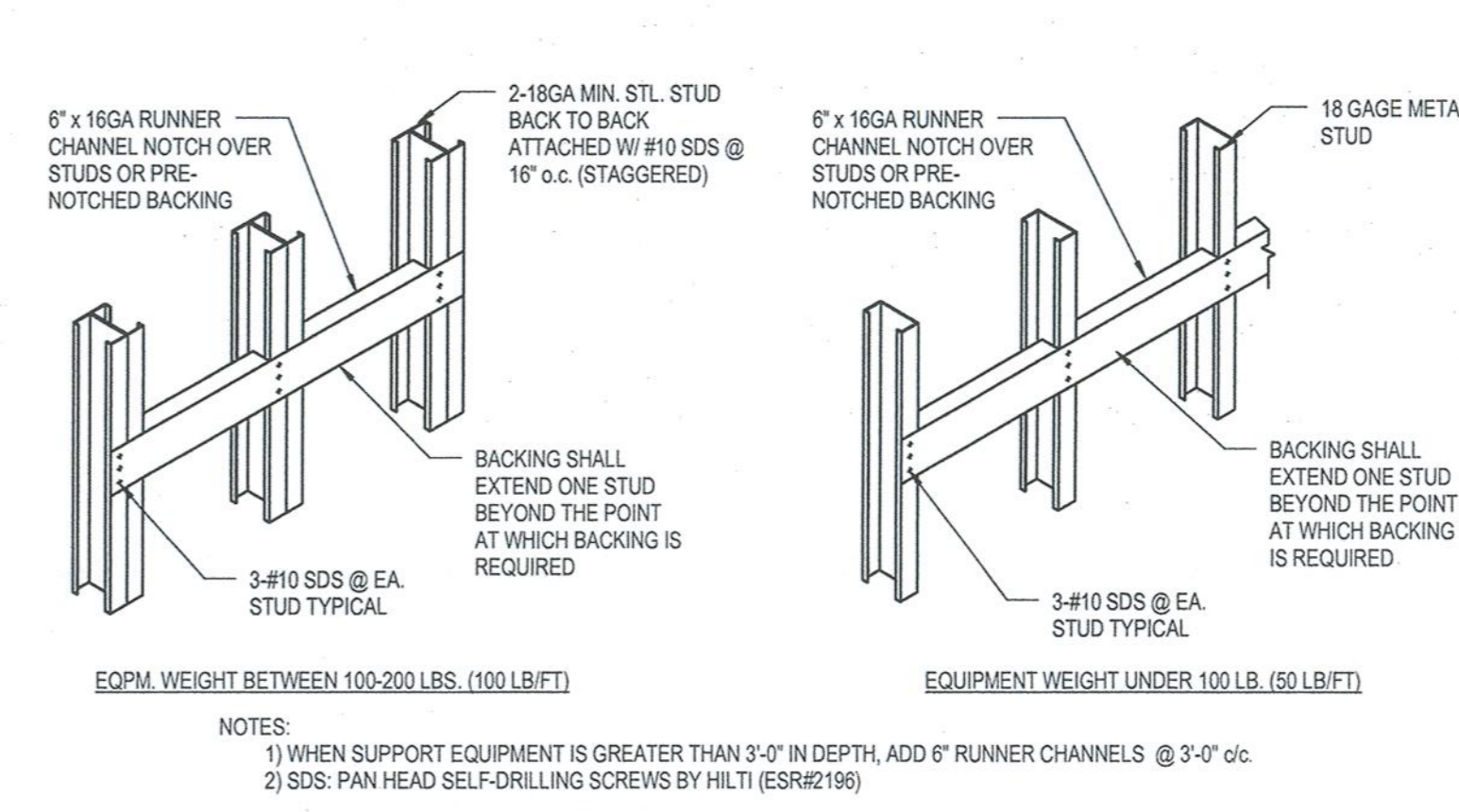
12 TYP TOP TRACK SPLICES (PLAN VIEW)  
SCALE: 1 1/2" = 1'-0"



13 TYP STUD CONNECTION  
SCALE: 1 1/2" = 1'-0"



14 TYP STUD BRIDGING  
SCALE: 1" = 1'-0"



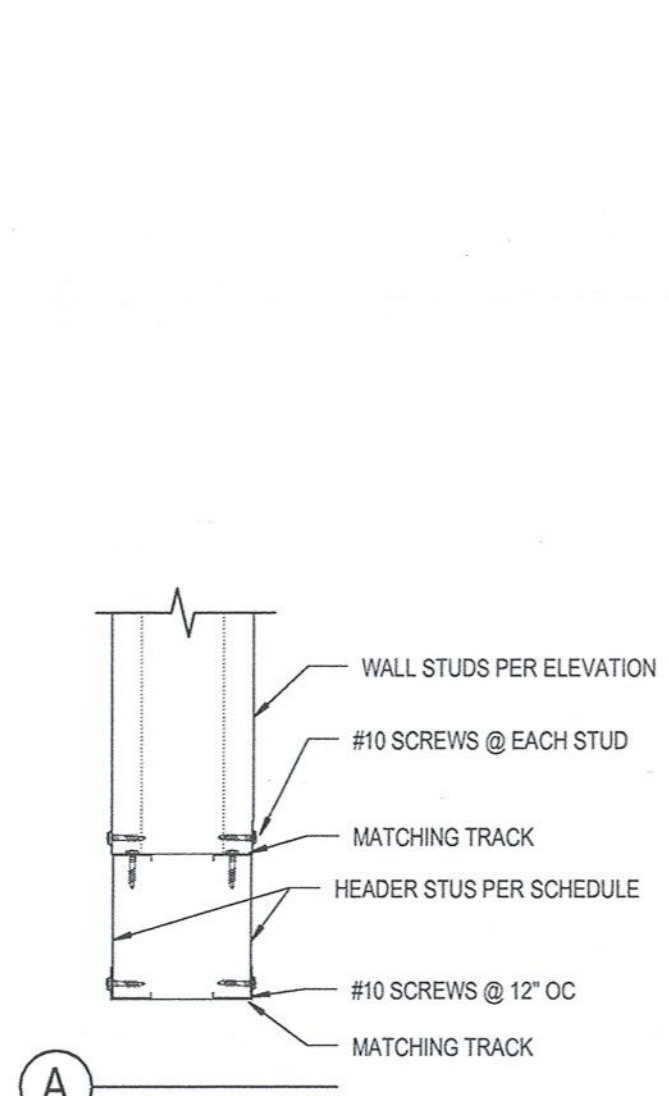
15 LIGHT GAGE BACKING DETAIL  
SCALE: 3/4" = 1'-0"

INTERIOR COLD FORMED METAL FRAMED OPNG SCHED

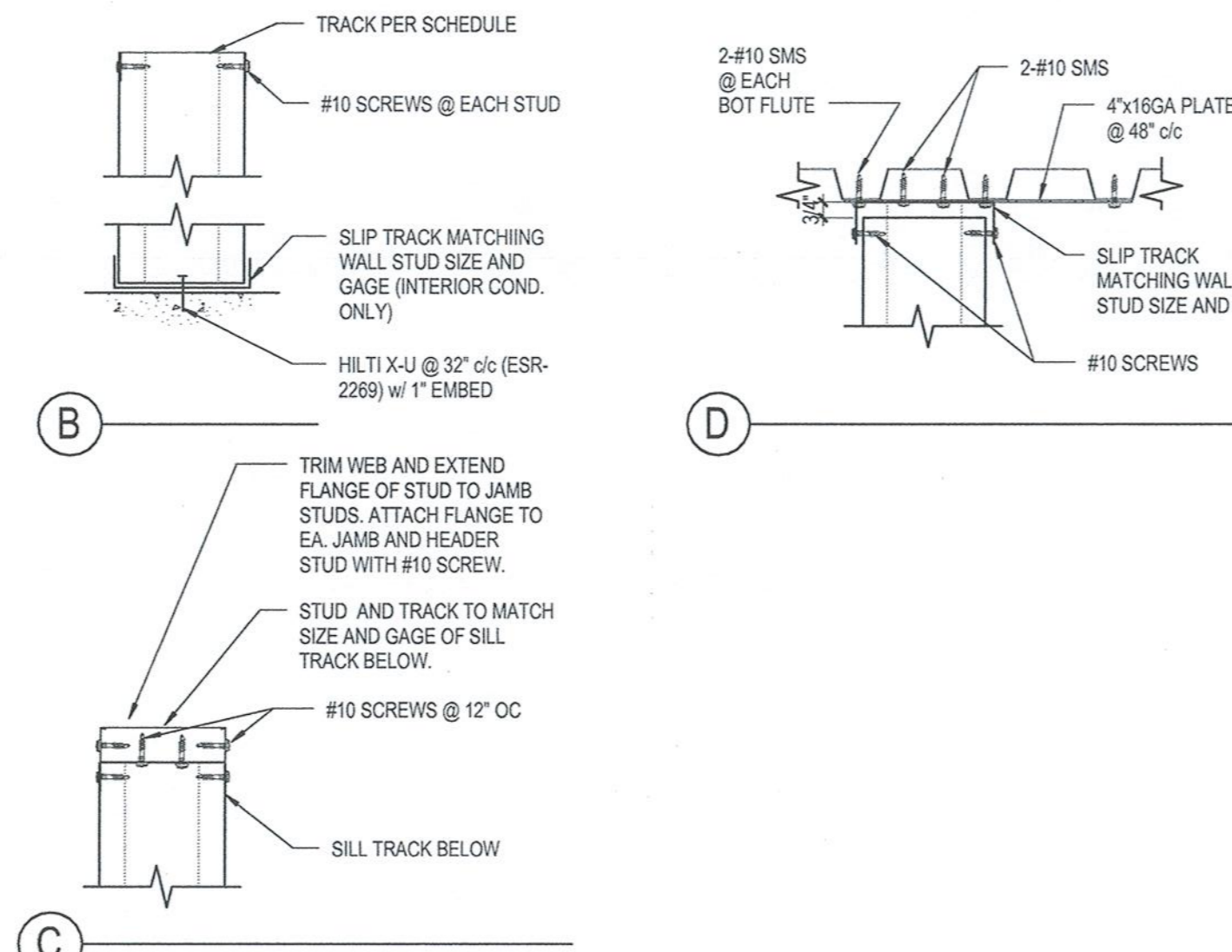
OPENING WIDTH (W)	HEADER	SILL
0'-0" W/ 3'-0" H	2-2"x11" S8x20GA	20GA TRACK - SEE B
0'-0" W/ 3'-6" H	2-2"x11" S8x20GA	20GA TRACK - SEE B
0'-0" W/ 4'-0" H	2-2"x11" S8x20GA	16GA TRACK - SEE B

EXTERIOR COLD FORMED METAL FRAMED OPNG SCHED

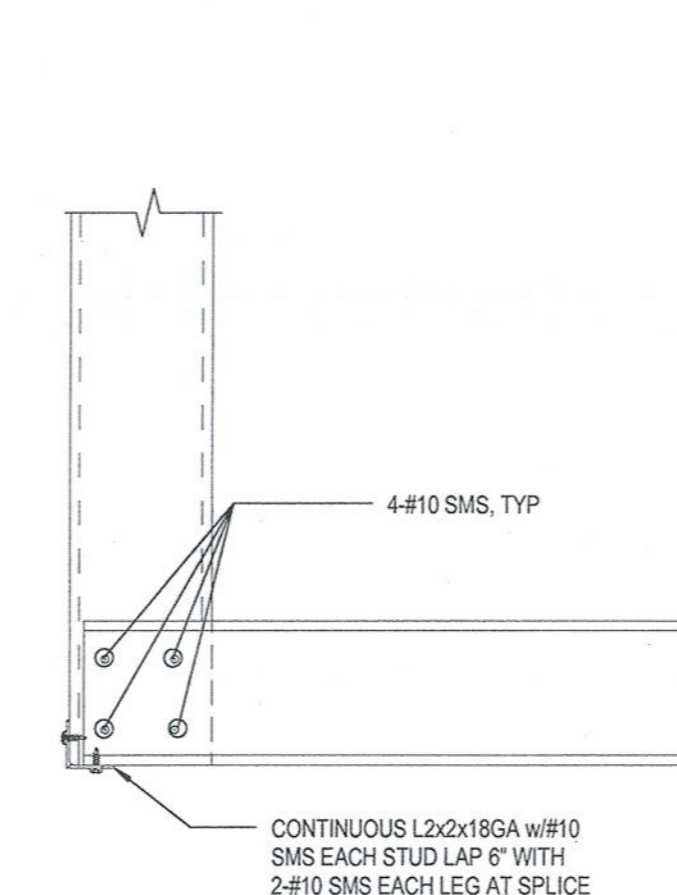
OPENING WIDTH (W)	HEADER	SILL
0'-0" W/ 3'-0" H	2-2"x11" S8x16GA	16GA TRACK - SEE B
0'-0" W/ 3'-6" H	2-2"x11" S8x16GA	16GA TRACK - SEE C
0'-0" W/ 4'-0" H	2-2"x11" S8x16GA	16GA TRACK - SEE C



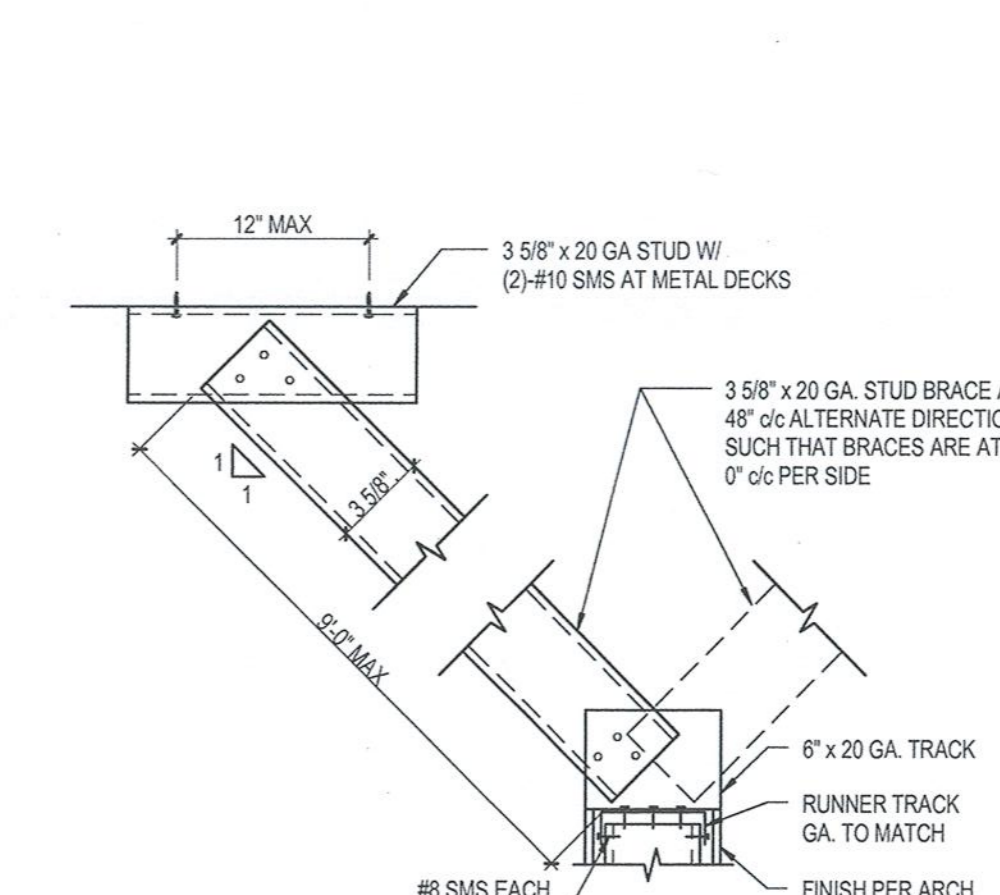
21 COLD-FORMED FRAMING WALL SECTION AT OPENING  
SCALE: 1 1/2" = 1'-0"



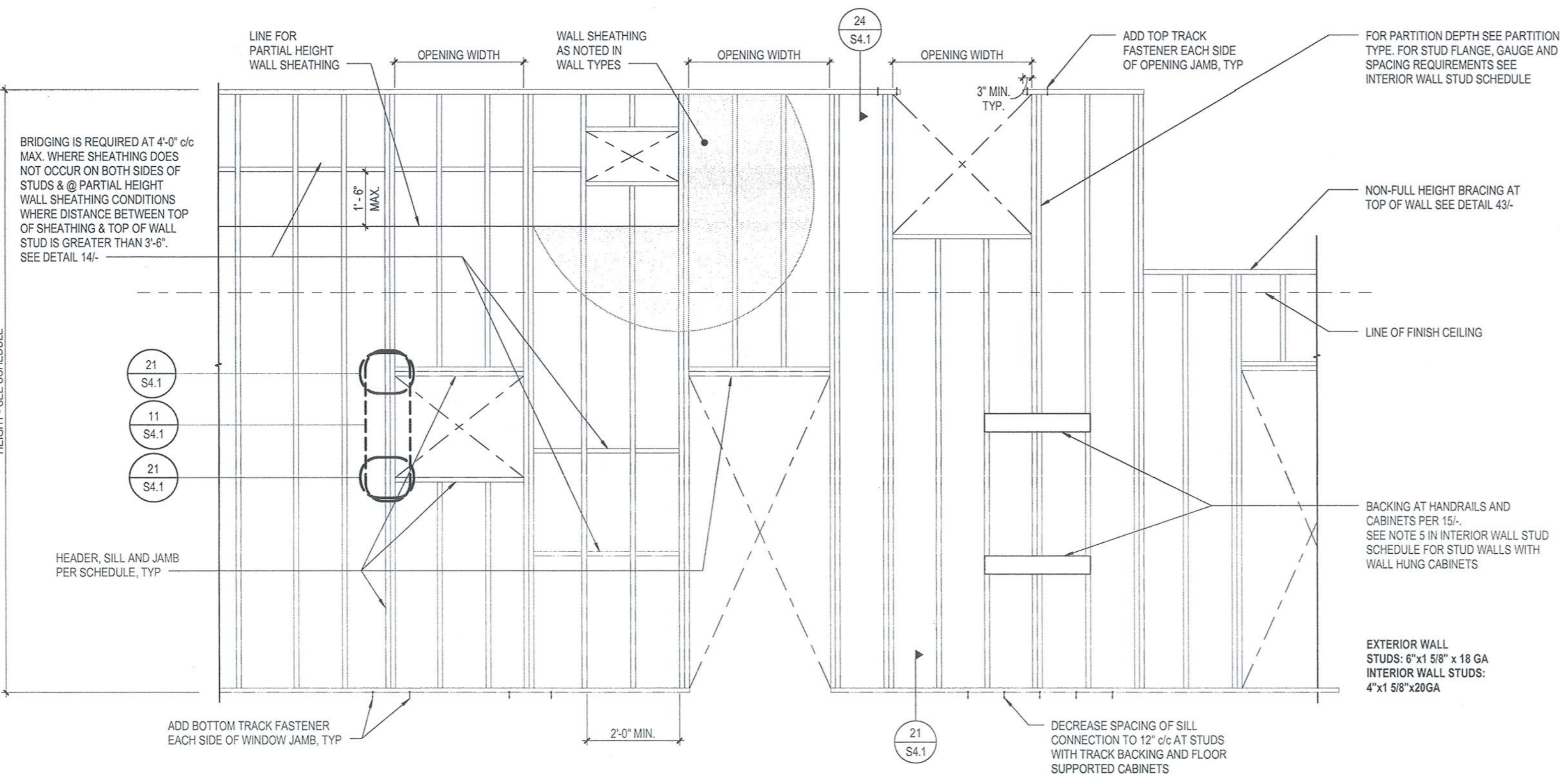
22 STEEL STUD PROPERTIES  
SCALE: 3/4" = 1'-0"



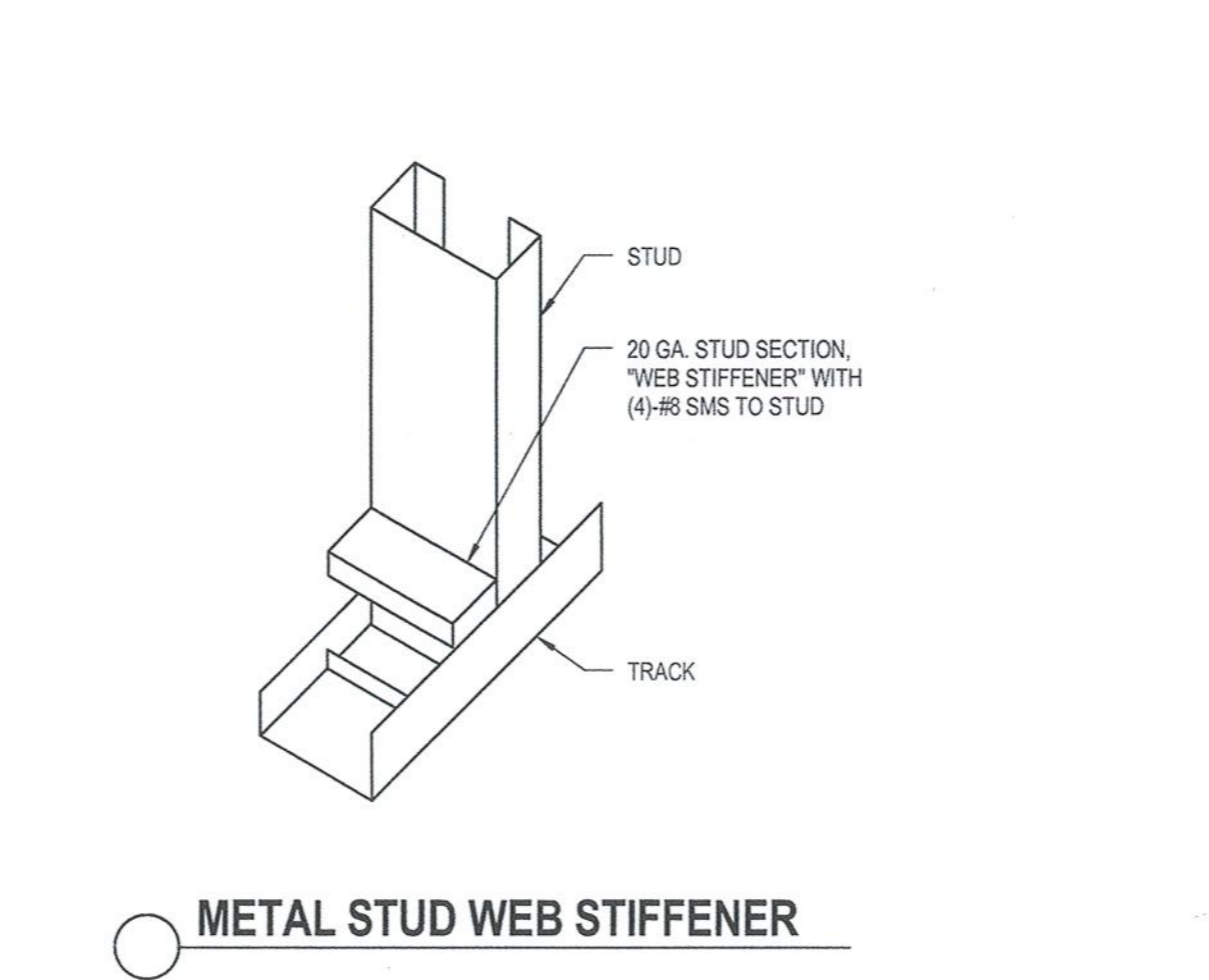
23 TYP METAL STUD CORNER/SOFFIT EDGE DETAIL  
SCALE: 1 1/2" = 1'-0"



24 NON-FULL HEIGHT PARTITION BRACING  
SCALE: 1" = 1'-0"



31 TYPICAL OPENING DETAIL IN COLD-FORMED FRAMING DETAIL  
SCALE: 3/8" = 1'-0"



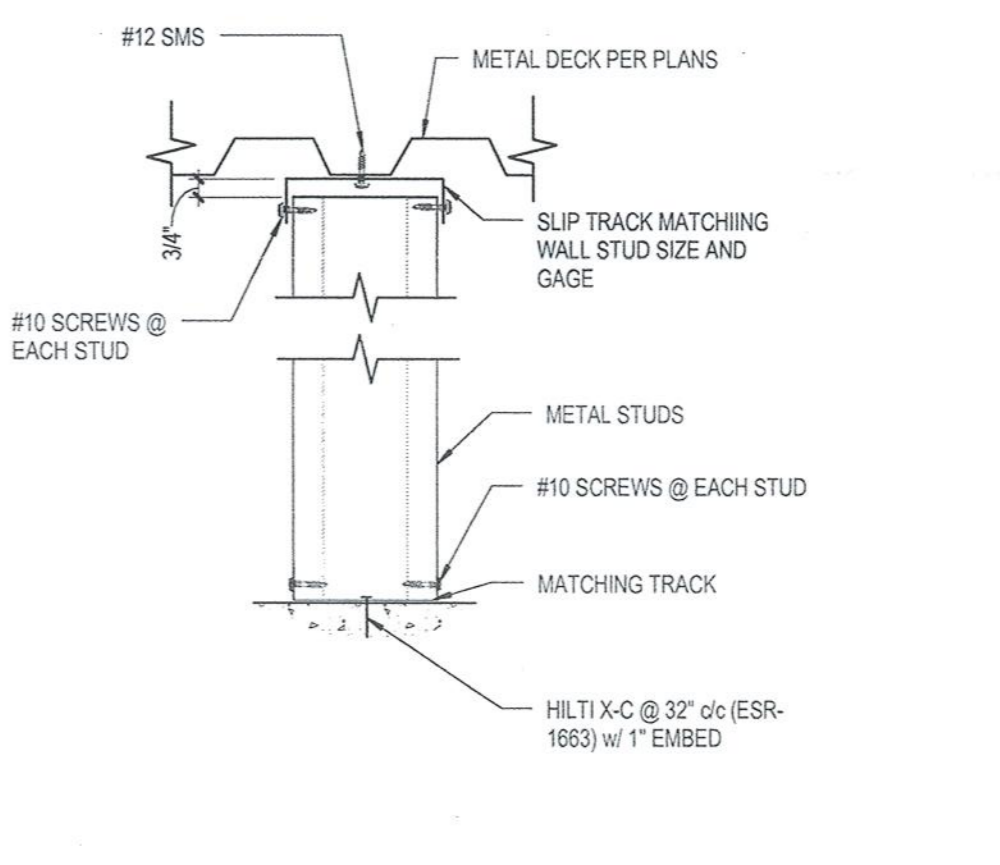
25 METAL STUD WEB STIFFENER  
SCALE: 3/4" = 1'-0"

INTERIOR NON-BEARING WALL OPENING FRAMING SCHEDULE

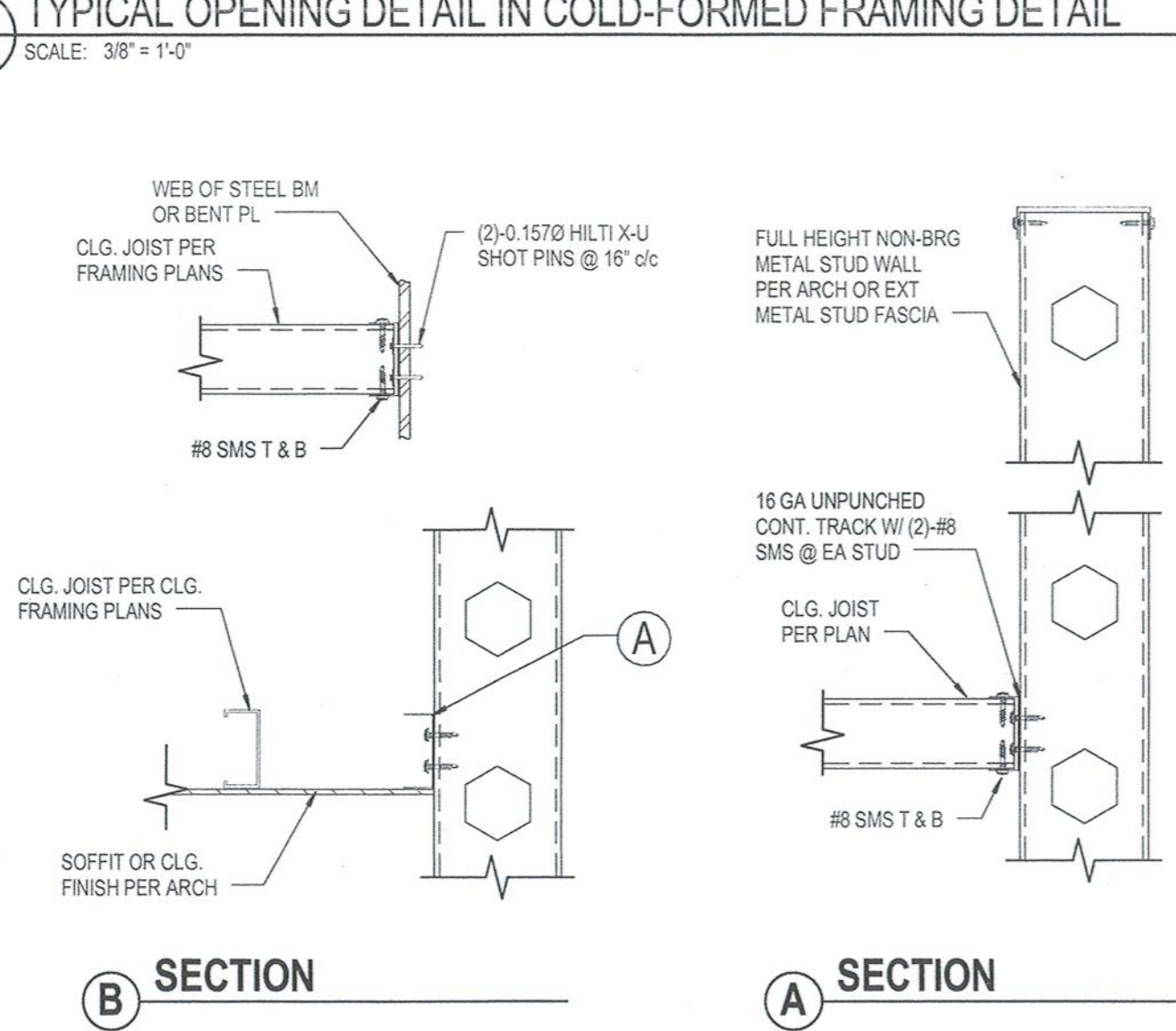
MAX OPNG WIDTH	MAX WALL HEIGHT	JAMB		HEADER		SILL	
		DETAIL NO.	TRACK SIZE	DETAIL NO.	TRACK SIZE	DETAIL NO.	TRACK SIZE
3'-6"	15'-0"	362S162-33	NONE	362T200-33	NONE	362T200-33	NONE
3'-6"	18'-0"	362S162-43	NONE	362T200-43	NONE	362T200-43	NONE
8'-0"	15'-0"	362S162-33	600S162-54	362S162-33	362S162-33	362T200-33	362T200-33
8'-0"	18'-0"	362S162-43	600S162-68	362S162-43	362S162-33	362T200-43	362T200-43

INTERIOR NON-BEARING WALL STUD SCHEDULE

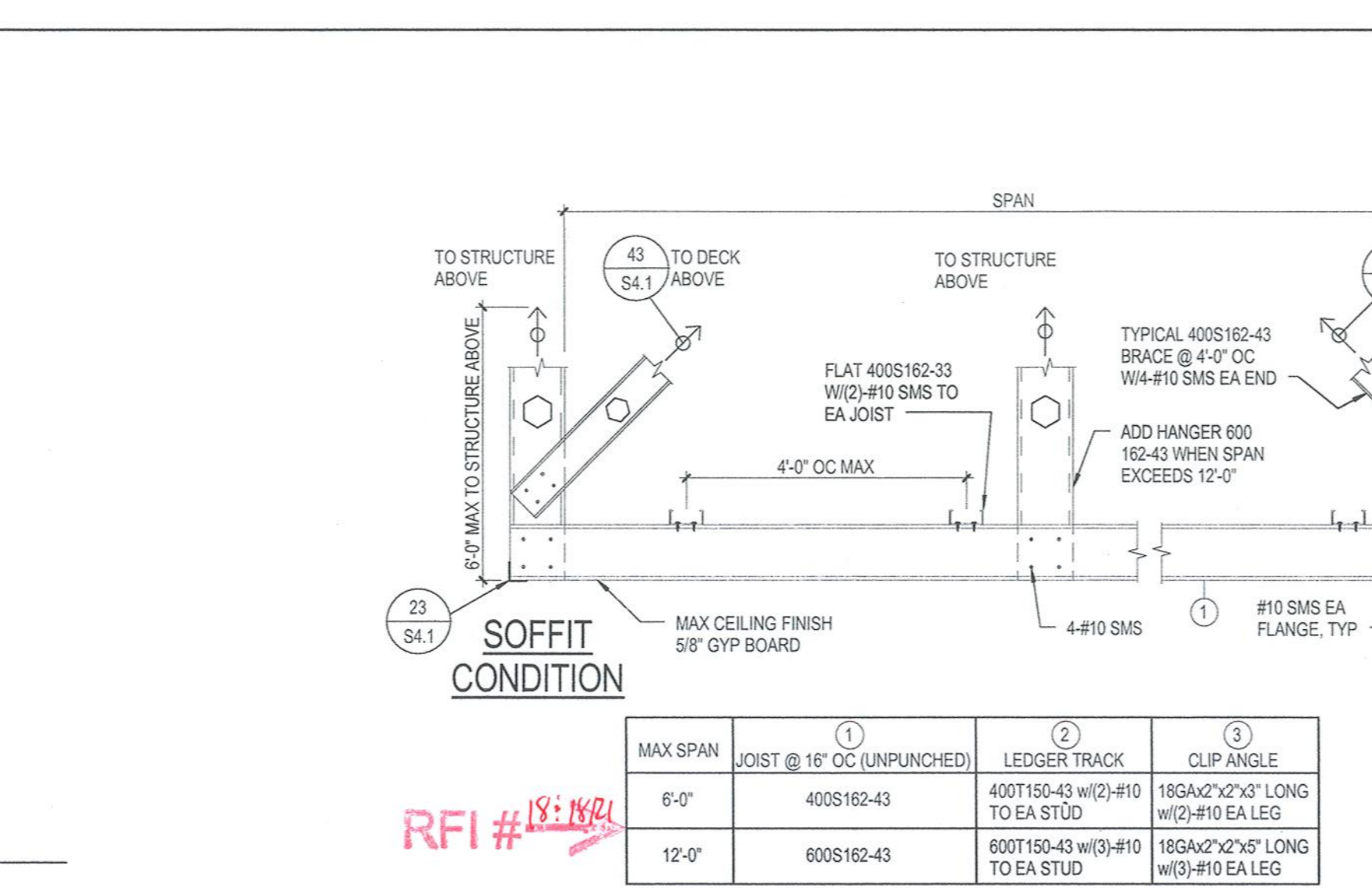
STUD DESIGNATION	STUD DEPTH	MAX HEIGHT	SPACING	GAUGE	FLANGE WIDTH	BACKING CAPACITY	WEB STIFFENER
362S162-43	3 5/8"	15'-0"	16" o/c	18	1 5/8"	YES	NO
362S200-54	3 5/8"	17'-0"	16" o/c	16	2"	YES	NO
400S200-43	4"	17'-2"	16" o/c	18	2"	YES	NO
600S162-43	6"	23'-7"	16" o/c	18	1 5/8"	YES	NO



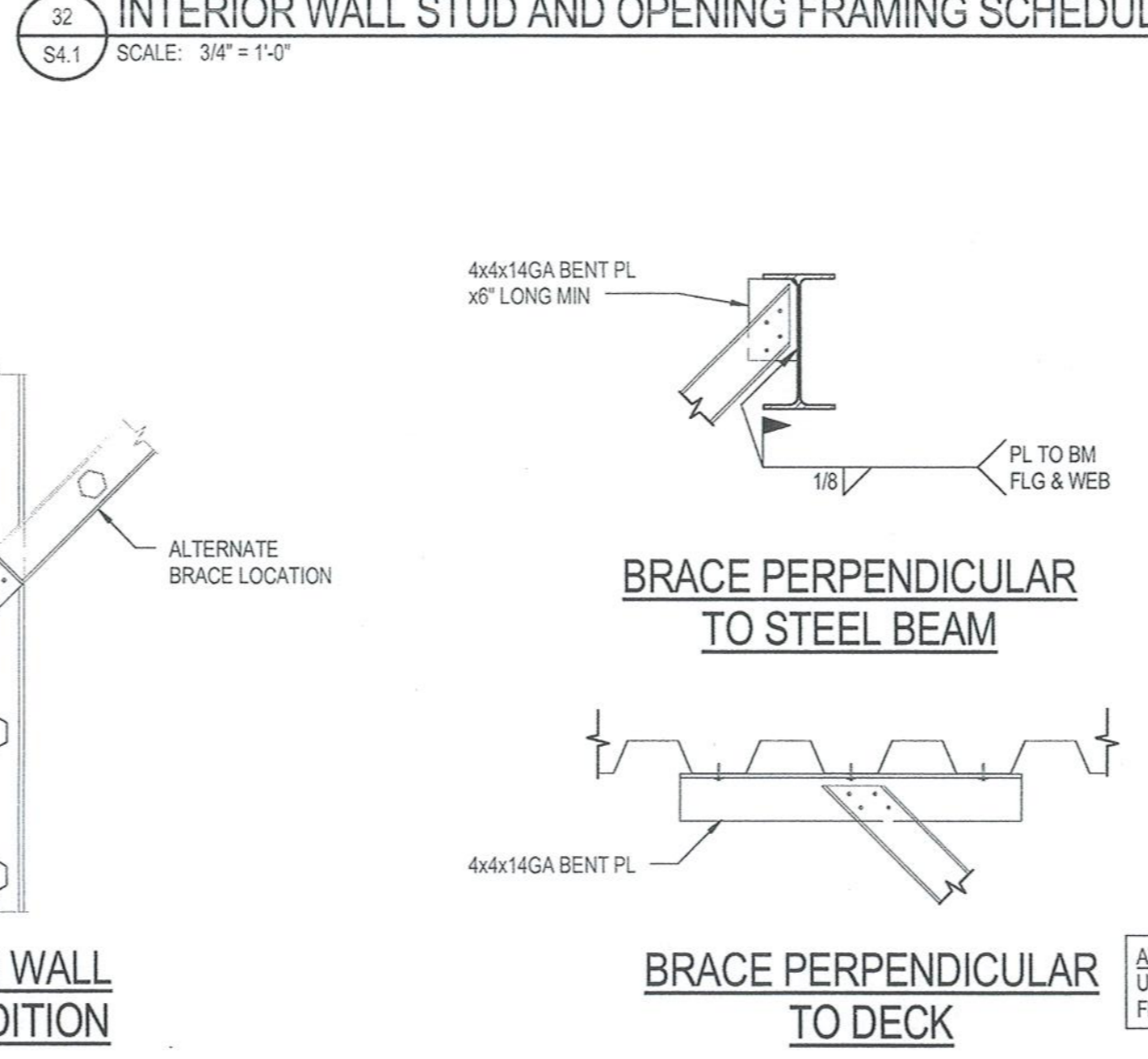
33 NON-BEARING STUD WALLS  
SCALE: 1 1/2" = 1'-0"



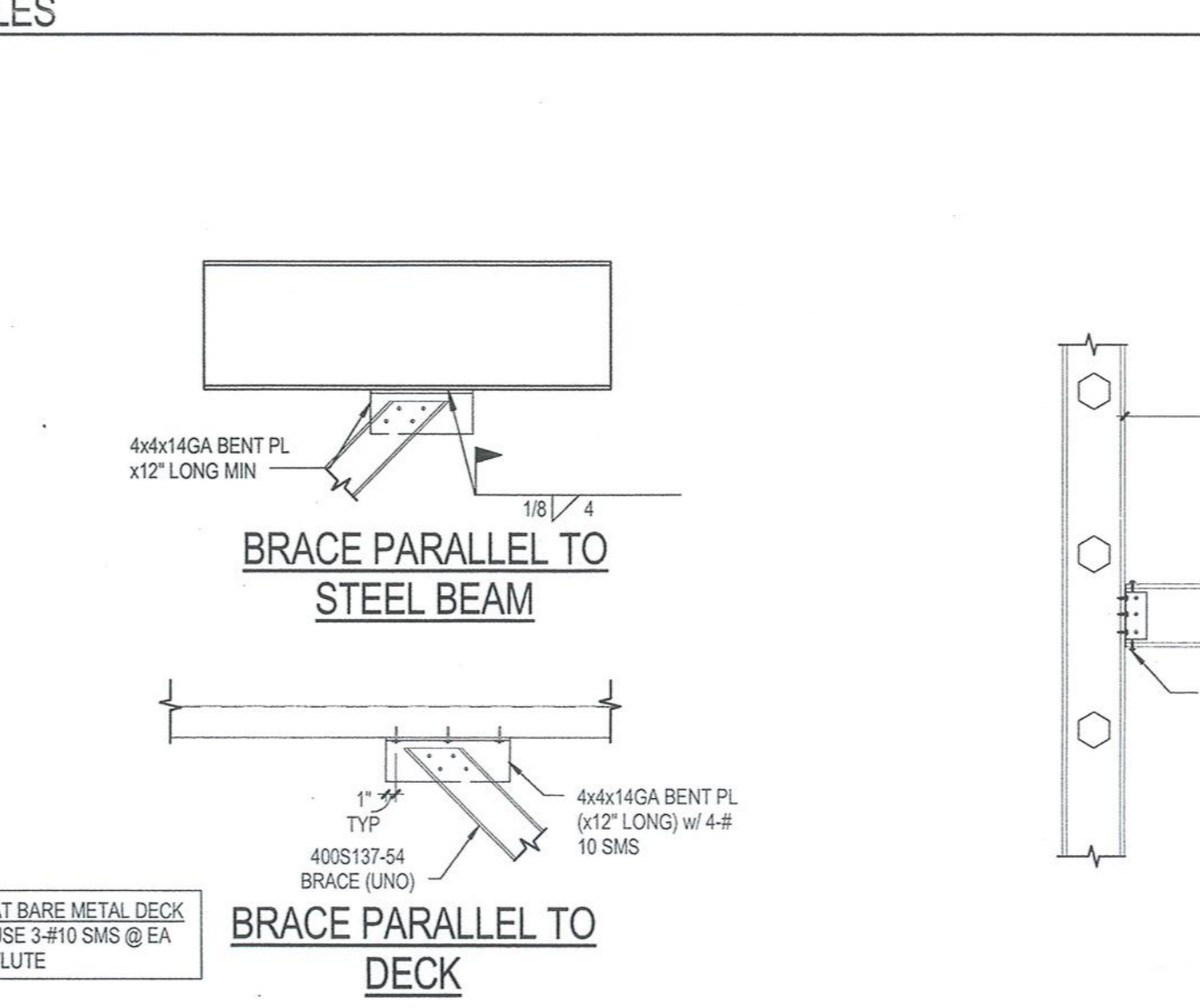
41 CEILING JOIST DETAIL  
SCALE: 1 1/2" = 1'-0"



42 TYPICAL CEILING SOFFIT SUPPORT DETAIL  
SCALE: 3/4" = 1'-0"

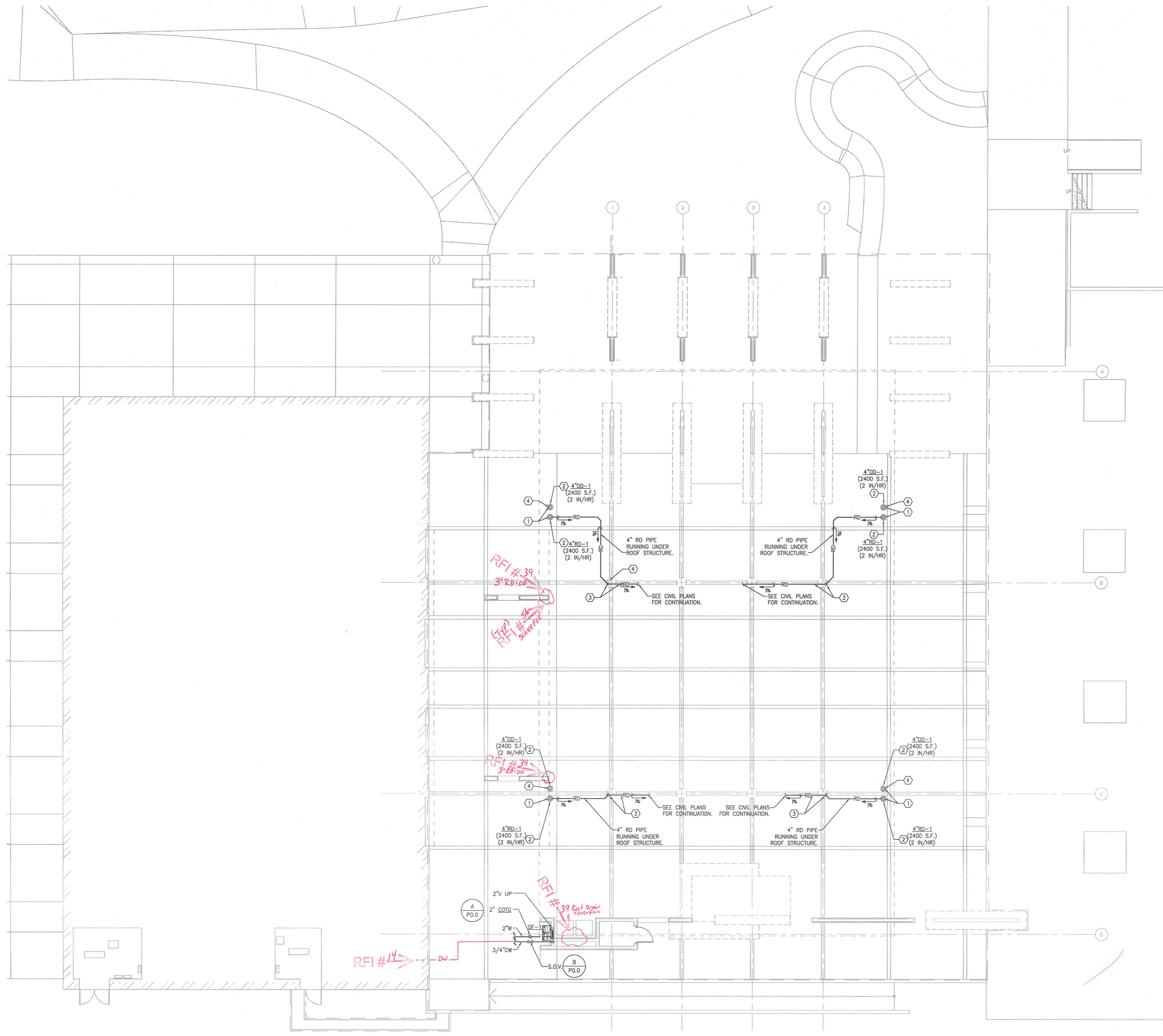


43 TYPICAL INTERIOR METAL STUD WALL BRACE DETAIL  
SCALE: 3/4" = 1'-0"



44 TYPICAL WALL SUPPORTED METAL STUD CEILING DETAIL  
SCALE: 3/4" = 1'-0"





- RENOVATION NOTES**
- ① 4" ROOF AND OVERFLOW DRAINS DOWN FROM ROOF.
  - ② PLUMBING FIXTURE ON ROOF.
  - ③ 4" RD ON TO BELOW GRADE. RUN BELOW CONCRETE PAD AND ABOVE COLUMN FOOTING.
  - ④ 4" OVERFLOW DRAIN PIPE DAYLIGHTED AT THE UNDERSIDE OF THE SOFFIT.

1 PLUMBING FLOOR PLAN  
SCALE: 1/8" = 1'-0"



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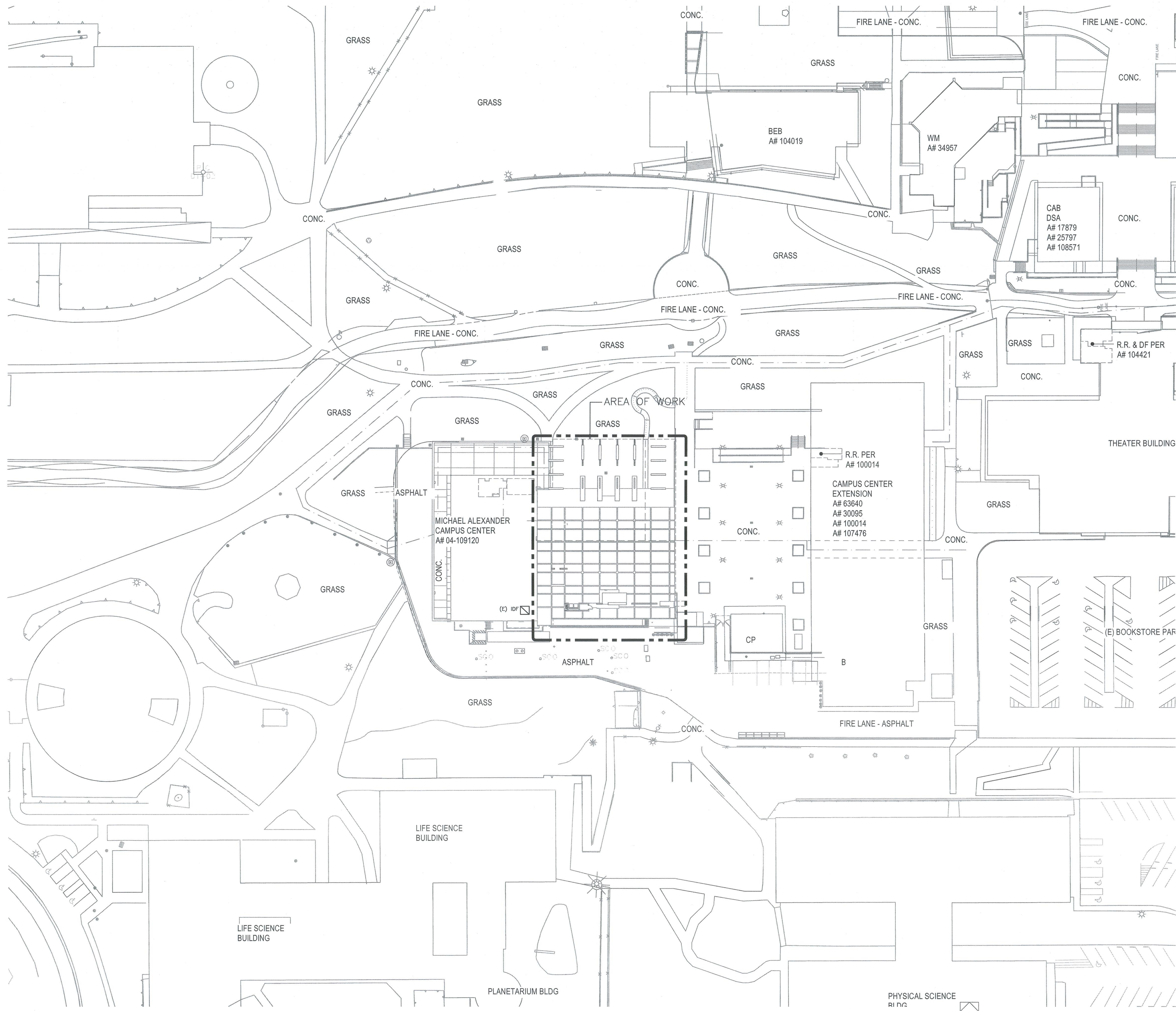


IDENTIFICATION STAMP  
DIV. OF THE STATE ARCHITECT  
OFFICE OF REGULATION SERVICES  
APPL. #04-15887  
AC: [initials] FS: [initials] SS: [initials]  
DATE: AUG 08 2017  
FILE NO: 38-C1

**PLUMBING FLOOR PLAN**  
**CAMPUS CENTER SHADE STRUCTURE**  
**MEASURE L PROJECTS AT CHAFFEY COLLEGE**  
5885 HAVEN AVENUE  
RANCHO CUCAMONGA, CA 91737





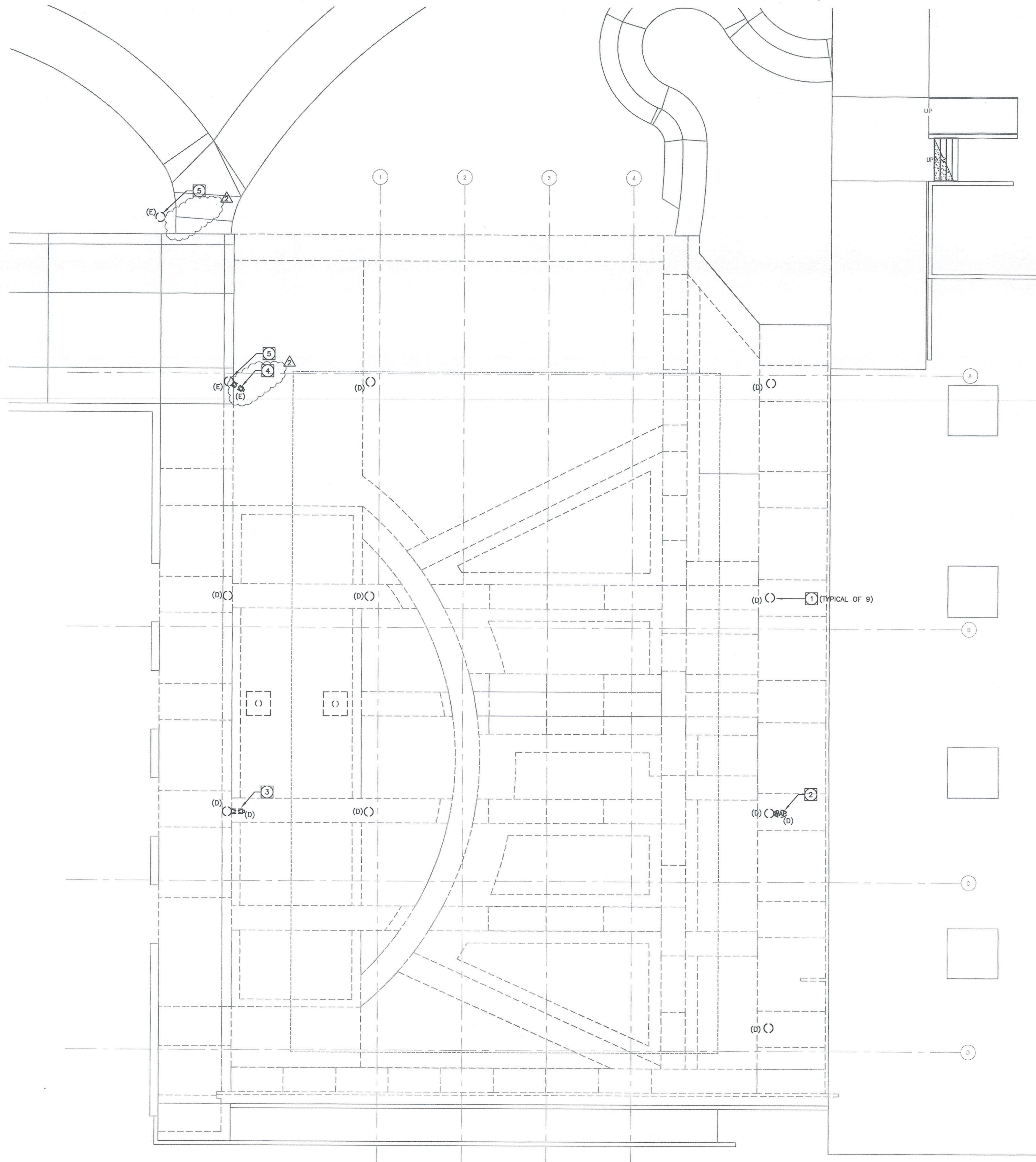


1 SITE ELECTRICAL PLAN  
 E01 SCALE: 1" = 30'-0"



- SITE PLAN GENERAL NOTES:**
- CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING ON THIS SITE TO AVOID EXISTING DUCTS, PIPING OR CONDUITS, ETC., AND TO PREVENT HAZARDS TO PERSONNEL AND/OR DAMAGE TO EXISTING UNDERGROUND UTILITIES OR STRUCTURES WHETHER OR NOT SHOWN AND INSTALLED BY ANY OTHER CONTRACTS. THE ENGINEER IS NOT RESPONSIBLE FOR THE LOCATION OF UNDERGROUND UTILITIES OR STRUCTURES WHETHER OR NOT SHOWN OR DETAILED AND INSTALLED BY ANY OTHER CONTRACTS. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER SHOULD SUCH UNIDENTIFIED CONDITIONS BE DISCOVERED. THESE DRAWINGS AND SPECIFICATIONS DO NOT INCLUDE THE NECESSARY ELEMENTS FOR CONSTRUCTION SAFETY.
  - CALL UNDERGROUND SERVICE ALERT (USA) AT 1 (800) 422-4133 OR APPLICABLE STATE AND LOCAL DIG SAFE OR UNDERGROUND ALERT HOTLINES PRIOR TO CONSTRUCTION START.
  - MINIMUM CONDUIT SIZE SHALL BE 3/4" - U.O.N.
  - MINIMUM CONDUCTOR SIZE SHALL BE #10 AWG. - U.O.N.
  - ALL SITE BRANCH CIRCUITS SHALL INCLUDE AN EQUIPMENT GROUND CONDUCTOR THAT, AT MINIMUM, MATCHES THE SIZE OF THE ASSOCIATED BRANCH CIRCUIT CONDUCTOR. WHERE MULTIPLE BRANCH CIRCUITS ARE ROUTED/GROUPED TOGETHER, THE EQUIPMENT GROUNDING CONDUCTOR SHALL MATCH THE SIZE OF THE LARGEST BRANCH CIRCUIT CONDUCTOR IN THE GROUP.
  - ALL ELECTRICAL EQUIPMENT MOUNTED OUTDOORS SHALL BE WEATHERPROOF (NEMA #3R).
  - ALL CONDUIT ONLY SHALL BE PROVIDED WITH A NYLON PULL STRING.
  - SEE ARCHITECTURAL/LANDSCAPE ARCHITECTURAL PLANS FOR EXACT LOCATIONS OF FIXTURES, PULLBOXES, MANHOLES, OTHER ELECTRICAL DEVICES, ETC. COORDINATE ALL UNDERGROUND STRUCTURES AND CONDUIT ROUTING WITH LANDSCAPE ARCHITECT PRIOR TO ROUGH-IN TO ENSURE THAT SUCH ITEMS ARE NOT PLACED IN CRITICAL LANDSCAPE PLANTING/HARDSCAPE AREAS.
  - UNLESS SPECIFICALLY SHOWN AS (E), (R), (ER), (D), EXISTING OR NON-BOLD, ALL ELECTRICAL DEVICES SHOWN ARE NEW.



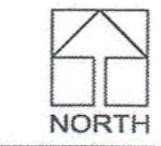


- PLAN NOTES:**
- EXISTING POST TOP LIGHT TO BE DISCONNECTED, REMOVED AND RETURNED TO THE DISTRICT FOR FUTURE USE ON EAST PLAZA PROJECT. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
  - EXISTING POLE MOUNTED WIRELESS ACCESS POINT TO BE DISCONNECTED, REMOVED AND RETURNED TO DISTRICT. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
  - EXISTING POLE MOUNTED CCTV CAMERA TO BE DISCONNECTED, REMOVED AND RETURNED TO THE DISTRICT. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
  - EXISTING POLE MOUNTED CCTV CAMERA TO BE REMAIN PROTECTED IN PLACE. VERIFY EXACT LOCATION IN FIELD.
  - EXISTING POST TOP LIGHT TO REMAIN PROTECTED IN PLACE.

- GENERAL DEMOLITION NOTES:**
- THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC ONLY. DO NOT SCALE THE ELECTRICAL DRAWINGS TO DETERMINE THE LOCATION OF EQUIPMENT OR OUTLETS. SEE ARCHITECTURAL PLANS, WHERE PROVIDED ON PROJECT, FOR EXTENT OF DEMOLITION.
  - THE EXISTING CONDITIONS SHOWN ARE FROM AVAILABLE RECORD DRAWINGS AND SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY ACTUAL EXISTING CONDITIONS AT SITE PRIOR TO SUBMITTING BID. ALL DEMOLITION, ALTERATION, EXTENSION, RELOCATION, REHABILITATION WORK SHALL BE INCLUDED IN CONTRACT. NO ADDITIONAL ALLOWANCE OR CHANGE ORDERS WILL BE ACCEPTED.
  - CONTRACTOR IS RESPONSIBLE TO RELOCATE OR REMOVE FROM WALLS, CEILINGS, FLOOR SPACES, ETC. ANY EXISTING CONDUITS, WIRES, BOXES, FITTINGS, FIXTURES OR OTHER ELECTRICAL EQUIPMENT WHICH INTERFERES WITH PLANNED REMODEL WORK. PROVIDE CIRCUIT CONTINUATION REQUIRED FOR ALL EXISTING OUTLETS, FIXTURES, EQUIPMENT, ETC. SCHEDULED TO REMAIN.
  - NOTIFY THE ENGINEER IMMEDIATELY WHENEVER EXISTING EQUIPMENT IS ENCOUNTERED WHICH MUST BE RELOCATED DUE TO THE NEW CONSTRUCTION, OR NOT INDICATED ON "AS-BUILT" DRAWINGS OR WAS BURIED UNDERGROUND OR EMBEDDED IN STRUCTURE WALLS.
  - CAREFULLY PROTECT ALL WALLS, TRIM, FLOORS, EQUIPMENT, UTILITY LINES AND MATERIALS. WHEN WORKING ON FINISHED SURFACES, LIMIT DAMAGE TO THE SMALLER AREA IF POSSIBLE AND RESTORE TO THE ORIGINAL CONDITION ALL SURFACES WHICH ARE DAMAGED BECAUSE OF THE INSTALLATION OF THIS WORK.
  - EQUIPMENT, MATERIALS AND SUPPLIES TEMPORARILY REMOVED FOR PROTECTION SHALL BE REPLACED IN ORIGINAL LOCATIONS. ANY MATERIALS DAMAGED SHALL BE REPLACED WITH NEW MATERIALS OF LIKE KIND AND QUALITY.
  - DEMOLITION WORK SHALL BE DONE IN A MANNER WHICH WILL NOT CAUSE UNNECESSARY INCONVENIENCE OR DANGER TO USERS OF THE PREMISES AND ADJACENT SITE, AND NOT INTERFERE WITH ITS OPERATION. ANY DEMOLITION WORK TO BE PERFORMED MUST BE PLANNED IN ADVANCE.
  - DO ALL DRILLING, CUTTING, ETC. REQUIRED TO DEMOLISH ELECTRICAL WORK AS INDICATED OR PROVIDE BLANK COVER PLATE ON ALL OUTLETS EXPOSED BY REMOVAL OF FIXTURE OF DEVICES.
  - RESEAL ALL PENETRATIONS OR OPENING THROUGH WALLS, CEILING, FLOORS, ETC., TO MAINTAIN THE RATING OF STRUCTURE.
  - ALL REMOVED MATERIALS AND EQUIPMENT WHICH IS SALVAGED MATERIALS SHALL REMAIN IN THE PROPERTY OF THE OWNER. DELIVER SUCH SALVAGED MATERIALS AND EQUIPMENT ON THE PREMISES AS DIRECTED BY OWNER AND NEATLY PILE OR STORE THEM AND PROTECT FROM DAMAGED. DISPOSE OF ALL HAZARDOUS MATERIAL PER GUIDELINE OF THE STATE OF CALIFORNIA, DEPARTMENT OF HEALTH SERVICES AND OTHER AGENCIES HAVING JURISDICTION.
  - CONTRACTOR SHALL FIELD VERIFY EXISTING CONDUIT/WIRING RUNS, REUSE AS REQUIRE AND REMOVE ALL UNUSED CONDUIT/WIRING. UNUSED CONDUIT IN INACCESSIBLE LOCATIONS (WALLS TO REMAIN) CAN BE ABANDONED IN PLACE. REMOVE UNUSED WIRING.
  - CONTRACTOR TO VERIFY CIRCUIT NUMBER AND LOADS FOR ALL EXISTING ELECTRICAL EQUIPMENT. REASSIGN CIRCUITS AND LOADS ACCORDINGLY. PROVIDE COMPLETE "AS BUILT" DRAWINGS AND TYPED DIRECTORIES FOR PANELS.
  - WHERE NECESSARY TO SHUT OFF UTILITY SERVICES OR CAUSE INTERRUPTION TO POWER OR SIGNAL SYSTEMS WHILE A BUILDING IS OCCUPIED OR THAT EFFECT ADJACENT BUILDINGS, SCHEDULE OUTAGES OR INTERRUPTIONS WITH THE OWNER, BUILDING OCCUPANTS AND/OR ADJACENT BUILDING OWNER(S) AND OCCUPANTS PRIOR TO CONDUCTING OUTAGES OR INTERRUPTIONS.
  - REFER TO ARCHITECTURAL DEMOLITION DRAWING FOR DEMOLITION AREAS. THE SCOPE OF THE DEMOLITION SHALL INCLUDE ALL LABOR, EXISTING ELECTRICAL EQUIPMENT. VERIFY EXACT SCOPE PRIOR TO COMMENCING WORK. REFER TO DEMO PLAN FOR SPECIFIC AREAS NOT IN SCOPE THE SCOPE INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING:
    - A. POWER: ALL EXISTING POWER SHALL REMAIN PROTECTED IN PLACE, U.O.N.
    - B. ALL EXISTING ELECTRICAL SWITCHGEAR, PANELBOARDS, PULLBOXES, ETC. SHALL REMAIN, U.O.N.
    - C. SIGNAL: ALL EXISTING SIGNAL SYSTEMS (CLOCKS, DATA OUTLETS, TELEPHONE OUTLETS, TELEVISION OUTLETS, SPEAKERS, ETC.) TO REMAIN PROTECTED IN PLACE, U.O.N.
    - D. FIRE ALARM: ALL EXISTING FIRE ALARM DEVICES TO REMAIN PROTECTED IN PLACE, U.O.N.
    - E. EXTERIOR LIGHTING: ALL EXISTING EXTERIOR LIGHTING FIXTURES AND ASSOCIATED CONTROLS TO BE DISCONNECTED AND REMOVED, U.O.N.
    - F. EXTERIOR POWER AND SIGNAL: ALL EXISTING EXTERIOR POWER AND SIGNAL DEVICES SHALL REMAIN PROTECTED IN PLACE, U.O.N.
  - WHERE NEW PARTITIONS OR OTHER CONSTRUCTION WILL COVER EXISTING, REMAINING OUTLETS MAKING THEM INACCESSIBLE, RELOCATED THESE OUTLETS AS REQUIRED, OR MAKE OTHER PROVISIONS SO THAT THE OUTLETS WILL REMAIN ACCESSIBLE AND OPERATIONAL.
  - WHERE EXISTING WALLS AND CEILINGS ARE TO REMAIN, PROVIDE BLANK COVER PLATES FOR OUTLETS WHERE EQUIPMENT OR DEVICES ARE REMOVED UNDER THIS CONTRACT. PRIME BLANK PLATES AND PAINT TO MATCH SURROUNDING AREA.
  - WHERE FIXTURES, EQUIPMENT, DEVICES, ETC. ARE SPECIFIED BY THE CONTRACT DOCUMENTS FOR REMOVAL, THE CONTRACTOR SHALL REMOVE ALL CIRCUIT CONDUCTORS/CABLING BACK TO THE NEAREST REMAINING JUNCTION BOX AND/OR POINT OF TERMINATION.
  - RELOCATE EXISTING CONDUITS AND/OR CONDUCTORS/CABLING ROUTING THROUGH AREAS WHERE NEW/REMOVED WALLS ARE SPECIFIED.
  - RELOCATION AND/OR REMOVAL OF EXISTING EQUIPMENT, DEVICES, OUTLETS BOXES, CONDUIT, WIRING, ETC. MAY AFFECT THE OPERATION OF EXISTING, REMAINING ELECTRICAL EQUIPMENT/DEVICES, THE CONTRACTOR SHALL PROVIDE ADDITIONAL MATERIALS AS REQUIRED TO MAINTAIN AND/OR RESTORE CONTINUITY OF SERVICES TO EXISTING REMAINING ELECTRICAL/DEVICES.
  - DISCONNECT ABANDONED CIRCUITS AT EXISTING PANEL BOARDS AND REMOVE WIRE TO LAST REMAINING DEVICES. LABEL ALL ABANDONED CIRCUIT BREAKERS "SPARE".

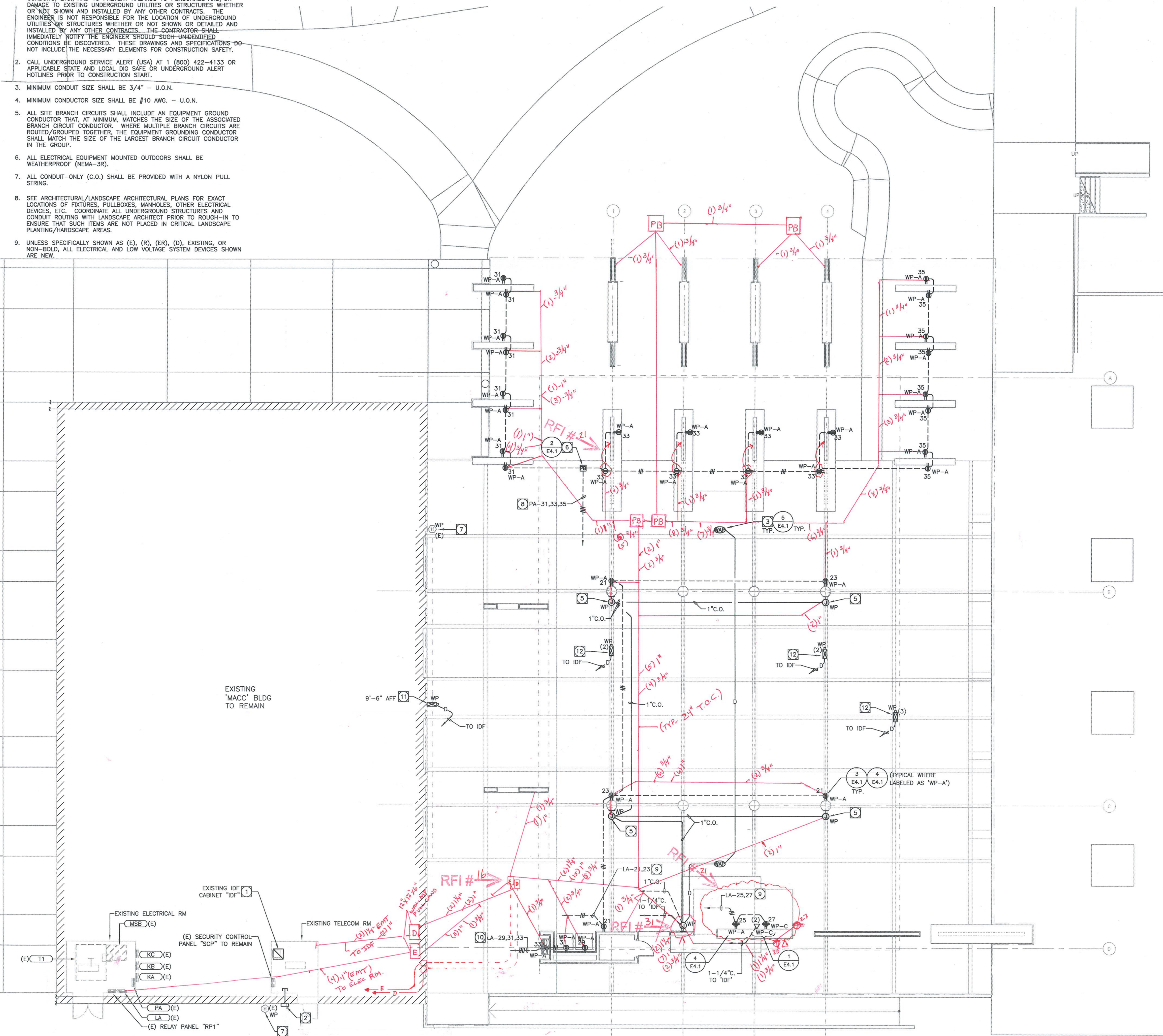
APPROVED  
DIVISION OF THE STATE ARCHITECT  
ACS PAA PLS RFP SS GL  
A 804- 115807 DATE DEC - 8 2017

1 ELECTRICAL DEMOLITION PLAN  
E1.1D SCALE: 1/8" = 1'-0"



**SITE PLAN GENERAL NOTES:**

- CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING ON THIS SITE TO AVOID EXISTING DUCTS, PIPING OR CONDUITS, ETC., AND TO PREVENT HAZARDS TO PERSONNEL AND/OR DAMAGE TO EXISTING UNDERGROUND UTILITIES OR STRUCTURES WHETHER OR NOT SHOWN AND INSTALLED BY ANY OTHER CONTRACTS. THE ENGINEER IS NOT RESPONSIBLE FOR THE LOCATION OF UNDERGROUND UTILITIES OR STRUCTURES WHETHER OR NOT SHOWN OR DETAILED AND INSTALLED BY ANY OTHER CONTRACTS. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER SHOULD SUCH UNDISCOVERED CONDITIONS BE DISCOVERED. THESE DRAWINGS AND SPECIFICATIONS DO NOT INCLUDE THE NECESSARY ELEMENTS FOR CONSTRUCTION SAFETY.
- CALL UNDERGROUND SERVICE ALERT (USA) AT 1 (800) 422-4133 OR APPLICABLE STATE AND LOCAL DIG SAFE OR UNDERGROUND ALERT HOTLINES PRIOR TO CONSTRUCTION START.
- MINIMUM CONDUIT SIZE SHALL BE 3/4" - U.O.N.
- MINIMUM CONDUCTOR SIZE SHALL BE #10 AWG. - U.O.N.
- ALL SITE BRANCH CIRCUITS SHALL INCLUDE AN EQUIPMENT GROUND CONDUCTOR THAT, AT MINIMUM, MATCHES THE SIZE OF THE ASSOCIATED BRANCH CIRCUIT CONDUCTOR. WHERE MULTIPLE BRANCH CIRCUITS ARE ROUTED/GROUPED TOGETHER, THE EQUIPMENT GROUNDING CONDUCTOR SHALL MATCH THE SIZE OF THE LARGEST BRANCH CIRCUIT CONDUCTOR IN THE GROUP.
- ALL ELECTRICAL EQUIPMENT MOUNTED OUTDOORS SHALL BE WEATHERPROOF (NEMA-3R).
- ALL CONDUIT-ONLY (C.O.) SHALL BE PROVIDED WITH A NYLON PULL STRING.
- SEE ARCHITECTURAL/LANDSCAPE ARCHITECTURAL PLANS FOR EXACT LOCATIONS OF FIXTURES, PULLBOXES, MANHOLES, OTHER ELECTRICAL DEVICES, ETC. COORDINATE ALL UNDERGROUND STRUCTURES AND CONDUIT ROUTING WITH LANDSCAPE ARCHITECT PRIOR TO ROUGH-IN TO ENSURE THAT SUCH ITEMS ARE NOT PLACED IN CRITICAL LANDSCAPE PLANTING/HARDSCAPE AREAS.
- UNLESS SPECIFICALLY SHOWN AS (E), (R), (ER), (D), EXISTING, OR NON-BOLD, ALL ELECTRICAL AND LOW VOLTAGE SYSTEM DEVICES SHOWN ARE NEW.



**1 POWER AND SIGNAL PLAN**  
SCALE: 1/8" = 1'-0"

**PLAN NOTES:**

- EXISTING IDF CABINET "IDF" TO REMAIN. PROVIDE ADDITIONAL PATCH PANEL AS REQUIRED TO TERMINATE ALL NEW CABLES INSTALLED ON THIS PROJECT. MODIFY LAYOUT OF EQUIPMENT WITHIN CABINET AS REQUIRED TO ACCOMMODATE NEW PATCH PANEL. PROVIDE AND INSTALL ALL PATCH CORDS PER SPECIFICATIONS.
- PROVIDE WALL MOUNT NEMA-3R PULL BOX 18" X 18" X 4" WITH 2" CONDUIT ROUTED UP EXTERIOR WALL TO ACCESSIBLE CEILING SPACE.
- PROVIDE RECESS-MOUNTED WEATHERPROOF POLYCARBONATE ENCLOSURE FOR WIRELESS LAN ACCESS POINT. VERIFY EXACT LOCATION PRIOR TO ROUGH-IN. TERMINATE CAT-6 CABLE(S) IN SURFACE MOUNTED OUTLET BOX INSIDE ENCLOSURE. ACCESS POINT ELECTRONICS IS OWNER FURNISHED OWNER INSTALLED. PROVIDE APPROPRIATE ENCLOSURE MOUNT TO PROPERLY ATTACH ENCLOSURE TO STRUCTURE. CONTRACTOR SHALL REQUEST OWNER'S APPROVED ENCLOSURE PART NUMBER, AND OWNER'S APPROVAL OF PROPOSED MOUNTING SOLUTION PRIOR TO ROUGH-IN. INCLUDE ALL COSTS IN BASE BID.
- COORDINATE FINAL LOCATION OF CCTV J-BOX IN FIELD PRIOR TO ROUGH-IN.
- FUTURE SPEAKER. MOUNT ON POLE ADJACENT TO CEILING.
- PROVIDE 11x17 IN-GRADE PULLBOX ENGRAVED "POWER".
- EXISTING FIRE ALARM SYSTEM WEATHERPROOF HORN TO REMAIN PROTECTED IN PLACE. SHOWN FOR REFERENCE ONLY. VERIFY EXACT LOCATION IN FIELD.
- PROVIDE 1" C-4#6, 1#10G. THROUGHOUT ENTIRE RUN.
- PROVIDE 3/4" C-3#10, 1#10G. THROUGHOUT ENTIRE RUN.
- PROVIDE 3/4" C-4#10, 1#10G. THROUGHOUT ENTIRE RUN.
- SURVEILLANCE CAMERA IS OFOL. PROVIDE 4S DEEP BOX. VERIFY EXACT LOCATION WITH CHAFFEY IT SERVICES IN THE FIELD PRIOR TO ROUGH-IN.
- SURVEILLANCE CAMERA IS OFOL. PROVIDE WEATHERPROOF BOX. MOUNT TO UNDERSIDE OF SHADE STRUCTURE. VERIFY EXACT LOCATION PRIOR TO ROUGH-IN.

**POWER PLAN GENERAL NOTES:**

- ALL RECEPTACLES ON COMMON WALLS SHALL BE SEPARATE BOXES AND OFFSET 24" MINIMUM.
- ALL PENETRATIONS THROUGH FIRE RATED WALLS SHALL BE PROTECTED FROM THE SPREAD OF FIRE WITH AN APPROVED FIRESTOP SYSTEM EQUAL OR GREATER THAN THE FIRE RATING OF THE WALL.
- ALL WALL-MOUNTED DEVICE HEIGHTS SHALL BE VERIFIED WITH THE ARCHITECT PRIOR TO ROUGH-IN.
- ALL FURNITURE FEED LOCATIONS TO BE VERIFIED WITH ARCHITECT AND FURNITURE VENDOR PRIOR TO ROUGH-IN.
- ALL FURNITURE WHIPS SHALL BE TRIMMED TO REDUCE EXCESS WHIP LENGTH.
- WHEN EXPOSED CEILINGS OR OPEN GRID CONDITIONS OCCUR, THE CONTRACTOR WILL NEED TO PROVIDE THE FOLLOWING ITEMS:  
- ALL BRANCH CIRCUITS SHALL BE IN EMT.  
- ALL BRANCH CIRCUITS SHALL BE ROUTED NEATLY AND IN PARALLEL TO STRUCTURES OR DUCT WORK.
- ALL VISUALLY OBJECTIONABLE BRANCH CIRCUITS SHALL BE REROUTED AT THE REQUEST OF THE ARCHITECT AT NO ADDITIONAL COST.
- EXPOSED CABLE/CONDUCTORS INSTALLED IN A PLENUM SPACE SHALL CONFORM TO NEC, OR CEC WHERE ADOPTED, ARTICLE 300.22(C).
- PROVIDE G.F.C.I. TYPE RECEPTACLE(S) OR RECEPTACLE(S) PROTECTED BY A GFCI CIRCUIT BREAKER(S) WHEN LOCATED WITHIN 6 FEET OF ANY SINK OR THERAPEUTIC TUB, SERVING ANY DRINKING FOUNTAIN OR VENDING MACHINE, WITHIN ANY KITCHEN SPACE AND/OR LOCATED OUTDOORS, WHERE RECEPTACLES ARE NOT READILY ACCESSIBLE. PROVIDE GFCI CIRCUIT BREAKER(S) TO PROTECT THE RESPECTIVE BRANCH CIRCUIT AND PROVIDE ADDITIONAL NEUTRAL CONDUCTORS IN THE BRANCH CIRCUITING AS REQUIRED TO ENSURE PROPER GFCI FUNCTION.
- PROVIDE OCCUPANCY SENSOR/LIGHTING CONTROL SYSTEM CONTROLLED RECEPTACLE RELAY(S) AS REQUIRED TO SWITCH CONTROLLED RECEPTACLES. CONTROL BRANCH CIRCUITRY AND CONTROL WIRING AS REQUIRED TO ALLOW OCCUPANCY SENSOR/LIGHTING CONTROL SYSTEM RELAY TO SWITCH STANDALONE AND/OR SYSTEMS FURNITURE CONTROLLED RECEPTACLES AS INDICATED ON PLANS. PROVIDE AN ADDITIONAL CONDUIT, WIRING AND PATHWAYS NECESSARY TO CONNECT BRANCH CIRCUITRY AND CONTROL WIRING TO REMOTE RELAYS TO INCLUDE RELAY(S) LOCATED ON ALTERNATE FLOORS, IN ELECTRICAL ROOMS, ETC.
- PROVIDE ADDITIONAL J-BOX NEAR PANEL FOR MULTIPLE HOMERUN CIRCUITRY.
- UNLESS SPECIFICALLY SHOWN AS (E), (R), (ER), (D), EXISTING OR NON-BOLD, ALL ELECTRICAL DEVICES SHOWN ARE NEW.

**COMMUNICATIONS PATHWAYS GENERAL NOTES:**

- CONDUITS SHALL (a) CONTAIN NO CONTINUOUS SECTIONS LONGER THAN 30M (98 FT.), AND, (b) CONTAIN NO MORE THAN (2) 90° BENDS OR (1) REVERSE BEND WITHOUT INSTALLING A PULLBOX. SPLIT CONDUITS IN PLACE OF PULLBOXES ARE UNACCEPTABLE.
- CONDUITS SHALL CONTAIN PLASTIC OR NYLON PULL TAPE RATED AT 200 LBS. WITH A MINIMUM OF 5 FEET OF EXTRA PULL TAPE COILED AT EACH END.
- CONDUIT BEND RADIUS SHALL BE (a) A MINIMUM OF 6 TIMES THE INTERNAL CONDUIT DIAMETER FOR CONDUITS 2" IN DIAMETER OR LESS, AND, (b) 10 TIMES THE INTERNAL CONDUIT DIAMETER FOR CONDUITS MORE THAN 2" IN DIAMETER.
- TERMINATE CONDUIT STUBS AND SLEEVES THAT PROTRUDE THROUGH STRUCTURAL FLOORS 2'-3" ABOVE THE FLOOR SURFACE.
- INSTALL BUSHINGS OR BELL ENDS AS REQUIRED ON ALL CONDUITS.
- FLEX CONDUIT IS UNACCEPTABLE FOR USE AS A COMMUNICATIONS CONDUIT EXCEPT AT SEISMIC JOINTS AND/OR IF APPROVED IN WRITING BY THE ENGINEER.
- ALL UNDER SLAB OR IN-SLAB CONDUITS SHALL BE INSTALLED IN A MANNER THAT PREVENTS WATER INFILTRATION OF THE CONDUIT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE GROUND WATER, RAIN WATER OR CONSTRUCTION WATER IS PREVENTED FROM ENTERING AND/OR REMOVED FROM THE CONDUITS PRIOR TO PLACEMENT OF COMMUNICATIONS CABLES. SEE ELECTRICAL SPECIFICATIONS, DETAILS AND PLANS FOR ADDITIONAL CONDUIT SEALING REQUIREMENTS.
- ALL PULLBOXES SHALL BE SIZED AND INSTALLED PER ANSI/TIA-569-C. PULLBOXES FOR IN/UNDER SLAB CONDUIT RUNS ARE NOT PERMITTED UNLESS OTHERWISE NOTED. PULLBOXES FOR OVERHEAD CONDUIT RUNS SHALL BE LOCATED ABOVE ACCESSIBLE CEILINGS WITHIN THE ACCESSIBLE CEILING SPACE AND SUPPORTED INDEPENDENTLY FROM THE STRUCTURE AND CONDUIT SUPPORTS. PULLBOXES FOR ROOF MOUNTED OR EXTERIOR ABOVE GRADE APPLICATIONS SHALL BE NEMA 3R RATED. PULLBOXES SHALL BE SIZED ACCORDING TO THE FOLLOWING:

CONDUIT SIZE	WIDTH	LENGTH	DEPTH	WIDTH INCREASE PER ADDITIONAL CONDUIT
1"	4"	16"	3"	2"
2"	8"	36"	4"	5"
3"	12"	48"	5"	6"
4"	15"	60"	8"	8"

- FOR OTHER CONDUIT SIZES REFER TO ANSI/TIA-569-C TABLE 12 - LATEST PUBLISHED EDITION.
- CONDUIT(S) SHALL EXIT A PULLBOX ON THE WALL OPPOSITE THE WALL ENTERED.
- PROVIDE LABELING OF EACH CONDUIT PER GENERAL ELECTRICAL SPECIFICATIONS.
- PROVIDE INTERNAL/EXTERNAL GAS AND WATER TIGHT MECHANICAL SEALING/PLUGGING OF EACH BUILDING ENTRY CONDUIT AS SPECIFIED ELSEWHERE IN THE DRAWINGS AND SPECIFICATIONS.









**GENERAL LIGHTING FIXTURE SCHEDULE NOTES:**

- A. THE LIGHTING FIXTURES AND COMPONENTS FOR THIS PROJECT HAVE BEEN SPECIFIED TO INSURE THAT SPECIFIC AESTHETIC AND PERFORMANCE REQUIREMENTS WILL BE SATISFIED. THESE PRODUCTS HAVE BEEN CAREFULLY RESEARCHED AND EACH SPECIFIED ITEM HAS UNIQUE QUALITIES WHICH WERE DETERMINED TO BE ESSENTIAL IN SATISFYING THE OWNERS, ARCHITECTS, AND ENGINEERS DESIGN CRITERIA, WHILE STILL FITTING WITHIN THE ESTABLISHED PROJECT BUDGET.
- B. SUBSTITUTIONS OF THE SPECIFIED PRODUCTS ARE STRICTLY PROHIBITED - UNLESS APPROVED AS STATED HEREIN. LIGHTING FIXTURE AND BALLAST SUBSTITUTIONS SHALL BE FORMALLY PRESENTED TO THE ENGINEER, BY APPOINTMENT ONLY, AT LEAST TEN (10) WORKING DAYS PRIOR TO BID TIME. THE SUBMITTAL MATERIAL SHALL INCLUDE THE FOLLOWING ITEMS:
- A COMPLETE AND OPERATING SAMPLE, WIRED FOR 120V OPERATION, WITH LAMP, CORD AND PLUG.
  - A COMPLETE PHOTOMETRIC REPORT, FOR THE PROPOSED SUBSTITUTE PRODUCT, USING THE SPECIFIED LAMP TYPE AND WATTAGE, INCLUDING TABULATED CANDLEPOWER VALUES, COEFFICIENT OF UTILIZATION, AND AN ISO-FOOT-CANDLE DIAGRAM. PRORATED DATA WILL NOT BE ACCEPTABLE. THE PHOTOMETRIC REPORT MUST BE DONE IN ACCORDANCE WITH PUBLISHED I.E.S. TESTING PROCEDURES AND CERTIFIED BY A REGISTERED ELECTRICAL ENGINEER.
  - A CURRENT ORIGINAL CATALOG DATA SHEET WITH LUMINAIRE CATALOG NUMBERS. MODIFIED DATA SHEETS WILL NOT BE ACCEPTABLE.
  - A SIGNED COPY OF THE "SUBSTITUTION COMPLIANCE FORM", LOCATED IN THE DIVISION 1 SPECIFICATION, STATING THAT IF THE PROPOSED SUBSTITUTION IS ACCEPTED, THE PROJECT SCHEDULE WILL NOT BE NEGATIVELY EFFECTED. IF THE COMPLETION OF THE PROJECT IS DELAYED BECAUSE OF THE APPROVED SUBSTITUTION, THE ELECTRICAL CONTRACTOR WILL BE RESPONSIBLE FOR PAYMENT OF ANY ESTABLISHED LIQUIDATED DAMAGES.
  - FOR SPECIFIC INTERIOR FIXTURE SUBSTITUTIONS, WHEN DIRECTED BY THE ENGINEER, A POINT-BY-POINT SCALED COMPUTER PRINTOUT SHALL BE PROVIDED VERIFYING THE ILLUMINATION LEVELS FOR THE SPECIFIC INTERIOR AREA. IF THE SUBSTITUTED FIXTURE IS AN EMERGENCY FIXTURE, THE REPORT SHALL BE RUN IN BOTH NORMAL AND EMERGENCY MODES. THIS REPORT SHALL BE CONFIGURED WITH SPECIFIC CONSTRAINTS, AS DIRECTED BY THE ENGINEER OF RECORD. THE REPORT MUST SHOW THAT THE SUBSTITUTED FIXTURE PROVIDES PERFORMANCE EQUAL TO OR BETTER THAN THE LIGHTING LEVELS OF THE SPECIFIED PRODUCT.
  - FOR ALL EXTERIOR FIXTURE SUBSTITUTIONS, A POINT-BY-POINT SCALED COMPUTER PRINTOUT SHALL BE PROVIDED VERIFYING THE ILLUMINATION LEVELS FOR THE ENTIRE SITE PLAN BASED ON USING THE PROPOSED ALTERNATIVE FIXTURES. THE REPORT MUST SHOW THAT THE SUBSTITUTED FIXTURE PROVIDES PERFORMANCE EQUAL TO, OR BETTER THAN THE LIGHTING LEVELS AND UNIFORMITY RATIOS (MAXIMUM AND AVG-MIN) OF THE SPECIFIED PRODUCT. THIS REPORT SHALL BE CONFIGURED WITH THE FOLLOWING CONSTRAINTS:
    - THE SPACING INCREMENT OR POINTS ON THE VERIFICATION REPORT SHALL NOT EXCEED TEN (10) FEET IN EITHER DIRECTION.
    - THE PRINTOUT SHALL BE BASED ON PROVIDING MAINTAINED FOOT-CANDLE LEVELS USING MEAN LAMP LUMENS AND A LIGHT LOSS FACTOR, AS DIRECTED BY THE ENGINEER OF RECORD.
    - THE PRINTOUT SHALL SHOW ANY ADDITIONAL ENERGY AND/OR ENERGY COSTS, FOR A TEN YEAR PERIOD, AS COMPARED TO THE ORIGINALLY SPECIFIED ITEM. THE TOTAL COSTS FOR THESE EXPENSES WILL BE DEDUCTED FROM THE CONTRACT COST.
- C. "Q" CHARACTERS IN FIXTURE MODEL NUMBER INDICATE THAT THE FIXTURES ARE SPECIFIED IN A GENERIC MOUNTING FORMAT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND PROVIDING ALL HANGERS, CLIPS AND NECESSARY HARDWARE TO INSTALL THE FIXTURE IN THE ENVIRONMENT AS SHOWN ON THE ARCHITECTURAL PLANS. ALL FIXTURES SHALL BE PROVIDED WITH ALL REQUIRED STRUCTURAL SUPPORTS AS REQUIRED BY THE CURRENTLY APPLICABLE OF THE UNIFORM BUILDING CODE, AS WELL AS ANY LOCAL CODES.
- D. CONFLICTS BETWEEN CATALOG NUMBERS AND FIXTURE DESCRIPTIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER, PRIOR TO BID TIME, FOR CLARIFICATION.
- E. "V" CHARACTERS IN FIXTURE MODEL NUMBER INDICATE THAT ALL FIXTURE VOLTAGES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING - SEE DRAWINGS FOR BRANCH CIRCUIT INFORMATION. IT IS POSSIBLE THAT FIXTURES WILL BE REQUIRED IN VARIOUS VOLTAGES.
- F. ALL FIXTURE FINISHES AND COLORS, UNLESS NOTED AS CUSTOM, SHALL BE SELECTED FROM THE FULL RANGE OF MANUFACTURERS STANDARD COLOR OPTIONS, AS SELECTED BY THE ARCHITECT. THIS DIRECTION WILL BE PROVIDED IN THE SHOP DRAWING REVIEW PROCESS. ALL FIXTURES INDICATED WITH A CUSTOM COLOR SHALL BE PROVIDED WITH A CUSTOM COLOR PAINT PER THE ARCHITECTURAL REVIEW COMMENTS OF THE SUBMITTED SHOP DRAWINGS.
- G. ALL BALLASTS SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:

- "Q" CHARACTERS IN FIXTURE MODEL NUMBER INDICATE THAT THE FIXTURE BALLAST TYPE AND QUANTITY MUST BE VERIFIED BY THE CONTRACTOR - USING FIXTURE CALLOUT INFORMATION AND FIXTURE SWITCHING CONFIGURATION INFORMATION. IT IS POSSIBLE THAT A SINGLE FIXTURE TYPE COULD BE REQUIRED IN VARIOUS BALLAST CONFIGURATIONS.
- FLUORESCENT(LINEAR/COMPACT):
  - NO SUFFIX PROVIDE ELECTRONIC, INSTANT START STANDARD BALLAST WITH HIGH POWER FACTOR, MAXIMUM THD OF 20%, CLASS "A" SOUND RATING, AND ZERO DEGREE FAHRENHEIT, MINIMUM START-TEMPERATURE RATING.
  - ACCEPTABLE MANUFACTURERS: ADVANCE, SYLVANIA, OR GE.
  - "o" SUFFIX PROVIDE ELECTRONIC PROGRAM START BALLAST WITH 0.95 MIN. POWER FACTOR, MAXIMUM THD OF 10%, CLASS "A" SOUND RATING, AND ZERO DEGREE FAHRENHEIT, MINIMUM START-TEMPERATURE RATING.
  - ACCEPTABLE MANUFACTURERS/MODEL FAMILY: ADVANCE OPTANIUM, SYLVANIA QUICKTRONIC PROFESSIONAL, OR GE ULTRASTART WHERE AN OPTANIUM, QUICKTRONIC PROFESSIONAL OR ULTRASTART BALLAST IS NOT MANUFACTURED FOR A PARTICULAR LAMP(S) PROVIDE: ADVANCE CENTIUM, SYLVANIA QUICKTRONIC HIGH EFFICIENCY, OR GE PROLINE BALLASTS.
- MASTER-SATELLITE / INBOARD-OUTBOARD SWITCHING:
  - WHERE FIXTURES ARE INDICATED WITH TANDEM WIRE CONNECTION, A MASTER-SATELLITE BALLAST CONFIGURATION SHALL BE PROVIDED THAT ACCOMMODATES THE INDICATED IN-BOARD / OUT-BOARD SWITCHING CONFIGURATION.
  - SINGLE STAND ALONE FIXTURES IN THE SAME SWITCHING ZONE AS TANDEM WIRED FIXTURES SHALL BE PROVIDED WITH MULTIPLE BALLASTS TO ACCOMMODATE THE INDICATED IN-BOARD / OUT-BOARD SWITCHING CONFIGURATION.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND PROVIDING THE APPROPRIATE BALLAST TYPE AND QUANTITY - BASED UPON THE FIXTURE CALLOUT INFORMATION AND SWITCHING CONFIGURATION.
- STEPPED DIMMING FLUORESCENT (LINEAR):
  - "b" SUFFIX PROVIDE ELECTRONIC, PROGRAM START, STEPPED DIMMING BALLAST (0%-50%-100%) WITH 0.95 MIN. POWER FACTOR, 10% MAXIMUM THD, CLASS "A" SOUND RATING, 100% OUTPUT BALLAST FACTOR BETWEEN 0.84 - 1.00, AND 50 DEGREE FAHRENHEIT MINIMUM START-TEMPERATURE RATING. BALLAST SHALL BE COMPLIANT WITH APPLICABLE ENERGY CODE.
  - ACCEPTABLE MANUFACTURERS: UNIVERSAL, PHILIPS ADVANCE, OR SYLVANIA
- CONTINUOUS DIMMING FLUORESCENT(LINEAR/COMPACT):
  - PROVIDE ELECTRONIC CONTINUOUS DIMMING BALLAST WITH HIGH POWER FACTOR, MAXIMUM THD OF 20%, CLASS "A" OR BETTER SOUND RATING, BALLAST FACTOR (BF) AS INDICATED, AND 50 DEGREE FAHRENHEIT RATING. BALLAST MUST BE COMPATIBLE WITH DIMMER AND/OR DIMMING SYSTEM. CONTINUOUS DIMMING BALLAST SHALL BE IDENTIFIED / PROVIDED AS FOLLOWS:
 

DIM 1%	-	7c	LUTRON #H30 SERIES	BF = 1.0	(T8/T5/TS10)
			LUTRON #HLS SERIES	BF = 0.95	(T4/T14Q)
DIM 5%	-	7d	LUTRON #H30 SERIES	BF = 1.0	(T8/T5/TS10/TS1T)
			LUTRON #ECS SERIES	BF = 0.95	(T4/T14Q)
DIM 10%	-	7e	LUTRON #ECS SERIES	BF = 0.85T8/1.0T5	(T8/T5/TS10/TS1T)
			LUTRON #ECS SERIES	BF = 0.95	(T4/T14Q)
DIM LV	-	7f	ADVANCE #MARK 7 (0-10V)	BF = 1.0	(T4/T14Q)
				BF = 0.95	(T8/T5/TS10/TS1T)
DIM 2-WIRE	-	7g	LUTRON #2W SERIES	BF = 0.95	(T4T)
				BF = 0.85	(T8)
- EQUAL BY ADVANCE, UNIVERSAL OR SYLVANIA QUICKTRONIC.
- HIGH INTENSITY DISCHARGE (HID):
  - NO SUFFIX PROVIDE HID BALLASTS WITH HIGH POWER FACTOR, ENCAPSULATED CORE & COIL TYPE, CORE & COIL TYPE, OR F-CAN TYPE, WITH CLASS "A" OR BETTER SOUND RATING UP THROUGH 175W AND CLASS "B" ABOVE 175W THROUGH 400W, AND ZERO DEGREE FAHRENHEIT MINIMUM START-TEMPERATURE RATING. ELECTRONIC HID BALLASTS SHALL BE UTILIZED FOR METAL HALIDE LAMPS 150W OR LESS. ALL NEW METAL HALIDE LUMINAIRES WITH 150W TO 500W LAMPS PROVIDED ON THE PROJECT SHALL BE EQUIPPED WITH PULSE START BALLASTS TO COMPLY WITH SECTION 1602, CCR TITLE 20 APPLANCE EFFICIENCY STANDARDS.

- WHEN REMOTE HID BALLASTS ARE REQUIRED, CONTRACTOR TO COORDINATE PROPER IGNITER SELECTION WITH FIXTURE MANUFACTURER BASED ON INSTALLATION-SPECIFIC DISTANCE REQUIREMENTS ON A PER FIXTURE BASIS. IF REMOTE ELECTRONIC HID BALLASTS ARE REQUIRED ON THE PROJECT AND EXCEED DISTANCE ELECTRONIC HID BALLASTS, MAGNETIC BALLASTS SHALL BE PERMITTED FOR 150W AND LOWER WATTAGE HID FIXTURES.
  - ACCEPTABLE MANUFACTURERS: ADVANCE, GE, SYLVANIA, UNIVERSAL OR VENTURE
- H. LIGHT FIXTURES INDICATED AS EMERGENCY SHALL BE IDENTIFIED / PROVIDED AS FOLLOWS:
- INTEGRAL BATTERY PACK (EB):
    - 3Jo/3EB - FIXTURE CONNECTED TO CIRCUIT "3", CONTROL SWITCHLEG "o" - WITH THE BATTERY CHARGING LEAD CONNECTED TO A CONSTANT HOT CIRCUIT "3".
    - 3NL/3EB - FIXTURE CONNECTED TO A CONSTANT HOT CIRCUIT "3". BATTERY CHARGING LEAD CONNECTED TO A CONSTANT HOT CIRCUIT "3".
  - REMOTE BACK-UP SOURCE (EM):
    - 3Jo/3EM - ROUTED THROUGH A U.L. LISTED TRANSFER RELAY (LC & D #GR-2001E/S) FOR SWITCHED CONTROLS OR A U.L. LISTED TRANSFER SWITCH (BODINE #GTD SERIES DEVICE) FOR DIMMING CONTROLS. CONNECTED TO A CONSTANT HOT EMERGENCY CIRCUIT "3". SEE DISTRIBUTED LIGHTING CONTROL SPECIFICATIONS FOR DEVICE REQUIREMENTS WHEN CONTROLLED BY OCCUPANCY SENSORS.
    - 3NL/3EM - FIXTURE CONNECTED TO A CONSTANT HOT EMERGENCY CIRCUIT "3".
- REMOTE BACK-UP SOURCE (EM) NOTES:
- ALL REMOTE BACK UP SOURCE (EM) FIXTURES SHALL BE PROVIDED WITH AN IN LINE FUSE. PROVIDE ADDITIONAL LABELING TO INDICATE FIXTURE IS PROTECTED BY A FUSE.
- EMERGENCY BATTERY PACKS SHALL BE PROVIDED AS FOLLOWS:
- LINEAR T8 FLUORESCENT LAMPS:
- |        |           |                  |                            |
|--------|-----------|------------------|----------------------------|
| BFT T8 | 1 LAMP    | 1400 LUMENS      | IOTA #I-320 OR BODINE #B50 |
| 5FT T8 | 1 LAMP    | 1325 LUMENS      | IOTA #I-320 OR BODINE #B50 |
| 4FT T8 | 2/1 LAMPS | 1350/1350 LUMENS | IOTA #I-320 OR BODINE #B50 |
| 3FT T8 | 2/1 LAMPS | 1200/1100 LUMENS | IOTA #I-320 OR BODINE #B50 |
| 2FT T8 | 2/1 LAMPS | 1125/1100 LUMENS | IOTA #I-320 OR BODINE #B50 |
- LINEAR T5/TS10 FLUORESCENT LAMPS:
- |          |        |             |                                |
|----------|--------|-------------|--------------------------------|
| 4FT T5HO | 1 LAMP | 1250 LUMENS | IOTA #ISL-540 OR BODINE #LP600 |
| 3FT T5HO | 1 LAMP | 1100 LUMENS | IOTA #ISL-540 OR BODINE #LP600 |
| 2FT T5HO | 1 LAMP | 700 LUMENS  | IOTA #ISL-540 OR BODINE #LP600 |
| 4FT T5   | 1 LAMP | 1200 LUMENS | IOTA #ISL-540 OR BODINE #LP600 |
| 3FT T5   | 1 LAMP | 850 LUMENS  | IOTA #ISL-540 OR BODINE #LP600 |
| 2FT T5   | 1 LAMP | 700 LUMENS  | IOTA #ISL-540 OR BODINE #LP600 |
- HIGH LUMEN COMPACT FLUORESCENT LAMPS (BXAX):
- |          |        |             |                                 |
|----------|--------|-------------|---------------------------------|
| 55W BXAX | 1 LAMP | 1050 LUMENS | IOTA #I-320 OR BODINE #LP600STU |
| 50W BXAX | 1 LAMP | 1050 LUMENS | IOTA #I-320 OR BODINE #LP600STU |
| 40W BXAX | 1 LAMP | 1050 LUMENS | IOTA #I-320 - NO KNOWN EQUAL    |
| 36W BXAX | 1 LAMP | 1050 LUMENS | IOTA #I-320 OR BODINE #B50      |
| 24W BXAX | 1 LAMP | 800 LUMENS  | BODINE #B84CG - NO KNOWN EQUAL  |
| 18W BXAX | 1 LAMP | 775 LUMENS  | BODINE #B84CG - NO KNOWN EQUAL  |
- COMPACT FLUORESCENT LAMPS:
- |         |        |             |                               |
|---------|--------|-------------|-------------------------------|
| 70W CFL | 1 LAMP | 1200 LUMENS | BODINE #B75C - NO KNOWN EQUAL |
| 57W CFL | 1 LAMP | 1160 LUMENS | IOTA #I-420 OR BODINE #B75C   |
| 42W CFL | 1 LAMP | 1250 LUMENS | IOTA #I-420 OR BODINE #B84CG  |
| 32W CFL | 1 LAMP | 1050 LUMENS | IOTA #I-420 OR BODINE #B84CG  |
| 26W CFL | 1 LAMP | 700 LUMENS  | IOTA #I-420 OR BODINE #B84CG  |
| 18W CFL | 1 LAMP | 600 LUMENS  | IOTA #I-420 OR BODINE #B84CG  |
| 13W CFL | 1 LAMP | 600 LUMENS  | IOTA #I-420 OR BODINE #B84CG  |
- LED LAMPS:
- BODINE #BLS23/#BLS722 SERIES - NO KNOWN EQUAL
- TO MAINTAIN UL LISTING OF LED FIXTURE, FIXTURE MANUFACTURER(S) SHALL INSTALL LED EMERGENCY BALLASTS AT THE FACTORY AND OBTAIN A UL LISTING OF THE FIXTURE WITH EMERGENCY BALLAST. FIELD-INSTALLATION OF LED EMERGENCY BALLAST(S) IS PROHIBITED. SHOULD THE SPECIFIED LED EMERGENCY BALLAST(S) NOT FIT WITHIN A GIVEN FIXTURE(S), CONTRACTOR SHALL INCLUDE ALL COSTS IN BASE BID TO LOCATE/CONNECT SELF-DIAGNOSTIC MINI INVERTER(S) (IOTA #ILS SERIES OR BODINE #ELI-???-SD) REMOTELY FROM THE FIXTURE(S) IN THE NEAREST ELECTRICAL ROOM.

- EMERGENCY BATTERY PACK NOTES:
- PROVIDE INTEGRAL TEST SWITCH OPTION FOR ALL EMERGENCY BALLASTS INSTALLED IN LIGHT FIXTURES.
  - CONTRACTOR TO VERIFY WITH FIXTURE MANUFACTURER(S) PRIOR TO BID THAT EMERGENCY BALLASTS ARE INTEGRAL TO FIXTURE HOUSINGS. SHOULD A BALLAST(S) NOT FIT WITHIN A GIVEN FIXTURE(S), CONTRACTOR SHALL INCLUDE ALL COSTS TO LOCATE EMERGENCY BALLAST(S) REMOTELY FROM THE FIXTURE ABOVE THE NEAREST ACCESSIBLE CEILING.
  - PROVIDE "DL" OPTION IN ALL DAMP LABEL INSTALLATIONS.
  - EMERGENCY BALLASTS SHALL PROVIDE NOT LESS THAN 90 MINUTES OF FIXTURE OPERATION.
- ALL RECESSED DOWNLIGHTS SUPPLIED WITH A BATTERY PACK SHALL BE PROVIDED WITH AN INTEGRAL COMBINATION TEST SWITCH / CHARGING INDICATOR LIGHT - MOUNTED INSIDE THE REFLECTOR. REMOTE TEST SWITCH / CHARGING LIGHTS ARE NOT ALLOWED. THE TEST SWITCH / CHARGING INDICATOR LIGHT SHALL BE SECURELY ATTACHED TO THE REFLECTOR WITH 18" OF SLACK LEADS FOR EASY REMOVAL OF THE REFLECTOR ASSEMBLY.
  - BATTERY PACKS ALL SHALL BE PROVIDED WITH A COMBINATION TEST SWITCH / CHARGE LIGHT.
  - ALL EXIT SIGNS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE LOCAL FIRE PREVENTION CODE AUTHORITY. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY HARDWARE SUCH THAT ALL EXIT SIGNS ARE INSTALLED IN AN APPROVED VISIBLE LOCATION. THE CONTRACTOR SHALL VERIFY CHEVRONS AND NUMBER OF PAGES PER EXIT SIGN WITH ARCHITECTURAL REFLECTED CEILING PLAN. ANY DISCREPANCIES BETWEEN EXIT SIGNS DEPICTED ON ARCHITECTURAL AND ELECTRICAL PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO ORDERING EXIT SIGNS.
  - ALL TRACK LIGHTING FIXTURES SHALL BE PROVIDED WITH THE APPROPRIATE TRACK SYSTEM WHICH SHALL INCLUDE ALL MISCELLANEOUS COMPONENTS REQUIRED FOR A COMPLETE INSTALLATION. TRACK LENGTH SHALL BE PER DRAWINGS.
  - "Q" CHARACTERS IN THE FIXTURE MODEL NUMBER INDICATE A FIXTURE OPTION THAT THE CONTRACTOR MUST IDENTIFY PRIOR TO ORDERING / PROVIDING SUBMITTALS.
  - PROVIDE A SUBMITTAL / SHOP DRAWING SUBMITTAL PER THE GENERAL PRODUCT REQUIREMENT SECTION FOR EACH FIXTURE TYPE INCLUDING BALLAST(S). ANY LIGHTING FIXTURES SUBMITTED WITHOUT SPECIFIC FIXTURE(S) BALLAST INFORMATION SHALL BE REJECTED AS INCOMPLETE. IN ADDITION, SEE GENERAL LAMP SCHEDULE NOTES FOR SEPARATE LAMP SUBMITTAL REQUIREMENTS.
  - PROVIDE LAMPING PER LAMP SCHEDULE.
  - SOCKETS SHALL BE GENERAL ELECTRIC, BRYANT, OR EQUAL, WHITE, TWIST-TURN CONTACT TYPE. PUSH CONTACT TYPE SOCKETS WILL NOT BE ALLOWED.
  - ALL LIGHTING FIXTURES SHALL BE MOUNTED AND INDIVIDUALLY SUPPORTED IN ACCORDANCE WITH APPLICABLE INDUSTRY AND SAFETY STANDARDS AND ALL NATIONAL AND LOCAL ELECTRICAL AND SEISMIC CODES. FIXTURES SHALL BE FURNISHED AND INSTALLED WITH ALL REQUIRED MOUNTING DEVICES, HARDWARE AND ACCESSORIES.
  - LOCATIONS OF FIXTURES SHALL BE PER THE ARCHITECTURAL REFLECTED CEILING PLAN AND SHALL BE COORDINATED AT TIME OF ROUGH IN. CONFLICTS BETWEEN THE ARCHITECTURAL REFLECTED CEILING PLAN AND THE ELECTRICAL PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT, IN WRITING, PRIOR TO ORDERING FIXTURES.
  - CONTRACTOR TO INCLUDE FIVE MINUTES OF AFTER DARK AIMING/ADJUSTING TIME (TWO HOURS MINIMUM) FOR ANY ADJUSTABLE FIXTURE AND FOR EACH INDIVIDUAL FIXTURE HEAD OR LAMP HOLDER IN A MULTI-FIXTURE / MULTI-LAMP ASSEMBLY. FIXTURES TO BE AIMED/ADJUSTED PER THE DIRECTION OF OWNER, ARCHITECT, AND ENGINEER.
  - ALL POLE MOUNTED FIXTURES, POST MOUNTED FIXTURES, AND BOLLARDS SHALL BE PROVIDED WITH A STRUCTURAL FOOTING AS DETAILED ELSEWHERE IN THE DRAWINGS. THE CAPITAL LETTER ADJACENT TO THE FIXTURE SYMBOL(S) INDICATES THE FOOTING TYPE - SEE ELECTRICAL DETAILS FOR MORE INFORMATION.
  - "NO KNOWN EQUAL" LIGHTING FIXTURE PRICING/BIDDING NOTES
    - EACH FIXTURE IDENTIFIED AS "NO KNOWN EQUAL" ON THIS PROJECT SHALL BE BID IN A "LINE ITEM" FORMAT. A PER UNIT MATERIAL COST SHALL BE PROVIDED FOR EACH "NO KNOWN EQUAL" FIXTURE. THIS PRICE SHALL INCLUDE LAMPS AS WELL AS ALL OTHER REQUIRED MATERIALS REQUIRED FOR INSTALLATION. THE FIXTURE PRICE QUOTED WILL BE UTILIZED, PRIOR TO SHOP DRAWING APPROVAL, FOR "ADDING" AND/OR "DELETING" ANY QUANTITY OF THE FIXTURE.
    - A UNIT COST SHALL BE SUBMITTED FOR EACH "NO KNOWN EQUAL" FIXTURE. SUBMIT THE PRICING AS PART OF THE BID FORM ON A SEPARATE 8-1/2" X 11" SHEET AS FOLLOWS:
 

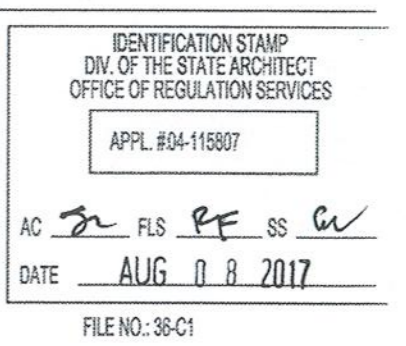
"NO KNOWN EQUAL" FIXTURE TYPE	LINE ITEM / PER UNIT MATERIAL COST
1	\$ XXXXX/EACH
2	\$ XXXXX/EACH
3	\$ XXXXX/EACH
    - FAILURE TO SUBMIT A LINE ITEM FOR EACH "NO KNOWN EQUAL" FIXTURE MAY RESULT IN THE REJECTION, REFUSAL, OR NON-ACCEPTANCE OF THE CONTRACTORS BID.

- T. "NO EQUAL - OWNER STANDARD" LIGHTING FIXTURE PRICING/BIDDING NOTES:
- FIXTURES IDENTIFIED AS "NO EQUAL - OWNER STANDARD" ARE TO BE PROVIDED AS SPECIFIED.
  - SUBSTITUTIONS ARE STRICTLY PROHIBITED.

**LIGHTING FIXTURE SCHEDULE**

SYMBOL	TYPE	MANUFACTURER AND MODEL NUMBER	FIXTURE WATTAGE	LAMP / LAMP OPTION	GENERAL DESCRIPTION
1	1	BIRCHWOOD LIGHTING VAN-LED-400-SLO-35-CR12-07-DR-[MNT?]-[FEED?]-CUP[RAL?]-FW-[VOLT?]-D10 EQUAL BY: ARCHITECTURAL LIGHTING WORKS	53W	LED/3500	SURFACE MOUNTED CONT. LINEAR FIXTURE FOR USE WITH 53W, 4912-LUMEN LED AT 3500K. WALL MOUNT AMING OUT HORIZONTALLY. FROSTED WHITE LENS. INTEGRAL 0-10V ELECTRONIC DIMMING DRIVER. 12" RUN LENGTH. WET LOCATION. NON-STANDARD RAL FINISH TO BE SELECTED BY ARCHITECT. MOUNTING AND VOLT TO BE CONFIRMED BY CONTRACTOR. PROVIDE ASSY. SHOP DRAWINGS FOR REVIEW.
2	2	BIRCHWOOD LIGHTING VAN-LED-400-SLO-35-CR12-07-DR-[MNT?]-[FEED?]-CUP[RAL?]-FW-[VOLT?]-D10 EQUAL BY: ARCHITECTURAL LIGHTING WORKS	4.4W/FT	LED/3500	RECESSED MOUNTED CONTINUOUS RUN LINEAR FIXTURE FOR USE WITH 383 LM/FT LED AT 3500K. FROSTED WHITE LENS. INTEGRAL 0-10V ELECTRONIC DIMMING DRIVER. WET LOCATION. REMOTE MOUNTED EMERGENCY BATTERY PACK AS INDICATED. NON-STANDARD RAL FINISH TO BE SELECTED BY ARCHITECT. MOUNTING AND VOLT TO BE CONFIRMED BY CONTRACTOR. PROVIDE ASSY. SHOP DRAWINGS FOR REVIEW.
3	3	INJUE VSF-K-B20-5-LED-D1-MSR-[STD. FINISH?]-8030-WMA-[STD. FINISH?]-VFS-BD EQUAL BY:	35W	LED/3000K	SMALL WALL MOUNTED FLOOD FOR USE WITH 35W, 3000-LUMEN LED AT 3000K. KNUCKLE MOUNT. MEDIUM OPTICS. INTEGRAL ELECTRONIC DIMMING. STANDARD FINISH TO BE SELECTED BY ARCHITECT. PROVIDE WITH WALL MOUNT ARM AND BARN DOORS IN MATCHING FINISH.
4	4	METALUX #ASNLX-LD4-48SL-UNV-EL7W-CD-1-U DM10-???	41	LED/3500K	SURFACE MOUNTED 4" LED LOW PROFILE WRAP STRIP FIXTURE, ELECTRONIC DRIVER, DAMP LOCATION LISTED, AND 90 MINUTE STANDBY EMERGENCY FIXTURE.
5	5	EQUAL BY:	-/-	-/-	
6	6	EQUAL BY:	-/-	-/-	
7	7	EQUAL BY:	-/-	-/-	
8	8	EQUAL BY:	-/-	-/-	
9	9	EQUAL BY:	-/-	-/-	
10	10	EQUAL BY:	-/-	-/-	
11	11	EQUAL BY:	-/-	-/-	
12	12	EQUAL BY:	-/-	-/-	
13	13	EQUAL BY:	-/-	-/-	
14	14	EQUAL BY:	-/-	-/-	
15	15	EQUAL BY:	-/-	-/-	

SEE GENERAL LIGHTING FIXTURE SCHEDULE NOTES FOR CRITICAL FIXTURE SPECIFICATION AND ORDERING INFORMATION.



STATE OF CALIFORNIA  
**OUTDOOR LIGHTING**  
 (REGULATORY TITLE 24, PART 6)  
 CERTIFICATE OF COMPLIANCE  
 Outdoor Lighting  
 Project Name: Chaffey College - Shade Structure Date: 12/13/2016

**I. Outdoor Lighting Schedule and Field Inspection Energy Checklist**

A	B	C		D		E	F	G	H	I	J	K
		Watts per luminaire	Number of luminaires	Watts per luminaire	Number of luminaires							
1	1 - Linear Surface LED	33.0	80	33.0	80	4,240	Non Sales Canopy					
3	3 - Wall Mid Flood LED	35.0	6	35.0	6	210	Non Sales Canopy					
2	2 - Linear Recessed LED w/lf	4.4	84	4.4	84	370	Non Sales Canopy					
INSTALLED WATTS PAGE TOTAL:								4,820	Enter sum total of all pages (Sum Total INSTALLED Outdoor lighting wattage) into NRCC-LTO-01-E, Page 1		4,820	

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance August 2015

STATE OF CALIFORNIA  
**OUTDOOR LIGHTING**  
 (REGULATORY TITLE 24, PART 6)  
 CERTIFICATE OF COMPLIANCE  
 Outdoor Lighting  
 Project Name: Chaffey College - Shade Structure Date: 12/13/2016

**G. Schedule of luminaires exempt from the cutoff requirements in §130.2(b)**

Name or Symbol	Description of exempt luminaire in accordance with the exemptions

**H. Schedule of luminaires exempt from the outdoor lighting control requirements in §130.2(c)**

Name or Symbol	Description of exempt luminaire in accordance with the exemptions

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance August 2015

STATE OF CALIFORNIA  
**OUTDOOR LIGHTING**  
 (REGULATORY TITLE 24, PART 6)  
 CERTIFICATE OF COMPLIANCE  
 Outdoor Lighting  
 Project Name: Chaffey College - Shade Structure Date: 12/13/2016

**A. General Information**

Project Address: 5565 Haven Avenue Rancho Cucamonga, CA 91737 Total Illuminated Hardscape Area: 0

Phase of Construction:  New Construction  Addition  Alteration

Outdoor Lighting Zone (OLZ)  OLZ-1  OLZ-2  OLZ-3  OLZ-4

I have complied with the ALI which OLZ applies to this site. For default lighting zone designations, see Title 24 Part 6, §10-114

**B. Lighting Compliance Documents (check box for each document included)**

For detailed instructions on the use of this and all Energy Efficiency Standards compliance documents, refer to the Nonresidential Manual published by the California Energy Commission.

NRCC-LTO-01-E Certification of Compliance  
 NRCC-LTO-02-E Outdoor Lighting Controls Certificate of Compliance  
 NRCC-LTO-03-E Outdoor Lighting Power Allowance Certificate of Compliance

**C. Summary of Allowed Outdoor Lighting Power**

1. Sum Total ALLOWED Outdoor Lighting Wattage from NRCC-LTO-03-E, page 1	Watts	=	4,820
2. Sum Total INSTALLED Outdoor Lighting Wattage from NRCC-LTO-01-E, page 2	Watts	=	4,820

**D. Declaration of Required Installation Certificates**

Declare by checking all Installation Certificates that will be submitted. (Retain copies and verify forms are completed and signed.)

NRCC-LTO-01-E Must be submitted for all buildings  Field Inspector  
 NRCC-LTO-02-E Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.  Field Inspector

**E. Declaration of Required Certificates of Acceptance**

Declare by checking all of the Certificates of Acceptance that will be submitted. (Retain copies and verify forms are completed and signed.)

NRCC-LTO-02-A Must be submitted for outdoor lighting controls.  Field Inspector

**F. Schedule of luminaires exempt from the outdoor lighting power requirements in §140.7**

Name or Symbol	Description of exempt luminaire in accordance with the exemptions

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance August 2015

**ENVELOPE MANDATORY MEASURES: NONRESIDENTIAL ENV-MM**

Project Name: Chaffey College - Shade Structure Date: 12/13/2016

**DESCRIPTION**

**Building Envelope Measures:**

§110.8(a): Installed Insulating material shall have been certified by the manufacturer to comply with the California Quality Standards for insulating material, Title 20 Chapter 4, Article 3.

§110.8(b): All Insulating Materials shall be installed in compliance with the flame spread rating and smoke density requirements of Sections 2602 and 707 of Title 24, Part 2.

§110.8(f): The opaque portions of fenestration glazing in nonresidential buildings shall have insulation with an installed R-value of no less than R-13 between framing members.

§110.7(a): All Exterior Joints and openings in the building that are observable sources of air leakage shall be caulked, gasketed, weatherstripped or otherwise sealed.

§110.8(a): Manufactured fenestration products and exterior doors shall have an infiltration rate not exceeding 0.3 cfm/ft<sup>2</sup> of window area, 0.3 cfm/ft<sup>2</sup> of door area for residential doors, 0.3 cfm/ft<sup>2</sup> of door area for nonresidential single doors (entrances and exits), and 1.0 cfm/ft<sup>2</sup> for nonresidential double doors (swing-in).

§110.8(a): Fenestration U-factor shall be rated in accordance with NFRC 100, or the applicable default U-factor.

§110.8(a): Fenestration SHGC shall be rated in accordance with NFRC 200, or NFRC 100 for air-butt fenestration, or the applicable default SHGC.

§110.8(b): Site Constructed Doors, Windows and Skylights shall be caulked between the unit and the building, and shall be weatherstripped (except for unframed glass doors and fire doors).

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance August 2015

STATE OF CALIFORNIA  
**OUTDOOR LIGHTING CONTROLS**  
 (REGULATORY TITLE 24, PART 6)  
 CERTIFICATE OF COMPLIANCE  
 Outdoor Lighting Controls  
 Project Name: Chaffey College - Shade Structure Date: 12/13/2016

**DOCUMENTATION AUTHOR'S DECLARATION STATEMENT**

I, certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: IKisc Signature Date: 12/13/2016

Address: 11870 Pierce St. Ste 160 City: Riverside, CA 92505 Phone: (949) 299-4160

**RESPONSIBLE PERSON'S DECLARATION STATEMENT**

I certify the following under penalty of perjury, under the laws of the State of California:

- The information provided on this Certificate of Compliance is true and correct.
- I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
- The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 6 and Part 6 of the California Code of Regulations.
- The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
- I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Ray Swartz Responsible Designer Signature: [Signature] State License: 12/13/2016 Address: 11870 Pierce Street Ste 160 City: Riverside, CA 92505 Phone: (949) 299-4160

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance August 2015

STATE OF CALIFORNIA  
**OUTDOOR LIGHTING CONTROLS**  
 (REGULATORY TITLE 24, PART 6)  
 CERTIFICATE OF COMPLIANCE  
 Outdoor Lighting Controls  
 Project Name: Chaffey College - Shade Structure Date: 12/13/2016

**B. Mandatory Outdoor Lighting Control Schedule and Field Inspection Checklist**

**Outdoor Lighting Control Schedule**

A	B	C	D	E	F	G	H	I	J	K	L	M
Location and Application of Luminaires being controlled	Type/Description of Lighting Control (i.e. motion sensor, photocell, outdoor astronomical time-switch control, centralized time-based zone lighting control)	# of Units	§130.2(b)	§130.2(b)	§130.2(b)	§130.2(b)	§130.2(b)	§130.2(b)	§130.2(b)	§130.2(b)	§130.2(b)	§130.2(b)

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance August 2015

STATE OF CALIFORNIA  
**OUTDOOR LIGHTING CONTROLS**  
 (REGULATORY TITLE 24, PART 6)  
 CERTIFICATE OF COMPLIANCE  
 Outdoor Lighting Controls  
 Project Name: Chaffey College - Shade Structure Date: 12/13/2016

**A. Mandatory Outdoor Lighting Control Declaration Statements**

Check all that apply:

- Lighting shall be controlled by self-contained lighting control devices which are certified to the Energy Commission according to the Title 20 Appliance Efficiency Regulations in accordance with §110.9(a).
- Lighting shall be controlled by a lighting control system or energy management control system in accordance with §110.9. An Installation Certificate shall be submitted in accordance with §130.4(b).
- All lighting controls and equipment shall comply with the applicable requirements in §110.9 and shall be installed in accordance with the manufacturer's instructions in accordance with §130.3.
- Part-Part Outdoor Lighting Controls, as defined in Section 100.1(b), shall meet the requirements in Section 110.9(b).
- All outdoor incandescent luminaires rated over 100 watts, determined in accordance with Section 130.0(c), shall be controlled by a motion sensor.
- All outdoor luminaires rated for use with lamps greater than 150 lamp watts, determined in accordance with Section 130.0(c), shall comply with Backlight, Uplight, and Glare (collectively referred to as "BUG") in accordance with Section 130.2(b).
- All installed outdoor lighting shall be controlled by a photocell or outdoor astronomical time-switch control in accordance with Section 130.2(c).
- All installed outdoor lighting shall be controlled and independently controlled from other electrical loads by an automatic scheduling control in accordance with Section 130.2(g).
- All installed outdoor lighting, where the bottom of the luminaire is mounted 24 feet or less above the ground, shall be controlled with automatic lighting controls in accordance with Section 130.2(j).
- For Outdoor Sales Frontage, Outdoor Sales Lots, and Outdoor Sales Canopies lighting, an automatic lighting control in accordance with Section 130.2(j)(4).
- For Building Facade, Ornamental Hardscape and Outdoor Dining lighting, an automatic lighting control in accordance with Section 130.2(j)(5).
- Before an occupancy permit is granted for a newly constructed building or area, or a new lighting system serving a building, area, or site is operated for normal use, indoor lighting controls serving the building, area, or site shall be certified as meeting the Acceptance Requirements for Code Compliance in accordance with §130.4.(3). Outdoor lighting controls shall comply with the applicable requirements of Section 130.2(c) and Reference Nonresidential Appendix NA7.8

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance August 2015

STATE OF CALIFORNIA  
**OUTDOOR LIGHTING CONTROLS**  
 (REGULATORY TITLE 24, PART 6)  
 CERTIFICATE OF COMPLIANCE  
 Outdoor Lighting Controls  
 Project Name: Chaffey College - Shade Structure Date: 12/13/2016

**DOCUMENTATION AUTHOR'S DECLARATION STATEMENT**

I, certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: IKisc Signature Date: 12/13/2016

Address: 11870 Pierce St. Ste 160 City: Riverside, CA 92505 Phone: (949) 299-4160

**RESPONSIBLE PERSON'S DECLARATION STATEMENT**

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- The information provided on this Certificate of Compliance is true and correct.
- I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
- The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 6 and Part 6 of the California Code of Regulations.
- The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
- I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Ray Swartz Responsible Designer Signature: [Signature] State License: 12/13/2016 Address: 11870 Pierce Street Ste 160 City: Riverside, CA 92505 Phone: (949) 299-4160

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance August 2015

STATE OF CALIFORNIA  
**OUTDOOR LIGHTING POWER ALLOWANCES**  
 (REGULATORY TITLE 24, PART 6)  
 CERTIFICATE OF COMPLIANCE  
 Outdoor Lighting Power Allowances  
 Project Name: Chaffey College - Shade Structure Date: 12/13/2016

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Responsible Designer Name: Ray Swartz Responsible Designer Signature: [Signature] State License: 12/13/2016 Address: 11870 Pierce Street Ste 160 City: Riverside, CA 92505 Phone: (949) 299-4160

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance August 2015

STATE OF CALIFORNIA  
**OUTDOOR LIGHTING POWER ALLOWANCES**  
 (REGULATORY TITLE 24, PART 6)  
 CERTIFICATE OF COMPLIANCE  
 Outdoor Lighting Power Allowances  
 Project Name: Chaffey College - Shade Structure Date: 12/13/2016

**C-1. WATTAGE ALLOWANCE PER SQUARE FOOT OF HARDSCAPE AREA (Ornamental Lighting) - Table 140.7-B**

Allowance for the total site illuminated hardscape area. Luminaires qualifying for this allowance shall be rated for 100 watts or less as determined in accordance with Section 130.0(c), and shall be post-top luminaires, tandem, pendant luminaires, or chandeliers.

If more than one luminaire type is used per location, use multiple rows for that location.

A	B	C	D	E	F	G	H	I	J
Name of area for which allowance is claimed	Wattage Allowance per square foot	Wattage Allowance per square foot	Luminaire Code or Symbol	Luminaire Description	Luminaire Quantity	Watts per luminaire	Design Watts (E x H)	Allowed Watts (smaller of D or I)	Watts per luminaire

Sum total allowance for ornamental lighting on the site: 0

**C-2. WATTAGE ALLOWANCE PER SQUARE FOOT OF SPECIFIC AREA - Table 140.7-B**

Allowance for Building Facade, Outdoor Sales Lots, Vehicle Service Station Canopies, Sales Canopies, Non-sales Canopies, Guard Stations, Student Pick-up/Drop-off zone, Outdoor Dining, Special Security Lighting for Retail Parking and Pedestrian Hardscape.

If more than one luminaire type is used per location, use multiple rows for that location.

A	B	C	D	E	F	G	H	I	J
Name of location for which allowance is claimed	Illuminated Area of Application	Wattage Allowance per square foot	Wattage Allowance per square foot	Luminaire Code or Symbol	Luminaire Description	Luminaire Quantity	Watts per luminaire	Design Watts (E x H)	Allowed Watts (smaller of D or I)
Campus Center Sh.	5,033	3.408	6.133	1	1 - Linear Surface LED	80	53.0	4,240	4,820
				3	3 - Wall Mid Flood LED	6	30.0	210	
				2	2 - Linear Recessed LED w/lf	84	4.4	370	

Sum total allowance for specific area on the site: 4,820

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance August 2015

STATE OF CALIFORNIA  
**OUTDOOR LIGHTING POWER ALLOWANCES**  
 (REGULATORY TITLE 24, PART 6)  
 CERTIFICATE OF COMPLIANCE  
 Outdoor Lighting Power Allowances  
 Project Name: Chaffey College - Shade Structure Date: 12/13/2016

**C. ADDITIONAL "USE IT OR LOSE IT" OUTDOOR LIGHTING POWER ALLOWANCES FOR SPECIFIC APPLICATIONS**

The additional specific outdoor lighting power allowance shall be the smaller of the allowed lighting power or the actual lighting power used.

Use Outdoor Lighting Zone (OLZ) that is documented on page 1 of NRCC-LTO-01-E to calculate the specific wattage allowances.

**C-1. WATTAGE ALLOWANCE PER APPLICATION - Table 140.7-B**

Available only for qualifying locations, which include Building Entrances or Exits; Primary Entrances to Senior Care Facilities, Police Stations, Hospitals, Fire Stations, and Emergency Vehicles (ambulance, fire, police, etc.); Vehicle Service Station Uncovered Fuel Dispenser

If more than one luminaire type is used per location, use multiple rows for that location.

A	B	C	D	E	F	G	H	I	J
Name of location for which allowance is claimed	Number of qualifying locations	Wattage Allowance per qualifying location	Wattage Allowance per qualifying location	Luminaire Code or Symbol	Luminaire Description	Luminaire Quantity	Watts per luminaire	Design Watts (E x H)	Allowed Watts (smaller of D or I)

Sum total allowance per application on the site: 0

**C-2. WATTAGE ALLOWANCE PER UNIT LENGTH (Sales Frontage) from Table 140.7-B**

If more than one luminaire type is used per location, use multiple rows for that location.

A	B	C	D	E	F	G	H	I	J
Name of location for which allowance is claimed	Linear feet of Sales Frontage	Wattage Allowance per linear foot	Wattage Allowance per linear foot	Luminaire Code or Symbol	Luminaire Description	Luminaire Quantity	Watts per luminaire	Design Watts (E x H)	Allowed Watts (smaller of D or I)

Sum total allowance for sales frontage on the site: 0

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance August 2015

STATE OF CALIFORNIA  
**OUTDOOR LIGHTING POWER ALLOWANCES**  
 (REGULATORY TITLE 24, PART 6)  
 CERTIFICATE OF COMPLIANCE  
 Outdoor Lighting Power Allowances  
 Project Name: Chaffey College - Shade Structure Date: 12/13/2016

**A. OUTDOOR LIGHTING POWER ALLOWANCE SUMMARY**

1. General Hardscape Lighting Power Allowance (Site Total from Section B of NRCC-LTO-03-E)

2. Additional Specific "Use it or Lose it" Lighting Power Allowances (Total watts of these cells shall be identical to total allowed watts determined in Section C-1 to C-4 of NRCC-LTO-03-E)

PER APPLICATION from Section C-1	PER UNIT LENGTH (SALES FRONTAGE) from Section C-2	PER HARDSCAPE AREA (ORNAMENTAL LIGHTING) from Section C-3	PER SPECIFIC AREA from Section C-4	Sum Total ALLOWED Outdoor Lighting Wattage (add rows 1 and 2)
0	0	0	4,820	4,820

**B. GENERAL HARDSCAPE LIGHTING POWER ALLOWANCE FROM TABLE 140.7-A**

Name of area	Area Wattage Allowance (AWA)				Linear Wattage Allowance (LWA)				Initial Wattage Allowance (IWA)	Total General Hardscape Lighting Allowance
	Illuminated Hardscape Area	AWA Per Square Foot	AWA (W)	AWA (E x H)	Perimeter Length of General Hardscape	LWA Per Linear Foot	LWA (W)	LWA (E x H)		

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance August 2015

**TITLE 24 GENERAL NOTE**

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK ASSOCIATED WITH FINAL INSPECTION AND APPLICABLE ACCEPTANCE REQUIREMENT PROCEDURES. INCLUDE ALL COSTS IN THE BASE BID. THIS SHALL INCLUDE BUT NOT BE LIMITED TO CONSTRUCTION INSPECTION, MEASUREMENTS, MONITORING, FUNCTIONAL TESTING, CALIBRATING, ETC. CONTRACTOR SHALL ASSUME THE ROLE OF "FIELD TECHNICIAN" AND "RESPONSIBLE PERSON" AS DEFINED IN STATE OF CALIFORNIA 2013 BUILDING ENERGY EFFICIENCY STANDARDS NONRESIDENTIAL COMPLIANCE MANUAL SECTION 13.2.2.

SEE STATE OF CALIFORNIA 2013 BUILDING ENERGY EFFICIENCY STANDARDS SECTIONS 10-103(a)3A AND 10-103(c)3B AND SECTION 130.4 FOR MORE INFORMATION.

SEE STATE OF CALIFORNIA 2013 BUILDING ENERGY EFFICIENCY STANDARDS NONRESIDENTIAL COMPLIANCE MANUAL CHAPTER 13 FOR MORE DETAILED REQUIREMENTS / INFORMATION.

SEE STATE OF CALIFORNIA 2013 BUILDING ENERGY EFFICIENCY STANDARDS RESIDENTIAL COMPLIANCE MANUAL CHAPTER 2 FOR MORE DETAILED REQUIREMENTS / INFORMATION.

PROVIDE COMPLETED INSTALLATION CERTIFICATE(S) AND CERTIFICATE(S) OF ACCEPTANCE AS REQUIRED TO THE SATISFACTION OF THE ENFORCEMENT AGENCY.

**Chaffey College**  
 5565 Haven Avenue Rancho Cucamonga, CA 91737  
 Telephone (909) 907-1737 www.chaffey.edu

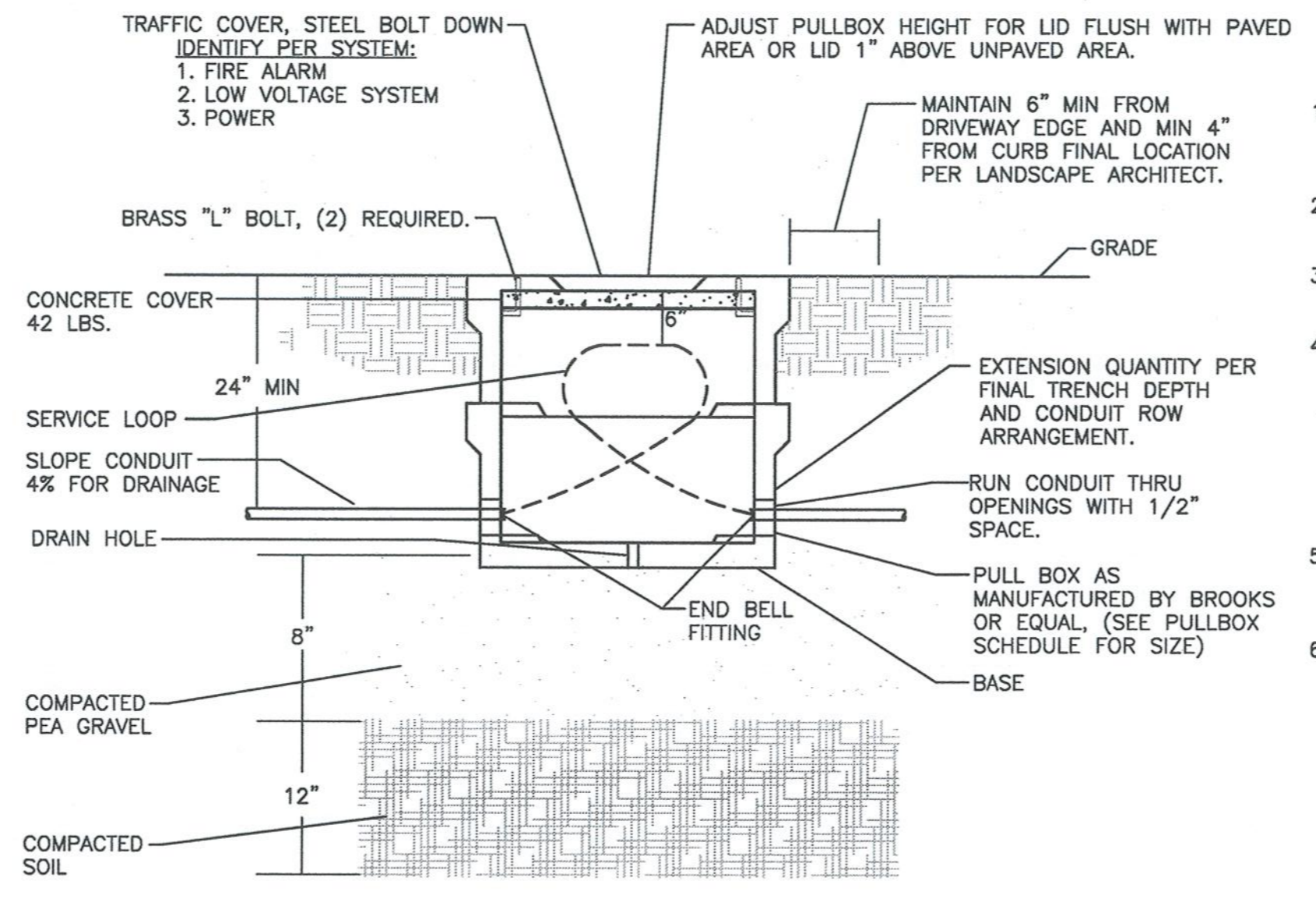
**tkisc**  
 COLLABORATIVE  
 11870 Pierce Street, Suite 160  
 Riverside, California 92506  
 951.299.4160 www.tkisc.com  
 Bill Voter - Electrical  
 Bill Voter - Mechanical

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**EXTERIOR TITLE 24**  
 CAMPUS CENTER SHADE STRUCTURE  
 MEASURE L PROJECTS AT CHAFFEY COLLEGE  
 5565 HAVEN AVENUE  
 RANCHO CUCAMONGA, CA 91737

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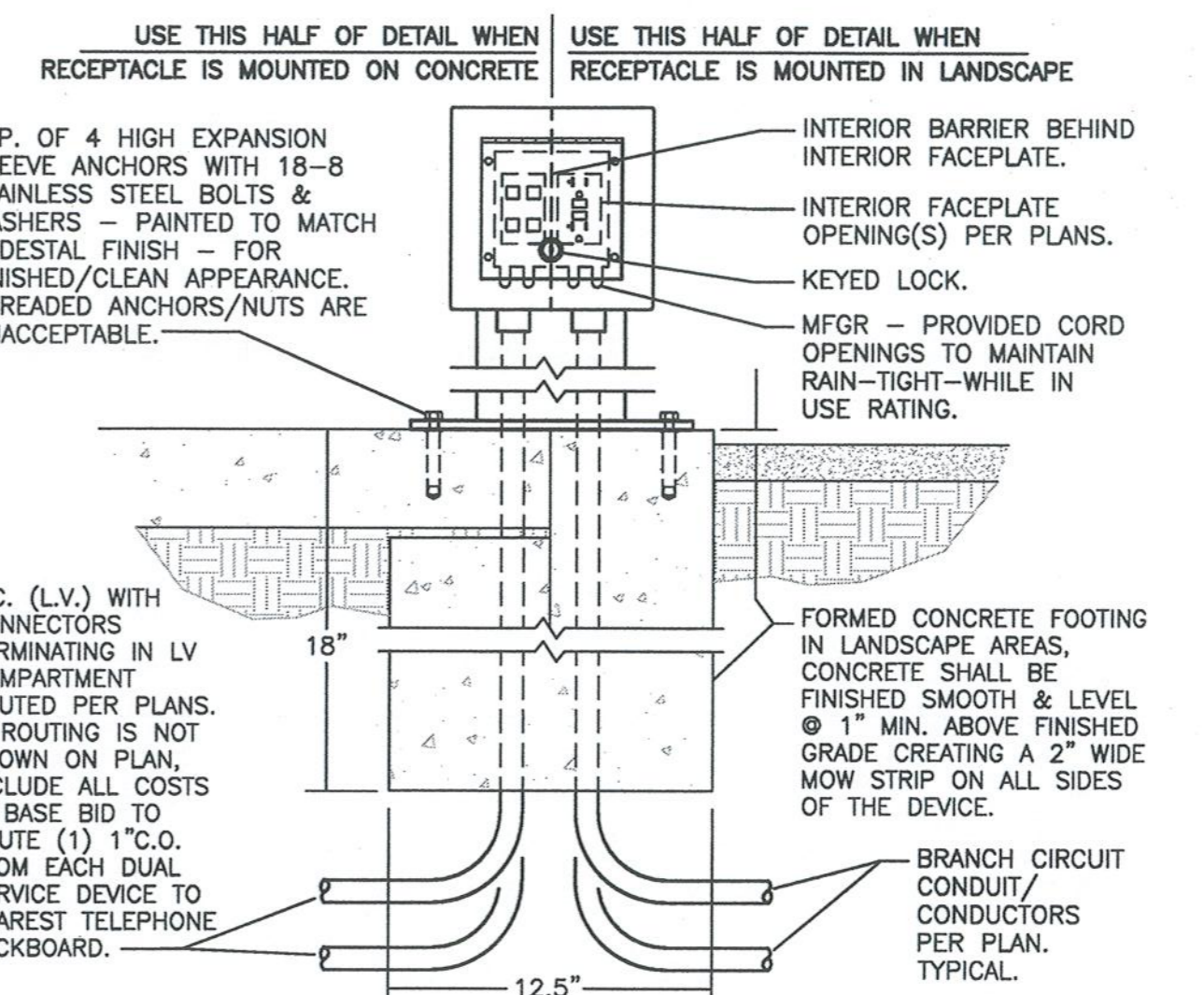
**E3.2**  
 PROJECT NUMBER: 75-18601-10  
 ISSUE DATE: 07/29/2017  
 Revision



**PULL BOX DETAIL**  
SCALE: N.T.S.

**PULL BOX NOTES**

1. ALL BOXES SHALL BE SET ON A MINIMUM 8" GRAVEL BASE WITH 1/2" DIAMETER GRAVEL.
2. ALL INCIDENTAL CONCRETE SHALL BE REMOVED FROM BOXES.
3. PROVIDE WATERTIGHT SPLICES AND CAPS FOR POWER CONDUCTORS.
4. PROVIDE SEALING GEL IN ALL CONDUITS (BOTH W/ CONDUCTORS AND IN EMPTY SPARE CONDUITS). THE GEL SHALL BE INSERTED IN THE CONDUIT TO A DEPTH OF 6" AND FLUSH W/ THE END OF THE CONDUIT. THE GEL SHALL BE MANUFACTURED BY 3M #4442 RE-ENTERABLE ENCAPSULANT.
5. PROVIDE IDENTIFYING TAGS ON ALL POWER AND COMMUNICATION CONDUCTORS IN PULLBOXES.
6. PULLBOX SHALL BE SIZED PER N.E.C. REQUIREMENTS.

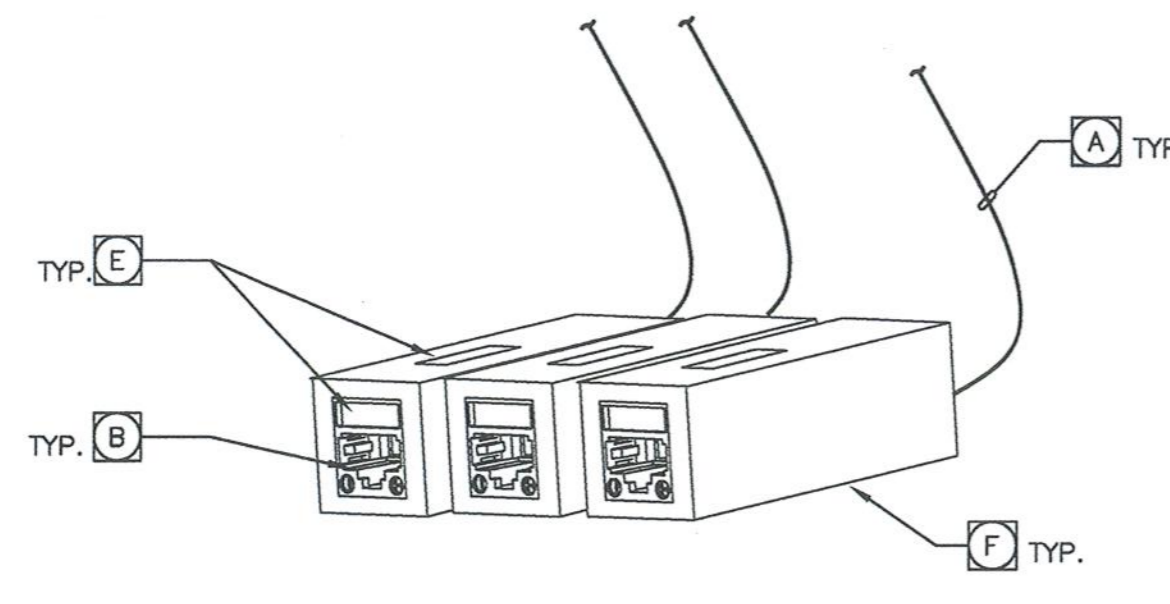


**DUAL SERVICE 'WP-C' SITE RECEPTACLE DETAIL**  
SCALE: N.T.S.

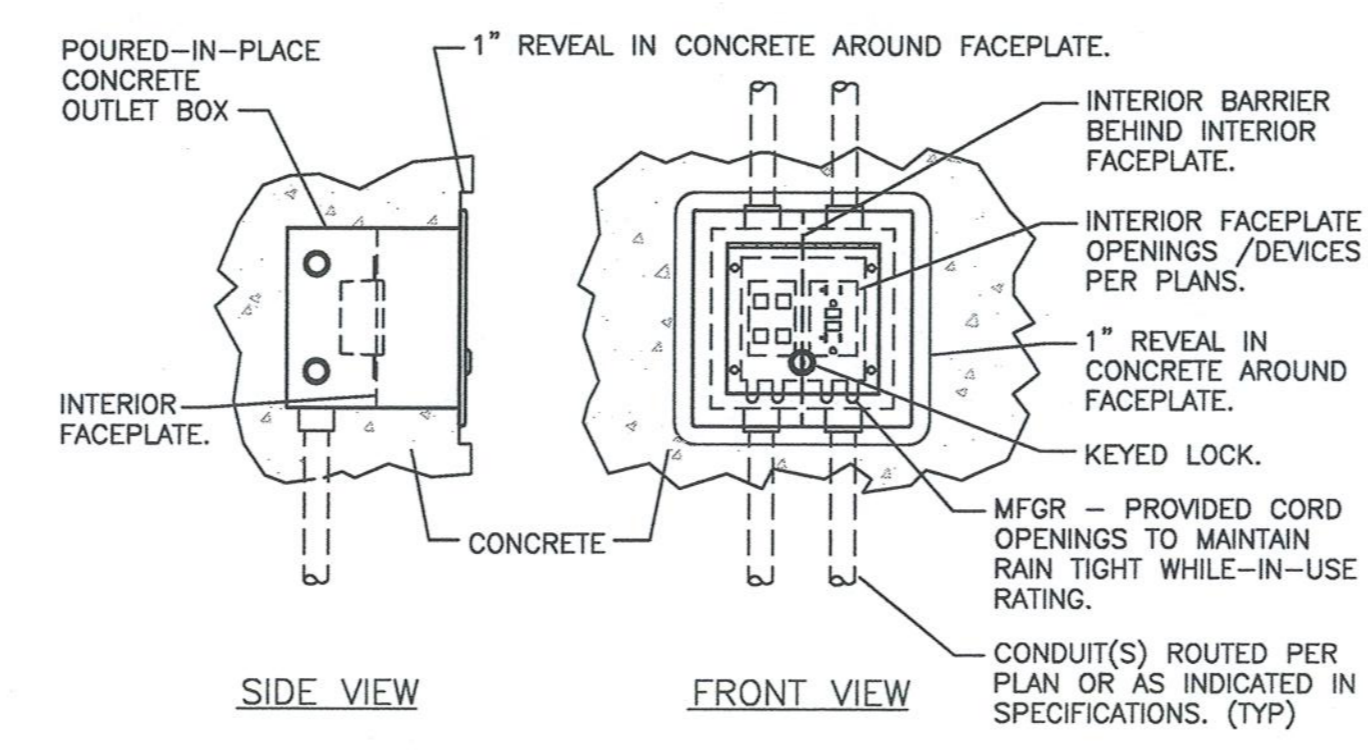
WHERE THE FOLLOWING SYMBOLS ARE INDICATED ON THE ELECTRICAL DRAWINGS ARCHITECTURAL DRAWINGS AND/OR STRUCTURED CABLING SYSTEM DRAWINGS:

(3) WP

THE FOLLOWING SHALL BE PROVIDED, AS DEPICTED IN THE FOLLOWING DIAGRAMMATIC CONNECTIVITY DETAIL. MOUNT DEVICES INSIDE WEATHERPROOF BOX.

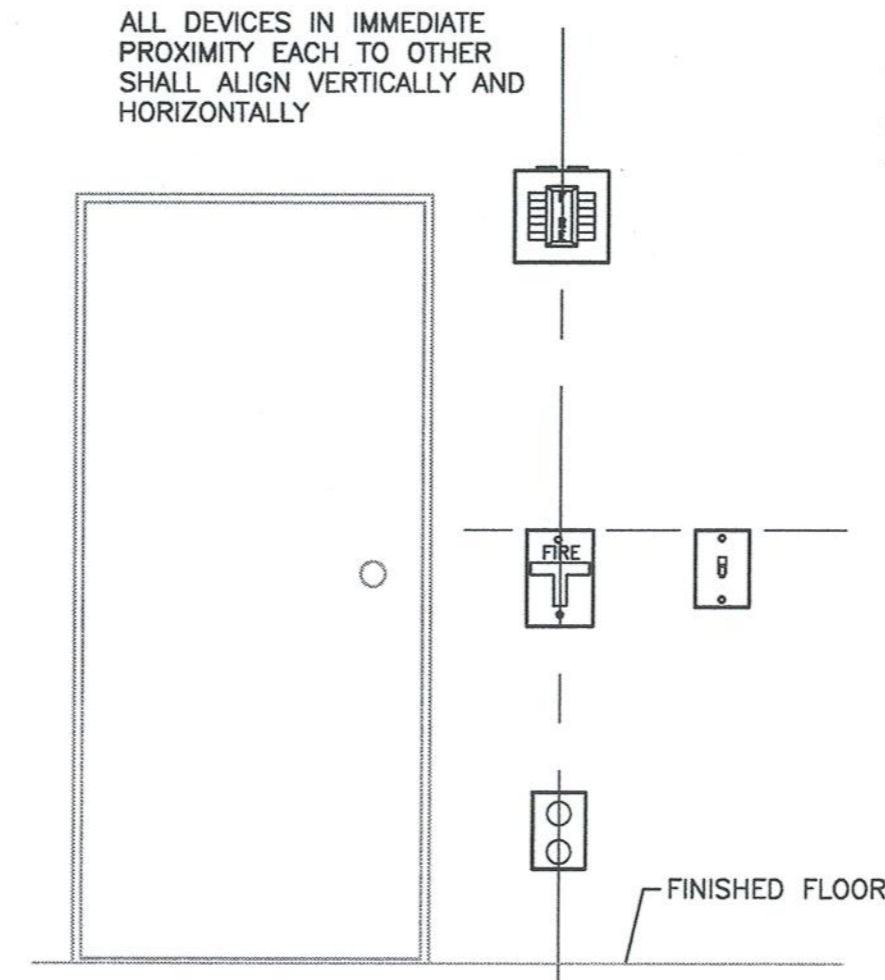


**EXTERIOR CAMERA LOCATION**  
SCALE: N.T.S.

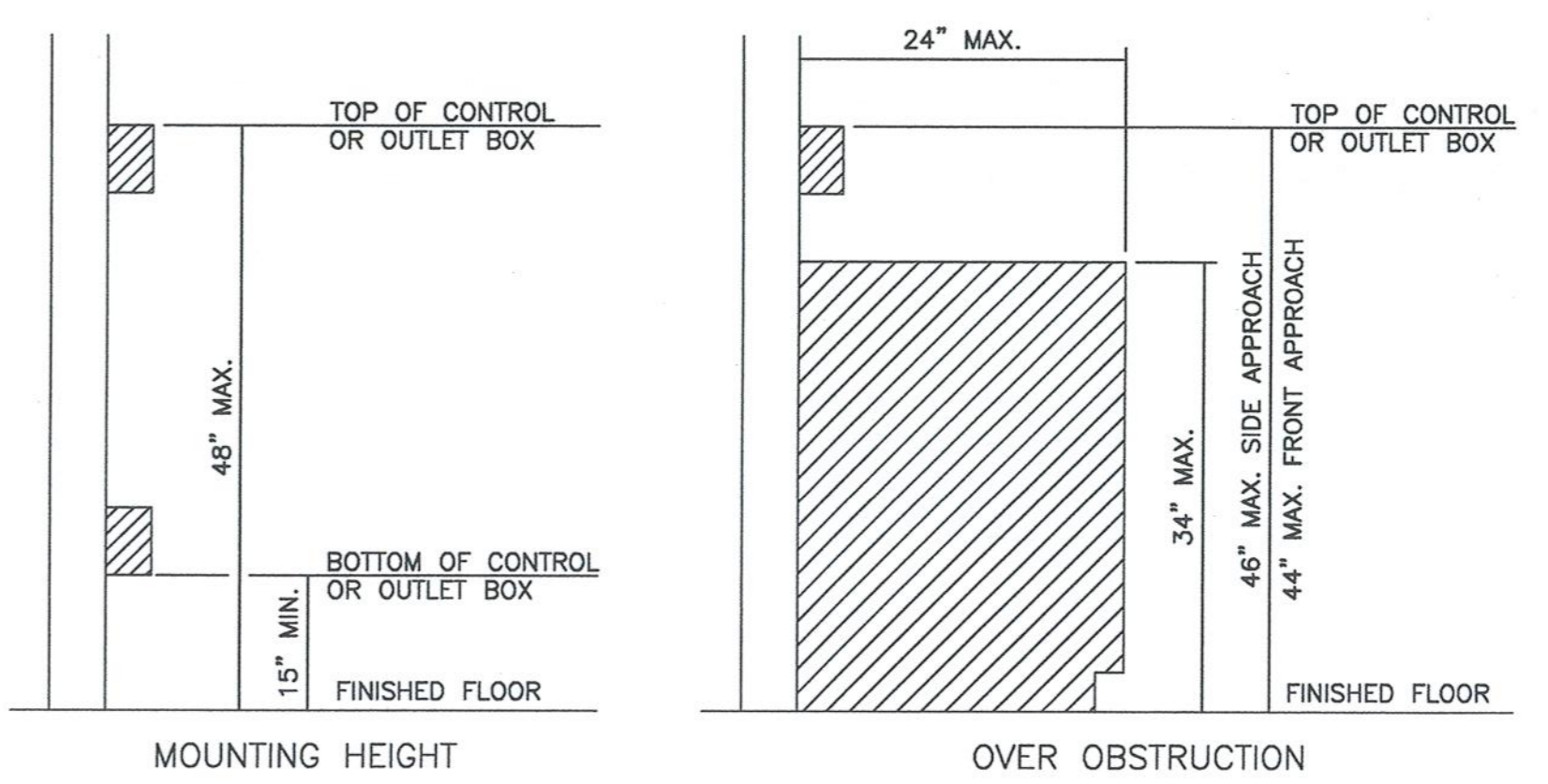


NOTE: DO NOT PROVIDE A REVEAL WHEN FIXTURE IS RECESSED IN A STONE-CLAD SURFACE.

**RFI #21 FLUSH OUTLET BOX 'WP-A' DETAIL (DEEP)**  
SCALE: N.T.S.



**DEVICE ALIGNMENT & MOUNTING HEIGHT DETAILS**  
SCALE: N.T.S.



ALL DEVICE HEIGHTS DEPICTED SHALL BE MODIFIED AS REQUIRED BY GOVERNING BUILDING CODES. CONTRACTOR TO VERIFY/RECONCILE APPLICABLE CODE REQUIREMENTS AND ANY DEVICE HEIGHT REQUIREMENTS DEPICTED ON ARCHITECTURAL OR INTERIOR DESIGN PLANS & SPECIFICATIONS PRIOR TO DEVICE ROUGH-IN. CONFLICTS OR LACK OF MOUNTING HEIGHT SPECIFICITY ON THE ARCHITECTURAL OR INTERIOR DESIGN PLANS & SPECIFICATIONS SHALL BE CAUSE FOR THE CONTRACTOR TO ISSUE A FORMAL WRITTEN RFI FOR RESOLUTION. DEVICE MOUNTING HEIGHT CLARIFICATIONS/SPECIFICATIONS SHALL NOT RESULT IN AN ADDITIONAL COST TO THE OWNER - CONTRACTOR SHALL INCLUDE ALL COSTS IN BASE BID.

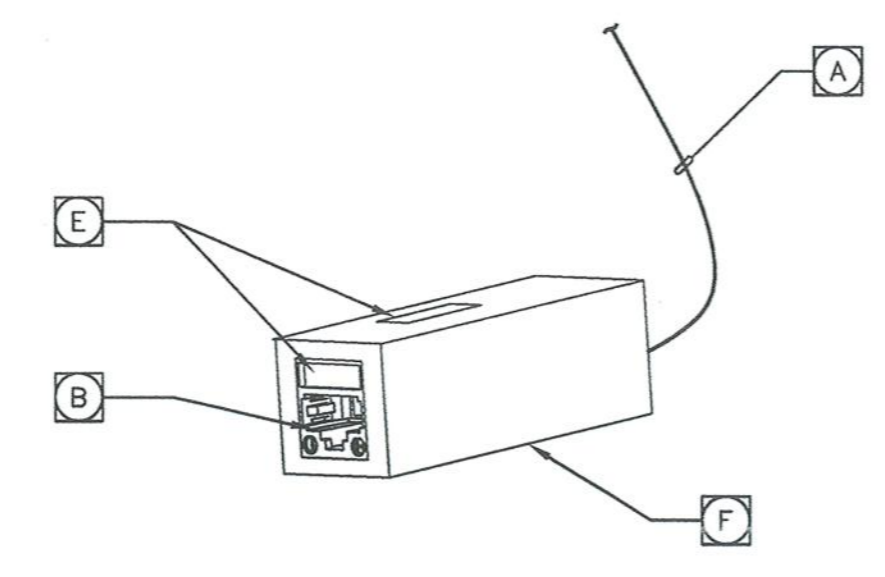
**FACEPLATE NOTES:**

1. PROVIDE (1) CAT-6, 4-PAIR UTP DATA CABLE(S) TO IDF RACK. TERMINATE STATION END(S) IN STATION CONNECTOR(S) PER SPECIFICATIONS. TERMINATE RACK END(S) ON CAT-6 PATCH PANEL(S) PER SPECIFICATIONS. COLOR OF CABLE(S) PER SPECIFICATIONS.
2. PROVIDE CAT-6 STATION 8PBC DATA CONNECTOR PER SPECIFICATIONS. COLOR PER CAMPUS STANDARDS.
3. BLANK INSERT. ALL UNUSED OPENINGS SHALL BE COVERED WITH A BLANK INSERT MATCHING THE COLOR OF THE FACEPLATE.
4. PROVIDE FACEPLATE PER SPECIFICATIONS. FACEPLATE MATERIAL AND FINISH SHALL MATCH ADJACENT/NEARBY POWER FACEPLATES, UNLESS OTHERWISE NOTED IN SPECIFICATIONS.
5. PROVIDE FACEPLATE LABELING PER SPECIFICATIONS. SEE SPECIFICATIONS FOR ALL OTHER LABELING REQUIREMENTS.
6. 1-PORT SURFACE MOUNTED BOX (SYSTIMAX P/N M101SMB-B-SXX OR EQUAL) LOCATE IN WEATHERPROOF BOX PER PLANS, UNLESS OTHERWISE NOTED.

WHERE THE FOLLOWING SYMBOLS ARE INDICATED ON THE ELECTRICAL DRAWINGS ARCHITECTURAL DRAWINGS AND/OR STRUCTURED CABLING SYSTEM DRAWINGS:

WP

THE FOLLOWING SHALL BE PROVIDED, AS DEPICTED IN THE FOLLOWING DIAGRAMMATIC CONNECTIVITY DETAIL. MOUNT DEVICE INSIDE WEATHERPROOF BOX.

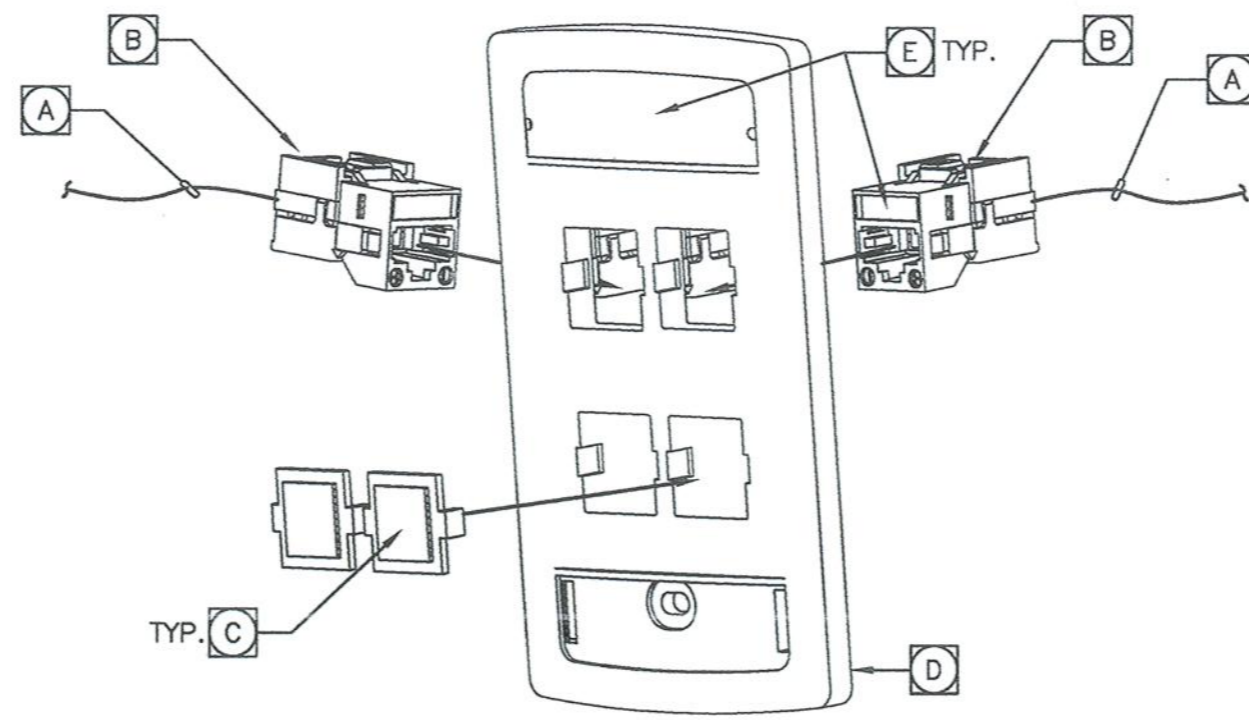


**EXTERIOR CAMERA LOCATION**  
SCALE: N.T.S.

WHERE THE FOLLOWING SYMBOLS ARE INDICATED ON THE ELECTRICAL DRAWINGS ARCHITECTURAL DRAWINGS AND/OR STRUCTURED CABLING SYSTEM DRAWINGS:

(2)

THE FOLLOWING SHALL BE PROVIDED, AS DEPICTED IN THE FOLLOWING DIAGRAMMATIC CONNECTIVITY DETAIL.

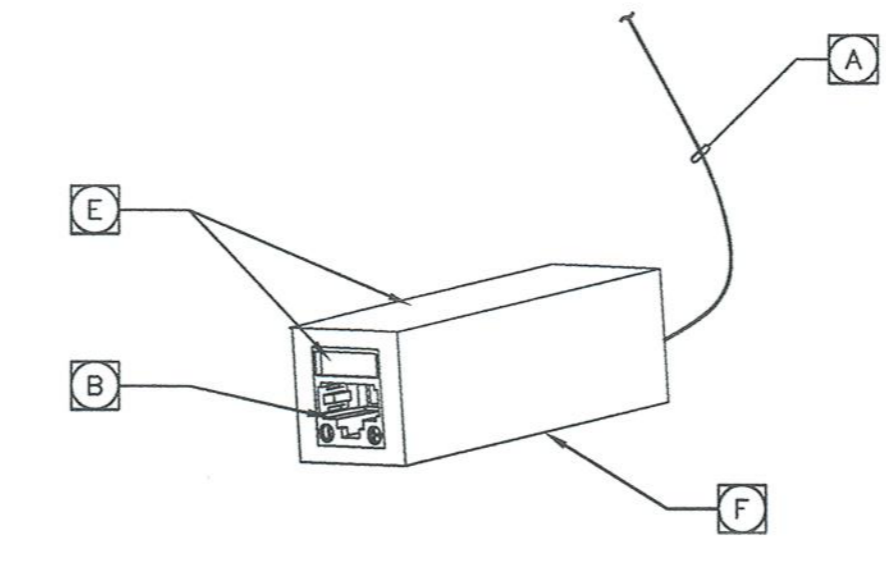


**DUAL DATA DEVICE**  
SCALE: N.T.S.

WHERE THE FOLLOWING SYMBOLS ARE INDICATED ON THE ELECTRICAL DRAWINGS ARCHITECTURAL DRAWINGS AND/OR STRUCTURED CABLING SYSTEM DRAWINGS:

(1)

THE FOLLOWING SHALL BE PROVIDED, AS DEPICTED IN THE FOLLOWING DIAGRAMMATIC CONNECTIVITY DETAIL.



**SINGLE DATA DEVICE**  
SCALE: N.T.S.

