

# IMPERIAL COMMUNITY COLLEGE DISTRICT

## IMPERIAL VALLEY COLLEGE

# TENNIS COURT RENOVATION SHADES AND NEW LIGHTING

380 EAST ATEN RD.  
IMPERIAL, CA 92251  
(760) 352-8320

### BOARD OF SCHOOL TRUSTEES:

AREA 1 - HORTENSIA ARMENDARIZ  
AREA 4 - ISABEL SOLIS  
AREA 7 - STEVEN M. TAYLOR

AREA 2 - KARLASIGMOND, BOARD PRESIDENT  
AREA 5 - MARK EDNEY  
DR. LENNOR M. JOHNSON, SUPERINTENDENT

AREA 3 - JERRY HART  
AREA 6 - ROMUALDO J. MEDINA, BOARD CLERK

### SHEET INDEX KEY / KEY PLAN

DISCIPLINE (eg. A = ARCHITECTURAL, P = PLUMBING, etc.)  
DRAWING TYPE (eg. FLOOR PLAN, ARCHITECTURAL SECTIONS, etc.)  
DRAWING TYPE SUB-SHEET NUMBER

**A2.2 ARCHITECTURAL SECTIONS**  
DRAWING TYPE SUB-SHEET NUMBER

### STATEMENT OF GENERAL CONFORMANCE

THE DRAWINGS OR SHEETS LISTED ON THE COVER OR INDEX SHEET  
 THIS DRAWING OR PAGE OF SPECIFICATIONS / CALCULATIONS FOR LIGHTS STANDARDS/SHADE STRUCTURES:  
LIGHT STANDARDS/SHADE STRUCTURES SECTION OF SHEET INDEX  
HAVE BEEN PREPARED BY OTHER DESIGN PROFESSIONALS OR CONSULTANTS WHO ARE LICENSED AND / OR AUTHORIZED TO PREPARE SUCH DRAWINGS IN THIS STATE. IT HAS BEEN EXAMINED BY ME FOR:  
1) DESIGN CONTENT AND APPEARS TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS AND THE PROJECT SPECIFICATIONS PREPARED BY ME, AND  
2) COORDINATION WITH MY PLANS AND SPECIFICATIONS AND IS ACCEPTABLE FOR INCORPORATION INTO THE CONSTRUCTION OF THIS PROJECT.

THE STATEMENT OF GENERAL CONFORMANCE "SHALL NOT BE CONSTRUED AS RELIEVING ME OF MY RIGHTS, DUTIES, AND RESPONSIBILITIES UNDER SECTIONS 17302 AND 17319 OF THE EDUCATION CODE AND SECTIONS 4-336, 4-341 AND 4-344" OF TITLE 24, PART 1, SECTION 4-317 (b).

I FIND THAT:  
 ALL DRAWINGS OR SHEETS LISTED ON THE COVER OR INDEX SHEET  
 THIS DRAWING OR PAGE OF SPECIFICATIONS / CALCULATIONS FOR LIGHTS STANDARDS/SHADE STRUCTURES:  
 IS/ARE IN GENERAL CONFORMANCE WITH THE PROJECT DESIGN, AND  
 HAS/HAVE BEEN COORDINATED WITH THE PROJECT PLANS SPECIFICATIONS.

JIMMIE SANDERS G-1644  
ARCHITECT / ENGINEER OF RECORD SIGNATURE

### GENERAL NOTES

NOTE: CALIFORNIA ELEVATOR UNIT ENFORCES CGR TITLE 8 AND USES THE 2004 ASME A17.1 BY ADOPTION

**PARTIAL LIST OF APPLICABLE STANDARDS:**

NFPA 13	STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS (CA AMENDED)	2016 EDITION
NFPA 14	STANDARD FOR THE INSTALLATION OF STANDPIPE AND HOSE SYSTEMS (CA AMENDED)	2016 EDITION
NFPA 17	STANDARD FOR DRY CHEMICAL EXTINGUISHING SYSTEMS	2017 EDITION
NFPA 17A	STANDARD FOR WET CHEMICAL EXTINGUISHING SYSTEMS	2017 EDITION
NFPA 20	STANDARD FOR THE INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION	2016 EDITION
NFPA 22	STANDARD FOR WATER TANKS FOR PRIVATE FIRE PROTECTION	2013 EDITION
NFPA 24	STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES (CA AMENDED)	2016 EDITION
NFPA 72	NATIONAL FIRE ALARM AND SIGNALING CODE (CA AMENDED)	2016 EDITION
NFPA 80	STANDARD FOR FIRE DOORS AND OTHER OPENINGS PROTECTIVES	2016 EDITION
NFPA 2001	STANDARD ON CLEAN AGENT FIRE EXTINGUISHING SYSTEMS (CA AMENDED)	2015 EDITION
UL 300	STANDARD FOR FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS FOR PROTECTION OF COMMERCIAL COOKING EQUIPMENT	2005 EDITION (R2010)
UL 464	AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, INCLUDING ACCESSORIES	2003 EDITION
UL 521	STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	1998 EDITION
UL 1971	STANDARD FOR SIGNALING DEVICES FOR THE HEARING IMPAIRED	2002 EDITION (R2010)
ICC 300	STANDARD FOR BLEACHERS, FOLDING AND TELESCOPIC SEATING, AND GRANDSTANDS	2011 EDITION

FOR A COMPLETE LIST OF APPLICABLE NFPA STANDARDS REFER TO 2019 CBC (SPM) CHAPTER 35 AND CALIFORNIA FIRE CODE CHAPTER 80.

SEE CALIFORNIA BUILDING CODE CHAPTER 35 FOR STATE OF CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS.

**5. TESTING AND INSPECTION:**  
A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.  
A DSA CERTIFIED PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY DSA SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR. THIS PROJECT SHALL REQUIRE ALL ITEMS PER DRAWING LIST OF REQUIRED STRUCTURAL TESTS & SPECIAL INSPECTIONS, INSPECTOR OF RECORD, CLASS 2.  
WORK EXEMPT FROM SPECIAL INSPECTION AND STRUCTURAL TESTING, THE PROJECT INSPECTOR SHALL VERIFY ALL CONSTRUCTION COMPLIES WITH THE APPROVED CONSTRUCTION DOCUMENTS (SEE TESTING AND INSPECTION EXEMPTION KEY).  
A. INSPECTOR OF RECORD, CLASS 2

**6. CHANGES TO APPROVED DRAWINGS:**  
CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR CONSTRUCTION CHANGE DOCUMENT APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-339, PART 1, TITLE 24, CCR.

**7. DEFERRED APPROVALS:**  
FABRICATION AND INSTALLATION OF THE DEFERRED APPROVAL ITEMS SHALL NOT BE STARTED UNTIL DETAILED CONTRACTOR'S PLANS AND SPECIFICATIONS AND ENGINEERING CALCULATIONS FOR THE ACTUAL SYSTEMS HAVE BEEN ACCEPTED AND ARE APPROVED BY THE DIVISION OF THE STATE ARCHITECT (D.S.A.). THE PLANS AND SPECIFICATIONS SHALL BE STAMPED AND SIGNED BY THE SUPPLIER'S ENGINEER LICENSED IN THE STATE OF CALIFORNIA AND THE ARCHITECT OF RECORD PRIOR TO SUBMITTAL TO D.S.A.  
A. NONE

**8. D.S.A. CLOSE-OUT CERTIFICATION:**  
NONE THIS PROJECT.

**9. CONSTRUCTION FIRE SAFETY:**  
CONTRACTOR IS RESPONSIBLE FOR FIRE SAFETY DURING DEMOLITION AND CONSTRUCTION AND SHALL COMPLY WITH CFC 2019 CHAPTER 33.

**10. LOCAL ORDINANCES:**  
GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.

**11. BUILDING DATA:**  
(2) SHADE STRUCTURES: 3 & 4

OCCUPANCY	A-3	TYPE II-B
FIRE SPRINKLER SYSTEM	NONE	
NUMBER OF STORIES	1	
BUILDING AREA	1,404 SF	
TOTAL AREA	2,200 SF (TABLE 506.2)	
ALLOWABLE AREA	9,500 SF (TABLE 506.2)	
AREA INCREASE	NONE	1,404 ≤ 9,500 = OK

(2) SHADE STRUCTURES: 1 & 2

OCCUPANCY	A-3	TYPE II-B
FIRE SPRINKLER SYSTEM	NONE	
NUMBER OF STORIES	1	
BUILDING AREA	1,008 SF	
TOTAL AREA	2,206 SF (TABLE 506.2)	
ALLOWABLE AREA	9,500 SF (TABLE 506.2)	
AREA INCREASE	NONE	1,008 ≤ 9,500 = OK

### PROJECT BIDDING

**BASE BID:**  
BASE BID SHALL INCLUDE ALL WORK SHOWN ON CONTRACT DOCUMENTS AS REQUIRED FOR RENOVATION OF THE EXISTING TENNIS COURTS. THE BASE BID INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING ITEMS:  
1. REMOVE EXISTING AC PAVING TENNIS COURTS, FENCINGS AND MISC SITE IMPROVEMENTS.  
2. PROVIDE NEW CONCRETE POST TENSION TENNIS COURTS.  
3. PROVIDE HARDSCAPE IMPROVEMENTS  
4. PROVIDE NEW FENCINGS AND GATE  
5. INSTALL NEW MUSCO TENNIS COURT LIGHTING  
6. INSTALL NEW CANTILEVERED SHADE STRUCTURES  
7. PROVIDE ELECTRICAL SERVICE TO LIGHTS AND WATER CHILLERS

**BASE BID EXCLUSIONS:**  
1. FURNISH NEW MUSCO TENNIS COURT LIGHTING. THE MUSCO LIGHTING AND STANDARDS WILL BE FURNISHED BY MUSCO.  
2. FURNISH NEW CANTILEVERED SHADE STRUCTURES. THE CANTILEVERED SHADE STRUCTURES WILL BE PROVIDED BY PARK PLANET.

### SHEET INDEX

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AS3	SITE SURVEY AND DEMOLITION PLAN
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LX.1.1	PLANTING IMAGES
LX.2.1	PLANTING DETAILS
LX.3.1	IRRIGATION DETAILS
SHEET COUNT: 45	

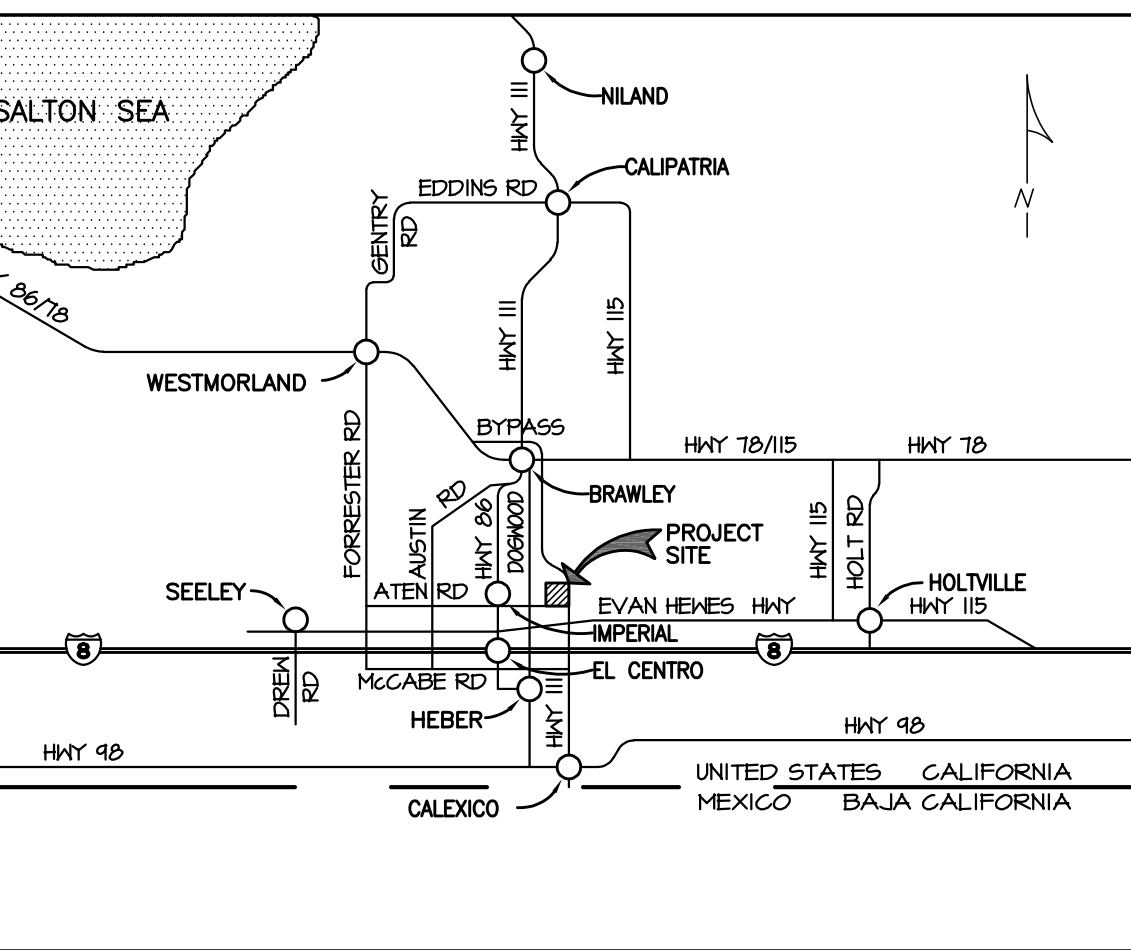
### CONSULTANTS

**STRUCTURAL**  
BIVE  
DAVE K. ADAMS  
9445 BALBOA AVENUE, SUITE 270  
SAN DIEGO, CA 92123  
(619) 294-5550

**ELECTRICAL**  
KRUSE AND ASSOCIATES  
KEITH KRUSE  
12245 NORLW TRADE DRIVE  
SUITE E  
SAN DIEGO, CA 92128  
(858) 676-9116

**GEOTECHNICAL**  
LANDMARK  
JEFFREY Q. LYON  
700 NORTH 4TH STREET  
EL CENTRO, CA 92243  
(760) 370-3000

### VICINITY MAP



### GENERAL NOTES

**1. EXAMINATION OF SITE AND CONTRACT DOCUMENTS:**  
EACH BIDDER SHALL VISIT THE SITE OF THE PROPOSED WORK AND FULLY ACQUANT HIMSELF WITH THE CONDITIONS RELATING TO THE CONSTRUCTION AND LABOR SO THAT HE MAY FULLY UNDERSTAND THE FACILITIES, DIFFICULTIES AND RESTRICTIONS ATTENDING THE EXECUTION OF THE WORK UNDER THE CONTRACT. BIDDERS SHALL THOROUGHLY EXAMINE AND BE FAMILIAR WITH THE DRAWINGS AND PROJECT MANUAL. THE FAILURE OR OMISSION OF ANY BIDDERS TO RECEIVE OR EXAMINE ANY CONTRACT, FORM, INSTRUMENT, ADDENDUM, OR OTHER DOCUMENT OR TO VISIT THE SITE AND ACQUANT HIMSELF WITH CONDITIONS THERE EXISTING SHALL IN NO-WISE RELIEVE ANY BIDDER FROM OBLIGATIONS WITH RESPECT TO HIS BID OR TO THE CONTRACT. THE SUBMISSION OF A BID SHALL BE TAKEN AS PRIMA FACIE EVIDENCE OF COMPLIANCE WITH THIS SECTION. THE ARCHITECT SHALL BE NOTIFIED PRIOR TO BID OF ANY UNUSUAL CONDITIONS OR DISCREPANCIES IN THE CONTRACT DOCUMENTS OR INTENT OF WORK TO BE ACCOMPLISHED, WHEREIN A CLARIFICATION OR ADDENDUM MAY BE ISSUED.

**2. PROJECT SCOPE:**  
THE SCOPE OF WORK FOR THIS PROJECT INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING ITEMS:  
1. REMOVE EXISTING AC PAVING TENNIS COURTS, FENCINGS AND MISC SITE IMPROVEMENTS.  
2. PROVIDE NEW CONCRETE POST TENSION TENNIS COURTS.  
3. PROVIDE HARDSCAPE IMPROVEMENTS  
4. PROVIDE NEW FENCINGS AND GATE  
5. MUSCO TENNIS COURT LIGHTING  
6. CANTILEVERED SHADE STRUCTURES  
7. PROVIDE ELECTRICAL SERVICE TO LIGHTS AND WATER CHILLERS

**3. GEOLOGICAL AND SOILS REPORT:**  
A GEOLOGICAL INVESTIGATION REPORT HAS BEEN ACCOMPLISHED FOR THE SITE AND IS ON FILE AT COUNTY OF IMPERIAL, ARCHITECTS OFFICE, AND SOILS ENGINEERS OFFICE. SOILS REPORT NO. LE22111

SOILS ENGINEER: LANDMARK, INC.  
780 NORTH 4TH STREET  
EL CENTRO, CALIFORNIA 92243  
(760) 370-3000

ALL GENERAL CONTRACTORS AND EARTH WORK SUBCONTRACTORS SHALL REVIEW THE SOILS REPORT PRIOR TO BID SUBMITTAL. COPIES OF REPORT ARE AVAILABLE UPON REQUEST AND NOT LESS THAN 7 DAYS PRIOR TO BID DATE.

**4. CODES AND STANDARDS:**  
APPLICABLE CODES:  
ALL WORK SHALL CONFORM TO 2019 TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).  
2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24, CCR  
2019 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR  
(2019 INTERNATIONAL BUILDING CODE, VOL. 1 & 2, AND 2019 CALIFORNIA AMENDMENTS)  
2019 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR  
(2017 NATIONAL ELECTRICAL CODE AND 2019 CALIFORNIA AMENDMENTS)  
2019 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR  
(2019 IAPMO UNIFORM MECHANICAL CODE AND 2019 CALIFORNIA AMENDMENTS)  
2019 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR  
(2019 IAPMO UNIFORM PLUMBING CODE AND 2019 CALIFORNIA AMENDMENTS)  
2019 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 CCR  
2019 CALIFORNIA FIRE CODE (CFC), PART 7, TITLE 24 CCR  
(2019 INTERNATIONAL FIRE CODE AND 2019 CALIFORNIA AMENDMENTS)  
2019 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR  
(2019 INTERNATIONAL EXISTING BUILDING CODE AND 2019 CALIFORNIA AMENDMENTS)  
2019 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR  
2019 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR  
TITLE 14 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS  
2016 ASME A17.5SA B44-13 SAFETY CODE FOR ELEVATORS AND ESCALATORS (PER 2019 CBC, PART 2 G1 39)

**APPROVALS**

**Sanders, INC.**  
Architecture/Engineering  
102 INDUSTRY WAY, SUITE A  
EL CENTRO, CA 92243  
760 353 5440 FAX 760 353 5442

Project Title  
**IMPERIAL VALLEY COLLEGE  
TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

Sheet Title  
**TITLE SHEET - GENERAL NOTES, SHEET INDEX**

Document Date	06-29-22	Project Number	22-081V
Date Last Revised		Sheet Number	T

*(Professional Engineer Seal for Jimmie Sanders, State of California, License No. 7644)*

ACCESSIBLE PATH OF TRAVEL AS INDICATED ON PLAN IS A BARRIER-FREE ACCESS ROUTE WITHOUT ABRUPT LEVEL CHANGES EXCEEDING 1/2" IF BEVELED AT 1:2 MAXIMUM SLOPE OR VERTICAL LEVEL CHANGES NOT EXCEEDING 1/4" MAXIMUM AND AT LEAST 48" IN WIDTH. SURFACE IS STABLE, FIRM, AND SLIP RESISTANT. CROSS-SLOPE SHALL NOT BE STEEPER THAN 1:48 AND SLOPE IN DIRECTION OF TRAVEL SHALL NOT BE STEEPER THAN 1:20. ACCESSIBLE PATH OF TRAVEL SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM AND FREE OF OBJECTS PROTRUDING MORE THAN 4" FROM THE WALL, ABOVE 27" AND LESS THAN 80" ABOVE THE FLOOR. ARCHITECT SHALL VERIFY THAT THERE ARE NO BARRIERS IN THE PATH OF TRAVEL.

- LEGEND:**
- A EXISTING ACCESSIBLE PATH OF TRAVEL - DSA# 04-110557
  - B EXISTING ACCESSIBLE PATH OF TRAVEL - DSA# 04-111262
  - C EXISTING ACCESSIBLE PATH OF TRAVEL - DSA# 04-111843
  - PROPOSED ACCESSIBLE PATH OF TRAVEL

**APPROVALS**

**BUILDING IDENTIFICATION:**

NUMBER	DESCRIPTION	CGST	OCCUPANCY GROUP	FIRE	DSA APPL. NO.	CLOSED DSA COMPLIANT
100	ADMINISTRATION	III-B	B	N	A-2614	Y
100	ADMINISTRATION	III-B	B	N	A-2614, 35564	Y, Y
100	ADMINISTRATION	III-B	B	N	A-2614, 04-11820	Y, OPEN
300	FINE ARTS	III-B	A-3, B	N	A-2614, 04-11820	Y, OPEN
400	ASSEMBLY CENTER / CLASSROOMS	III-B	B	N	A-2614	Y
500A	ENGLISH / MATHEMATICS	V	B	N	A-20204, 2614	Y, Y
500B	DEMOGRAPHICS / PARKING	V	B	N	A-20204, 2614	Y, Y
600	COLLEGE CENTER	III-B	A-2, B	N	A-2614, 21291, 2614	Y, Y, Y
100	GYMNASIUM	III-B	A-2, B	Y	A-2614, 26153, 21291, 2614	Y, Y, Y, Y
800	BUSINESS	III-B	A-3, B	N	A-2614, 21291, 04-11820	Y, Y, OPEN
100	METER BUSINESS BUILDING	V-B	B	N	A-3542, 52345	Y, Y
1000	STUDENT AFFAIRS OFFICE	V-B	B	N	A-3542	Y
1100	AUTO TECHNOLOGY	II-B	S-1	N	A-2614	Y
1200	HELDING	II-B	H-3	N	A-35852	Y
1300	AUTO TECHNOLOGY / HUMANITIES	V-B	B	N	A-35852	Y
1400	TOOL STORAGE	V-B	B	N	UNKNOWN	Y
1500	LIBRARY MEDIA CENTER	V-A	A-3, B	Y	A-36444, 100260, 110557	Y, Y, Y
1600	TECHNOLOGY CENTER	V-B	B	N	A-35750	Y
1700	HORSEFORCE DEVELOPMENT CENTER	V-B	B	N	UNKNOWN	Y
1800	MAINTENANCE / WAREHOUSE	V-B	B	N	A-2614, A-30401	Y, Y
1900	BOOKSTORE	V-B	B	N	UNKNOWN	Y
2000	NOT USED	-	-	-	NA	-
2100	SHADE STRUCTURE / DISABLED STUDENT	V-B	A-3, B	N	A-11279	Y
2200	PRESCHOOL	III-B	B	N	A-54425	Y
2300	INFANT TODDLER CENTER	V-B	E	N	A-100748	Y
2400	HUMAN RESOURCES	V-B	B	N	NONE	Y
2500	MATH LAB CENTER	V-B	B	N	UNKNOWN	Y
2600	READING / WRITING / LANGUAGE LABORATORY	V-B	B	N	A-109704	Y
2700	SCIENCE	III-A	A-3, B	Y	A-108533	Y
2800	ART GALLERY	V-B	A-3	N	A-10775	Y
3100	CAREER TECHNICAL	II-B	B, H-3	Y	A-112064	Y
3200	CAREER TECHNICAL	II-B	B	Y	A-112064	Y
100-1000	RELOCATABLE CLASSROOMS	V-B	B	N	A-110913	Y
A	INFORMATION BOOTH "A"	V	B	N	NA	-
B	INFORMATION BOOTH "B"	V	B	N	NA	-
C	SHOWERS / TOILETS	V-B	B	N	UNKNOWN	Y
D	POOLS AND GRANDSTANDS	V-B	A-5	N	A-36433	Y
E	CARPENTER SHOP	V-B	B	N	UNKNOWN	Y
F	NOT USED	-	-	-	NA	-
G	SHADE STRUCTURE	II-B	B	N	A-110551	Y
H	SHADE STRUCTURE	II-B	B	N	A-110551	Y
J	SHADE STRUCTURE	II-B	B	N	A-110551	Y
K	NOT USED	-	-	-	NA	-
L	SHADE STRUCTURE	II-B	B	N	A-110551	Y
M	SHADE STRUCTURE	II-B	B	N	A-110551	Y
N	SHADE STRUCTURE	II-B	B	N	A-110551	Y
P	SHADE STRUCTURE	II-B	A-3	N	A-11045	Y
Q	SHADE STRUCTURE	II-B	A-3	N	A-11045	Y
R	SHADE STRUCTURE	II-B	A-3	N	A-54425	Y
S	SHADE STRUCTURE	II-B	A-3	N	A-10106	Y
T	SHADE STRUCTURE	-	-	-	NA	-
U	SHADE STRUCTURE	V-B	A-3	N	04-11841	Y
V	SHADE STRUCTURE	II-B	A-3	N	-	-
W	SHADE STRUCTURE	II-B	A-3	N	-	-
X	SHADE STRUCTURE	II-B	A-3	N	-	-
Y	SHADE STRUCTURE	II-B	A-3	N	-	-

**GATE SCHEDULE:**

NUMBER	SIZE	GATE	MATERIAL	DETAIL	REMARKS
G1	3'-0" x 8'-0"	GHANLINK	5/8X4	(N) MAINTENANCE GATE	(A)
G2	14'-0" x 8'-0"	GHANLINK	5/8X4	(N) MAINTENANCE ROLLING GATE	(A)
G3	3'-0" x 8'-0"	GHANLINK	5/8X4	(N) ACCESSIBLE PEDESTRIAN GATE w/ WITH PANG HARDWARE	(A)
G4	3'-0" x 8'-0"	GHANLINK	5/8X4	(N) ACCESSIBLE PEDESTRIAN GATE w/ WITH PANG HARDWARE	(A)
G5	3'-0" x 8'-0"	GHANLINK	5/8X4	(N) ACCESSIBLE PEDESTRIAN GATE w/ WITH PANG HARDWARE	(A)
G6	3'-0" x 8'-0"	GHANLINK	5/8X4	(N) ACCESSIBLE PEDESTRIAN GATE w/ WITH PANG HARDWARE	(A)
G7	14'-0" x 8'-0"	GHANLINK	5/8X4	(N) MAINTENANCE ROLLING GATE	(A)
G8	3'-0" x 8'-0"	GHANLINK	5/8X4	(N) ACCESSIBLE PEDESTRIAN GATE	(A)
G9	3'-0" x 8'-0"	GHANLINK	5/8X4	(N) ACCESSIBLE PEDESTRIAN GATE	(A)
G10	14'-0" x 8'-0"	GHANLINK	5/8X4	(N) MAINTENANCE ROLLING GATE	(A)
G11	3'-0" x 8'-0"	GHANLINK	5/8X4	(N) ACCESSIBLE PEDESTRIAN GATE w/ WITH PANG HARDWARE	(A)
G12	3'-0" x 8'-0"	GHANLINK	5/8X4	(N) ACCESSIBLE PEDESTRIAN GATE w/ WITH PANG HARDWARE	(A)

NOTE: ALL GATES ARE NEW UNLESS NOTED OTHERWISE  
 (A) MAINTENANCE GATE SHALL REMAIN LOCKED DURING SCHOOL HOURS AND AFTER HOURS  
 SPECIAL FUNCTIONS AND ARE TO BE OPERATED ONLY BY MAINTENANCE STAFF

**KEYNOTES:**

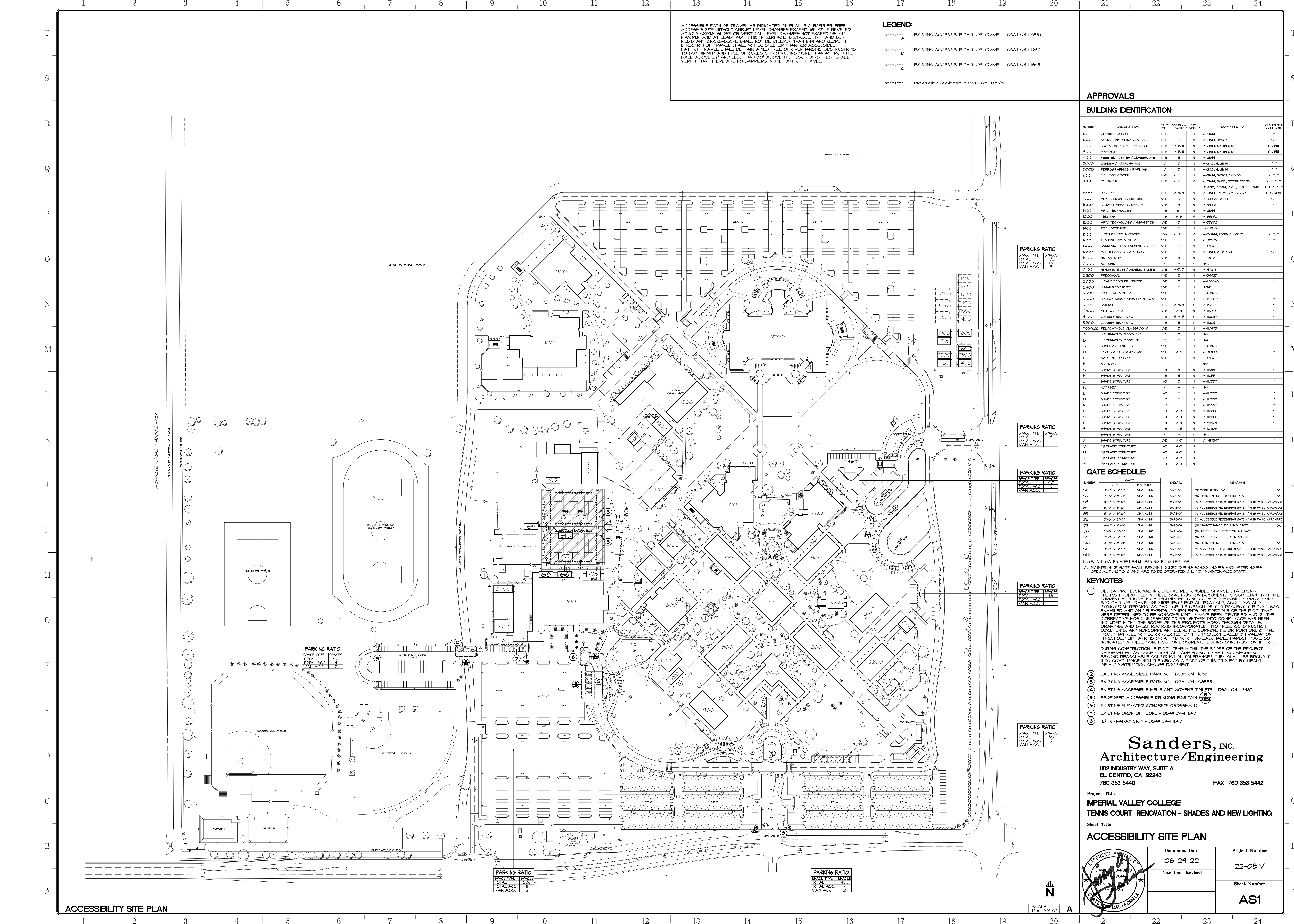
- 1) DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT: THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS, AS PART OF THE DESIGN OF THIS PROJECT, THE P.O.T. HAS EXAMINED ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WERE DETERMINED TO BE NON-COMPLIANT. ITEMS THAT WERE 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 NON-COMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. SHALL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP AS SO INDICATED IN THESE CONSTRUCTION DOCUMENTS, DURING CONSTRUCTION, IF P.O.T. DURING CONSTRUCTION, IF P.O.T. ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CODE COMPLIANT ARE FOUND TO BE NON-COMPLIANT 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.
- 2) EXISTING ACCESSIBLE PARKING - DSA# 04-110557
- 3) EXISTING ACCESSIBLE PARKING - DSA# 04-108533
- 4) EXISTING ACCESSIBLE MEN'S AND WOMEN'S TOILETS - DSA# 04-111841
- 5) PROPOSED ACCESSIBLE DRINKING FOUNTAIN (A) (B) (C) (D) (E) (F) (G) (H) (I) (J) (K) (L) (M) (N) (O) (P) (Q) (R) (S) (T) (U) (V) (W) (X) (Y) (Z)
- 6) EXISTING ELEVATED CONCRETE CROSSWALK
- 7) EXISTING DROP OFF ZONE - DSA# 04-111843
- 8) EXISTING SIGN - DSA# 04-111843

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Project Title  
**IMPERIAL VALLEY COLLEGE  
 TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

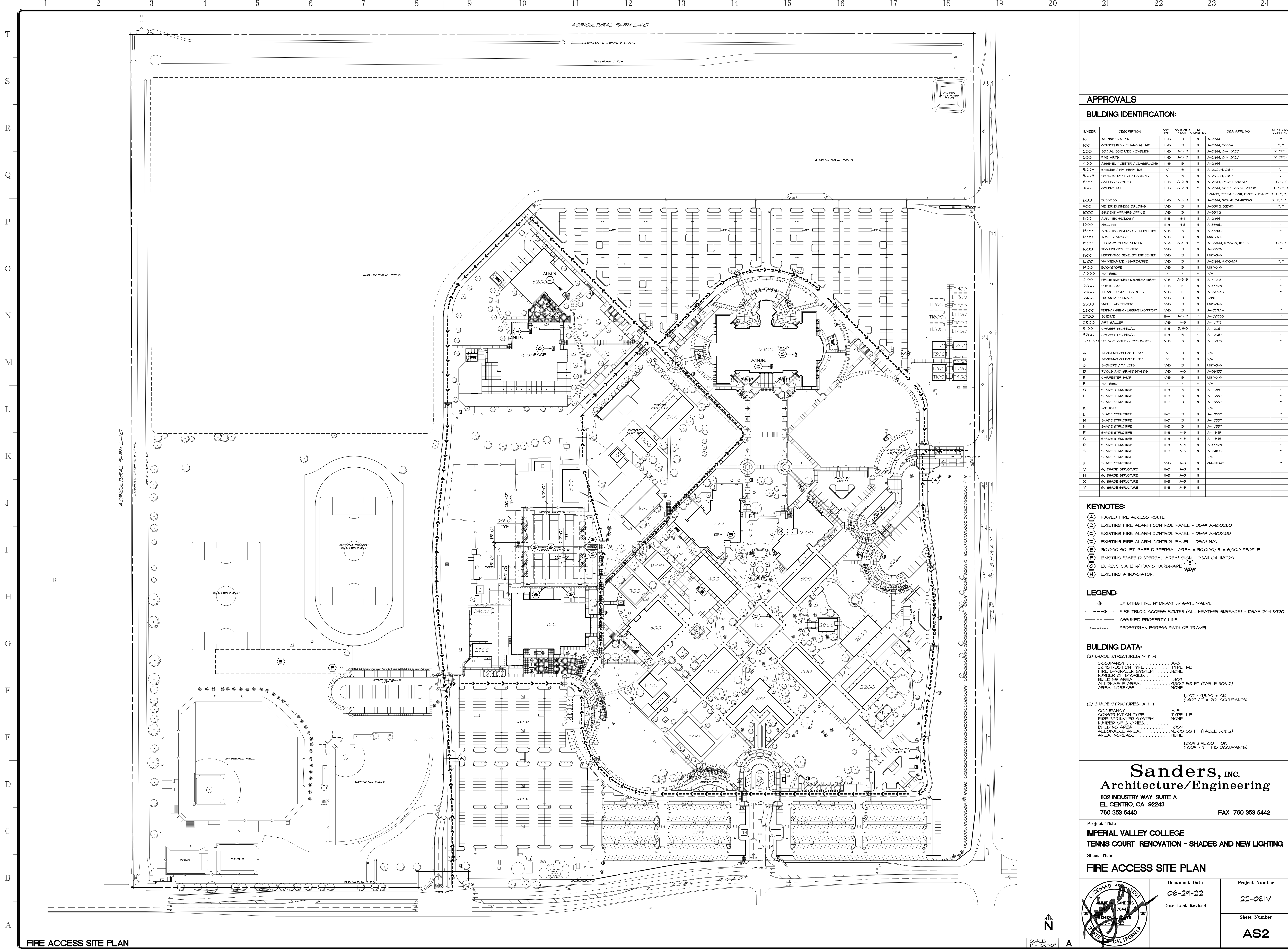
Sheet Title  
**ACCESSIBILITY SITE PLAN**

Document Date: 06-29-22  
 Project Number: 22-081V  
 Date Last Revised: \_\_\_\_\_  
 Sheet Number: AS1



ACCESSIBILITY SITE PLAN

SCALE: 1" = 100'-0"



**APPROVALS**

**BUILDING IDENTIFICATION:**

NUMBER	DESCRIPTION	CONSTR TYPE	OCCUPANCY GROUP	FIRE SPRINKLERS	DSA APPL. NO.	CLOSED DSA COMPLIANT
10	ADMINISTRATION	III-B	B	N	A-2614	Y
100	CONSELING / FINANCIAL AID	III-B	B	N	A-2614, 35564	Y, Y
200	SOCIAL SCIENCES / ENGLISH	III-B	A-3, B	N	A-2614, 04-18120	Y, OPEN
300	FINE ARTS	III-B	A-3, B	N	A-2614, 04-18120	Y, OPEN
400	ASSEMBLY CENTER / CLASSROOMS	III-B	B	N	A-2614	Y
500A	ENGLISH / MATHEMATICS	V	B	N	A-20204, 2614	Y, Y
500B	DEMOGRAPHICS / PARKING	V	B	N	A-20204, 2614	Y, Y
600	COLLEGE CENTER	III-B	A-2, B	N	A-2614, 21291, 55500	Y, Y, Y
700	GYMNASIUM	III-B	A-2, B	Y	A-2614, 26153, 21291, 28378	Y, Y, Y, Y
800	BUSINESS	III-B	A-3, B	N	A-2614, 21291, 04-18120	Y, Y, OPEN
1000	METER BUSINESS BUILDING	V-B	B	N	A-35412, 52343	Y, Y
10000	STUDENT AFFAIRS OFFICE	V-B	B	N	A-35412	Y
1100	AUTO TECHNOLOGY	II-B	S-I	N	A-2614	Y
1200	HELDING	II-B	H-3	N	A-35352	Y
1300	AUTO TECHNOLOGY / HUMANITIES	V-B	B	N	A-35352	Y
1400	TOOL STORAGE	V-B	B	N	UNKNOWN	Y
1500	LIBRARY MEDIA CENTER	V-A	A-3, B	Y	A-36644, 100260, 10557	Y, Y, Y
1600	TECHNOLOGY CENTER	V-B	B	N	A-3575	Y
1700	HORSEFORCE DEVELOPMENT CENTER	V-B	B	N	UNKNOWN	Y
1800	MAINTENANCE / WAREHOUSE	V-B	B	N	A-2614, A-30401	Y, Y
1900	BOOKSTORE	V-B	B	N	UNKNOWN	Y
2000	NOT USED	-	-	-	NA	
2100	HEALTH SERVICES / DISABLED STUDENT	V-B	A-3, B	N	A-11279	Y
2200	PRESCHOOL	III-B	E	N	A-54425	Y
2300	INFANT TODDLER CENTER	V-B	E	N	A-100746	Y
2400	HUMAN RESOURCES	V-B	B	N	NONE	
2500	MATH LAB CENTER	V-B	B	N	UNKNOWN	Y
2600	READING / WRITING / LANGUAGE LABORATORY	V-B	B	N	A-103704	Y
2700	SCIENCE	II-A	A-3, B	Y	A-10553	Y
2800	ART GALLERY	V-B	A-3	N	A-10775	Y
3100	CAREER TECHNICAL	II-B	B, H-3	Y	A-112064	Y
3200	CAREER TECHNICAL	II-B	B	Y	A-112064	Y
100-1000	RELOCATABLE CLASSROOMS	V-B	B	N	A-110473	Y
A	INFORMATION BOOTH "A"	V	B	N	NA	
B	INFORMATION BOOTH "B"	V	B	N	NA	
C	SHOWERS / TOILETS	V-B	B	N	UNKNOWN	
D	POOLS AND GRANDSTANDS	V-B	A-5	N	A-36433	Y
E	CARPENTER SHOP	V-B	B	N	UNKNOWN	
F	NOT USED	-	-	-	NA	
G	SHADE STRUCTURE	II-B	B	N	A-10251	Y
H	SHADE STRUCTURE	II-B	B	N	A-10251	Y
I	SHADE STRUCTURE	II-B	B	N	A-10251	Y
J	SHADE STRUCTURE	II-B	B	N	A-10251	Y
K	SHADE STRUCTURE	II-B	B	N	A-10251	Y
L	SHADE STRUCTURE	II-B	B	N	A-10251	Y
M	SHADE STRUCTURE	II-B	B	N	A-10251	Y
N	SHADE STRUCTURE	II-B	B	N	A-10251	Y
O	SHADE STRUCTURE	II-B	B	N	A-10251	Y
P	SHADE STRUCTURE	II-B	B	N	A-10251	Y
Q	SHADE STRUCTURE	II-B	B	N	A-10251	Y
R	SHADE STRUCTURE	II-B	B	N	A-10251	Y
S	SHADE STRUCTURE	II-B	B	N	A-10251	Y
T	SHADE STRUCTURE	II-B	B	N	A-10251	Y
U	SHADE STRUCTURE	II-B	B	N	A-10251	Y
V	SHADE STRUCTURE	II-B	B	N	A-10251	Y
W	SHADE STRUCTURE	II-B	B	N	A-10251	Y
X	SHADE STRUCTURE	II-B	B	N	A-10251	Y
Y	SHADE STRUCTURE	II-B	B	N	A-10251	Y

**KEYNOTES:**

- (A) PAVED FIRE ACCESS ROUTE
- (B) EXISTING FIRE ALARM CONTROL PANEL - DSA# A-100260
- (C) EXISTING FIRE ALARM CONTROL PANEL - DSA# A-108533
- (D) EXISTING FIRE ALARM CONTROL PANEL - DSA# N/A
- (E) 30,000 SQ. FT. SAFE DISPERSAL AREA = 30,000 / 5 = 6,000 PEOPLE
- (F) EXISTING "SAFE DISPERSAL AREA" SIGN - DSA# 04-18120
- (G) EGRESS GATE w/ PANIC HARDWARE
- (H) EXISTING ANNUNCIATOR

**LEGEND:**

- EXISTING FIRE HYDRANT w/ GATE VALVE
- FIRE TRUCK ACCESS ROUTES (ALL HEAVY SURFACE) - DSA# 04-18120
- ASSUMED PROPERTY LINE
- PEDESTRIAN EGRESS PATH OF TRAVEL

**BUILDING DATA:**

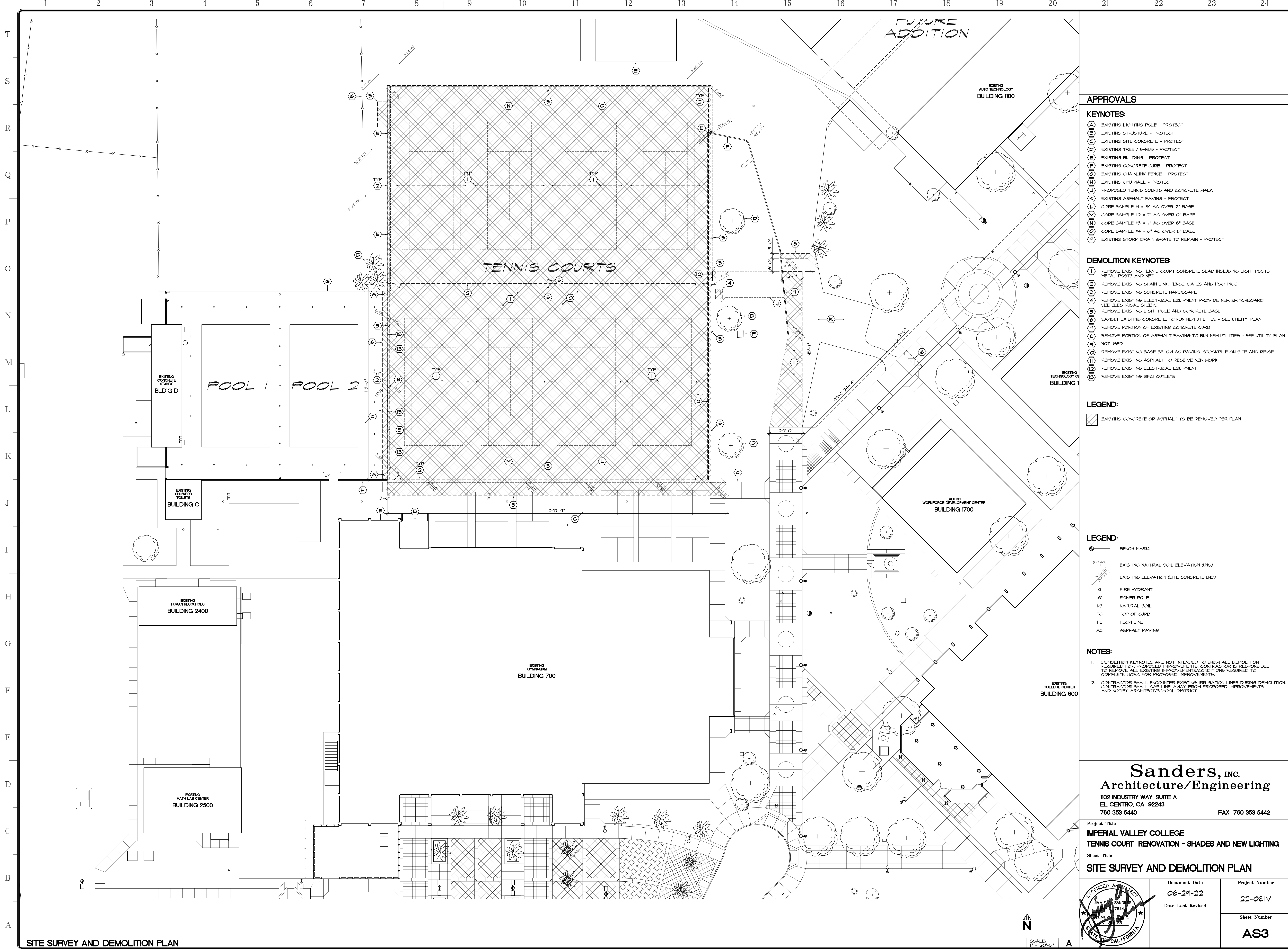
- (2) SHADE STRUCTURES: V 4 H
  - OCCUPANCY: A-3
  - CONSTRUCTION TYPE: TYPE II-B
  - FIRE SPRINKLER SYSTEM: NONE
  - NUMBER OF STORIES: 1
  - BUILDING AREA: 1,401
  - ALLOWABLE AREA: 4,500 SQ FT (TABLE 506.2)
  - AREA INCREASE: NONE
- (2) SHADE STRUCTURES: X 4 Y
  - OCCUPANCY: A-3
  - CONSTRUCTION TYPE: TYPE II-B
  - FIRE SPRINKLER SYSTEM: NONE
  - NUMBER OF STORIES: 1
  - BUILDING AREA: 1,001
  - ALLOWABLE AREA: 4,500 SQ FT (TABLE 506.2)
  - AREA INCREASE: NONE

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Project Title  
**IMPERIAL VALLEY COLLEGE  
 TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

Sheet Title  
**FIRE ACCESS SITE PLAN**

	Document Date <b>06-29-22</b>	Project Number <b>22-081V</b>
	Date Last Revised	Sheet Number <b>AS2</b>



**APPROVALS**

**KEYNOTES:**

- (A) EXISTING LIGHTING POLE - PROTECT
- (B) EXISTING STRUCTURE - PROTECT
- (C) EXISTING SITE CONCRETE - PROTECT
- (D) EXISTING TREE / SHRUB - PROTECT
- (E) EXISTING BUILDING - PROTECT
- (F) EXISTING CONCRETE CURB - PROTECT
- (G) EXISTING CHAINLINK FENCE - PROTECT
- (H) EXISTING CMU WALL - PROTECT
- (J) PROPOSED TENNIS COURTS AND CONCRETE WALK
- (K) EXISTING ASPHALT PAVING - PROTECT
- (L) CORE SAMPLE #1 = 8" AC OVER 2" BASE
- (M) CORE SAMPLE #2 = 1" AC OVER 0" BASE
- (N) CORE SAMPLE #3 = 1" AC OVER 6" BASE
- (O) CORE SAMPLE #4 = 6" AC OVER 6" BASE
- (P) EXISTING STORM DRAIN GRATE TO REMAIN - PROTECT

**DEMOLITION KEYNOTES:**

- (1) REMOVE EXISTING TENNIS COURT CONCRETE SLAB INCLUDING LIGHT POSTS, METAL POSTS AND NET
- (2) REMOVE EXISTING CHAIN LINK FENCE, GATES AND FOOTINGS
- (3) REMOVE EXISTING CONCRETE HARDSCAPE
- (4) REMOVE EXISTING ELECTRICAL EQUIPMENT PROVIDE NEW SWITCHBOARD SEE ELECTRICAL SHEETS
- (5) REMOVE EXISTING LIGHT POLE AND CONCRETE BASE
- (6) SAWCUT EXISTING CONCRETE, TO RUN NEW UTILITIES - SEE UTILITY PLAN
- (7) REMOVE PORTION OF EXISTING CONCRETE CURB
- (8) REMOVE PORTION OF ASPHALT PAVING TO RUN NEW UTILITIES - SEE UTILITY PLAN
- (9) NOT USED
- (10) REMOVE EXISTING BASE BELOW AC PAVING, STOCKPILE ON SITE AND REUSE
- (11) REMOVE EXISTING ASPHALT TO RECEIVE NEW WORK
- (12) REMOVE EXISTING ELECTRICAL EQUIPMENT
- (13) REMOVE EXISTING GFCI OUTLETS

**LEGEND:**

- EXISTING CONCRETE OR ASPHALT TO BE REMOVED PER PLAN

**LEGEND:**

- BENCH MARK
- EXISTING NATURAL SOIL ELEVATION (NO)
- EXISTING ELEVATION (SITE CONCRETE UNO)
- FIRE HYDRANT
- POWER POLE
- NATURAL SOIL
- TOP OF CURB
- FLOW LINE
- ASPHALT PAVING

**NOTES:**

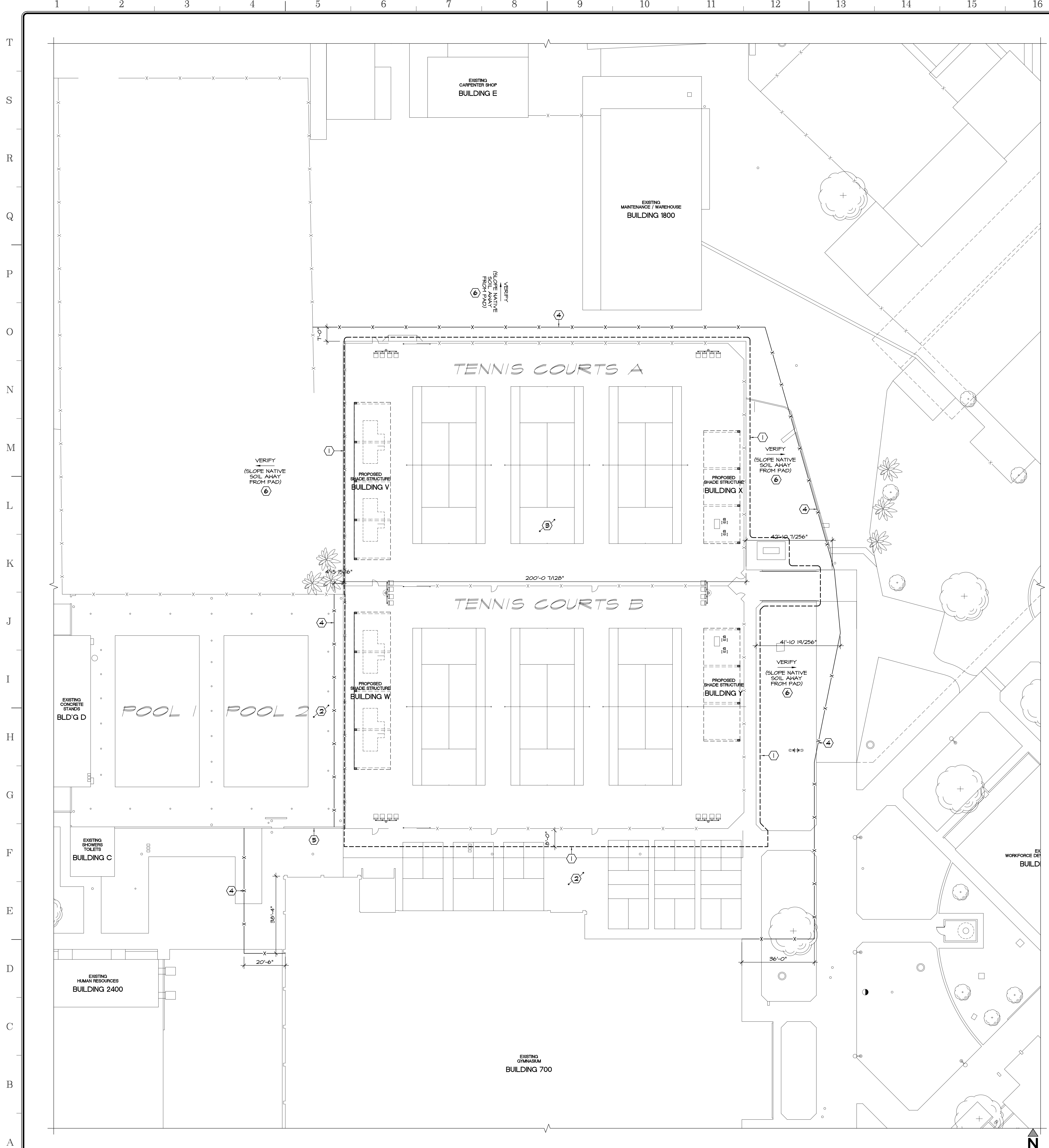
1. DEMOLITION KEYNOTES ARE NOT INTENDED TO SHOW ALL DEMOLITION REQUIRED FOR PROPOSED IMPROVEMENTS. CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EXISTING IMPROVEMENTS/CONDITIONS REQUIRED TO COMPLETE WORK FOR PROPOSED IMPROVEMENTS.
2. CONTRACTOR SHALL ENCOUNTER EXISTING IRRIGATION LINES DURING DEMOLITION. CONTRACTOR SHALL CAP LINE AWAY FROM PROPOSED IMPROVEMENTS, AND NOTIFY ARCHITECT/SCHOOL DISTRICT.

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Project Title  
**IMPERIAL VALLEY COLLEGE  
 TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

Sheet Title  
**SITE SURVEY AND DEMOLITION PLAN**

	Document Date 06-29-22	Project Number 22-081V
	Date Last Revised	Sheet Number <b>AS3</b>



**APPROVALS**

**KEYNOTES:**

- ① LIMITS OF ENGINEERED PAD (A 1800)
- ② EXISTING SITE CONCRETE / AC PAVING - PROTECT
- ③ PROPOSED TENNIS COURTS - SEE HARDSCAPE PLAN FOR DIMENSIONS FOR LAYOUT OF ENGINEERED PAD
- ④ TEMPORARY CONSTRUCTION FENCING - CHAINLINK FENCE
- ⑤ EXISTING MASONRY WALL - PROTECT
- ⑥ PLACE NATIVE SOIL EXCAVATED FOR GRANULAR PAD SLOPED TO (E) NATIVE SOIL

**LEGEND:**

- 10.76 BENCH MARK, BUILDING #700, GYMNASIUM FINISH FLOOR ELEVATION 10.76
- (88.40) EXISTING NATURAL SOIL ELEVATION (NO)
- EXISTING ELEVATION (SITE CONCRETE UNO)
- FIRE HYDRANT
- POWER POLE
- NATURAL SOIL
- TOP OF CURB
- FLOW LINE
- ASPHALT PAVING
- FINISH FLOOR
- TOP OF AC PAVING

**NOTES:**

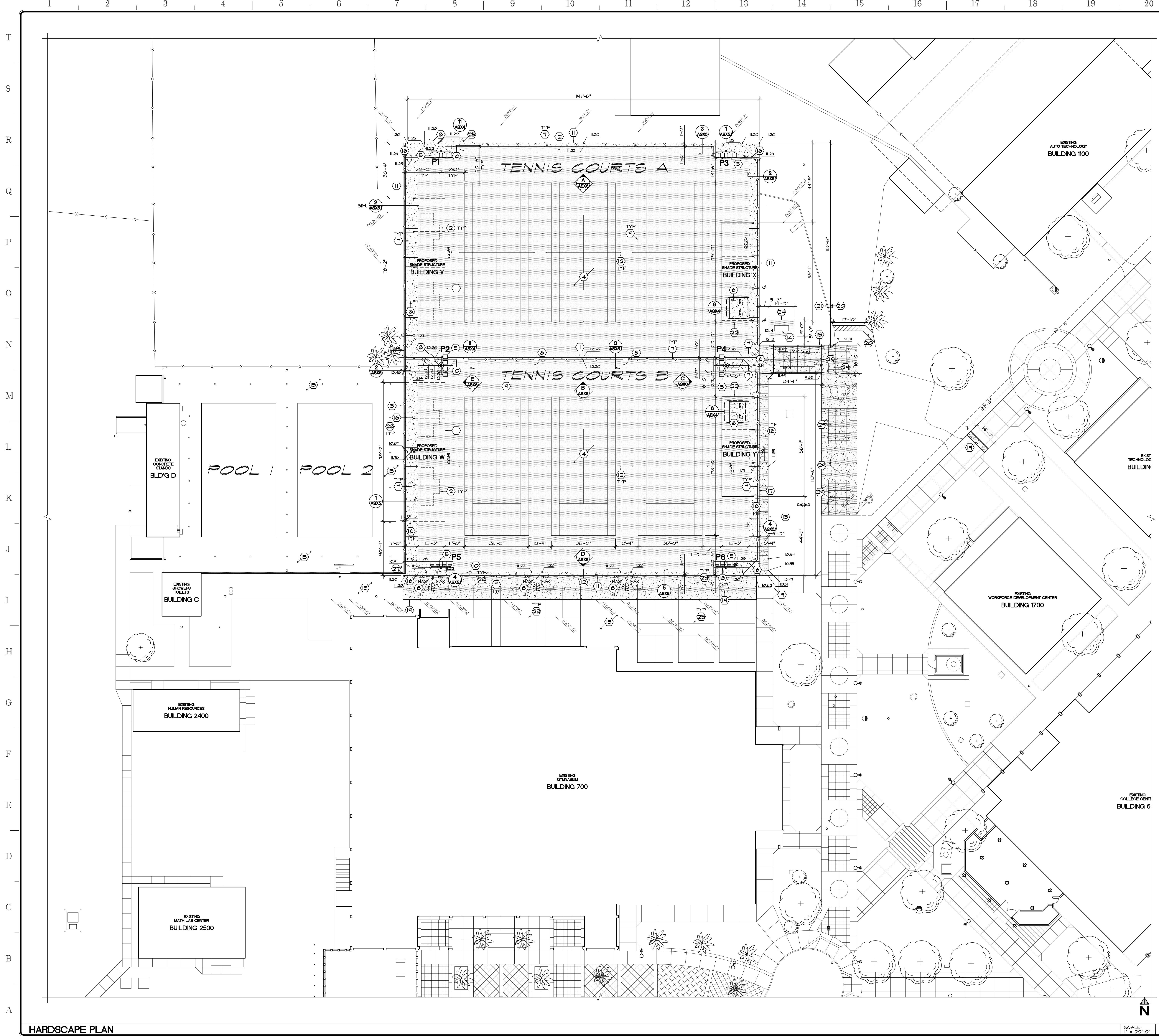
1. ALL DIMENSIONS ARE TO FACE OF CURB AND FACE OF STUD/CHU (NO).
2. ALL NATIVE SOIL EXCAVATED FOR CONSTRUCTION OF GRANULAR BUILDING PAD SHALL REMAIN ON SITE AND BE USED FOR INFILL AROUND GRANULAR PAD.
3. ROUGH GRADING ONLY, FOR FINISH GRADING SEE HARDSCAPE PLAN.

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Project Title  
**IMPERIAL VALLEY COLLEGE**  
**TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

Sheet Title  
**SITE GRADING PLAN**

	Document Date 06-29-22	Project Number 22-081V
	Date Last Revised	Sheet Number <b>AS4</b>



**APPROVALS**

**KEYNOTES:**

- 1 PROVIDE NEW 10'x10' SHADE STRUCTURE (A) FURNISHED BY PARKED PLANET
- 2 PROVIDE NEW 5 TIER MOVABLE BLEACHERS (A) FURNISHED BY OWNER
- 3 PROVIDE NEW 6" CONCRETE CURB (A) (ABX2)
- 4 PROVIDE NEW TENNIS COURTS POST TENSION SLAB - SEE STRUCTURAL DRAWINGS FURNISHED BY MUSCO
- 5 INSTALL NEW SPORTS FIELD LIGHTING - SEE MONOPOLE DRAWINGS FURNISHED BY MUSCO
- 6 PROVIDE NEW WATER STATION W/ CHILLER (7) (ABX4)
- 7 PROVIDE NEW CHAIN LINK FENCE AND SCREEN TYPICAL (A) (ABX4)
- 8 PROVIDE 3'-0" CHAIN LINK SWING GATE (A) (ABX4)
- 9 PROVIDE NEW TENNIS COURT STRIPPING (A) (ABX4)
- 10 PROVIDE 14'-0" CHAIN LINK ROLLING GATE (A) (ABX4)
- 11 PROVIDE NEW CONCRETE CURB (4) (ABX4)
- 12 PROVIDE NEW TENNIS POST AND FOOTING (A) (ABX2)
- 13 6" THICK CONCRETE WALK (A) (ABX2)
- 14 NEW PANEL 1" AND MUSCO CONTROL PANEL - SEE ELECTRICAL DRAWINGS
- 15 EXISTING CONCRETE HARDSCAPE - PROTECT
- 16 EXPANSION JOINT (A) (ABX2)
- 17 CONSTRUCTION JOINT (A) (ABX2)
- 18 CONTROL JOINT (A) (ABX2)
- 19 NEW TO EXISTING CONCRETE - MATCH EXISTING ELEVATION (A) (ABX2)
- 20 NEW ASPHALT PAVING TO EXISTING PAVING - MATCH EXISTING ELEVATION (A) (ABX2)
- 21 NEW CONCRETE CURB (A) (ABX2)
- 22 PROVIDE NEW 10'x56' SHADE STRUCTURE (A) FURNISHED BY PARKED PLANET
- 23 RESTRIPE EXISTING COURTS
- 24 PROVIDE NEW CONCRETE PAD FOR NEW SWITCHGEAR (A) (ABX2)
- 25 PROVIDE NEW HARDSCAPE
- 26 ACCESSIBLE RAMP (A) (ABX2)
- 27 ASISTIVE LISTENING SYSTEM SIGNAGE (A) (ABX2)
- 28 EXISTING FLOOR DRAIN TO REMAIN - PROTECT
- 29 6" THICK COLORED CONCRETE WALK (A) (ABX2)

**LEGEND:**

- 336.55 BENCH MARK - TOP OF FIRE HYDRANT ADJACENT TO NORTHEAST CORNER OF LIBRARY MEDIA CENTER BLD'G 1500
- 933.4 EXISTING ELEVATION FROM AERIAL SURVEY
- EXISTING ELEVATION (SITE CONCRETE U.N.O.)
- 36.80 PROPOSED ELEVATION (SITE CONCRETE U.N.O.)
- .02 DIRECTION OF SLOPE W/ SLOPE NOTED
- 0.22 RADIUS - NOTED IN DECIMAL FEET
- GB GRADE BREAK
- SD STORM DRAIN
- FH FIRE HYDRANT
- IRR IRRIGATION HYDRANT
- PF POWER POLE
- LS LIGHT STANDARDS - SEE ELECTRICAL DRAWINGS
- M MANHOLE
- SCD STORM DRAIN CATCH BASIN
- EL EXISTING CHAIN LINK FENCE
- NS NATURAL SOIL
- TC TOP OF CURB
- FL FLOOR LINE
- TB TOP OF BENCH
- TP TOP OF PLANTER
- PB POLE BASE
- D DRAIN

**NOTES:**

1. ALL DIMENSIONS ARE TO FACE OF CURB AND FACE OF STUD/CHU (U.N.O.).
2. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY DRAINAGE OF SITE. CONTRACTOR SHALL NOTIFY ARCHITECT PRIOR TO CONSTRUCTION. ANY SITE CONCRETE WHICH WILL NOT PROPERLY DRAIN.
3. ALL CONTROL JOINTS TO BE SAW CUT.
4. ALL NATIVE SOIL REMOVED FOR CONSTRUCTION HARDSCAPE SHALL REMAIN ON SITE. CONTRACTOR SHALL USE NATIVE SOIL FOR FINISH GRADINGS.
5. MAXIMUM CROSS SLOPE AT ALL ACCESSIBLE PATHS OF TRAVEL IS 2%.
6. PROVIDE 1'-0" MIN. TOP SOIL AT ALL PLANTING AREAS.
7. PROVIDE TOP SOIL SLOPED AWAY FROM SITE CONCRETE AT 4:1 MAX. SLOPE, TYP. FOR ENTIRE PROJECT.
8. ALL PROPOSED GRADES +100.0. HUNDREDS POSITION NOT SHOWN FOR CLARITY.

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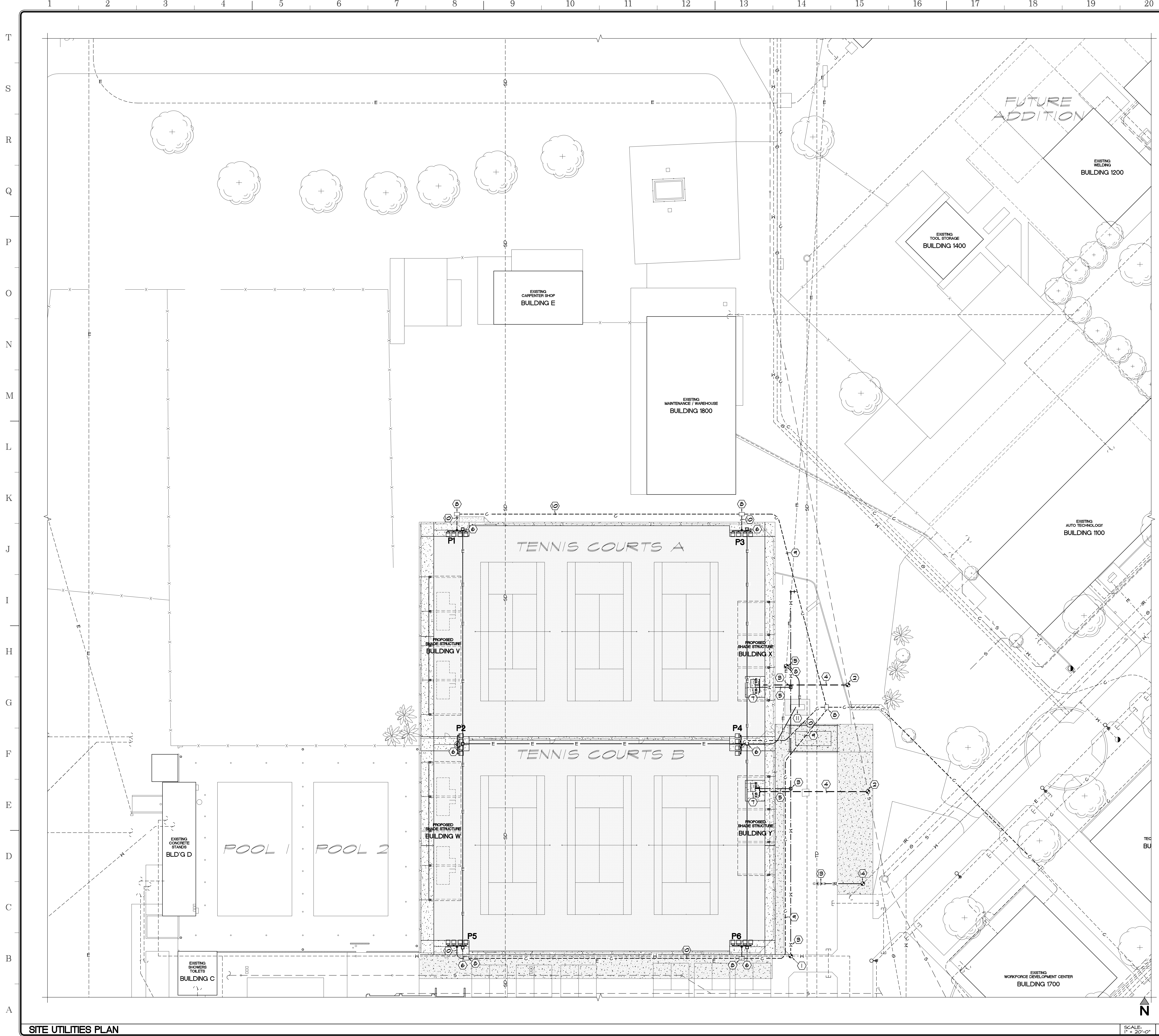
Project Title  
**IMPERIAL VALLEY COLLEGE**  
**TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

Sheet Title  
**HARDSCAPE PLAN**

	Document Date <b>06-29-22</b>	Project Number <b>22-081V</b>
	Date Last Revised	Sheet Number <b>AS5</b>

**HARDSCAPE PLAN**

SCALE: 1" = 20'-0"



- APPROVALS**
- LEGEND:**
- S --- EXISTING SEWER LINE - PROTECT
  - W --- EXISTING WATER LINE - PROTECT
  - G --- EXISTING GAS LINE - PROTECT
  - E --- EXISTING ELECTRICAL LINE - PROTECT
  - C --- EXISTING COMMUNICATIONS LINE - PROTECT
  - IR --- EXISTING IRRIGATION LINE - PROTECT
  - SD --- EXISTING STORM DRAIN LINE - PROTECT
  - TD --- EXISTING TILE DRAIN LINE - PROTECT
  - SD --- EXISTING STORM DRAIN LINE - PROTECT
  - W --- NEW WATER LINE - SIZE NOTED
  - S --- NEW SEWER LINE - SIZE NOTED
  - E --- NEW ELECTRICAL LINE - SEE ELECTRICAL DRAWINGS
  - C --- NEW COMMUNICATIONS LINE - SEE COMMUNICATION DRAWINGS
  - SD --- NEW STORM DRAIN LINE
  - IR --- NEW IRRIGATION LINE
- FIRE HYDRANT
  - IRRIGATION HYDRANT
  - MANKOLE
  - ⚡ POWER POLE
  - ⊕ LIGHT STANDARD
  - ⊕ HOSE BIBB
  - ⊕ POINT OF CONNECTION

- KEYNOTES**
- ① POINT OF CONNECTION TO EXISTING WATER LINE AND NEW SHUT OFF VALVE
  - ② POINT OF CONNECTION TO EXISTING SEWER LINE
  - ③ PROVIDE A NEW WATER SHUT OFF VALVE
  - ④ PROVIDE A NEW 2" SEWER LINE
  - ⑤ PROVIDE A NEW 3/4" WATER LINE
  - ⑥ PROVIDE ELECTRICAL PULL BOX, SEE ELECTRICAL DRAWINGS
  - ⑦ PROVIDE DRINKING FOUNTAIN AND CHILLER (AS7/AS7)
  - ⑧ PROVIDE NEW 24"x36" CONCRETE PULLBOX JENSEN 2436 PDB WITH HEAVY DUTY COVER
  - ⑨ PROVIDE (2) 2" P.V.C. C.O.
  - ⑩ PROVIDE (1) 2" P.V.C. C.O.
  - ⑪ NEW PANEL T - SEE ELECTRICAL DWGS
  - ⑫ PROVIDE NEW 3" IRRIGATION WATER LINE
  - ⑬ PROVIDE NEW IRRIGATION BACKFLOW PREVENTER
  - ⑭ POINT OF CONNECTION TO EXISTING IRRIGATION LINE
  - ⑮ POINT OF CONNECTION TO EXISTING ELECTRICAL LINE - SEE ELECTRICAL DWGS

- NOTES:**
1. CONTRACTOR SHALL REPAIR OR REPLACE ANY LINE BROKEN OR DAMAGED DURING COURSE OF PLACEMENT OF NEW LINES. CONSTRUCTION OF TRENCHING, OR HEAVY EQUIPMENT ON SITE SHALL BE VISITED BY A "DIG ALERT" COMPANY FOR THE PURPOSE OF LOCATING ALL UNDERGROUND UTILITIES.
  2. PRIOR TO ANY EXCAVATION THE SITE SHALL BE VISITED BY A "DIG ALERT" COMPANY FOR THE PURPOSE OF LOCATING ALL UNDERGROUND UTILITIES.
  3. CAP ALL STUBBED OUT CONDUIT FOR FUTURE.
  4. PROVIDE PULL STRINGS FOR ALL CONDUIT.
  5. ALL UTILITY LINES ARE EXISTING UNLESS NOTED OTHERWISE - PROTECT
  6. SAWCUT EXISTING SITE CONCRETE FOR NEW UTILITIES TO NEAREST CONTROL JOINT, PROVIDE NEW FLUSH CONCRETE TO EXISTING PER 14.05
  7. NEW UTILITY TRENCHING SHALL BE PER 14.05

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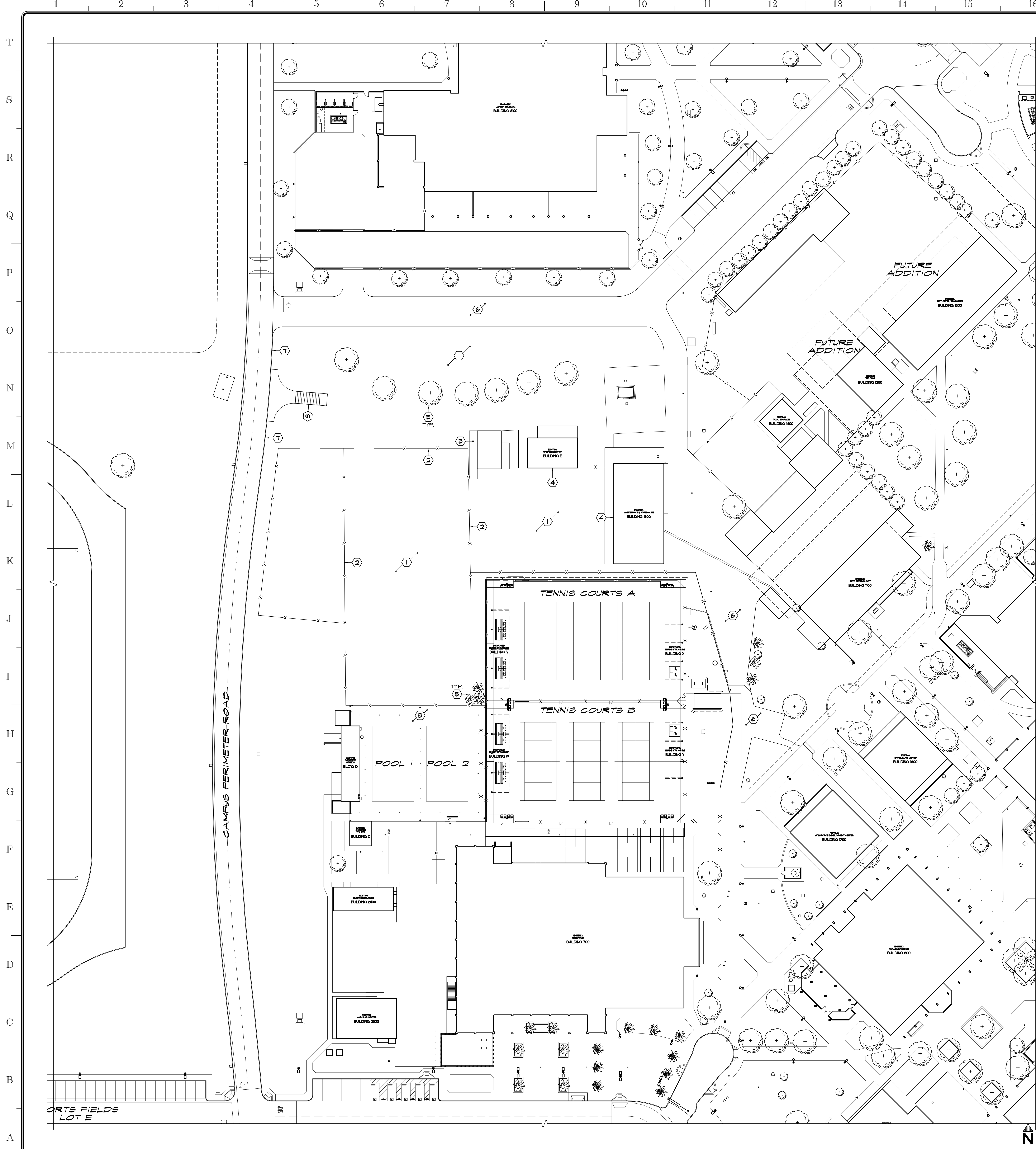
Project Title  
**IMPERIAL VALLEY COLLEGE  
 TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

Sheet Title  
**SITE UTILITIES PLAN**

	Document Date <b>06-29-22</b>	Project Number <b>22-081V</b>
	Date Last Revised 	Sheet Number <b>AS6</b>

**SITE UTILITIES PLAN**

SCALE: 1" = 20'-0"



**KEYNOTES:**

- ① CONSTRUCTION CHAIN LINK FENCING
- ② LIMIT OF EXCAVATION FOR ENGINEERED PAD
- ③ PROVIDE STABILIZED CONSTRUCTION SITE EXIT (C ASP)

**EXISTING KEYNOTES:**

- ① EXISTING LANDSCAPING - PROTECT
- ② EXISTING FENCE - PROTECT
- ③ EXISTING CONCRETE - PROTECT
- ④ EXISTING BUILDING - PROTECT
- ⑤ EXISTING TREE - PROTECT
- ⑥ EXISTING AC PAVING - PROTECT
- ⑦ EXISTING CONCRETE CURB - PROTECT

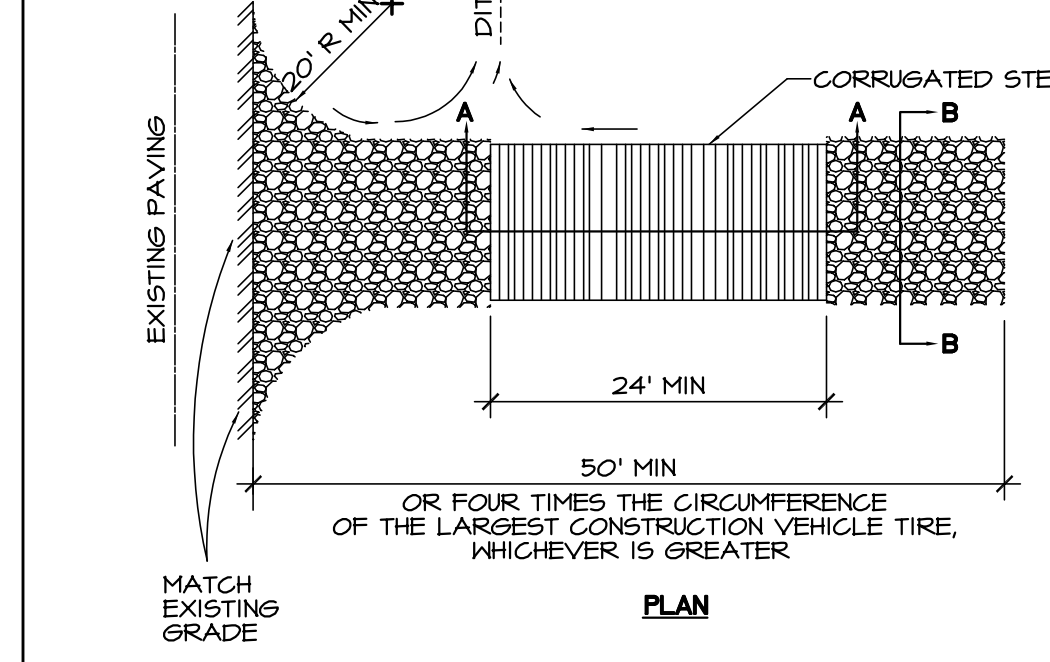
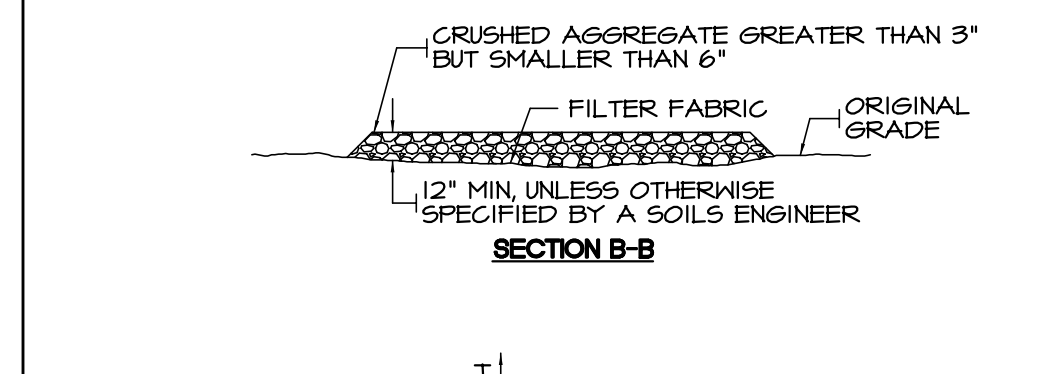
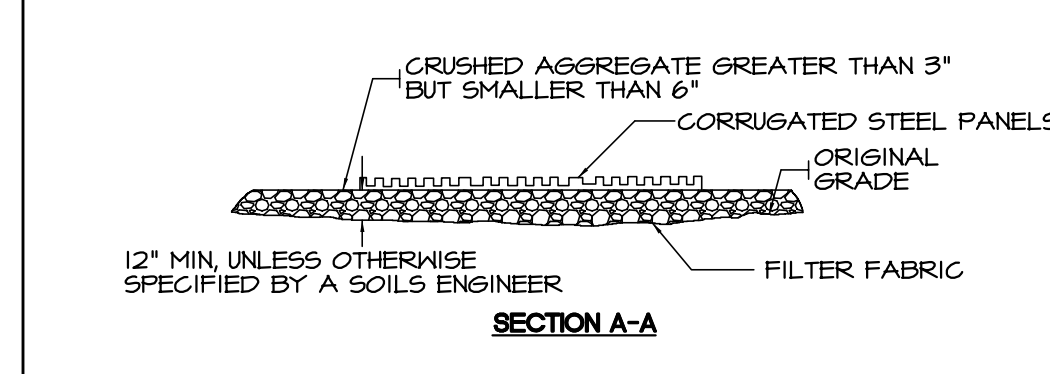
**LEGEND:**

- ⊕ 86.30 BENCH MARK: NGS DESIGNATION V1225, PID DBO430  
N52 28 26 347N, H15 31 42 24520  
NGS ELEVATION ADJUSTED 5000'
- (86.40) EXISTING NATURAL SOIL ELEVATION (INO)
- /— EXISTING ELEVATION (SITE CONCRETE INO)
- ⊙ FIRE HYDRANT
- ⊕ POWER POLE
- NS NATURAL SOIL
- TC TOP OF CURB
- FL FLOW LINE
- AC ASPHALT PAVING
- FF FINISH FLOOR

**NOTES:**

1. ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON-SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SHALES, AREA DRAINS, NATURAL DRAINAGE COURSES OR WIND.
2. STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
3. WATER USED FOR DUST CONTROL TO BE NON-POTABLE IRRIGATION WATER.
4. FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTINGS AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.
5. EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISION SHALL BE MADE TO RETAIN CONCRETE WASTES ON-SITE UNTIL THEY CAN BE DISPOSED OF A SOLID WASTE.
6. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.
7. SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEEP UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
8. ANY SLOPES WITH DISTURBED SOILS OR DENIVED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.
9. THE FOLLOWING BMP'S AS OUTLINED IN, BUT NOT LIMITED TO, THE CALIFORNIA STORMWATER QUALITY ASSOCIATION, CALIFORNIA STORMWATER BEST MANAGEMENT PRACTICE HANDBOOK-CONSTRUCTION, JANUARY 2003, OR THE LATEST REVISED EDITION, MAY APPLY DURING THE CONSTRUCTION OF THIS PROJECT (ADDITIONAL MEASURES MAY BE REQUIRED IF DEEMED APPROPRIATE BY COUNTY PROJECT INSPECTORS):

- EROSION CONTROL**
- EC-1 SCHEDULING: MATERIAL DELIVERY AND STORAGE
  - EC-2 PRESERVATION OF EXISTING VEGETATION
- SEDIMENT CONTROL**
- SC-10 STORM DRAIN INLET PROTECTION
- WIND EROSION CONTROL**
- WE-1 WIND EROSION CONTROL
- TRACKING CONTROL**
- TC-1 STABILIZED CONSTRUCTION ENTRANCE/ EXIT
- NON-STORMWATER MANAGEMENT CONTROL**
- NS-1 WATER CONSERVATION PRACTICES
  - NS-2 VEHICLE AND EQUIPMENT CLEANING
  - NS-3 VEHICLE AND EQUIPMENT TIEING
- WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL**
- WM-1 MATERIAL DELIVERY AND STORAGE
  - WM-2 MATERIAL USE
  - WM-3 STOCKPILE MANAGEMENT



**A STABILIZED ENTRANCE/EXIT** SCALE: 1" = 40'-0"

**APPROVALS**

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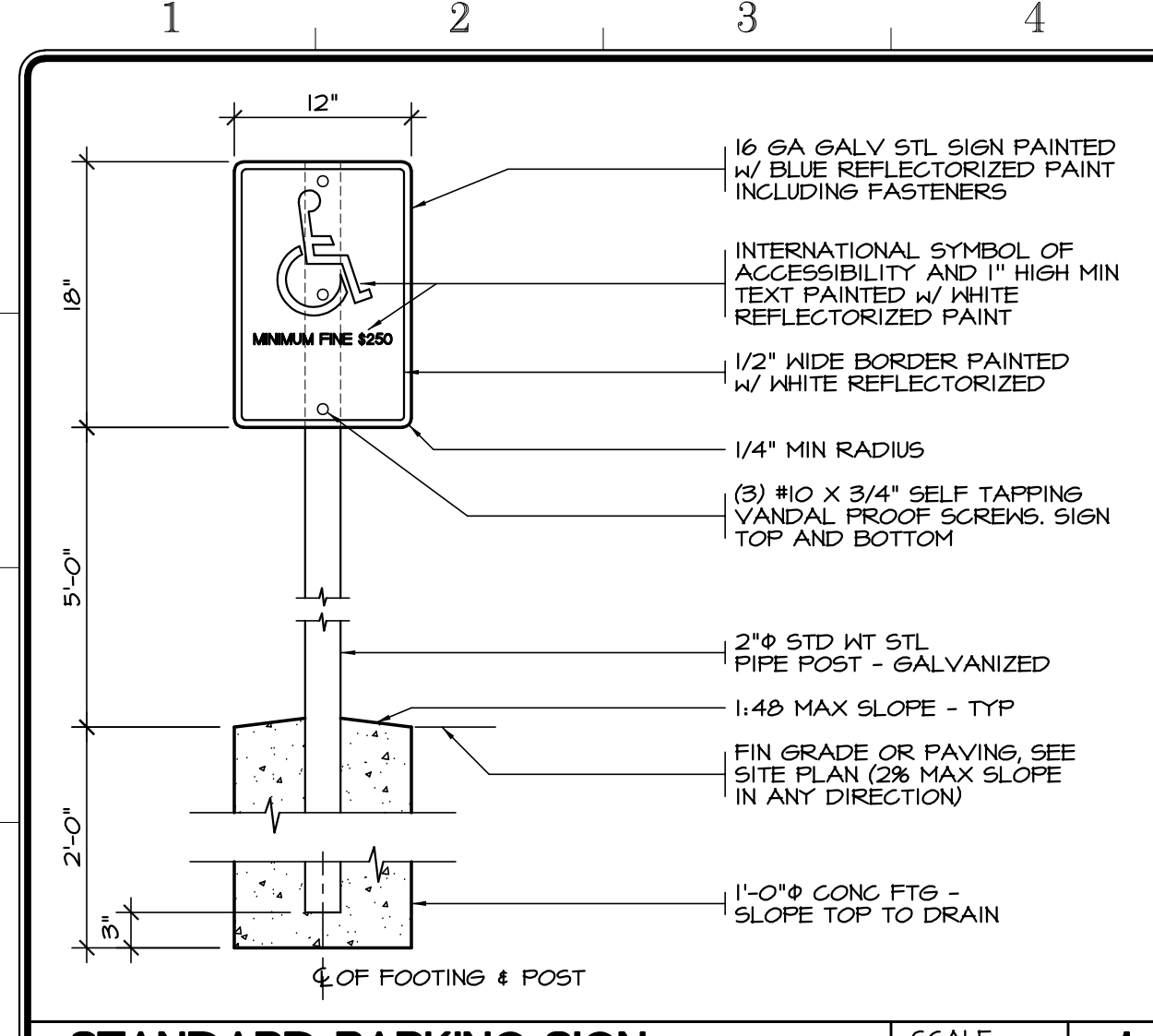
Project Title  
**IMPERIAL VALLEY COLLEGE  
 TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

Sheet Title  
**EROSION AND SEDIMENTATION  
 CONTROL PLAN**

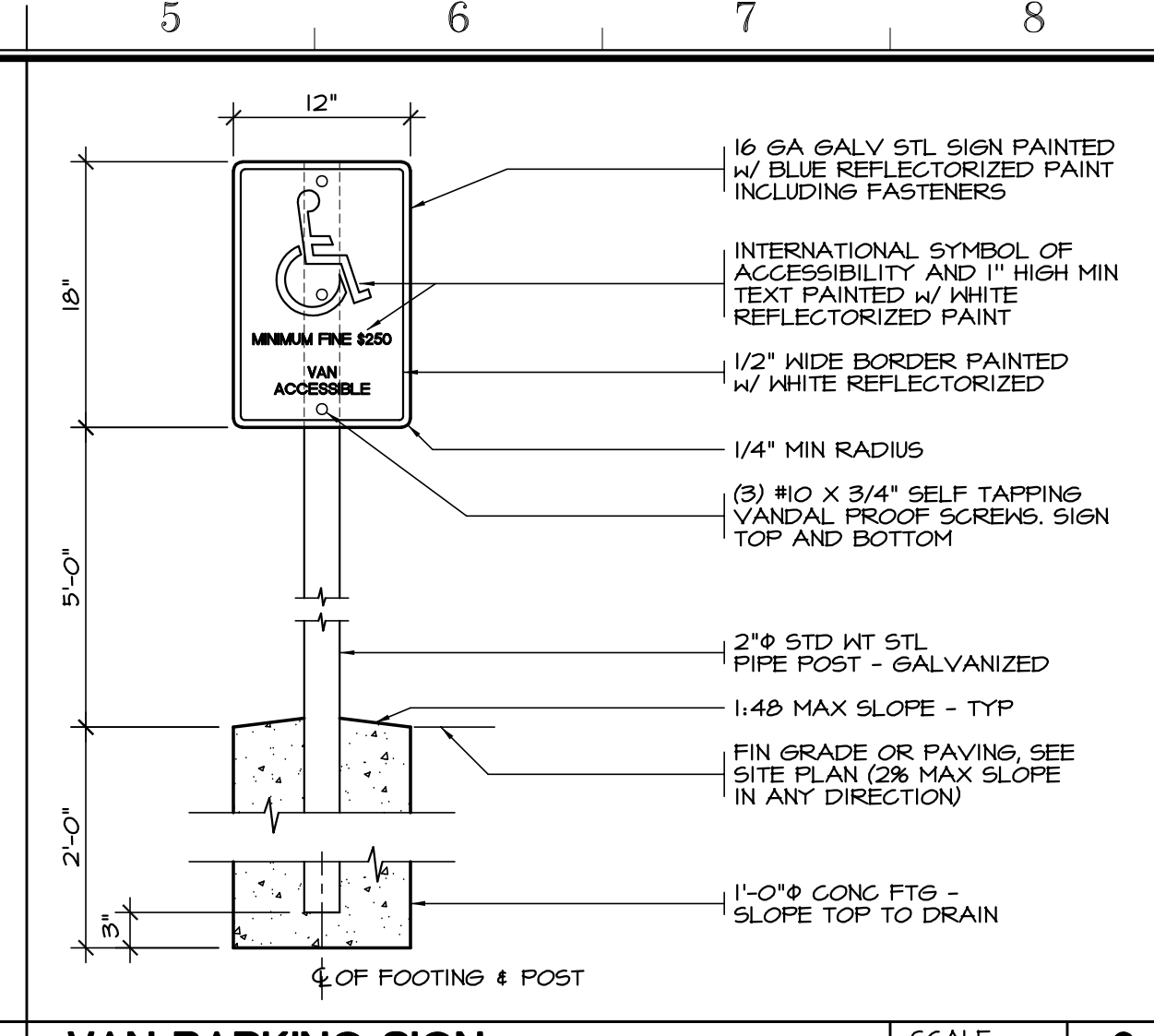
Document Date 06-29-22	Project Number 22-081V
Date Last Revised	Sheet Number AS7

**LICENSED ARCHITECT**  
 JUNIOR SANDERS  
 LICENSE NO. 76476  
 STATE OF CALIFORNIA

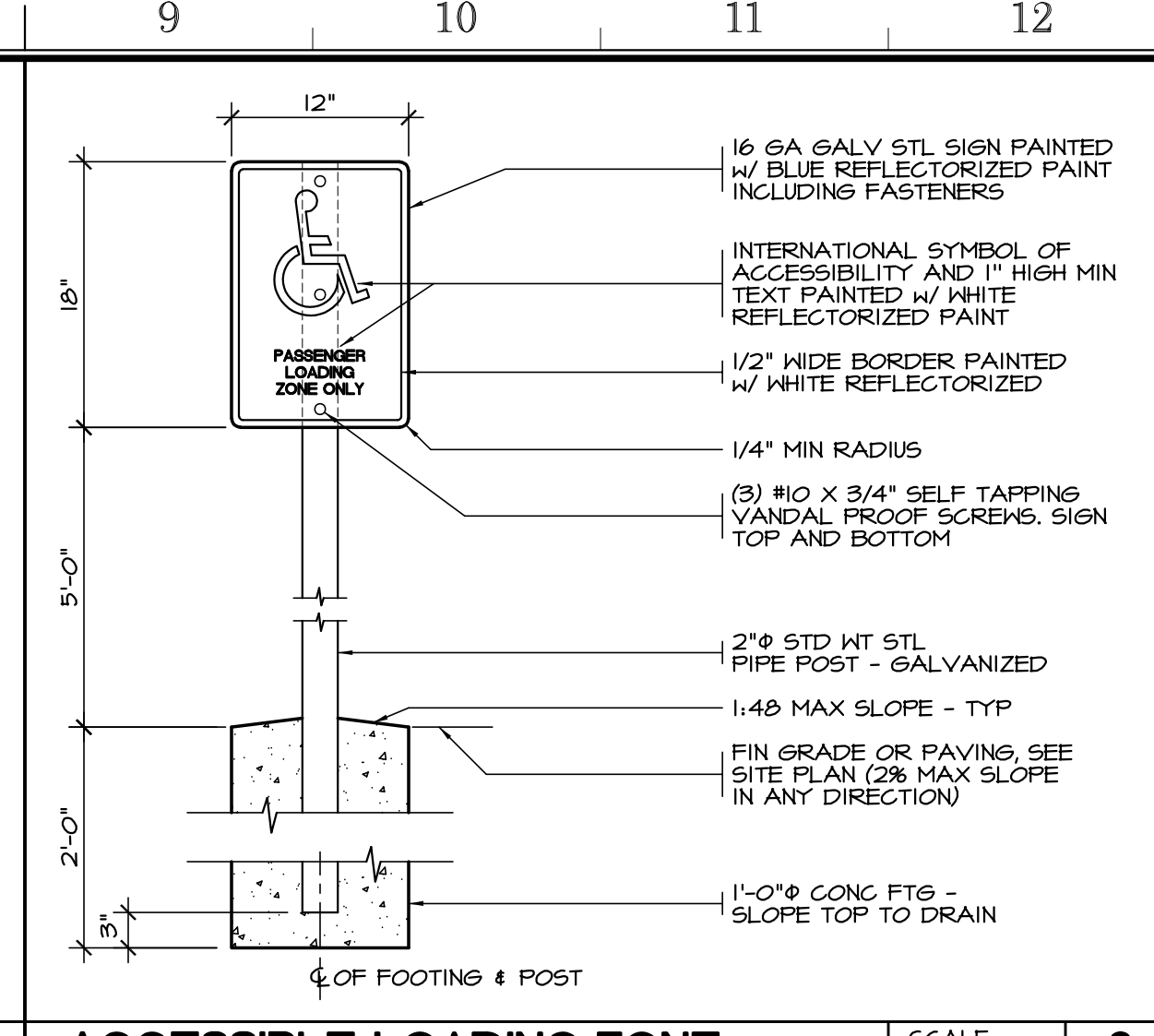




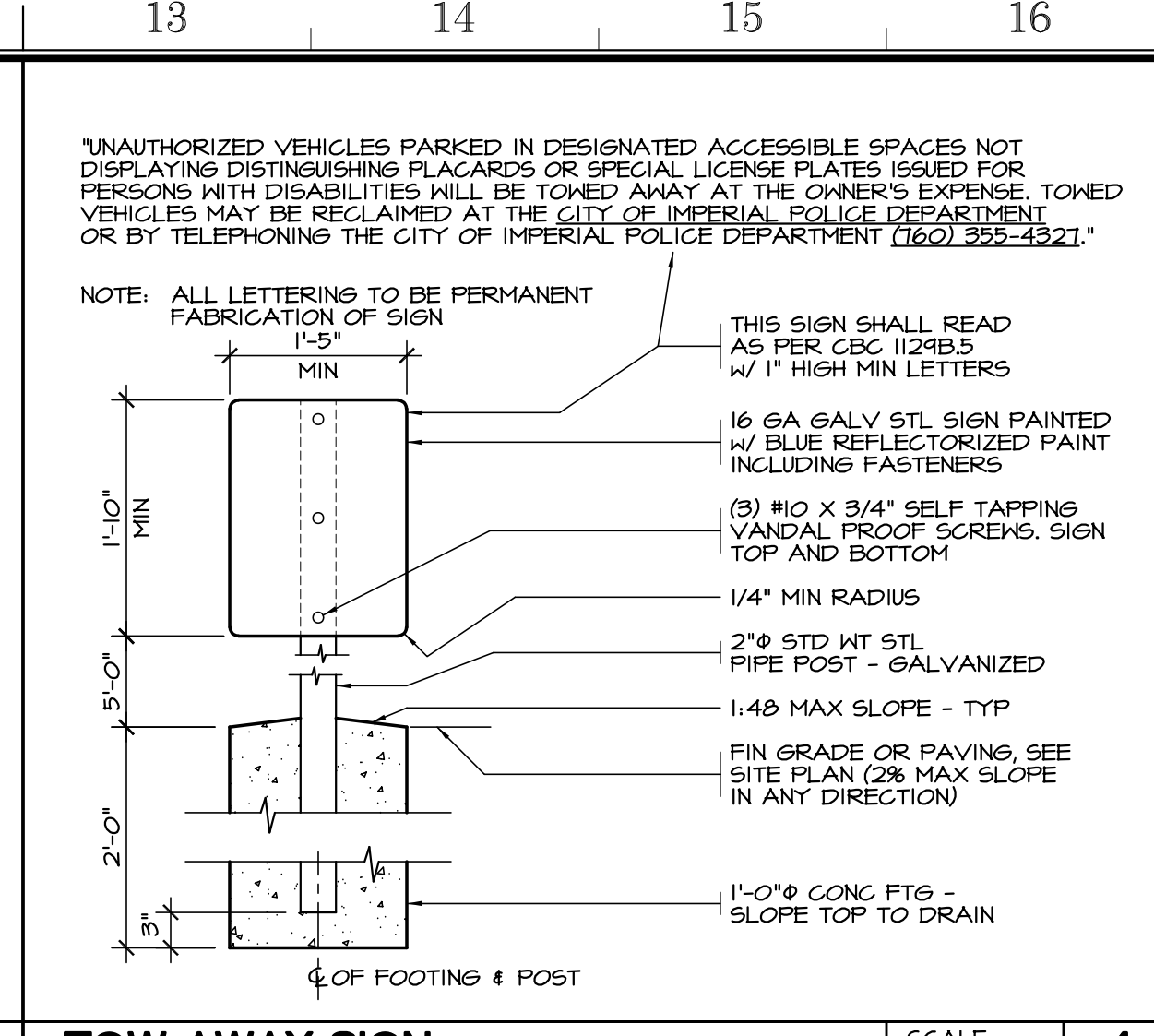
**STANDARD PARKING SIGN** SCALE: 1" = 1'-0" 1



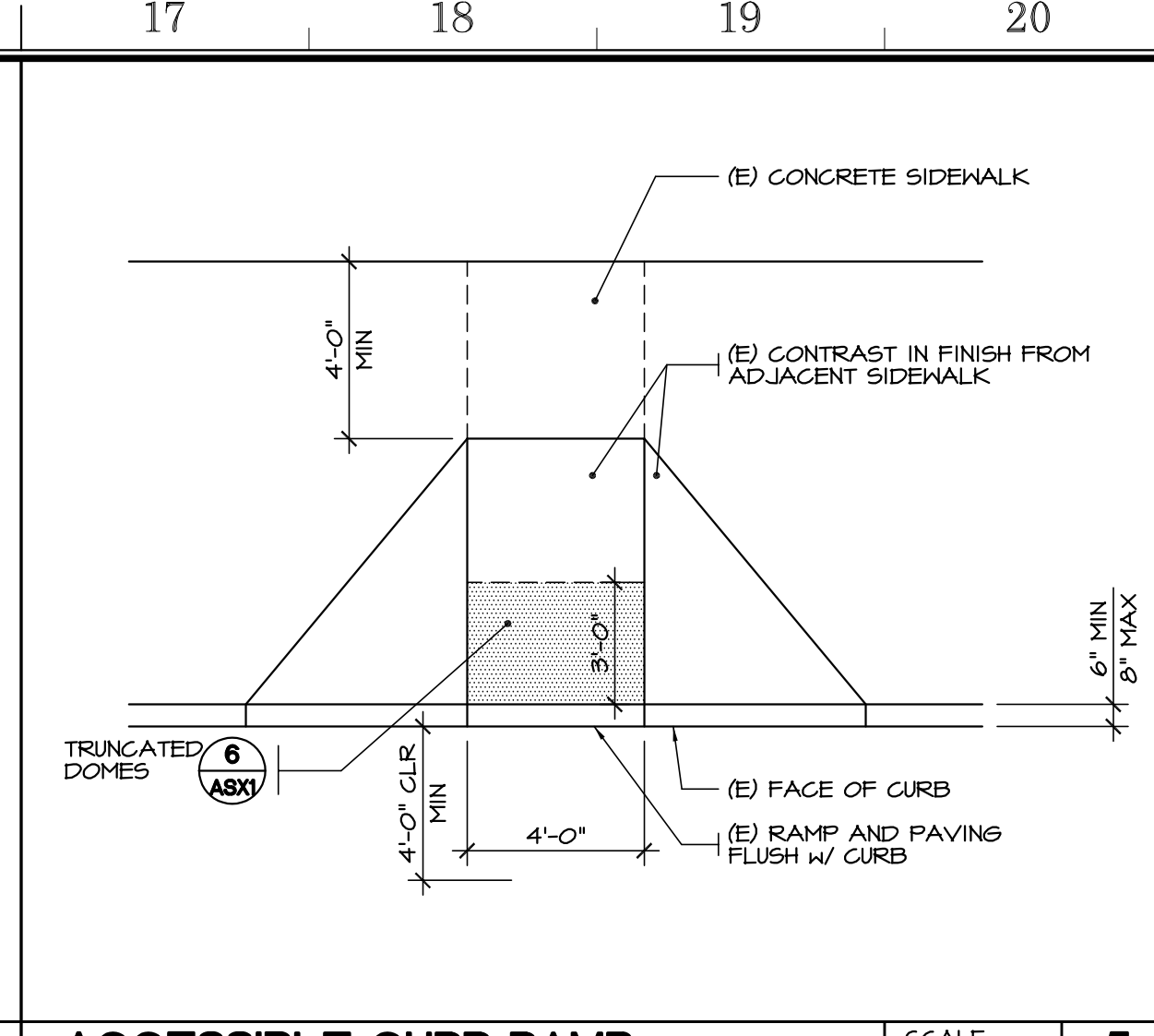
**VAN PARKING SIGN** SCALE: 1" = 1'-0" 2



**ACCESSIBLE LOADING ZONE** SCALE: 1" = 1'-0" 3

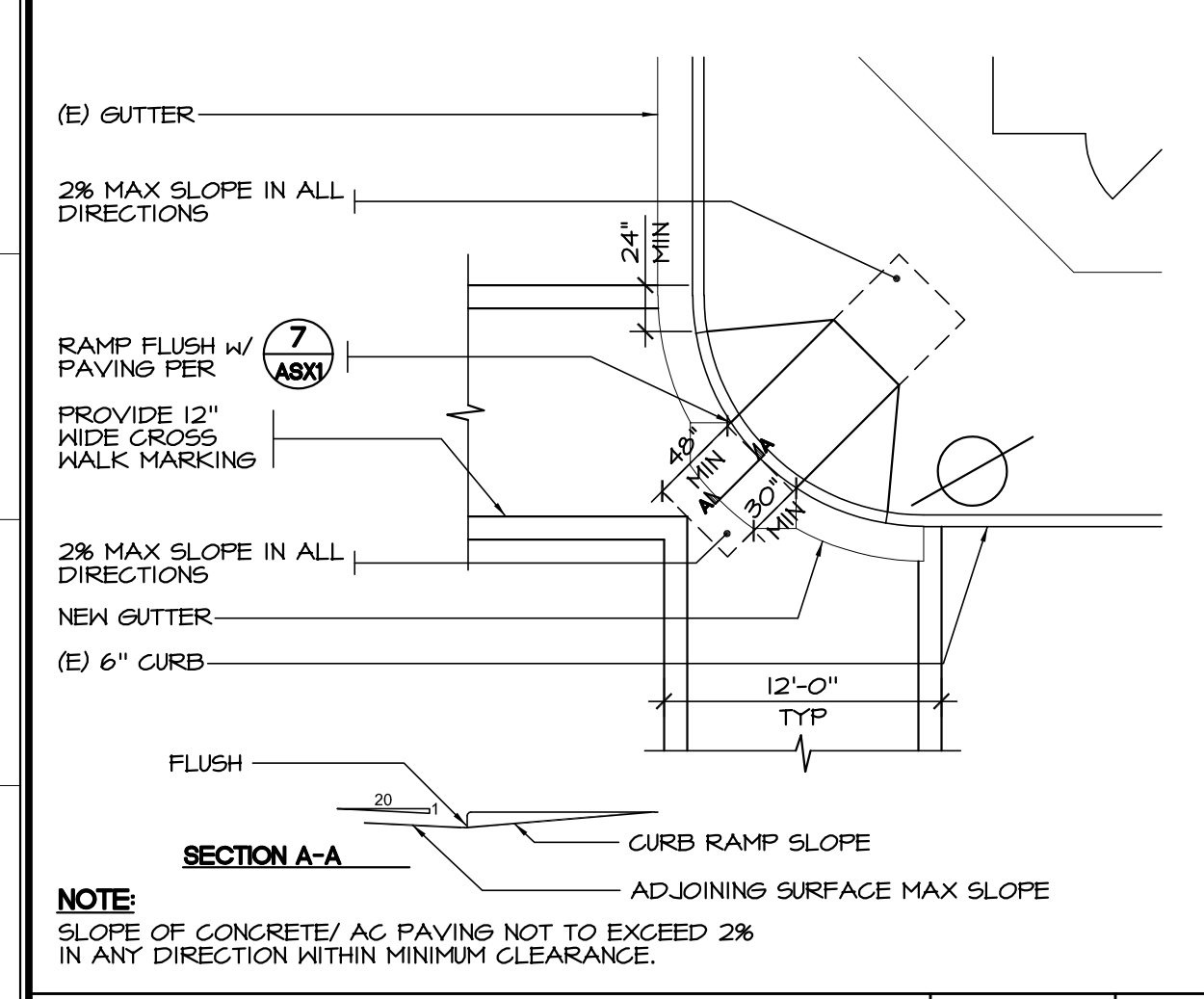


**TOW AWAY SIGN** SCALE: 1" = 1'-0" 4

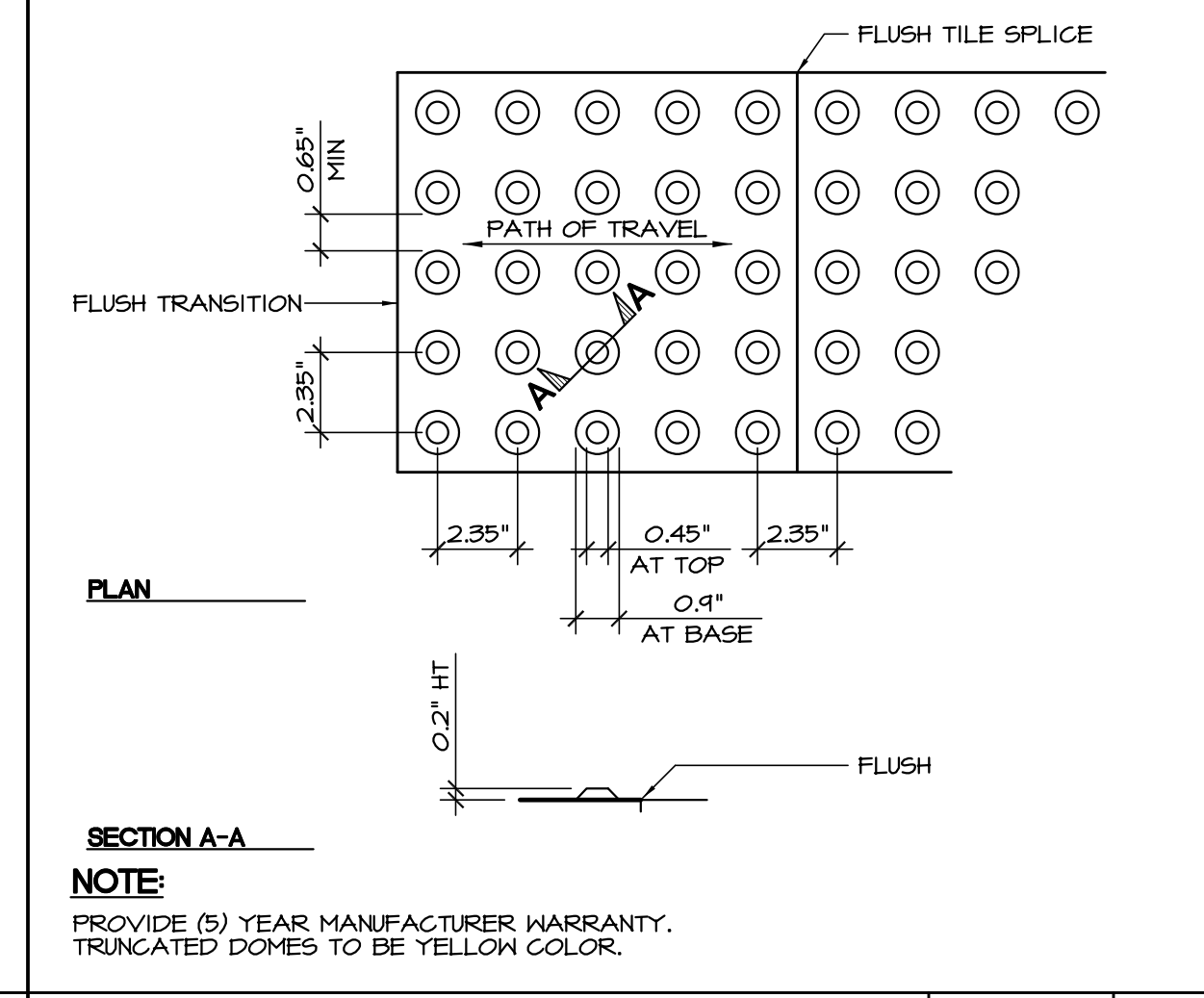


**ACCESSIBLE CURB RAMP** SCALE: 1/4" = 1'-0" 5

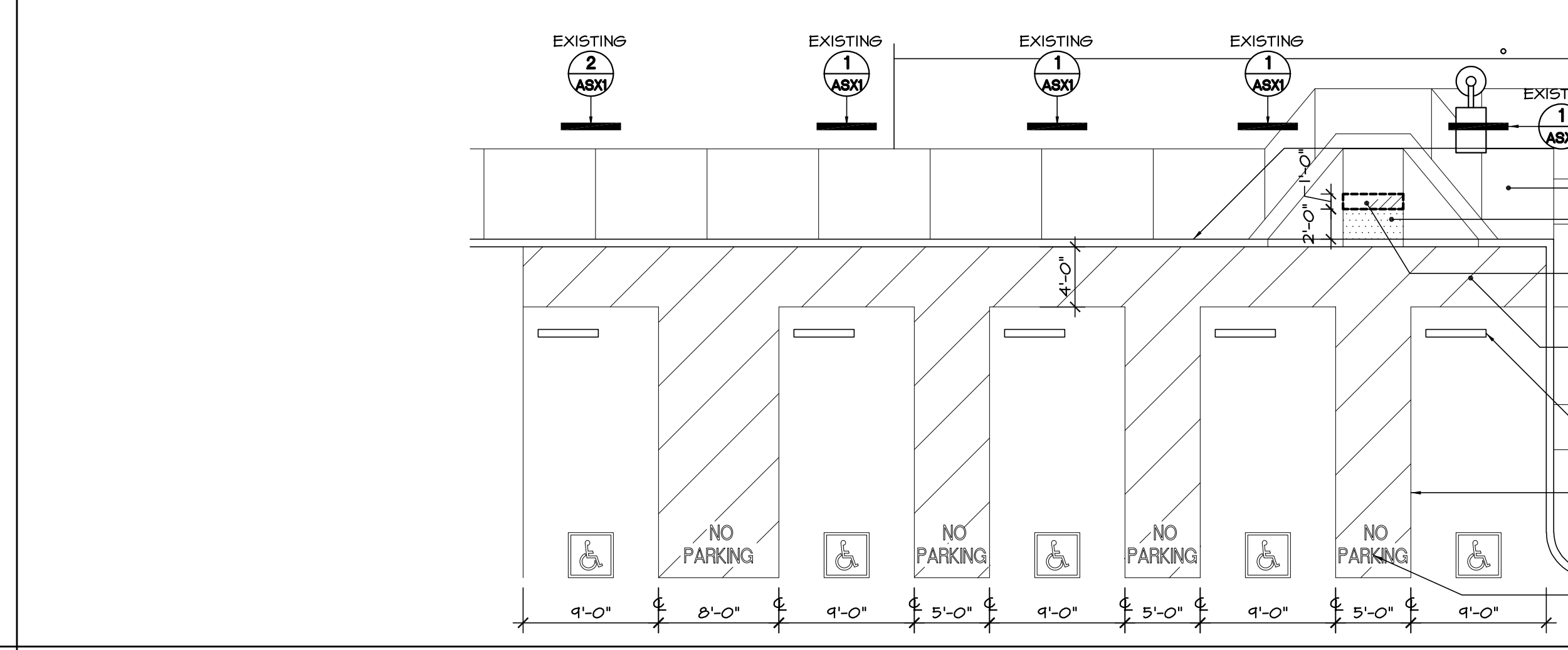
**APPROVALS**



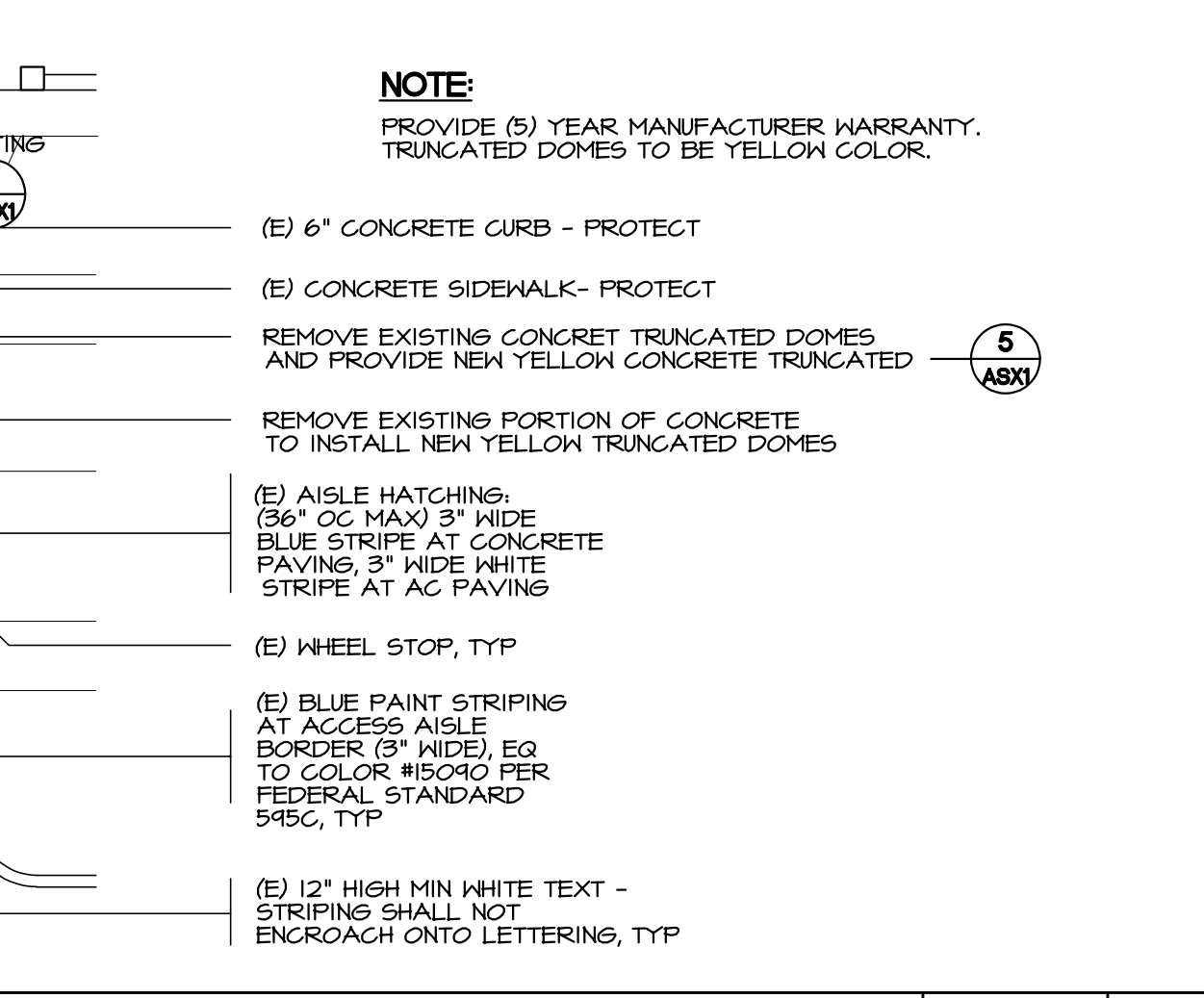
**CURB RAMP STRIPING** SCALE: 1/8" = 1'-0" 6



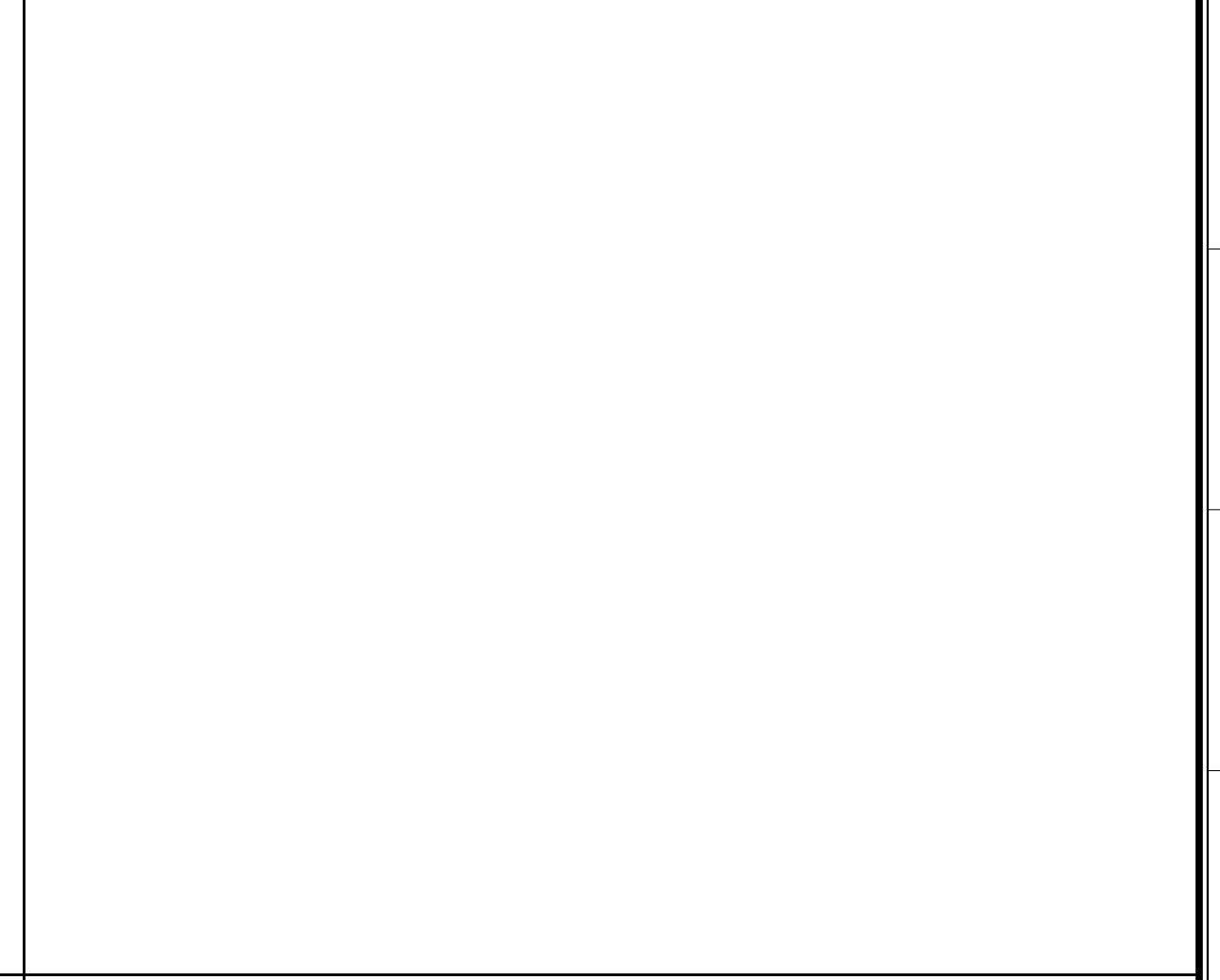
**TRUNCATED DOMES** SCALE: 1/4" = 1'-0" 7



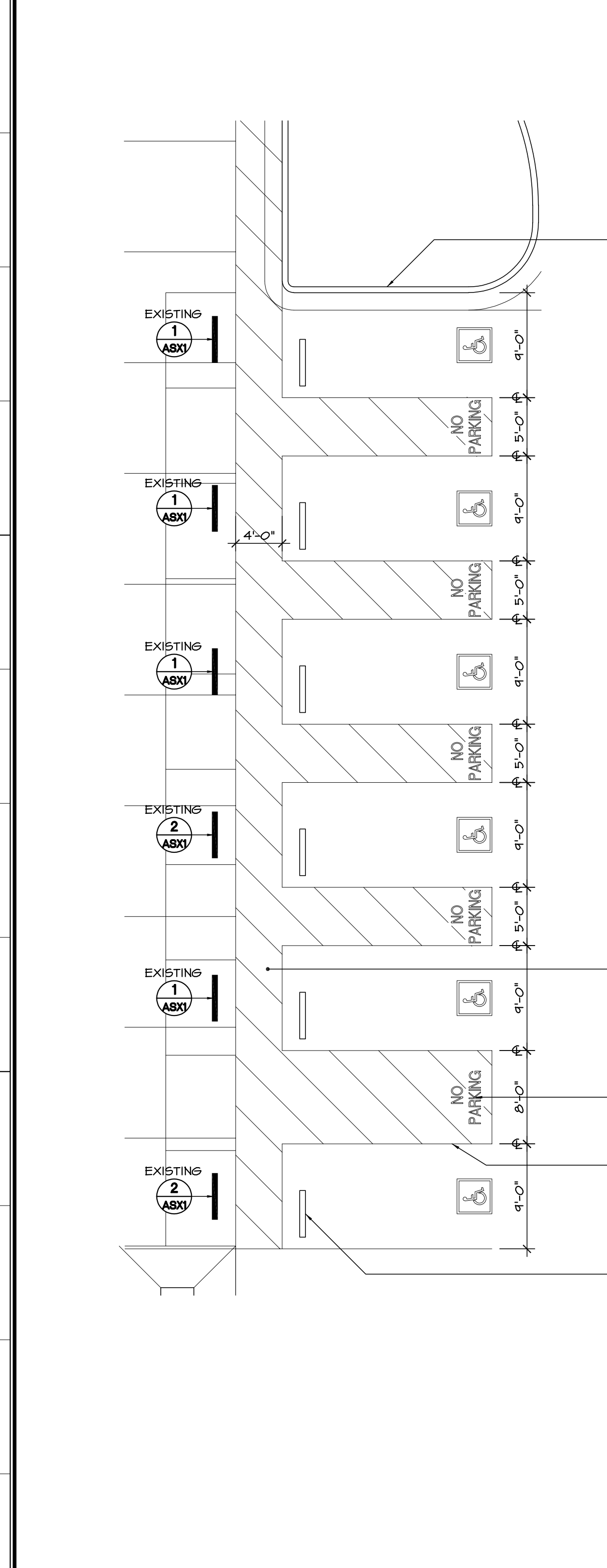
**EXISTING ACCESSIBLE PARKING DETAIL** SCALE: 1/8" = 1'-0" 8



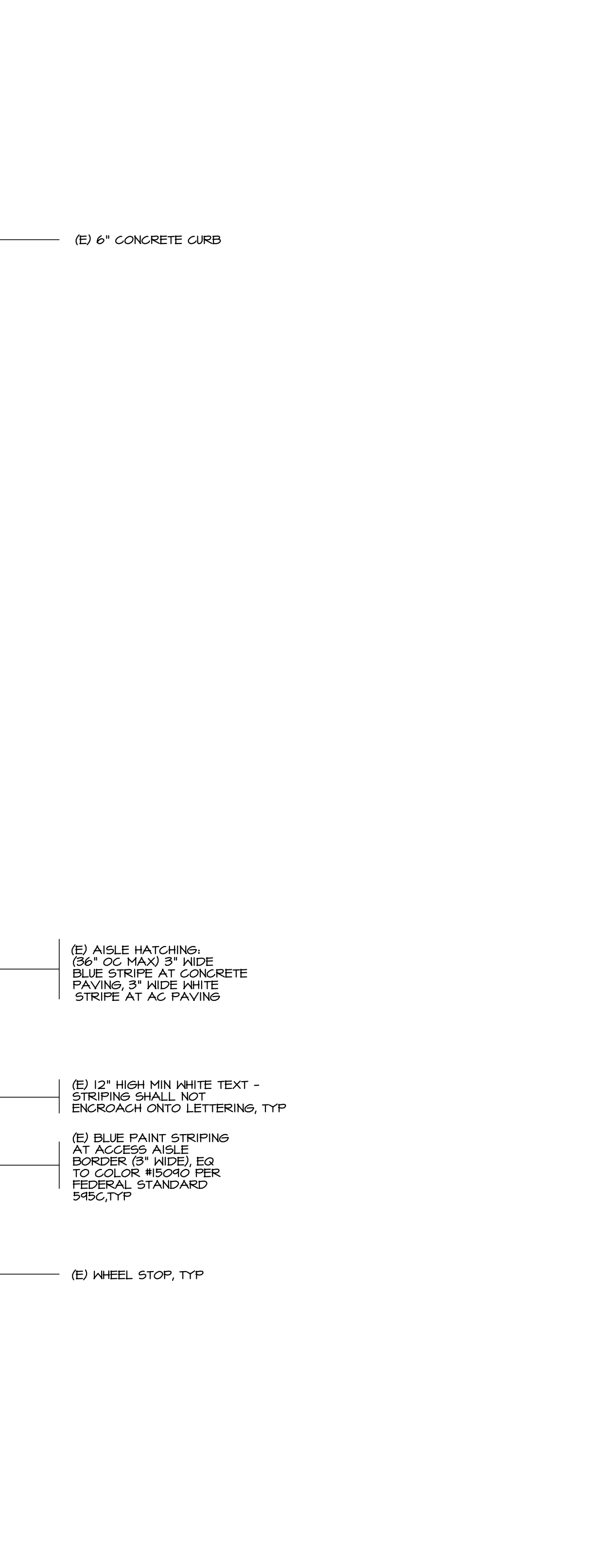
**EXISTING ACCESSIBLE PARKING DETAIL** SCALE: 1/8" = 1'-0" 9



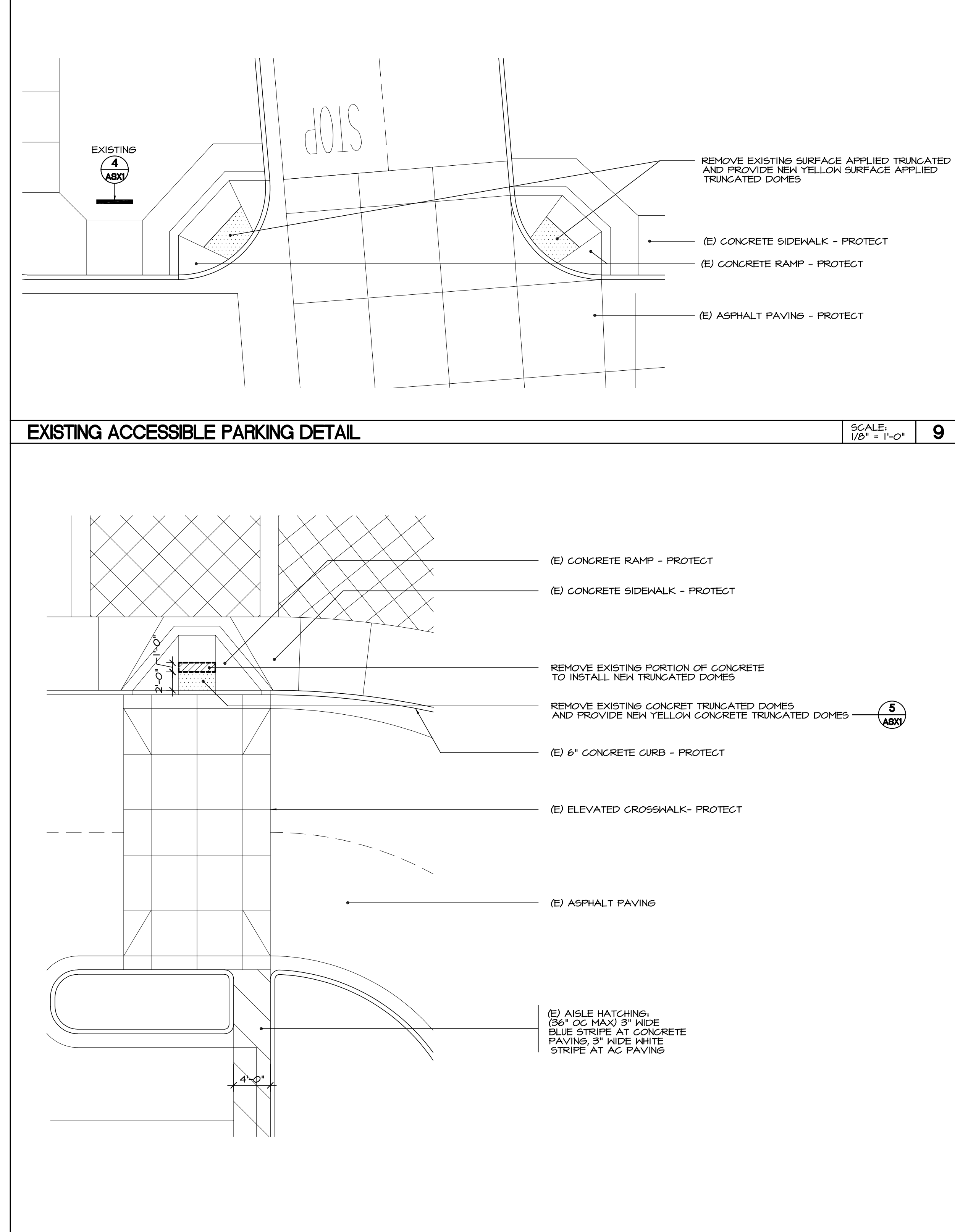
**EXISTING ACCESSIBLE PARKING DETAIL** SCALE: 1/8" = 1'-0" 10



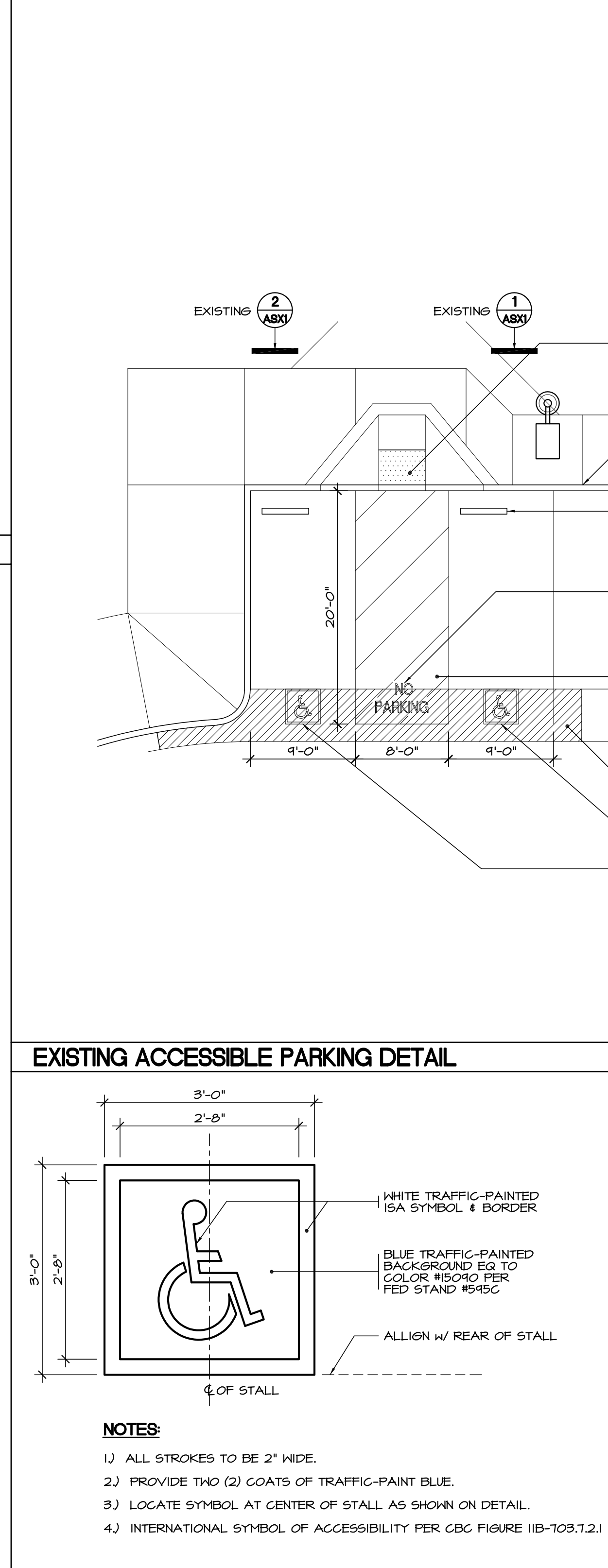
**EXISTING ACCESSIBLE PARKING DETAIL** SCALE: 1/8" = 1'-0" 11



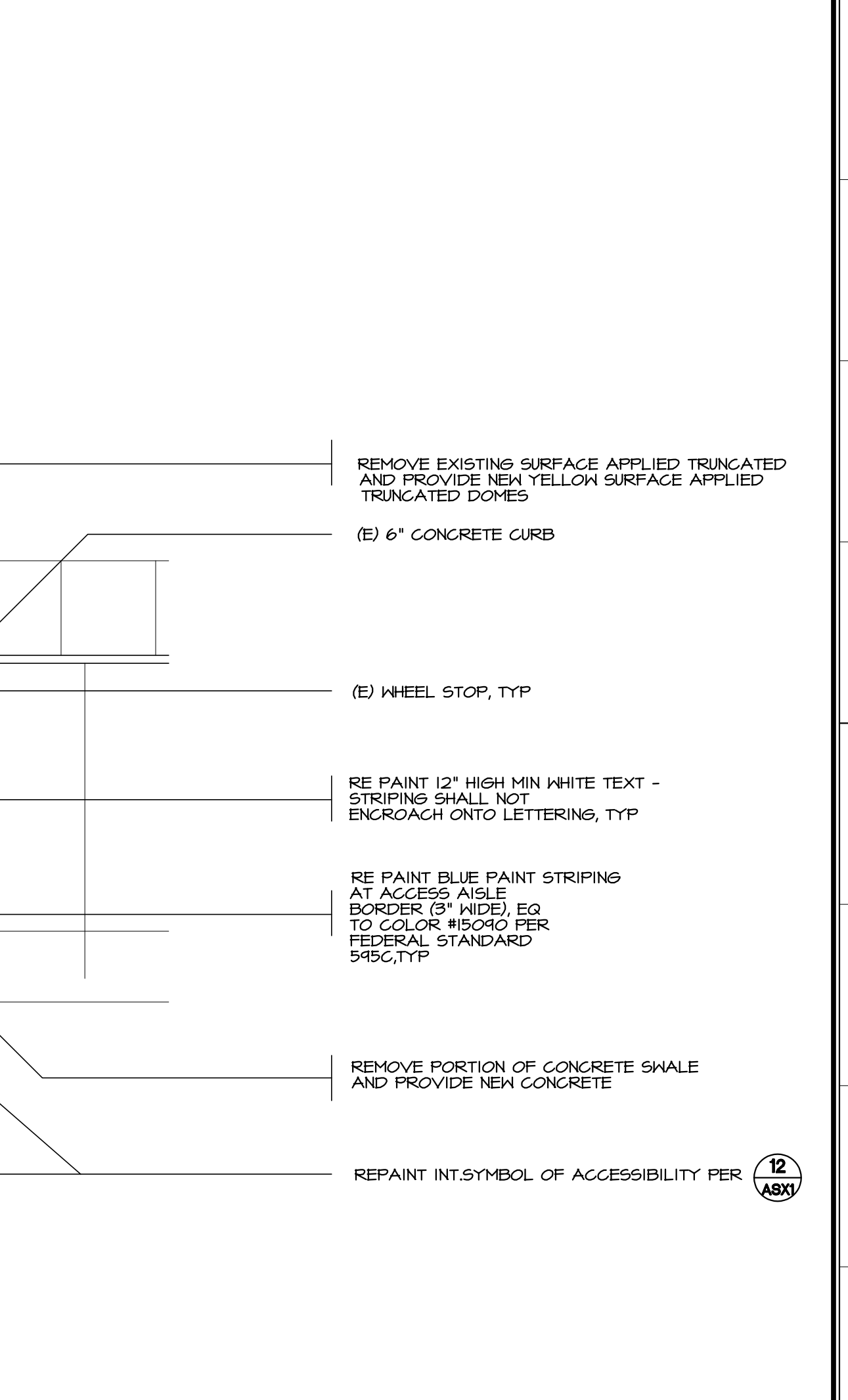
**EXISTING ACCESSIBLE PARKING DETAIL** SCALE: 1/8" = 1'-0" 12



**EXISTING ACCESSIBLE PARKING DETAIL** SCALE: 1/8" = 1'-0" 13



**INTL SYMBOL OF ACCESSIBILITY** SCALE: 3/4" = 1'-0" 13



**INTL SYMBOL OF ACCESSIBILITY** SCALE: 3/4" = 1'-0" 13

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Project Title  
**IMPERIAL VALLEY COLLEGE  
 TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

Sheet Title  
**SITE ACCESSIBILITY DETAILS**

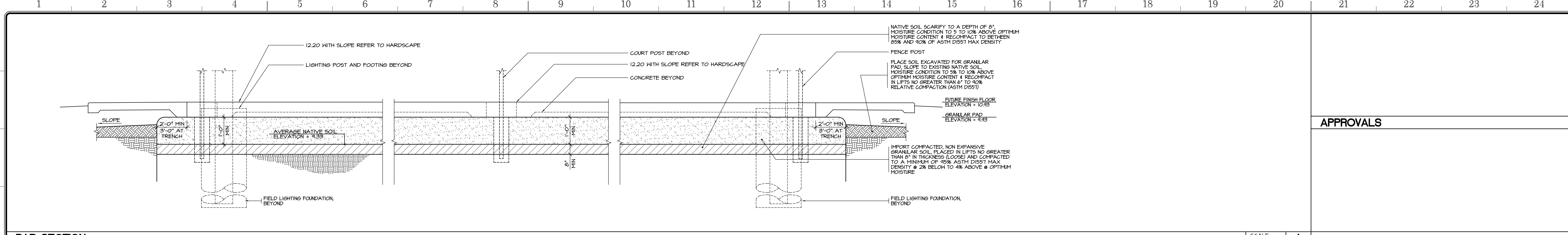
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 06-29-22

Date Last Revised

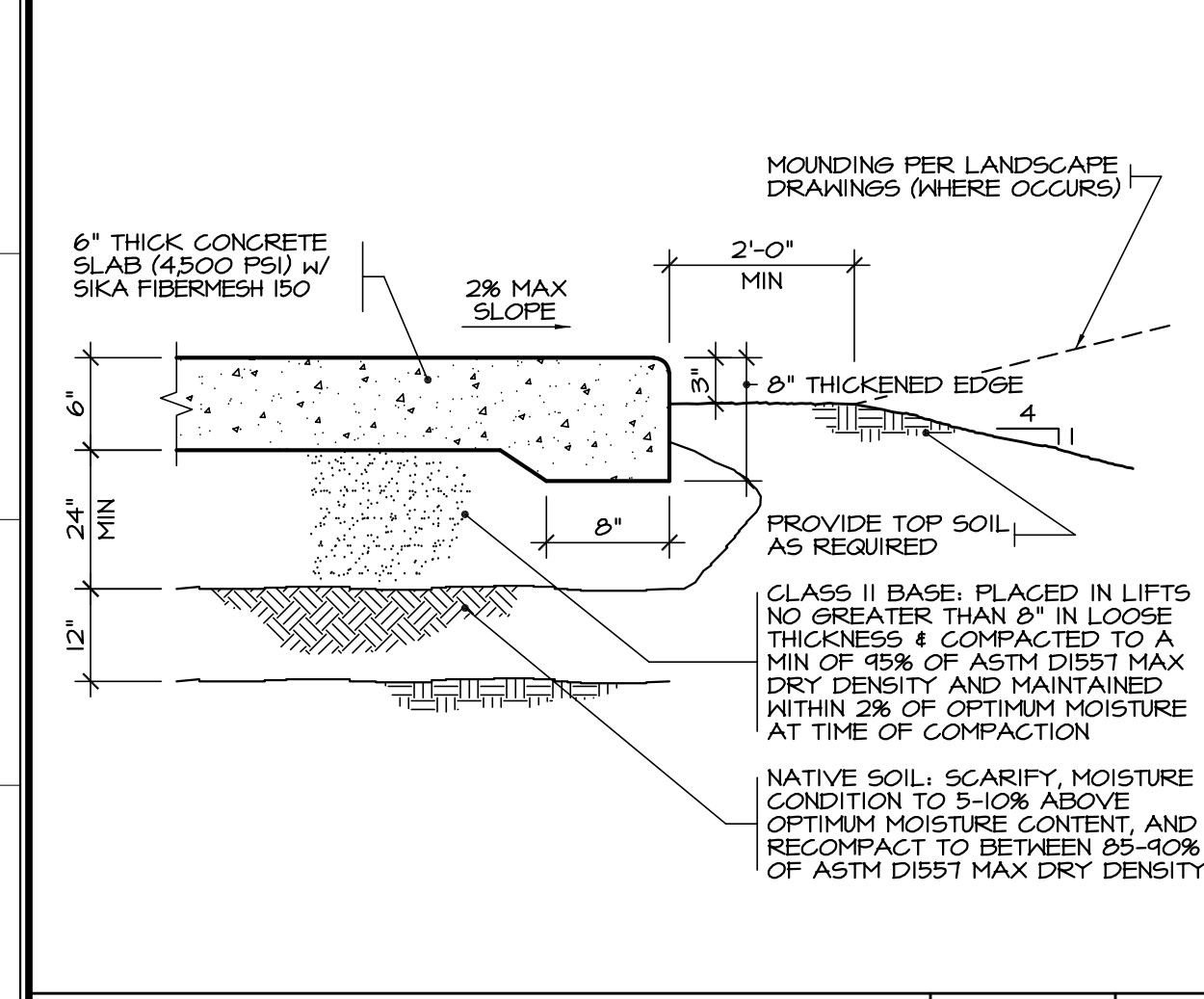
Project Number  
 22-081V

Sheet Number  
**ASX1**

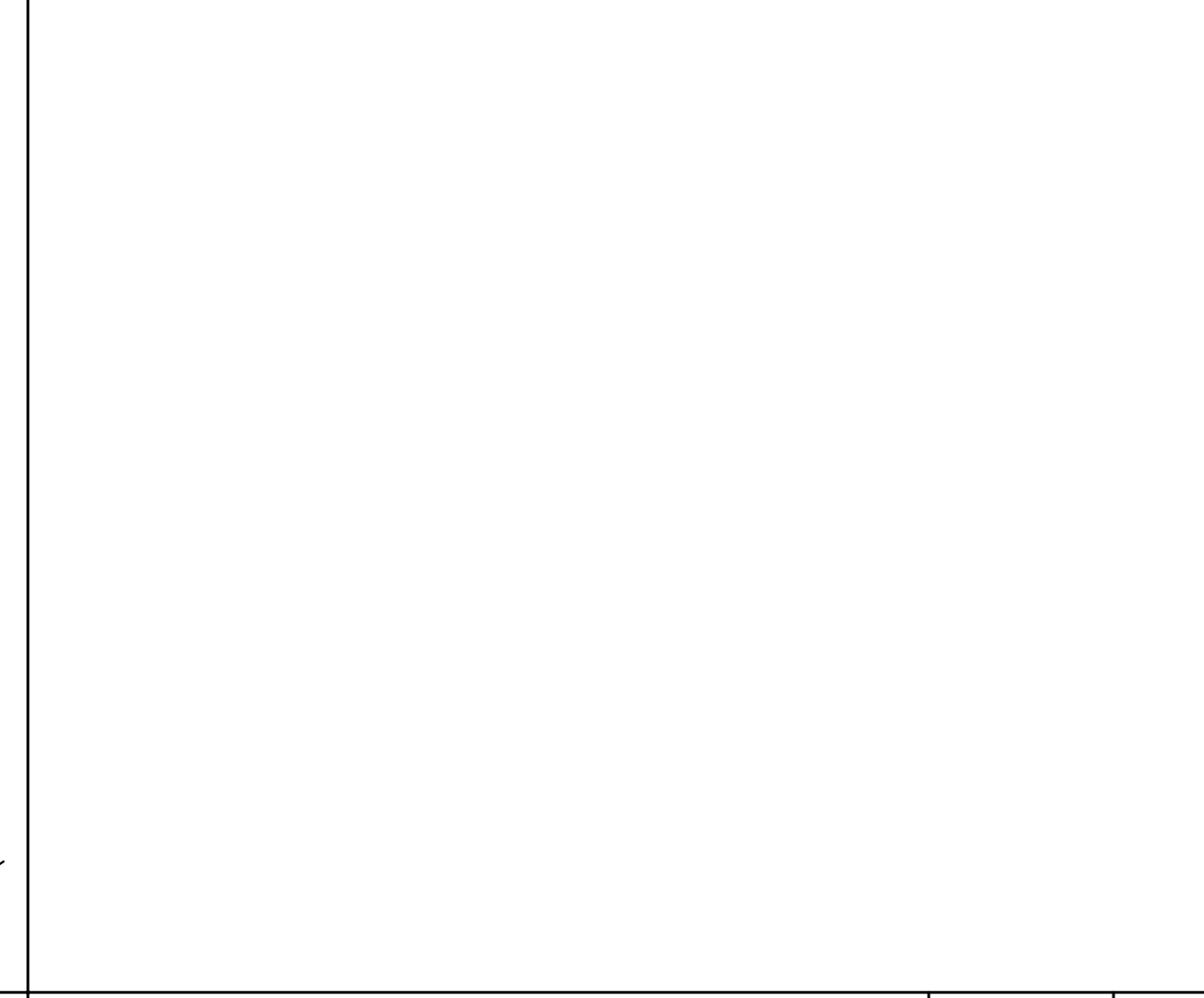
NOTES:  
 1) ALL STROKES TO BE 2" WIDE.  
 2) PROVIDE TWO (2) COATS OF TRAFFIC-PAINT BLUE.  
 3) LOCATE SYMBOL AT CENTER OF STALL AS SHOWN ON DETAIL.  
 4) INTERNATIONAL SYMBOL OF ACCESSIBILITY PER CBC FIGURE 11B-103.7.2.1



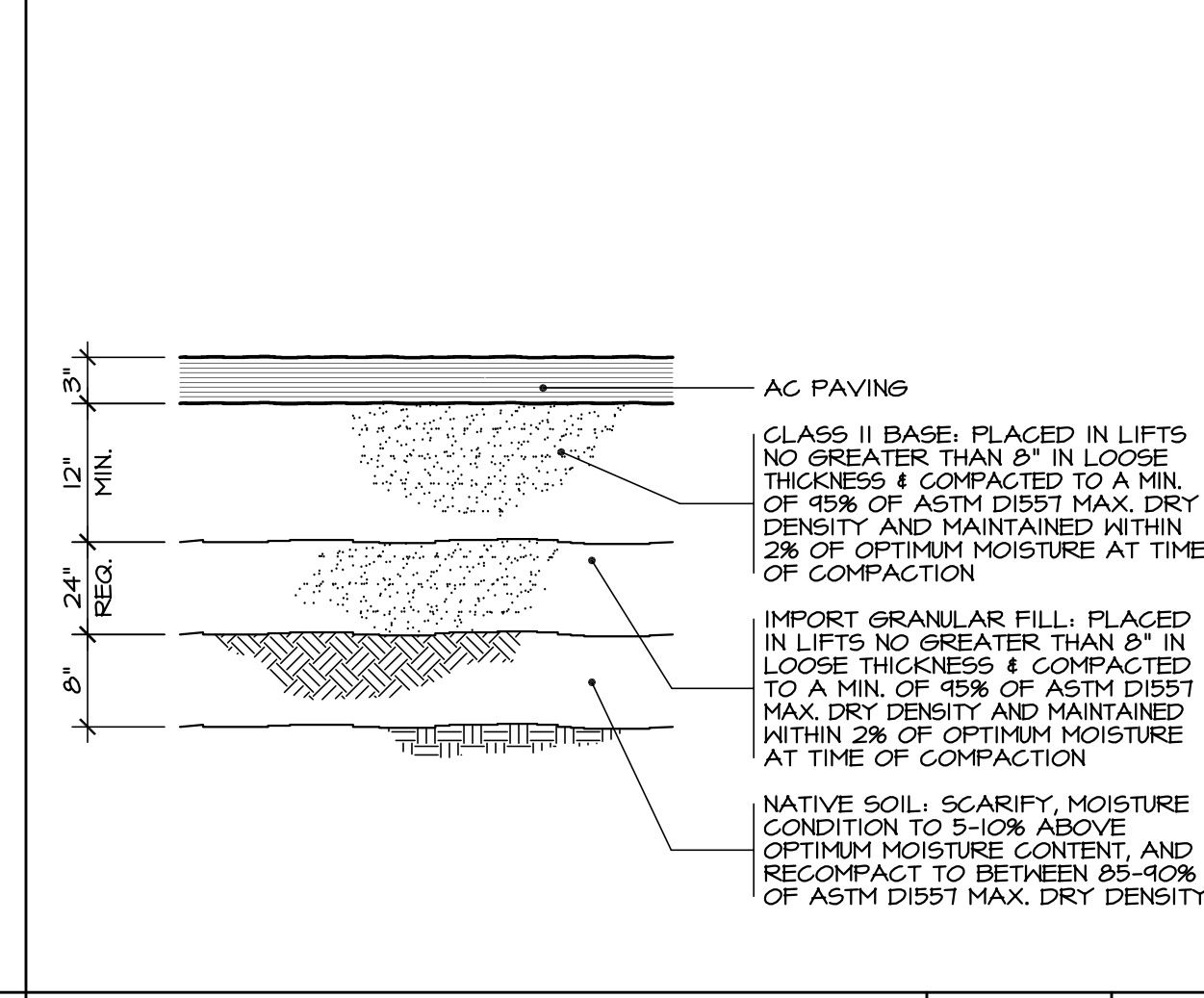
**PAD SECTION** SCALE: 3/8" = 1'-0" **A**



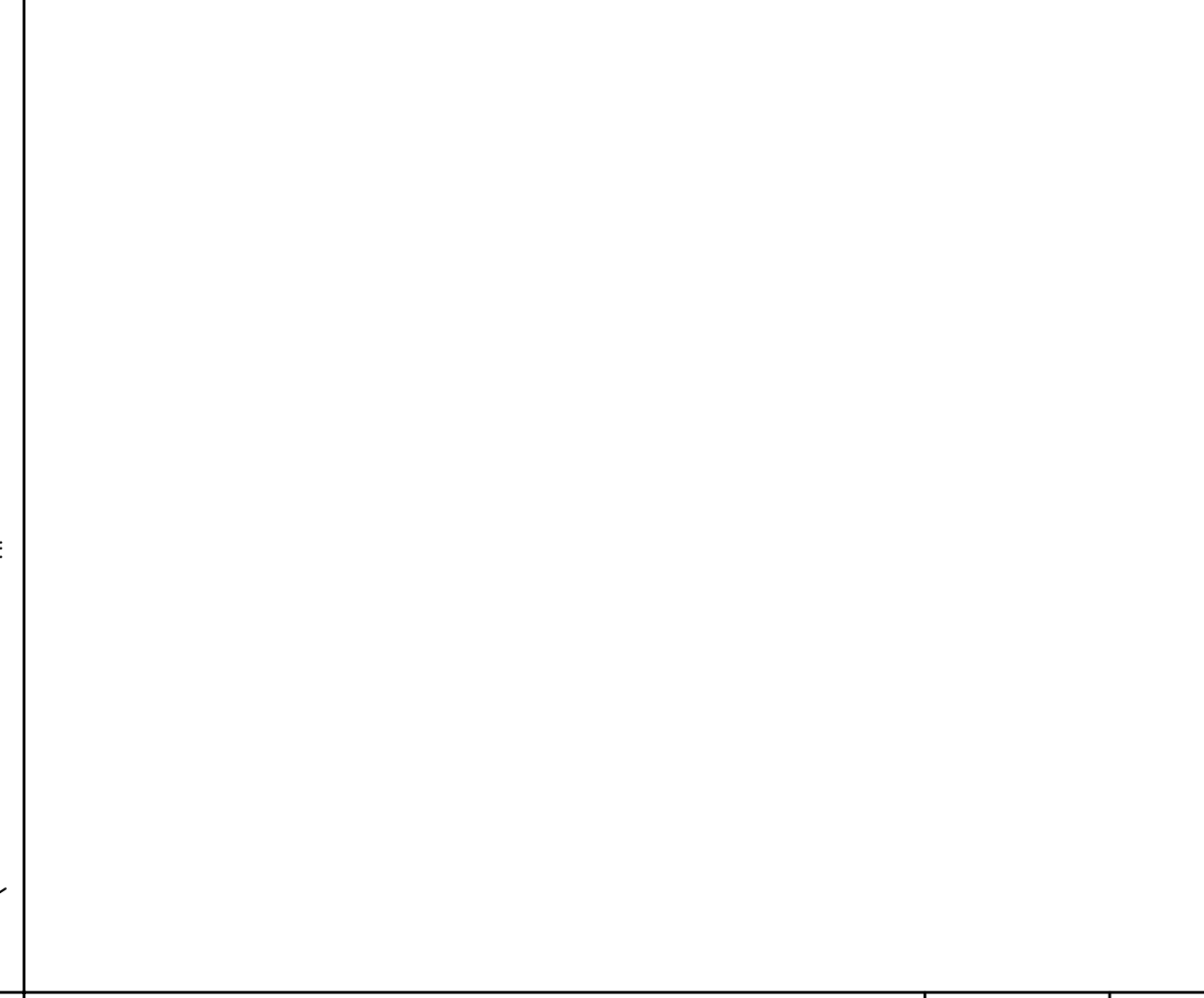
**SITE CONCRETE SECTION** SCALE: 3/8" = 1'-0" **1**



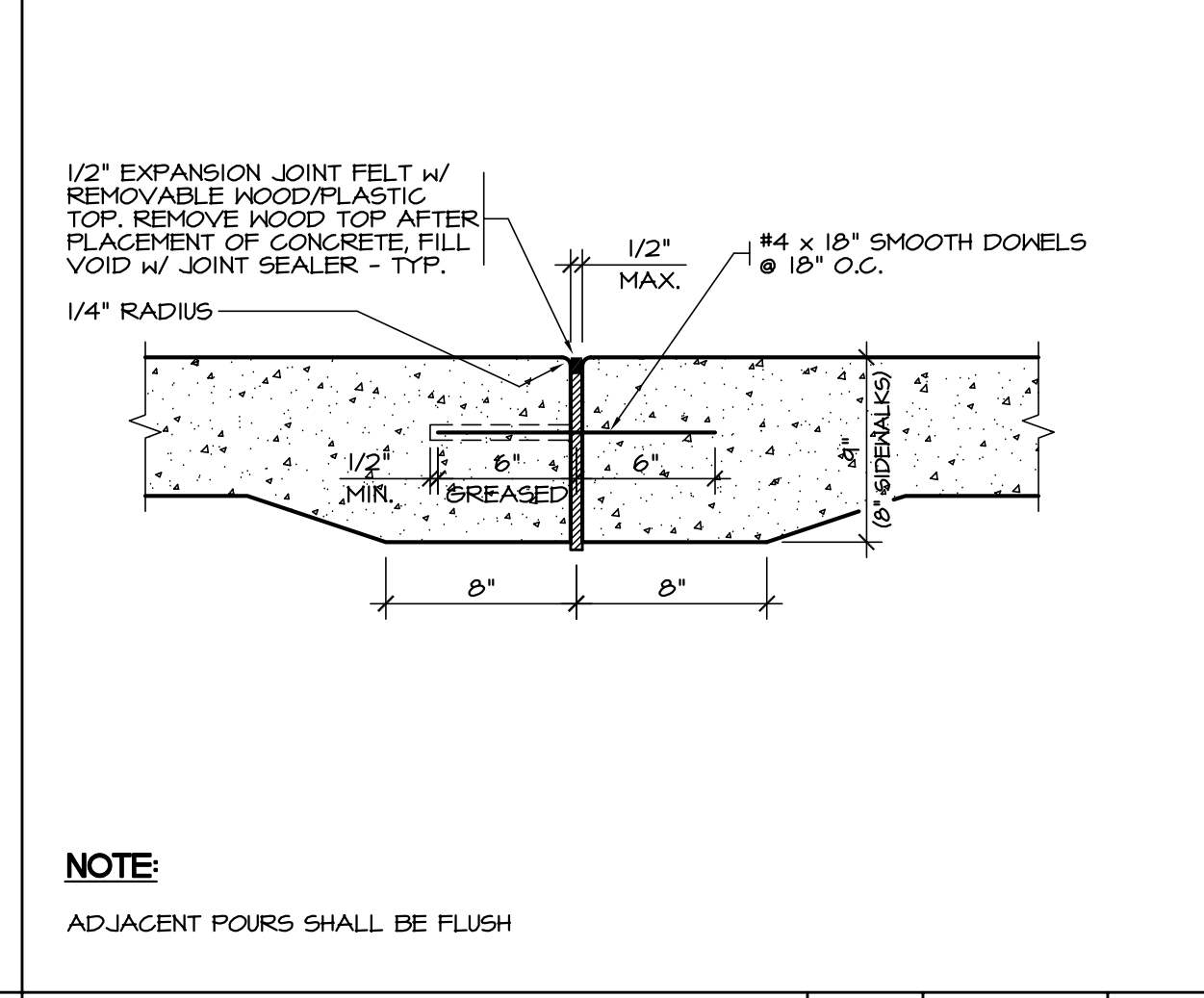
**NOT USED** **2**



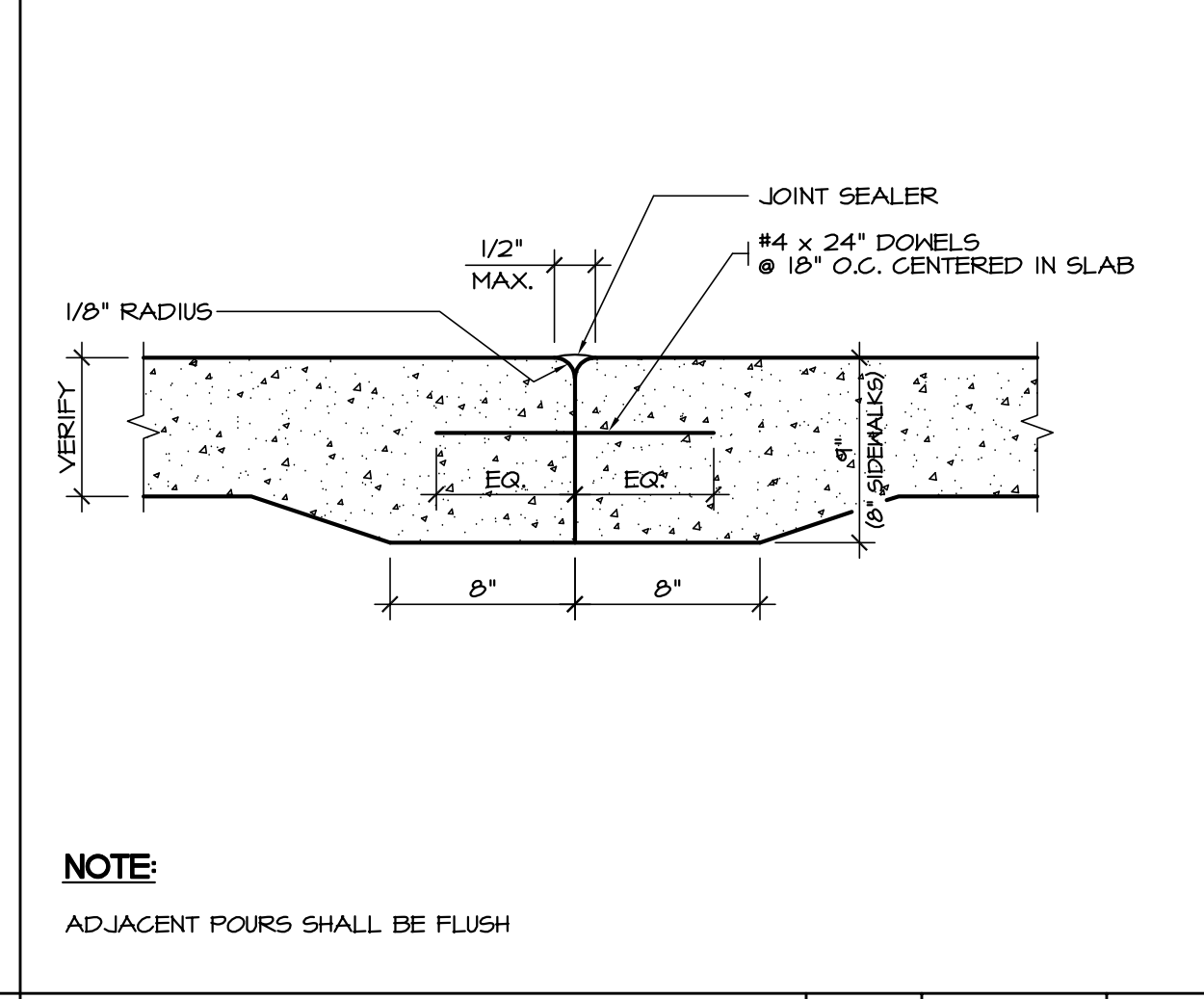
**3' AC PAVING SECTION** SCALE: 1" = 1'-0" **3**



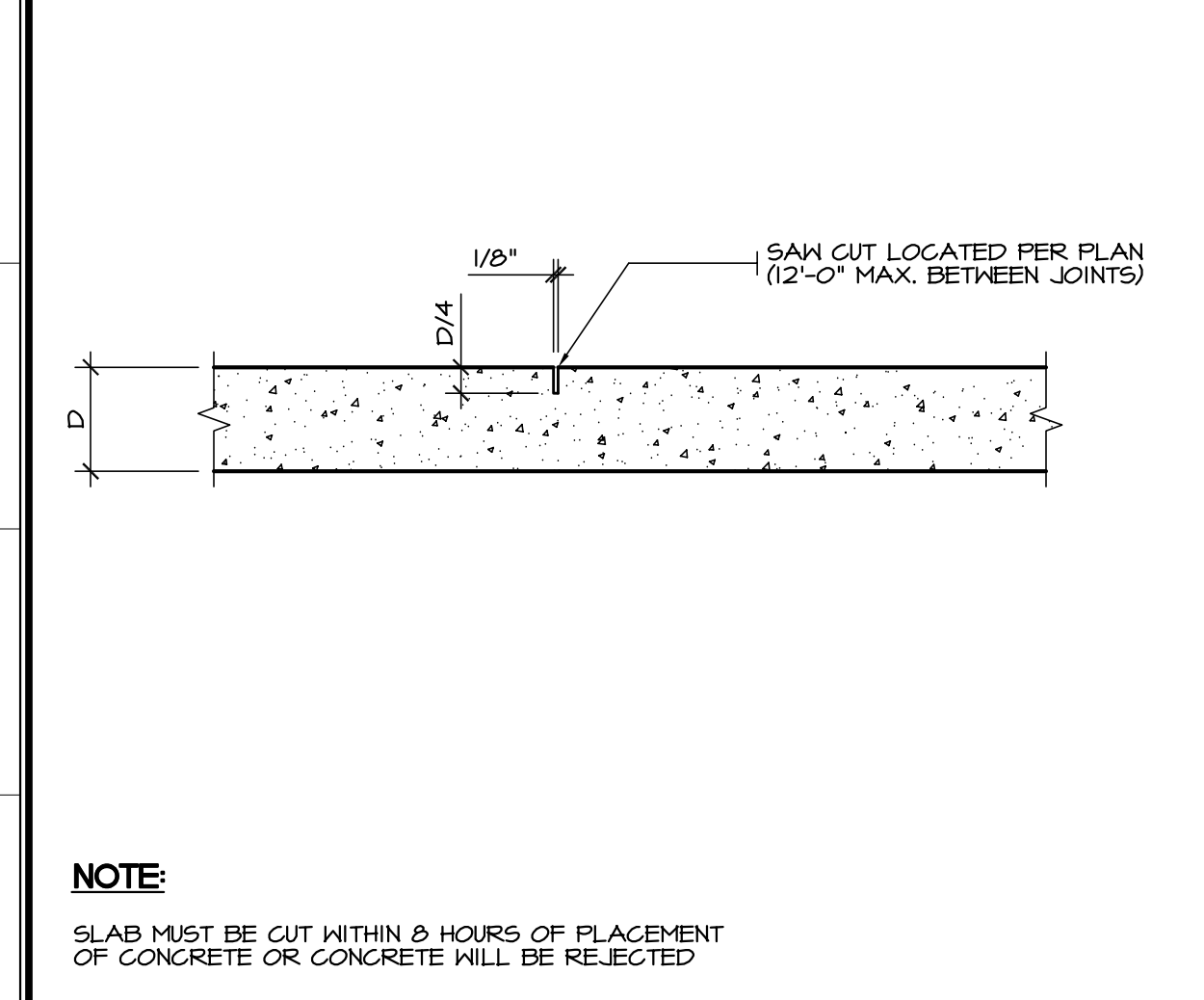
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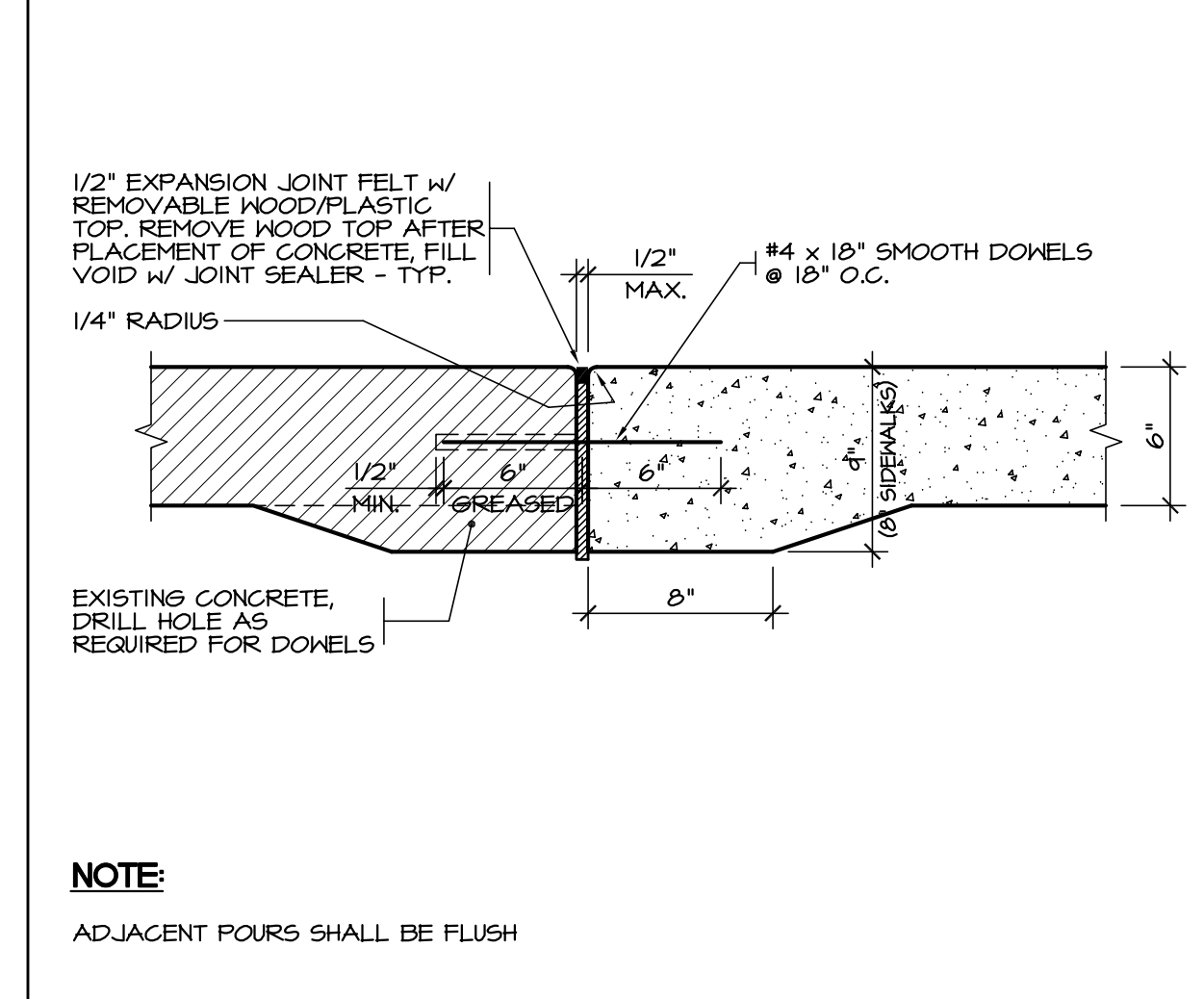
**EXPANSION JOINT** EXEMPTION C2, C4 SCALE: 1 1/2" = 1'-0" **5**



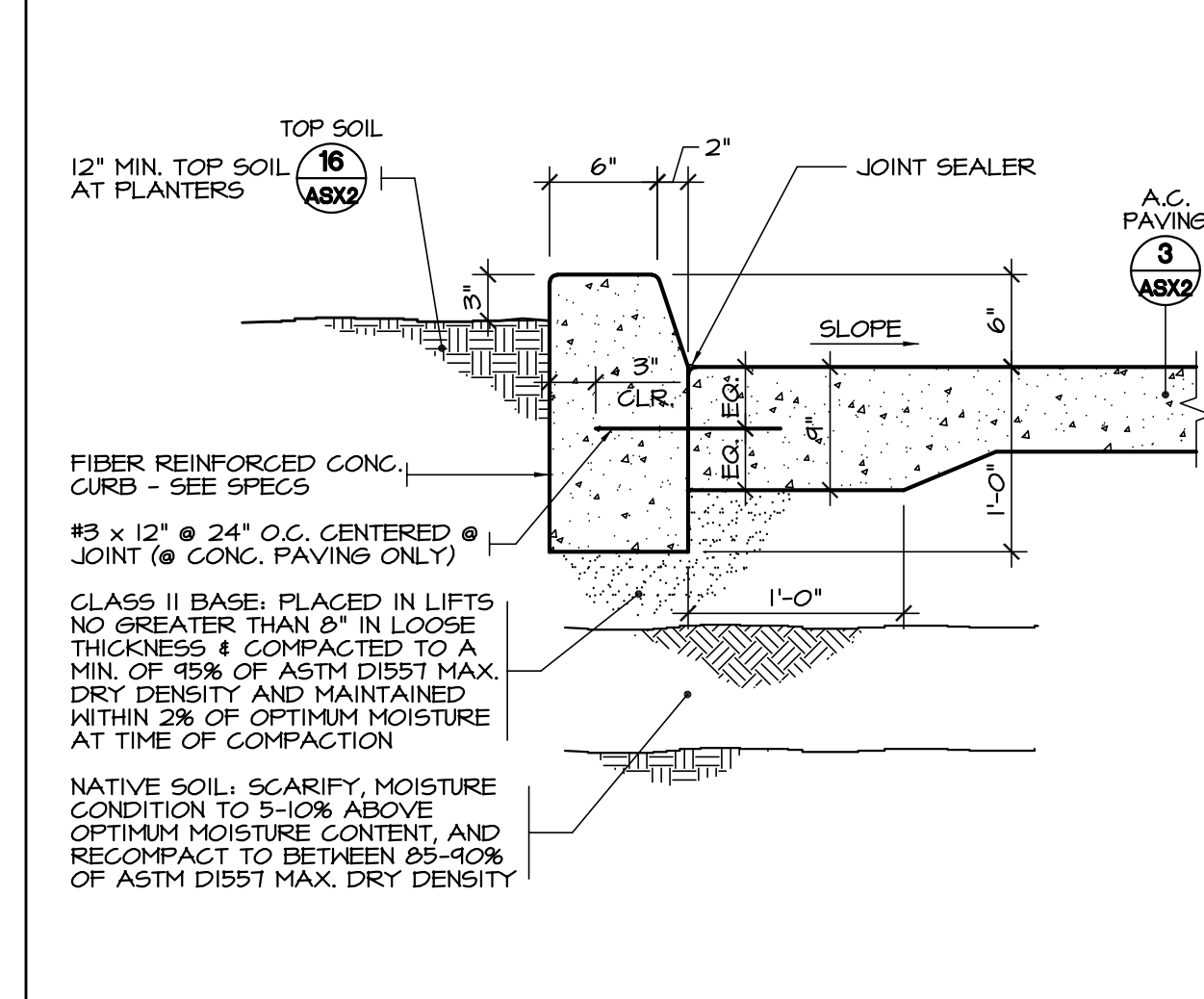
**CONSTRUCTION JOINT** EXEMPTION C2, C4 SCALE: 1 1/2" = 1'-0" **6**



**CONTROL JOINT, SAW CUT** EXEMPTION C2 SCALE: 1 1/2" = 1'-0" **7**



**NEW TO EXISTING CONCRETE** EXEMPTION C2, C4 SCALE: 1 1/2" = 1'-0" **8**



**CURB AT PAVING** SCALE: 1" = 1'-0" **9**



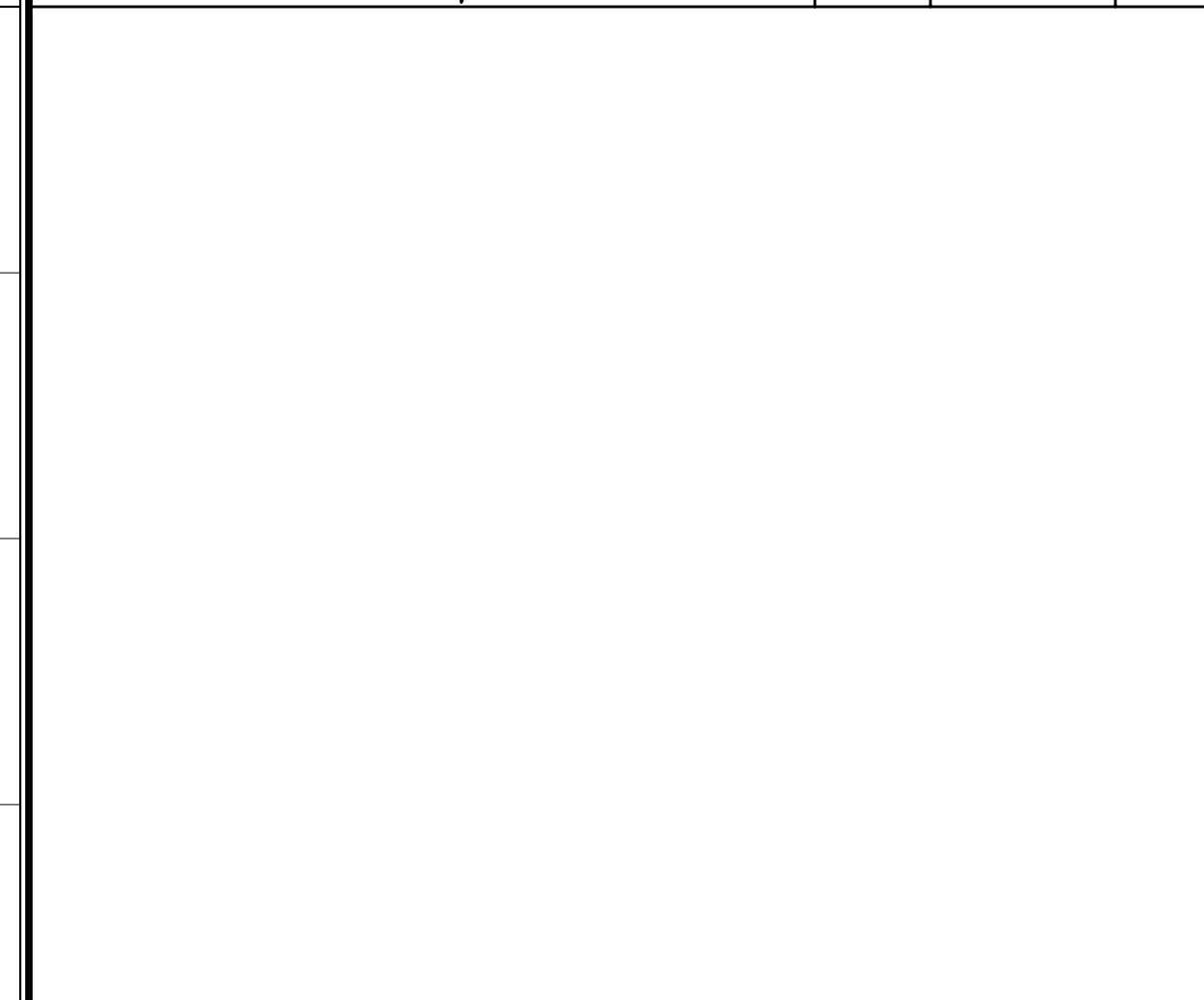
**NOT USED** **10**



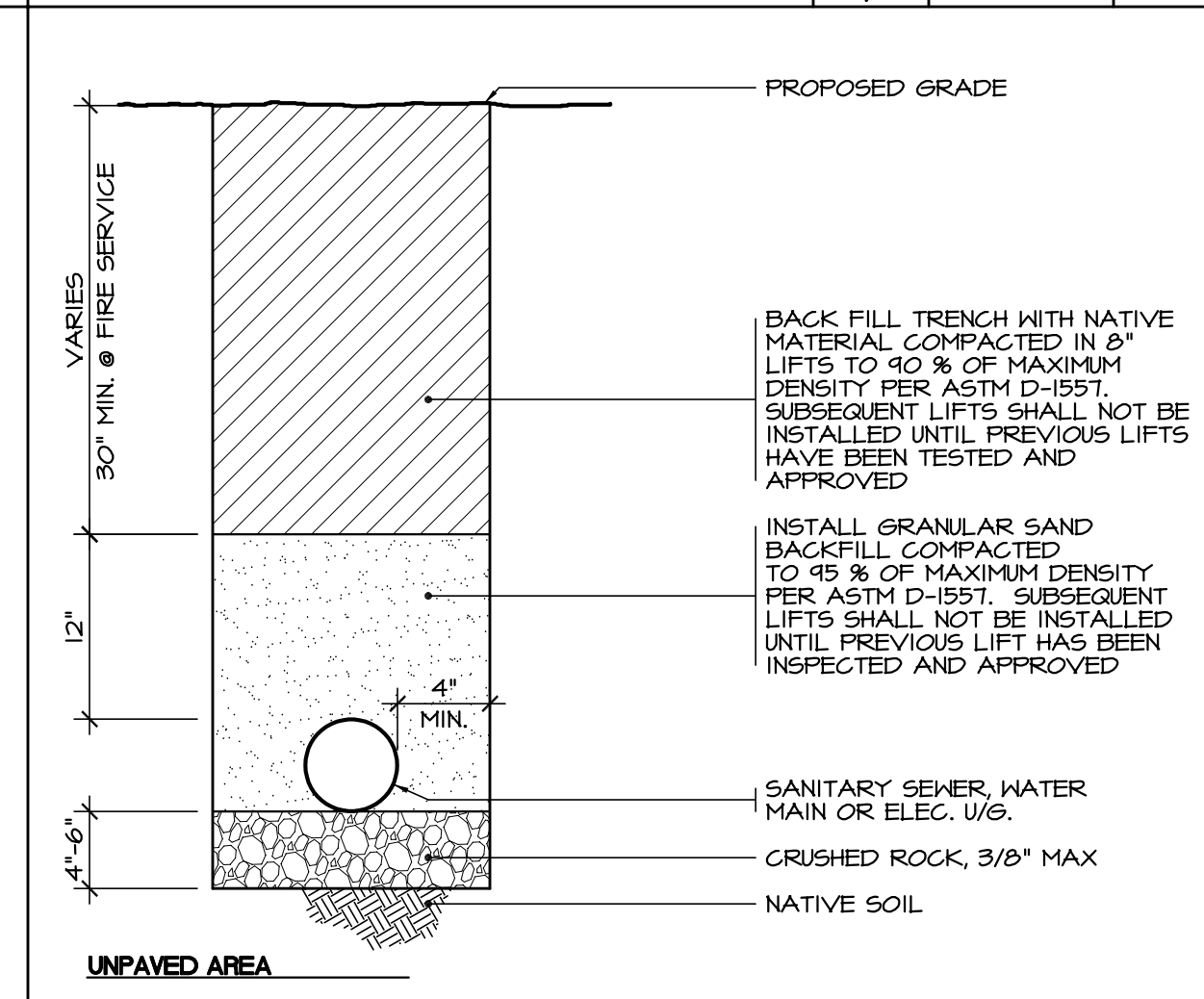
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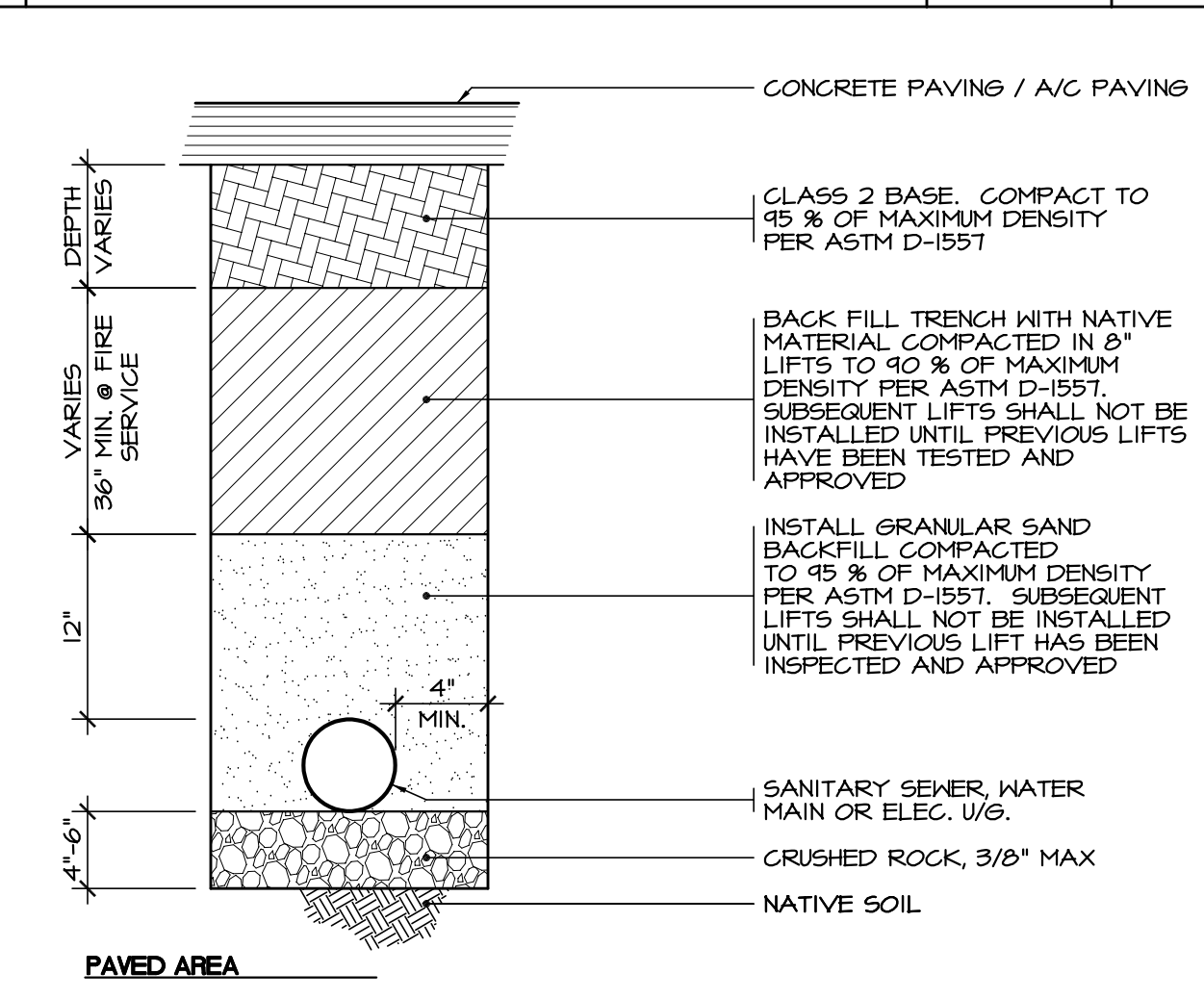
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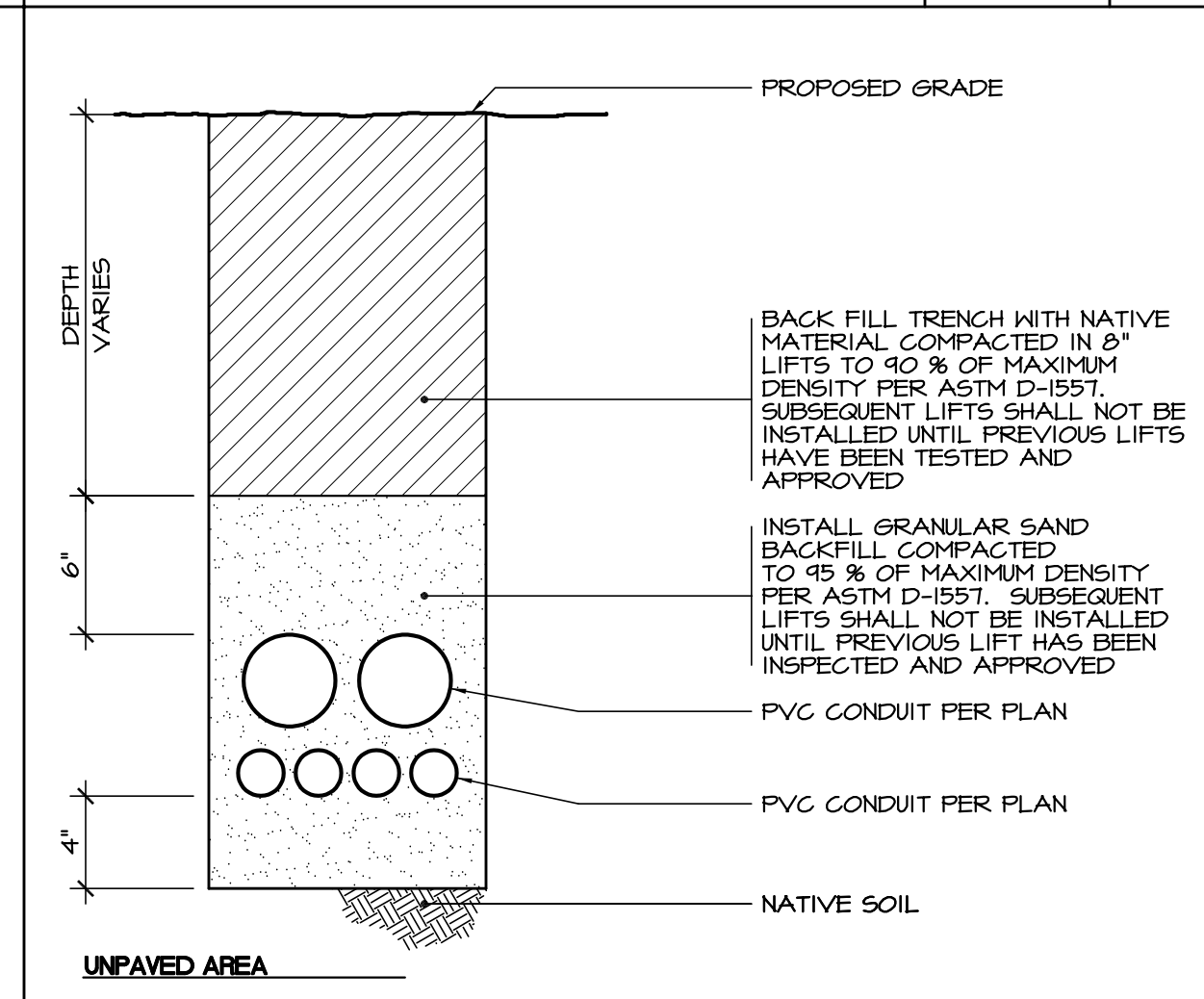
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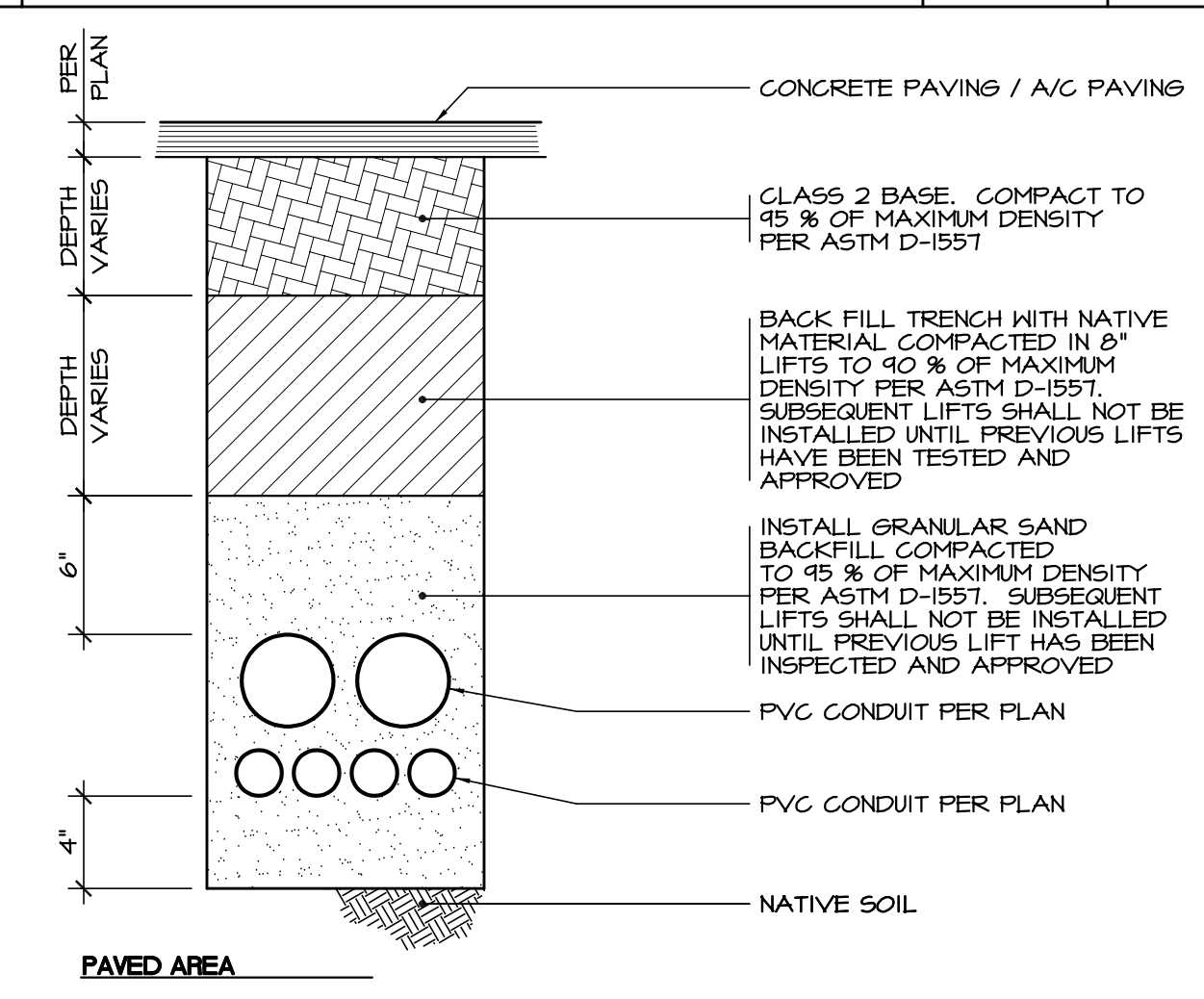
**TYPICAL HDPE TRENCH DETAIL** SCALE: N.T.S. **14**



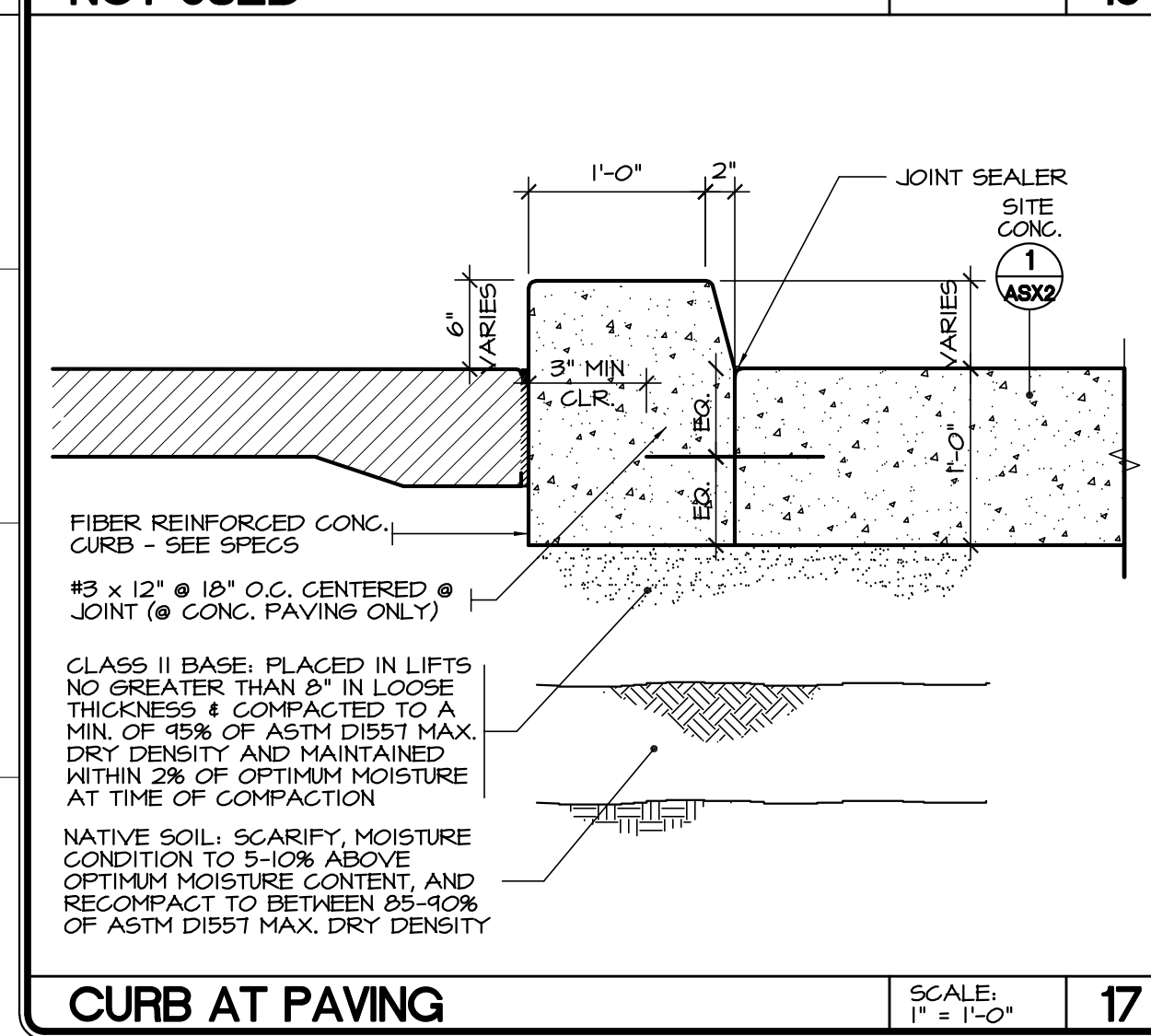
**TYPICAL PVC TRENCH DETAIL** SCALE: N.T.S. **15**



**NOT USED** **17**



**TOP SOIL AT CURBS** EXEMPTION C2 SCALE: 1" = 1'-0" **16**



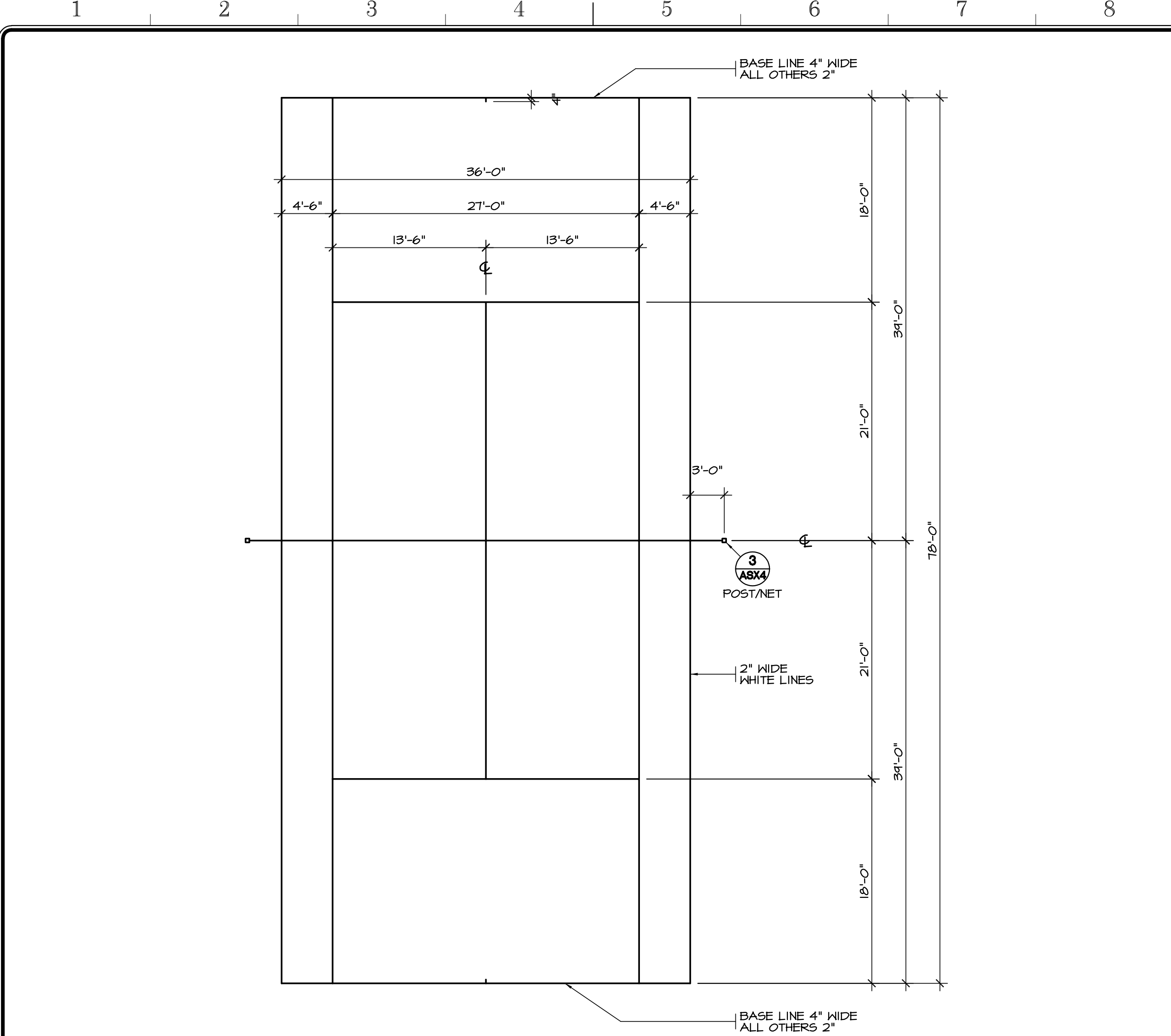
**CURB AT PAVING** SCALE: 1" = 1'-0" **17**

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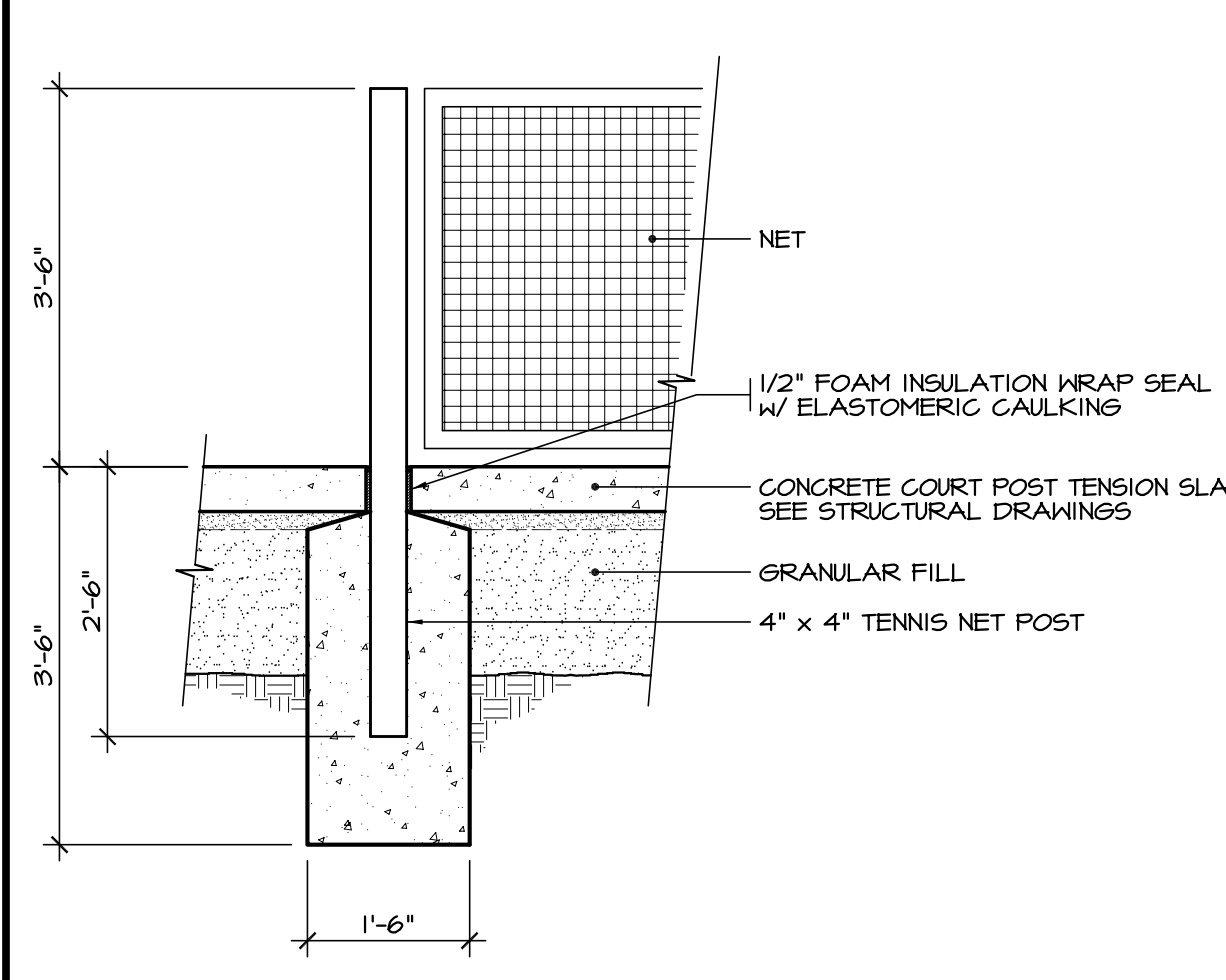
Project Title  
**IMPERIAL VALLEY COLLEGE  
 TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

Sheet Title  
**TYPICAL SITE DETAILS**

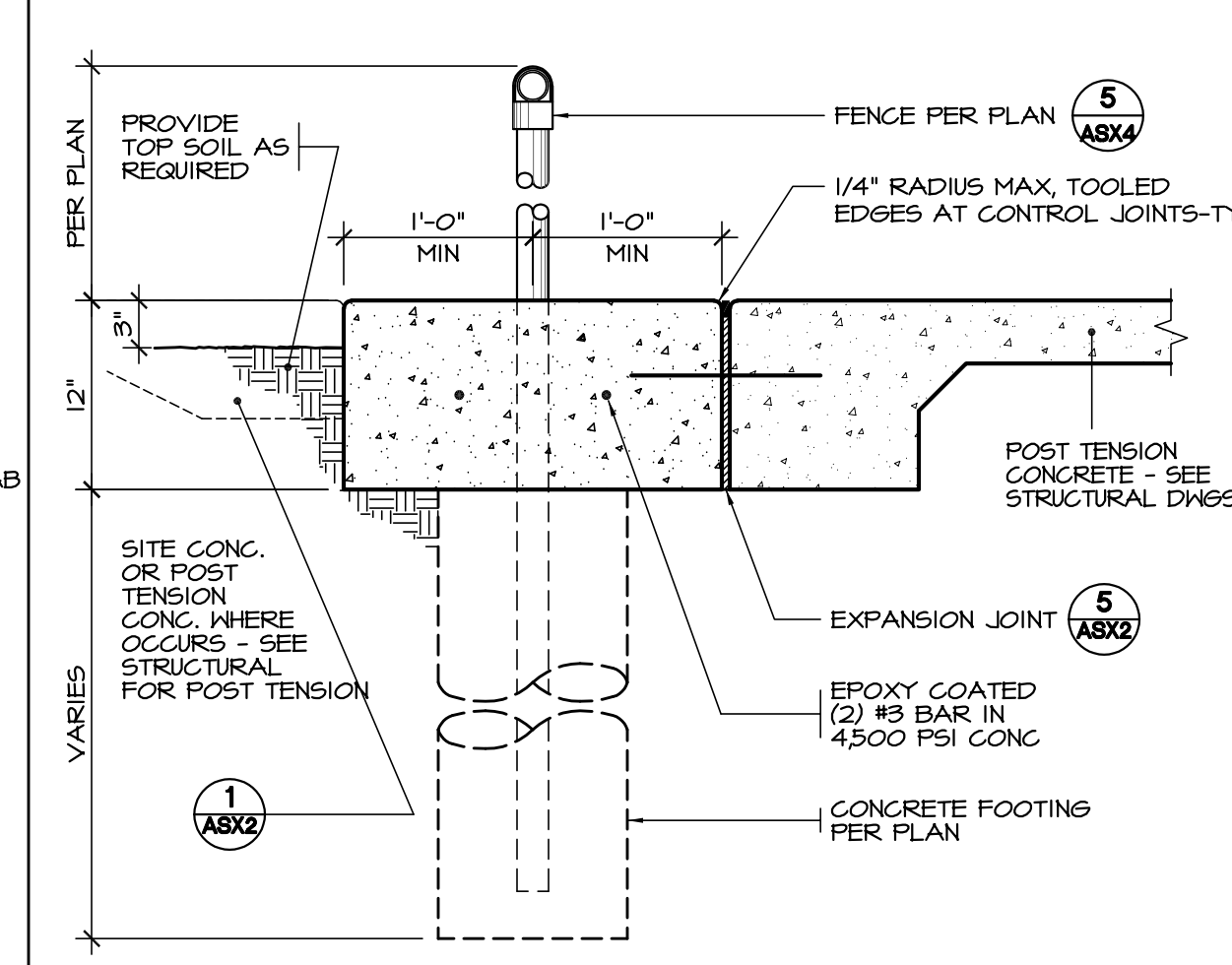
Document Date <b>06-24-22</b>	Project Number <b>22-081V</b>
Date Last Revised	Sheet Number <b>ASX2</b>



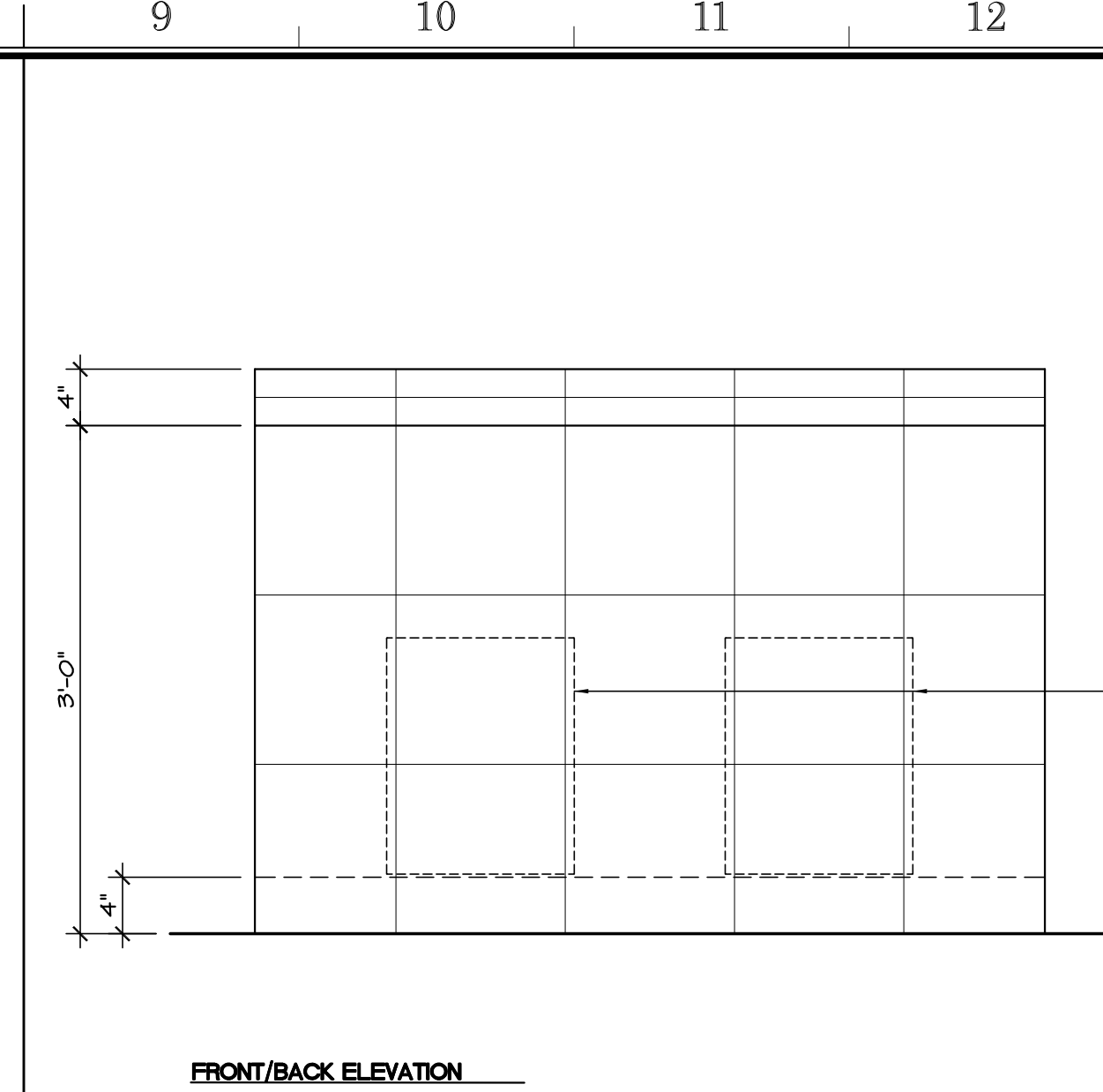
**TENNIS COURT STRIPPING** SCALE: 1/8" = 1'-0" 1



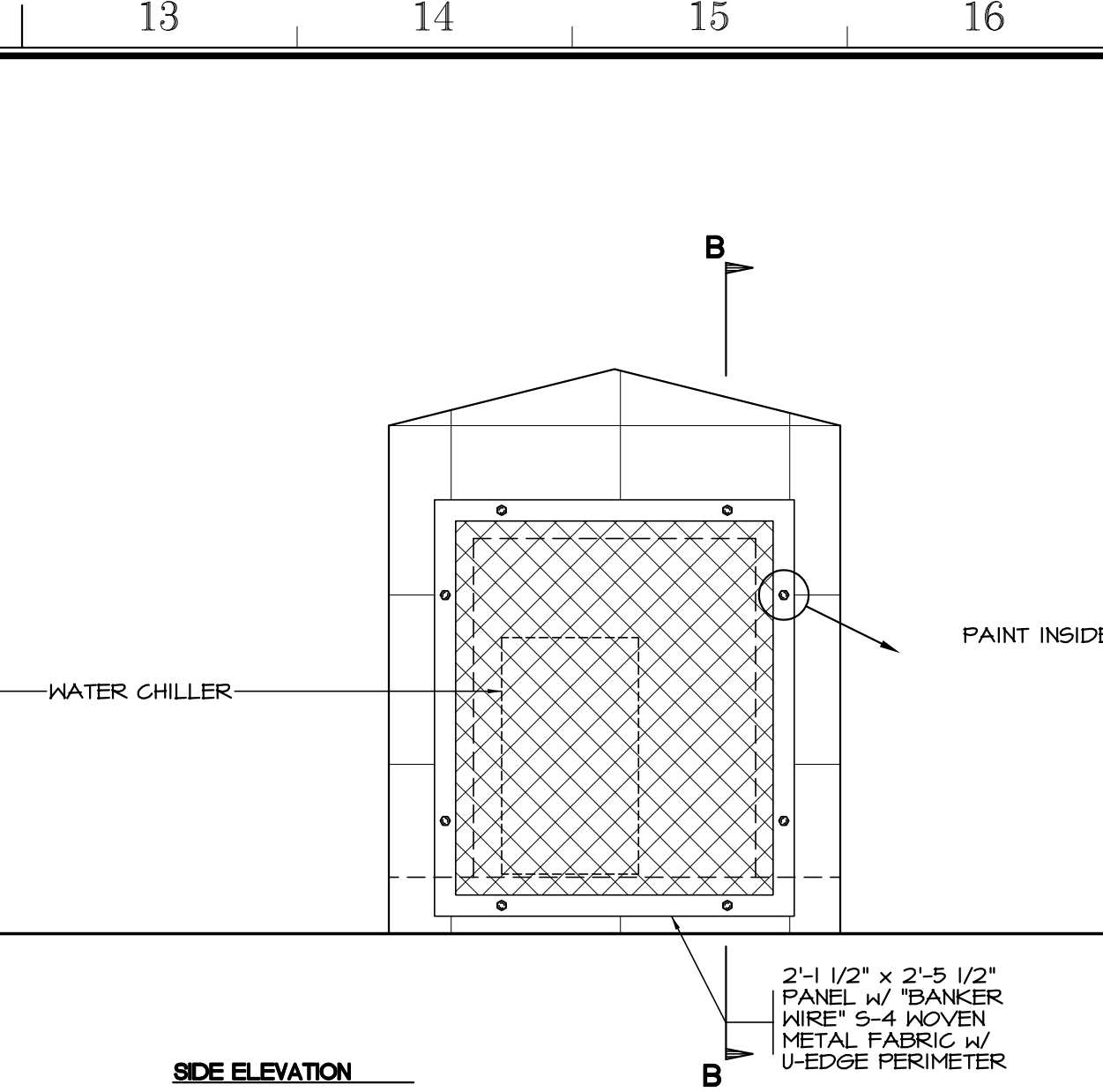
**POST / NET** SCALE: NONE 3



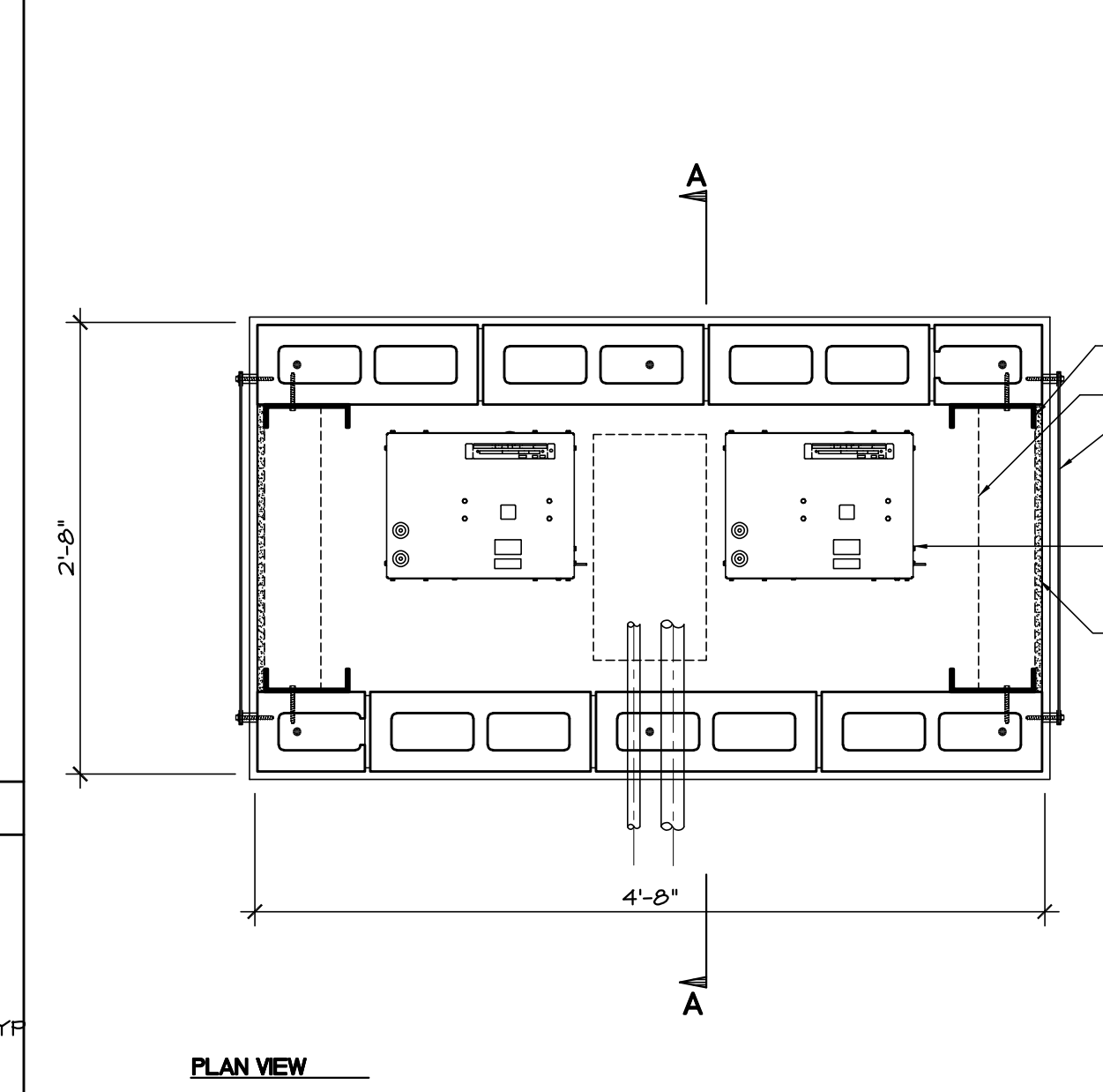
**CURB AT FENCE** SCALE: 1" = 1'-0" 4



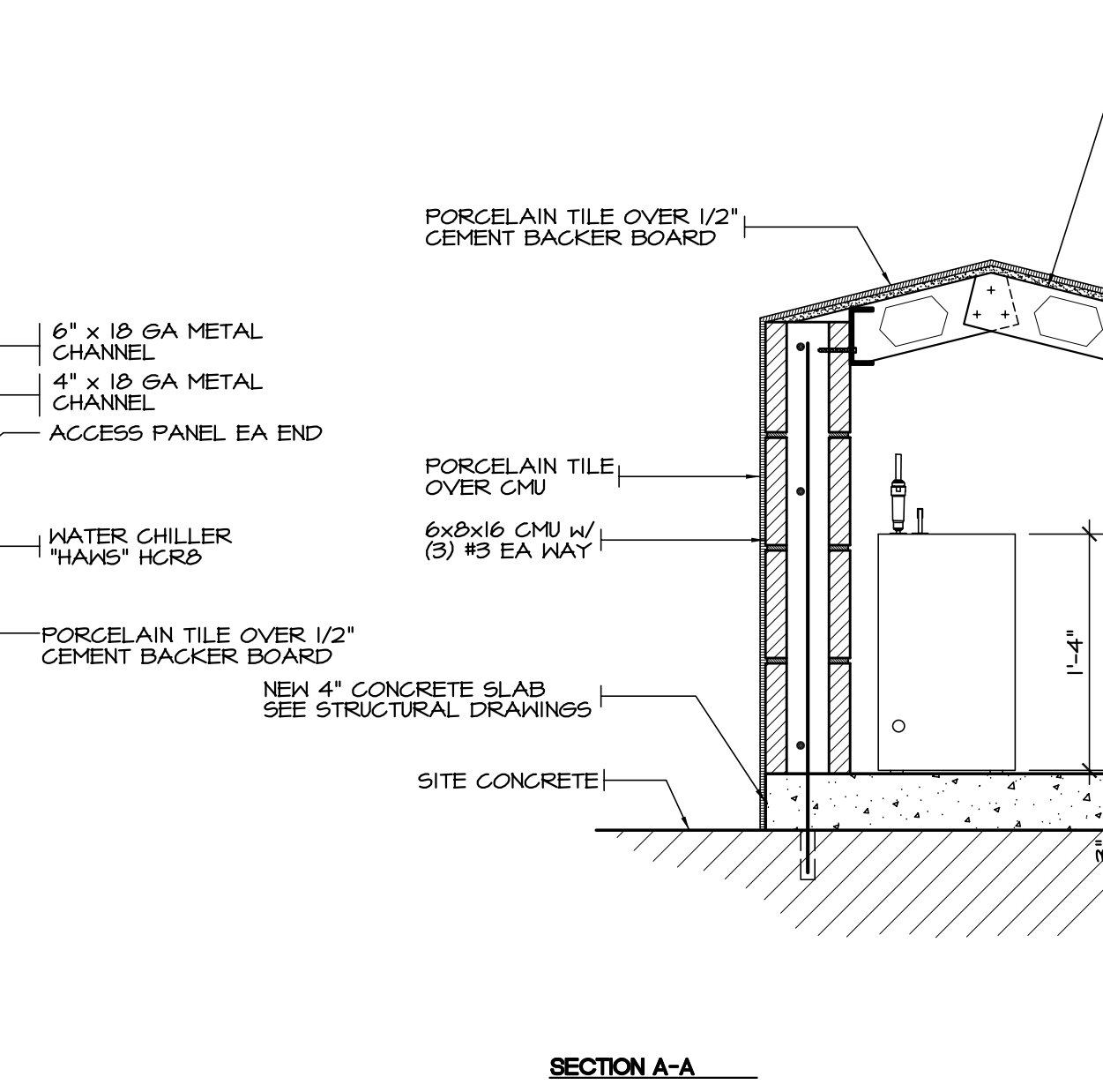
**FRONT/BACK ELEVATION**



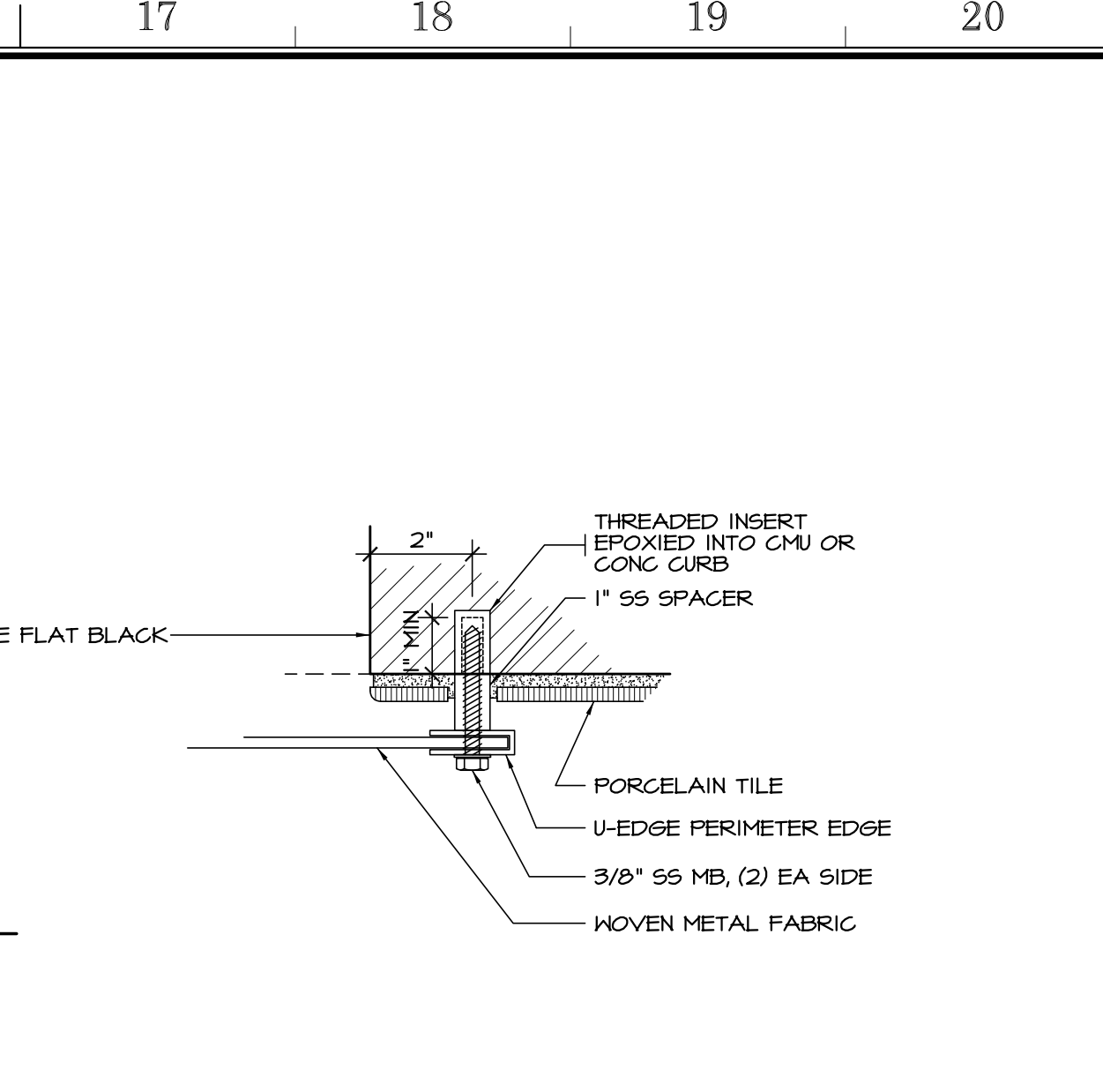
**SIDE ELEVATION**



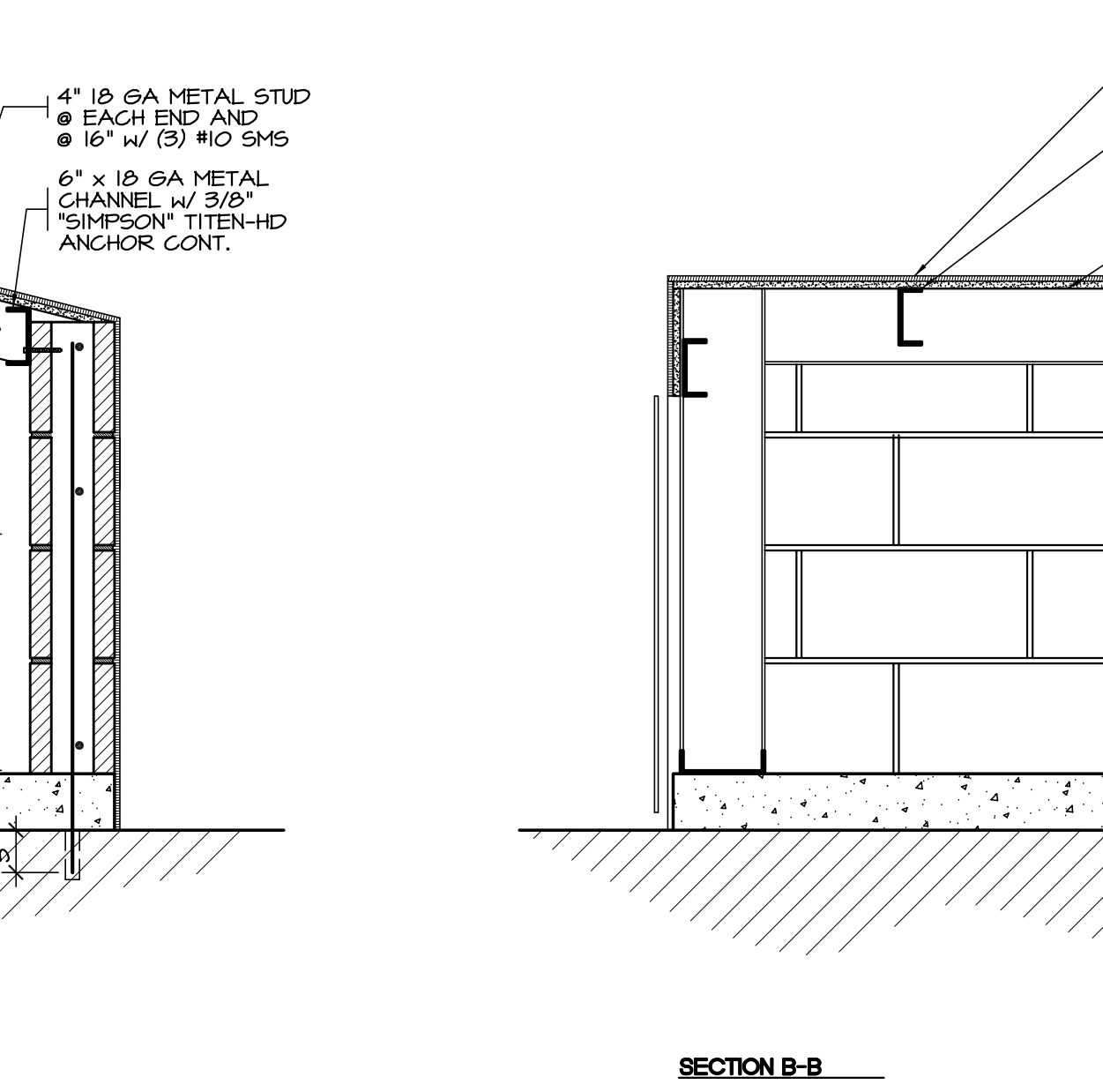
**PLAN VIEW**



**SECTION A-A**

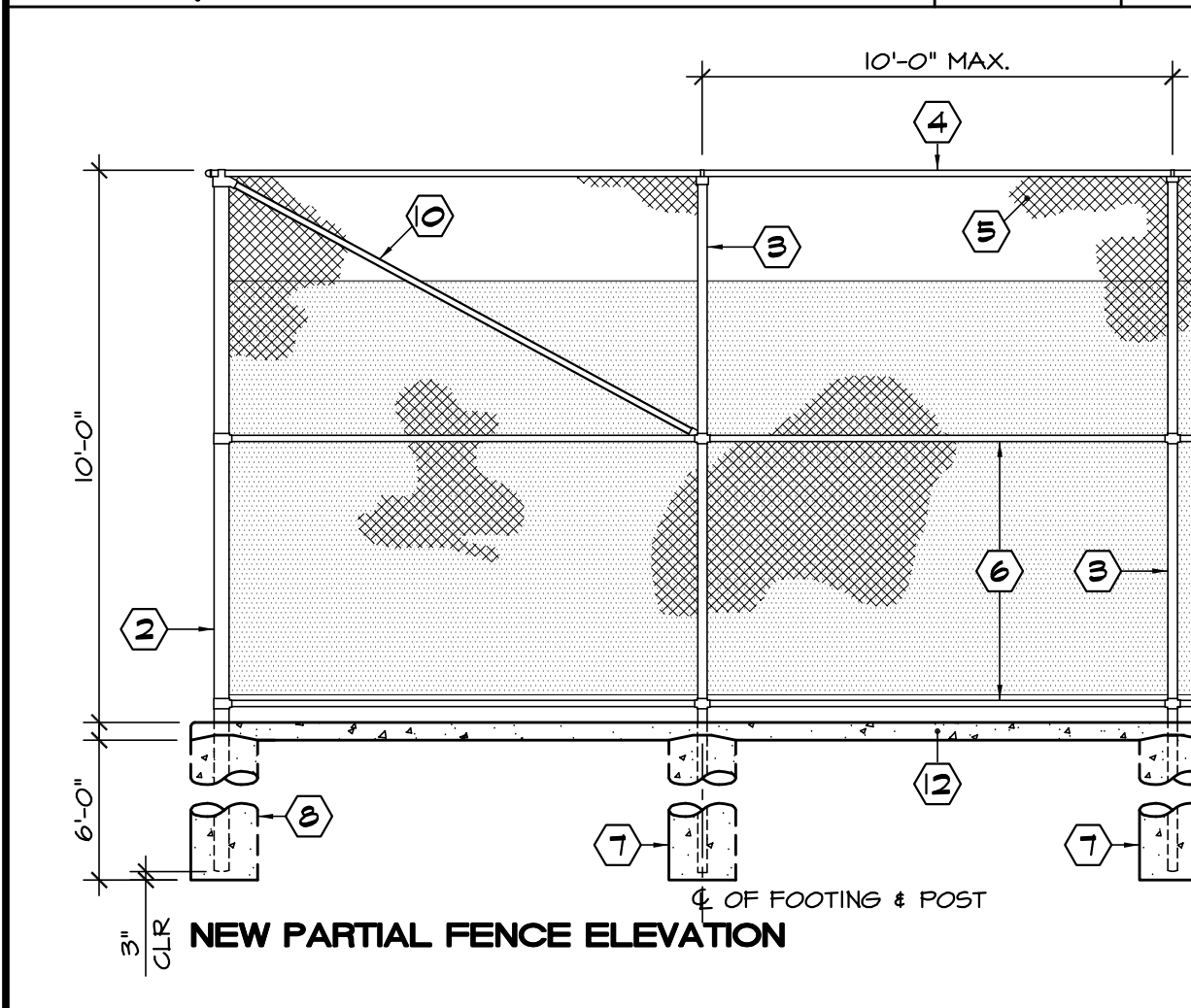


**DETAIL**

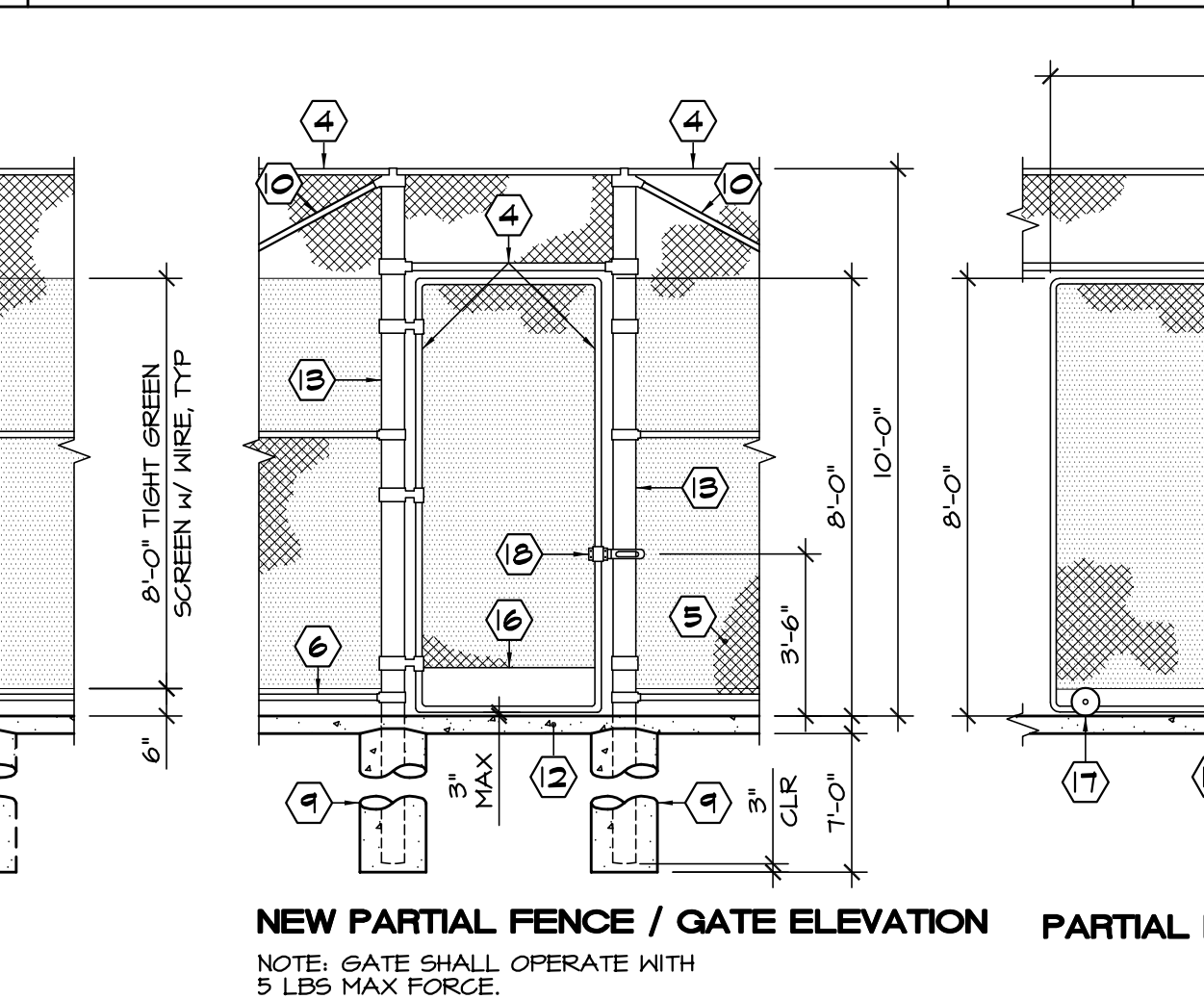


**SECTION B-B**

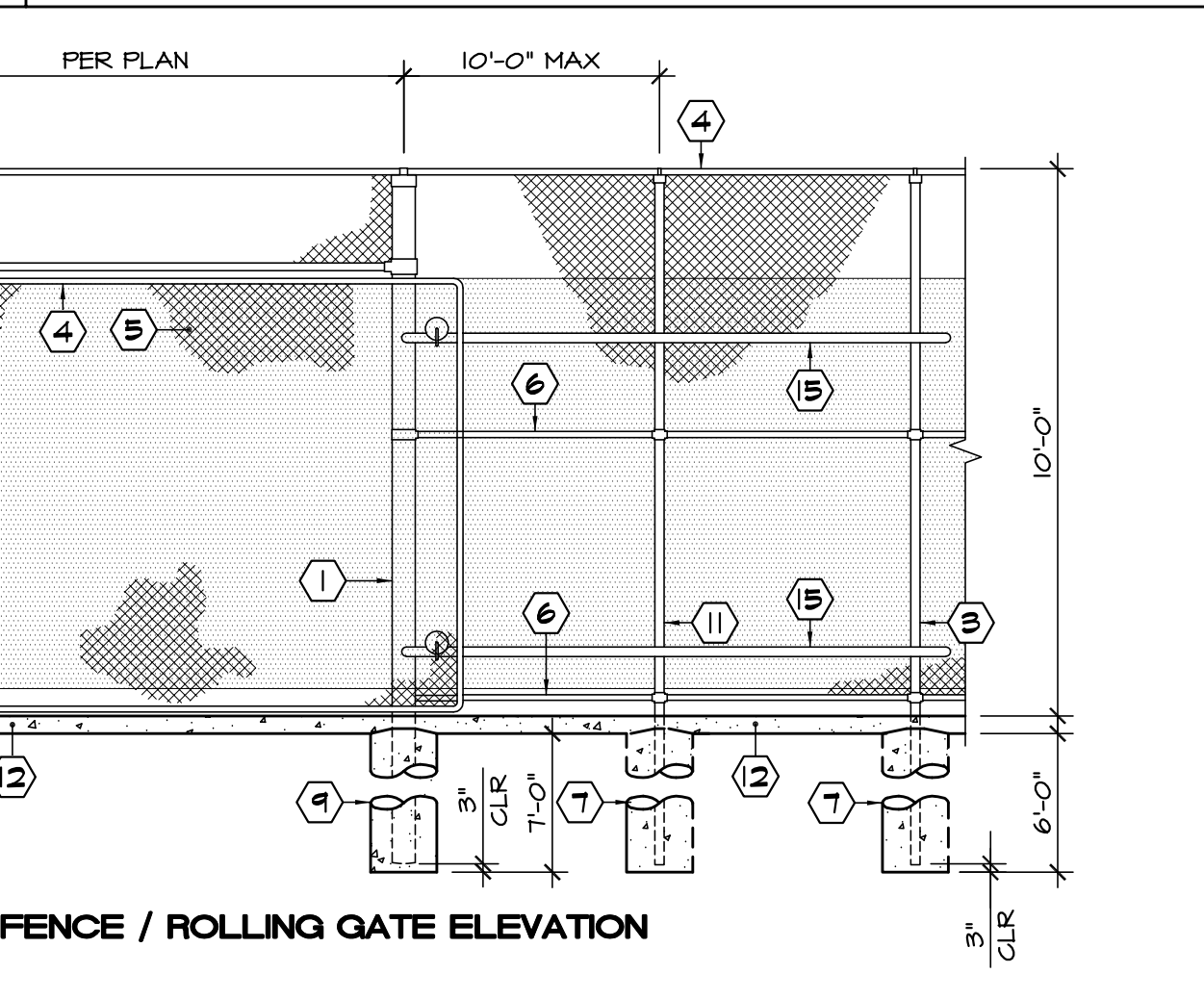
**APPROVALS**



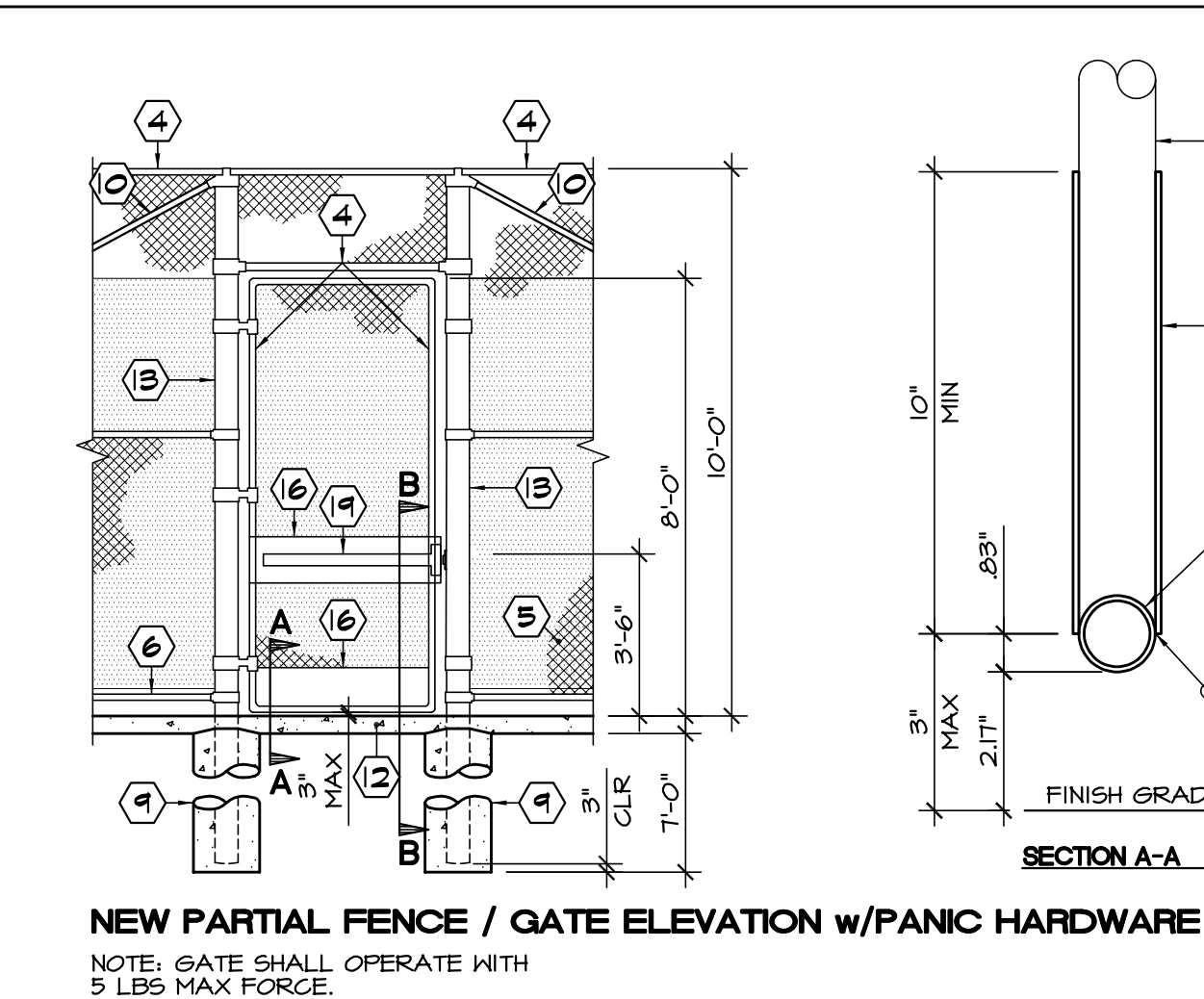
**NEW PARTIAL FENCE ELEVATION**



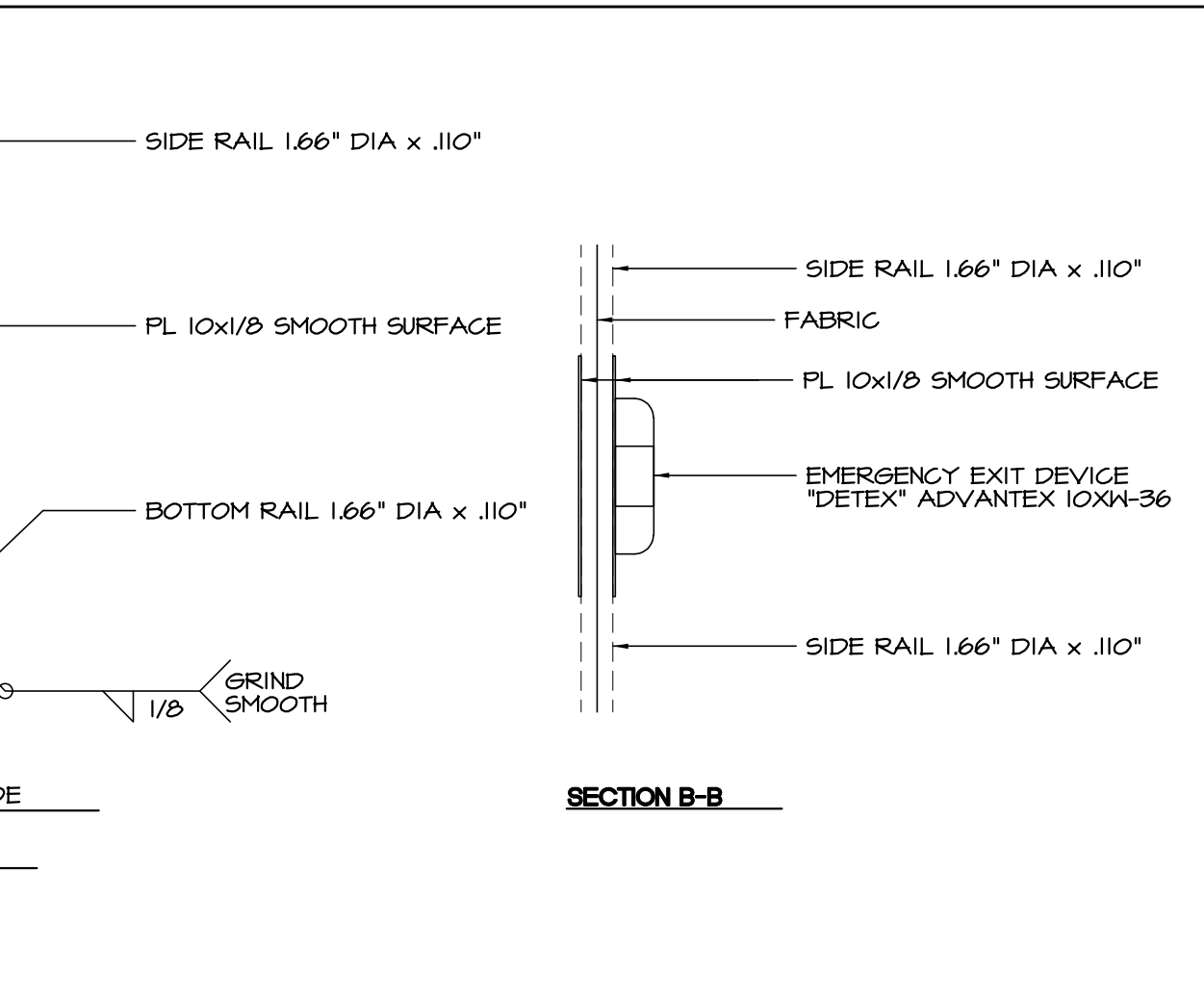
**NEW PARTIAL FENCE / GATE ELEVATION**



**PARTIAL FENCE / ROLLING GATE ELEVATION**



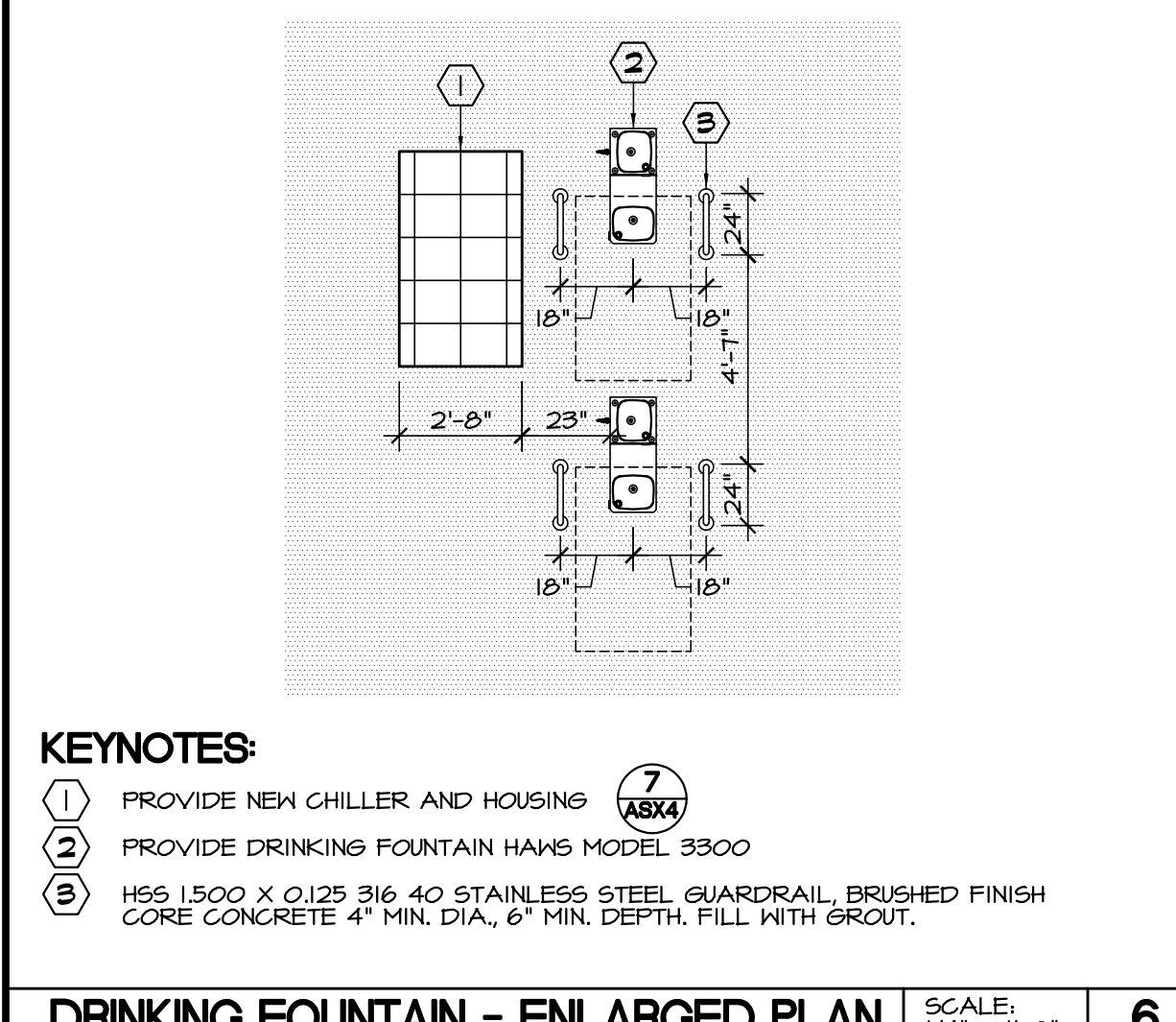
**NEW PARTIAL FENCE / GATE ELEVATION w/PANIC HARDWARE**



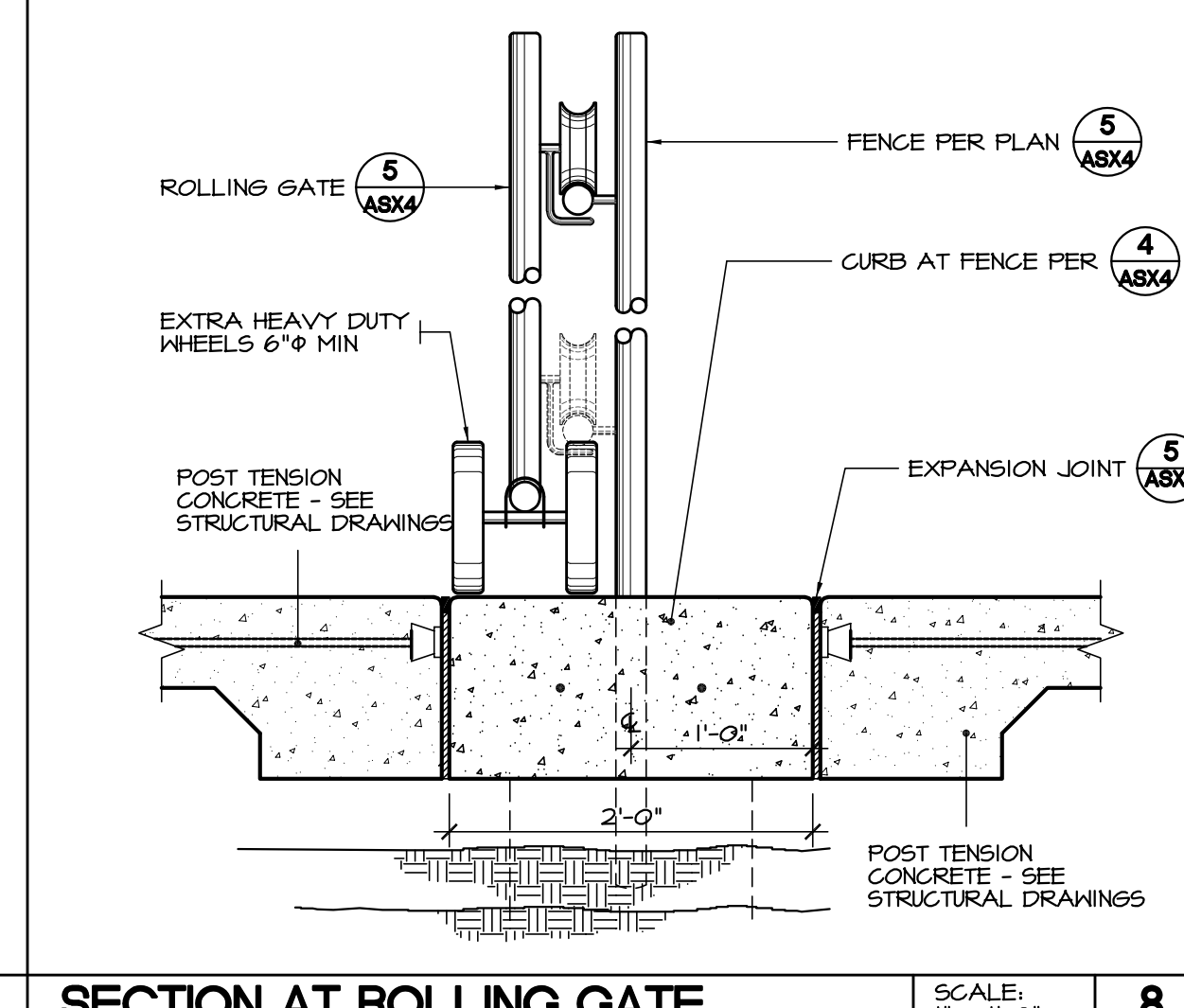
**SECTION A-A** and **SECTION B-B**

- FENCE KEYNOTES: FENCE TO 10'-0" HIGH**
- 1 TERMINAL POST - 5.563"ø x 250', 1.6 lb/ft, T-40 GALVANIZED
  - 2 CORNER POST - 4.5" DIA x 231', 1.0 lb/ft, T-40 GALVANIZED
  - 3 LINE POST - 2.875" DIA x 160', 4.64 lb/ft, T-40 GALVANIZED
  - 4 TOP RAIL - 1.66" DIA x 110', 1.82 lb/ft, T-40 GALVANIZED
  - 5 FABRIC - 2' x 9 GA KK, 1.2 OUNCES OF ZINC PER SQ FT
  - 6 BOTTOM RAIL - 1.66" DIA x 110', 1.82 lb/ft, T-40 GALVANIZED
  - 7 LINE POST FOOTING - 1'-6"ø x 6'-0" CONC
  - 8 CORNER POST FOOTING - 1'-6"ø x 6'-0" CONC
  - 9 TERMINAL/GATE POST FOOTING - 1'-6"ø x 6'-0" CONC
  - 10 BRACE AT ALL CORNERS - 1.91ø x 0.120" 2.28 lb/ft POST
  - 11 INTERMEDIATE SUPPORT @ GATE - SAME AS LINE POST
  - 12 CONCRETE CURB (ASX4)
  - 13 SINGLE WALK GATE POST - SAME AS TERMINAL POST
  - 14 DOUBLE WALK GATE POST - SAME AS TERMINAL POST (NOT SHOWN)
  - 15 ROLLER SUPPORT - HEAVY DUTY
  - 16 SMOOTH 10" KICK PLATE @ BOTH SIDES - FLUSH w/ GATE FRAMING
  - 17 HEAVY DUTY ROLLER, 6" DIAMETER MIN
  - 18 LATCHING FORK w/ LEVER HARDWARE (ASX4)
  - 19 PANIC HARDWARE (ASX4)

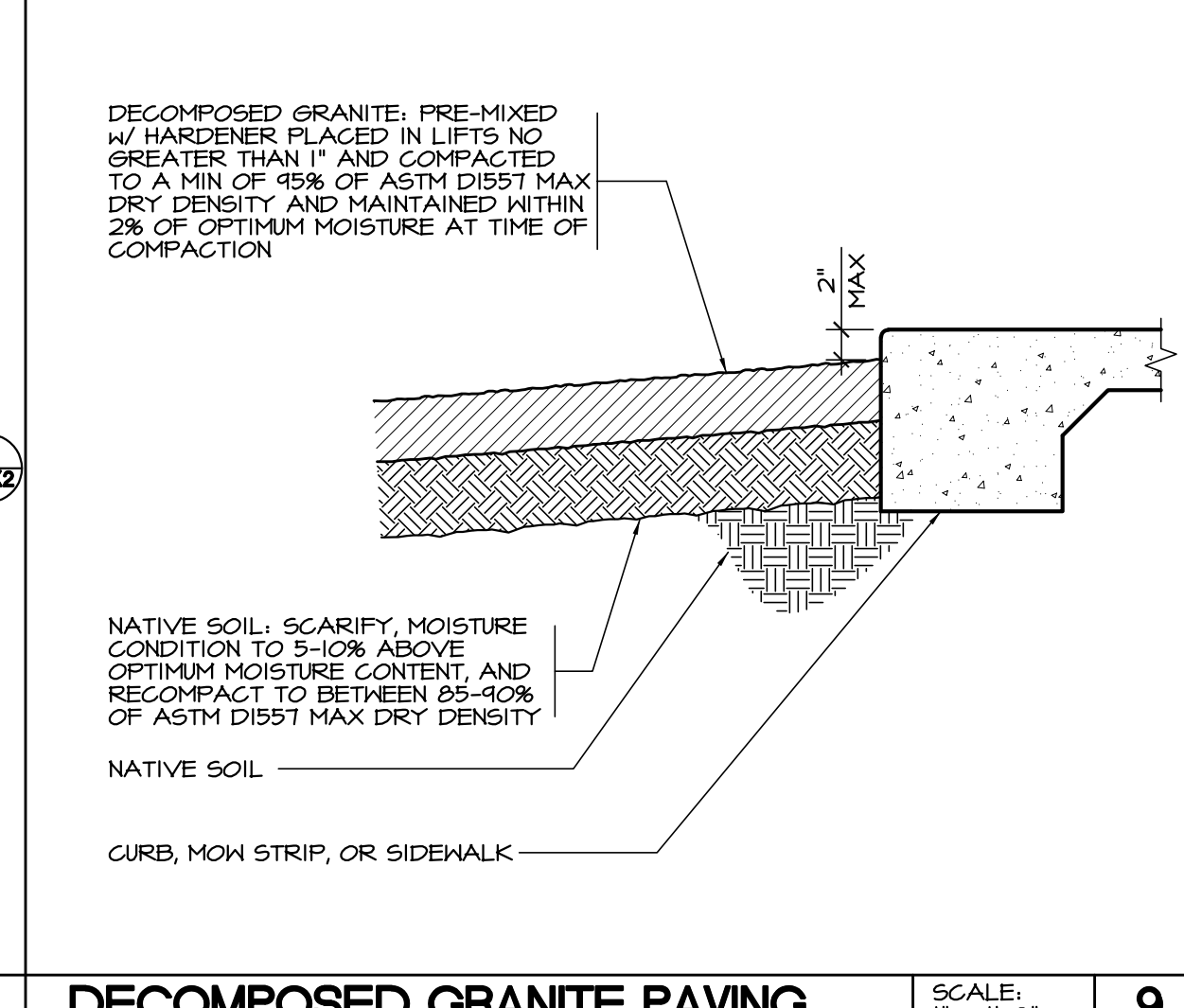
**SCALE: NONE** 5



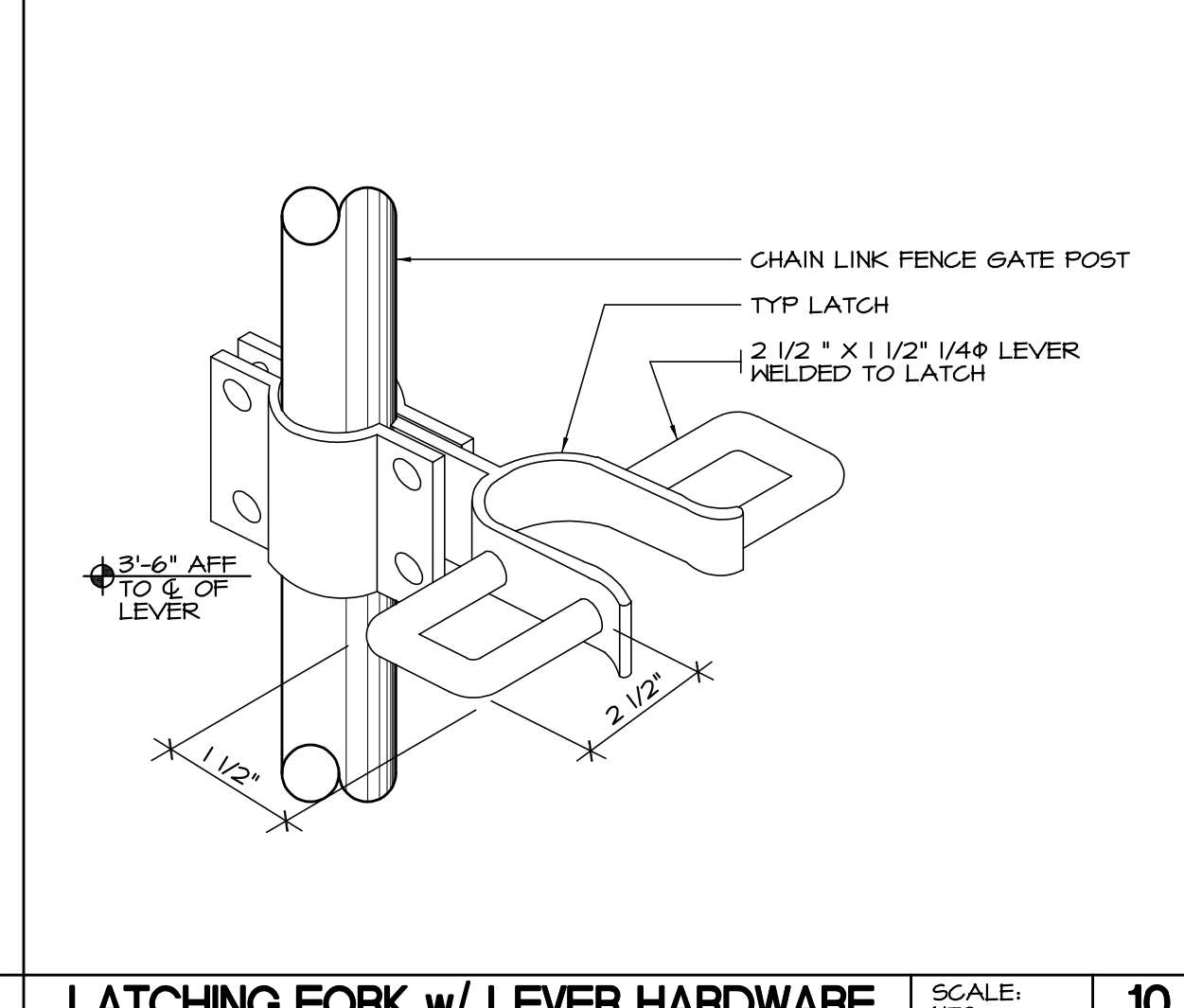
**DRINKING FOUNTAIN - ENLARGED PLAN** SCALE: 1/4" = 1'-0" 6



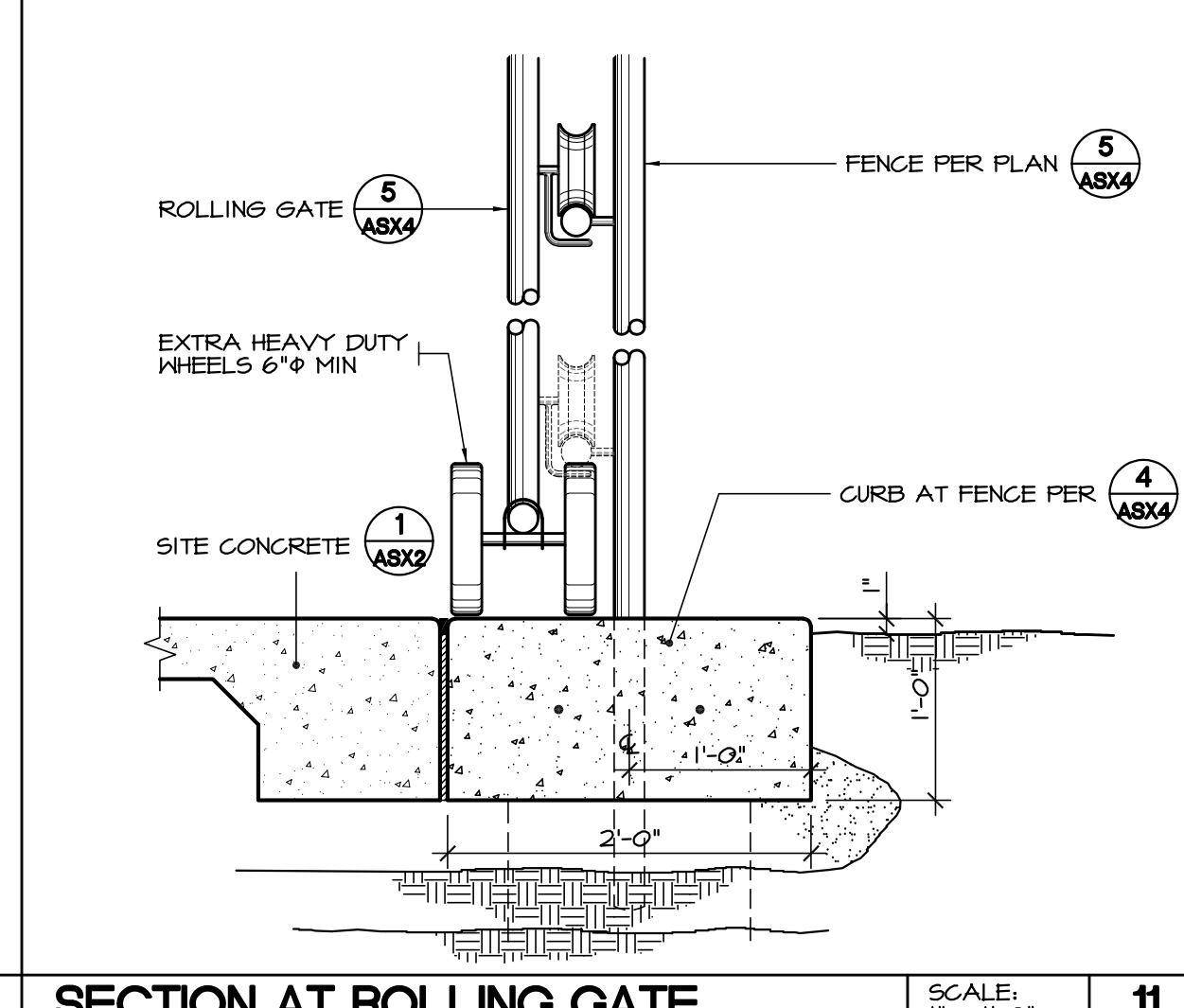
**SECTION AT ROLLING GATE** SCALE: 1" = 1'-0" 8



**DECOMPOSED GRANITE PAVING** SCALE: 1" = 1'-0" 9



**LATCHING FORK w/ LEVER HARDWARE** SCALE: NTS 10



**SECTION AT ROLLING GATE** SCALE: 1" = 1'-0" 11

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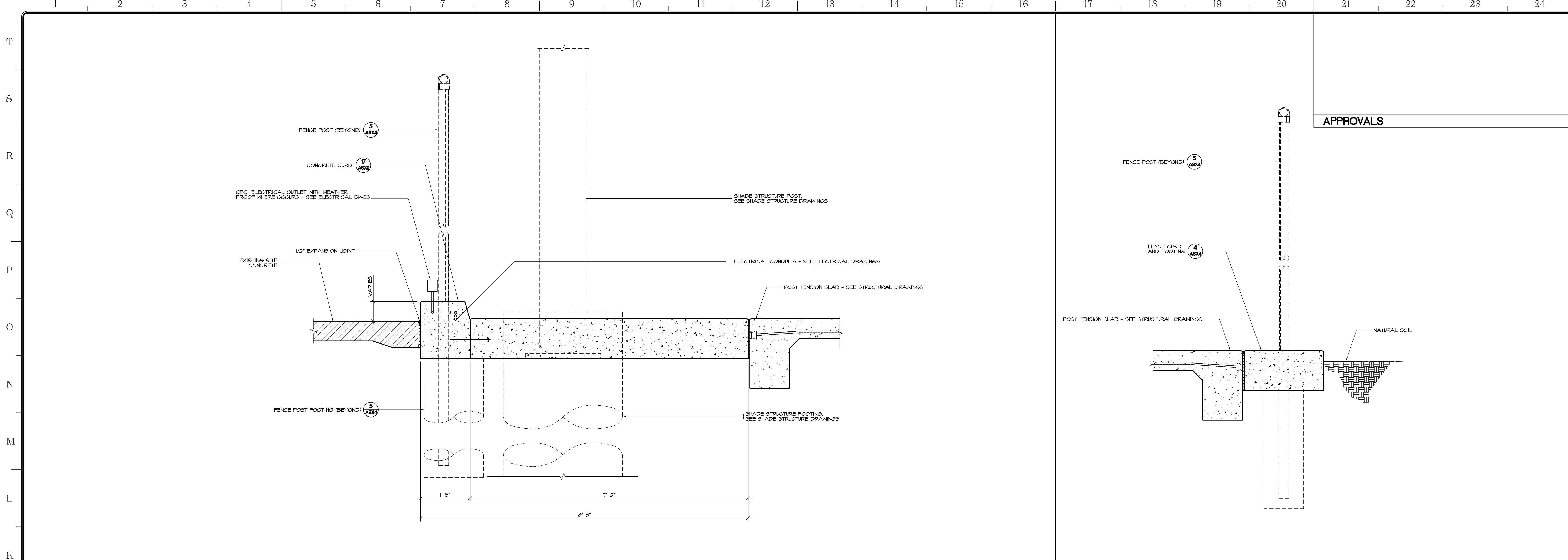
Project Title  
**IMPERIAL VALLEY COLLEGE  
 TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

Sheet Title  
**SITE DETAILS**

Document Date	Project Number
06-29-22	22-081V
Date Last Revised	Sheet Number
	<b>ASX4</b>

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**SCALE: NONE** 5



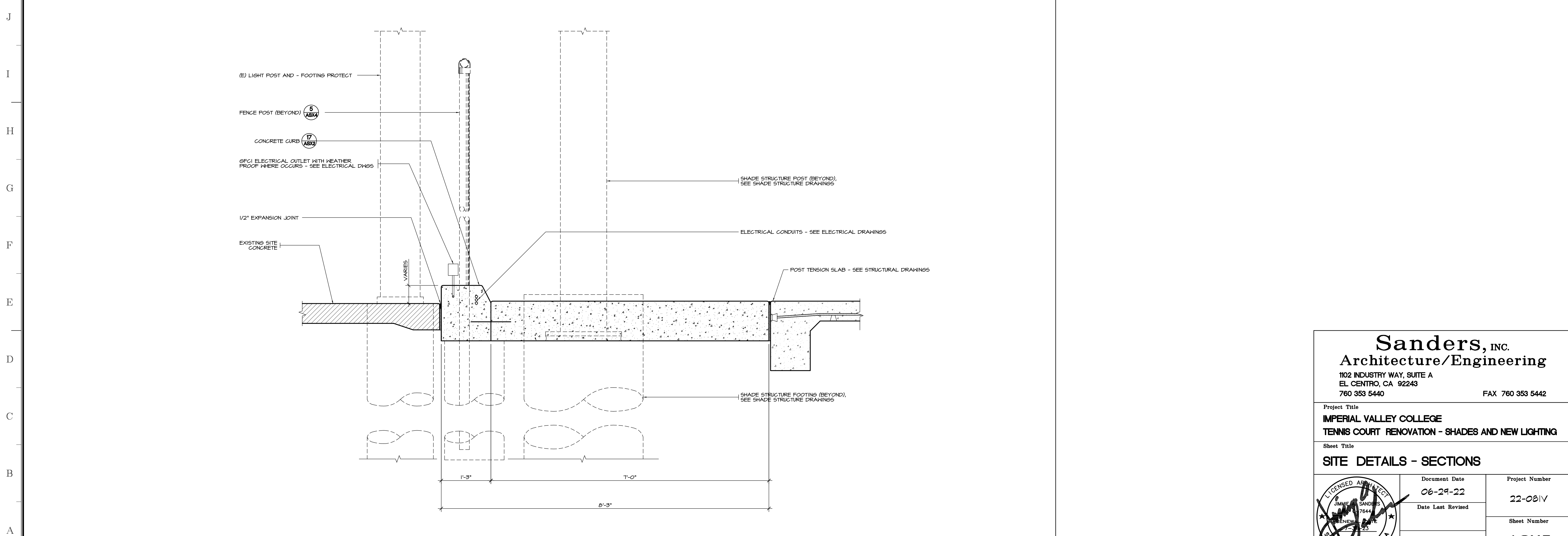
APPROVALS

MOW CURB DETAIL AT POOL

SCALE: 1" = 1'-0" 1

MOW CURB DETAIL AT NATURAL SOIL

SCALE: 1" = 1'-0" 3



MOW CURB DETAIL AT POOL w/ (E) LIGHT POST

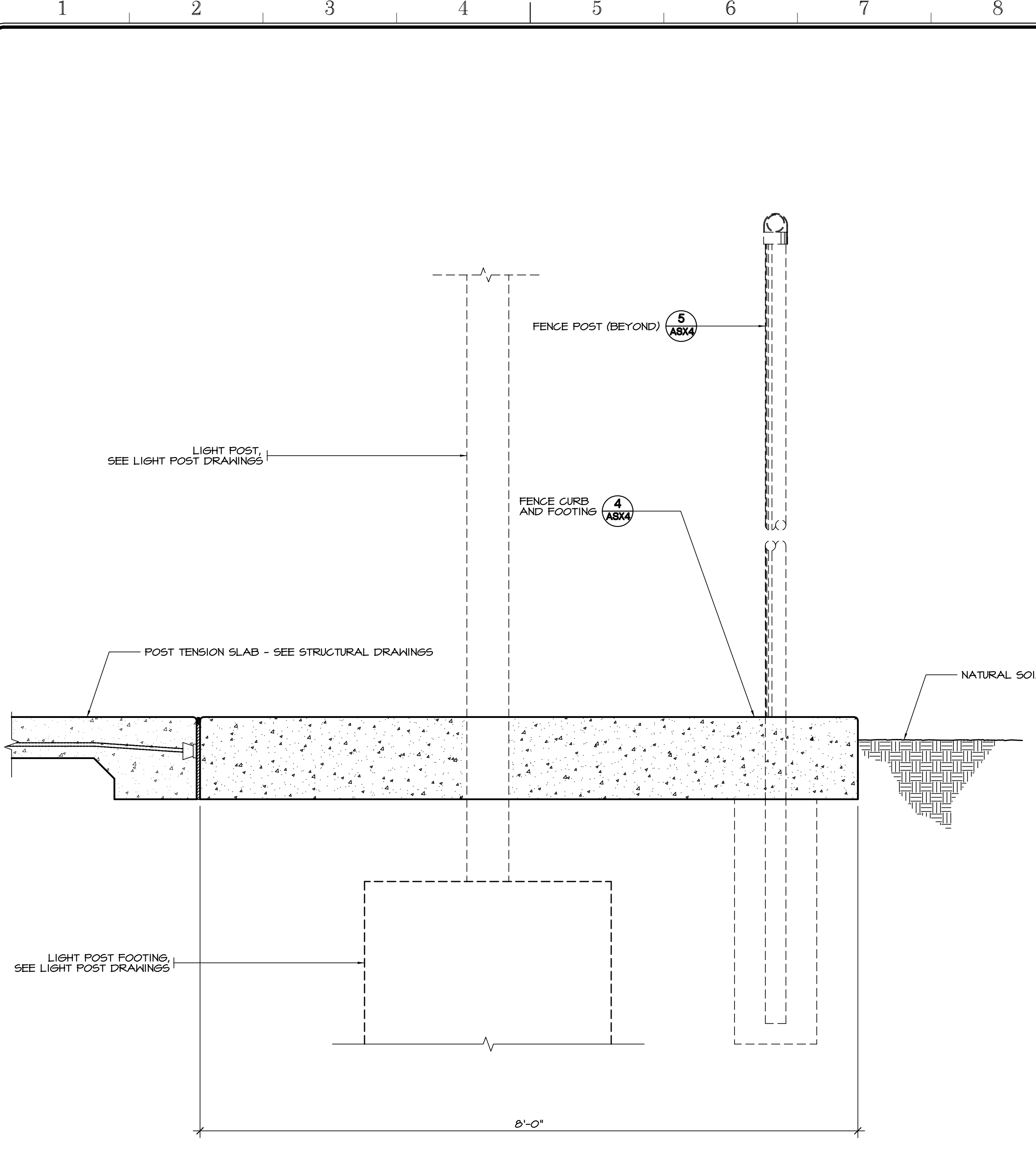
SCALE: 1" = 1'-0" 2

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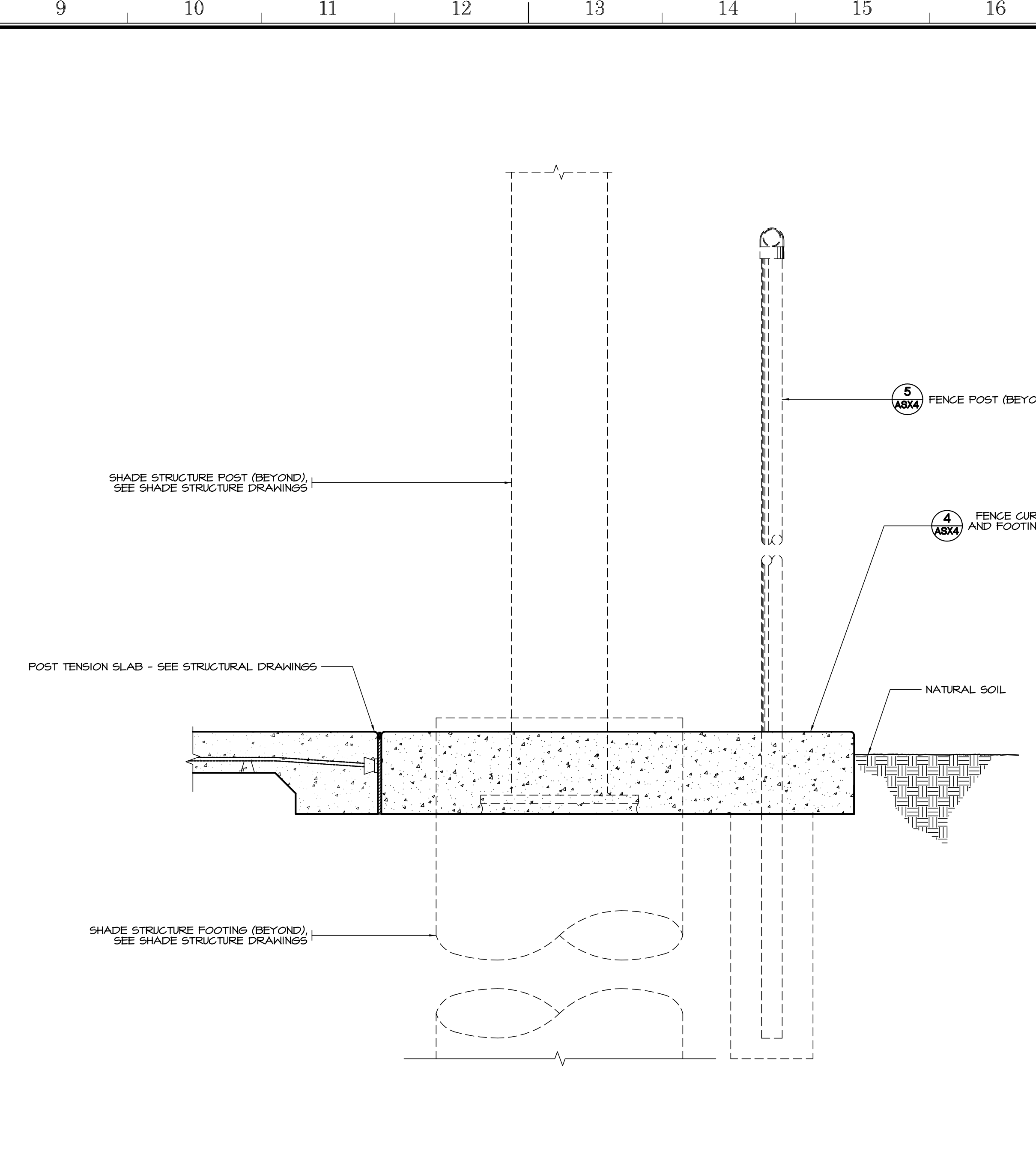
Project Title  
**IMPERIAL VALLEY COLLEGE  
 TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

Sheet Title  
**SITE DETAILS - SECTIONS**

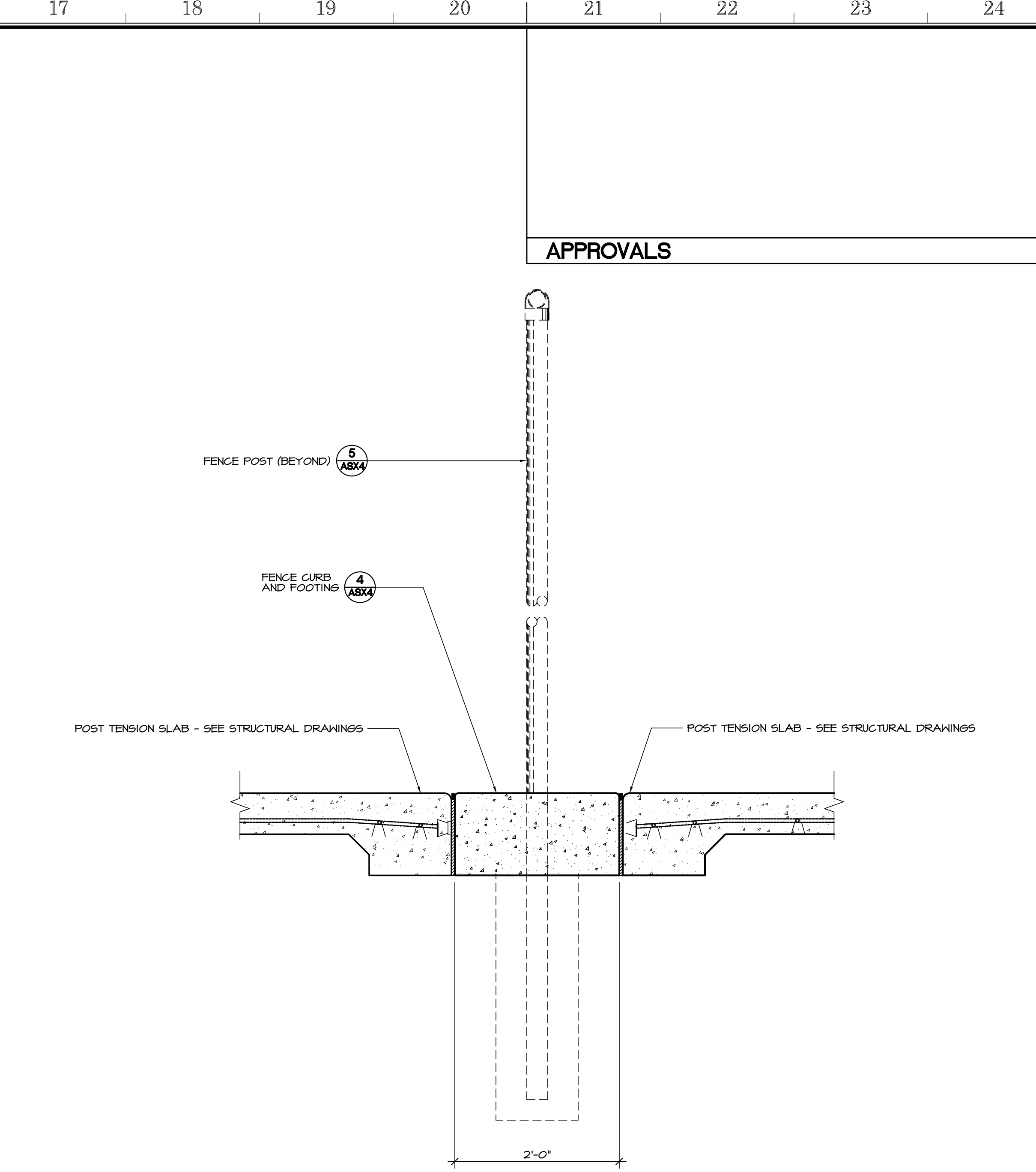
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	Date Last Revised	Sheet Number <b>ASX5</b>



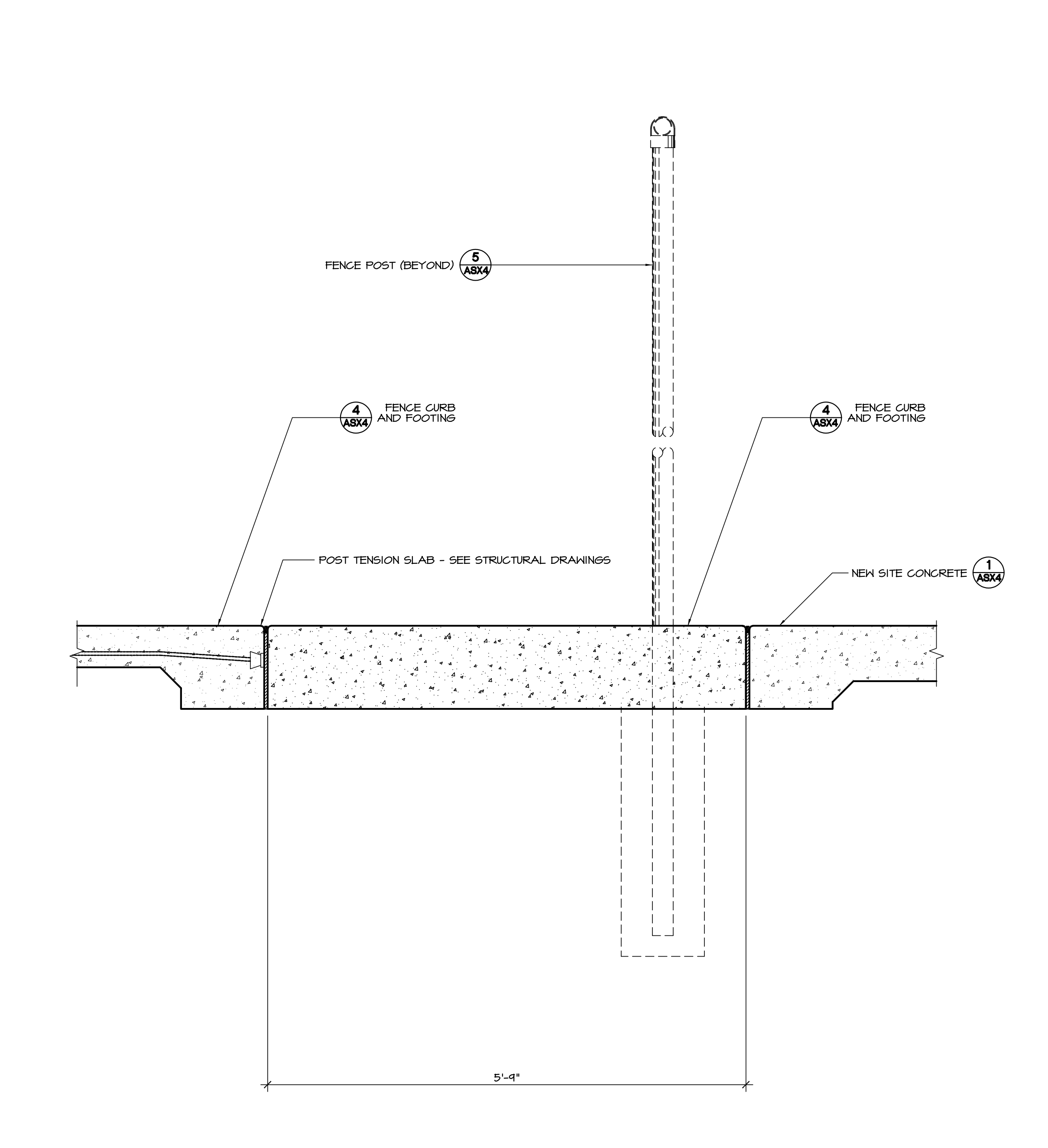
MOW CURB DETAIL w/ (N) LIGHT POST SCALE: 1" = 1'-0" 1



MOW CURB DETAIL AT NATURAL SOIL SCALE: 1" = 1'-0" 2

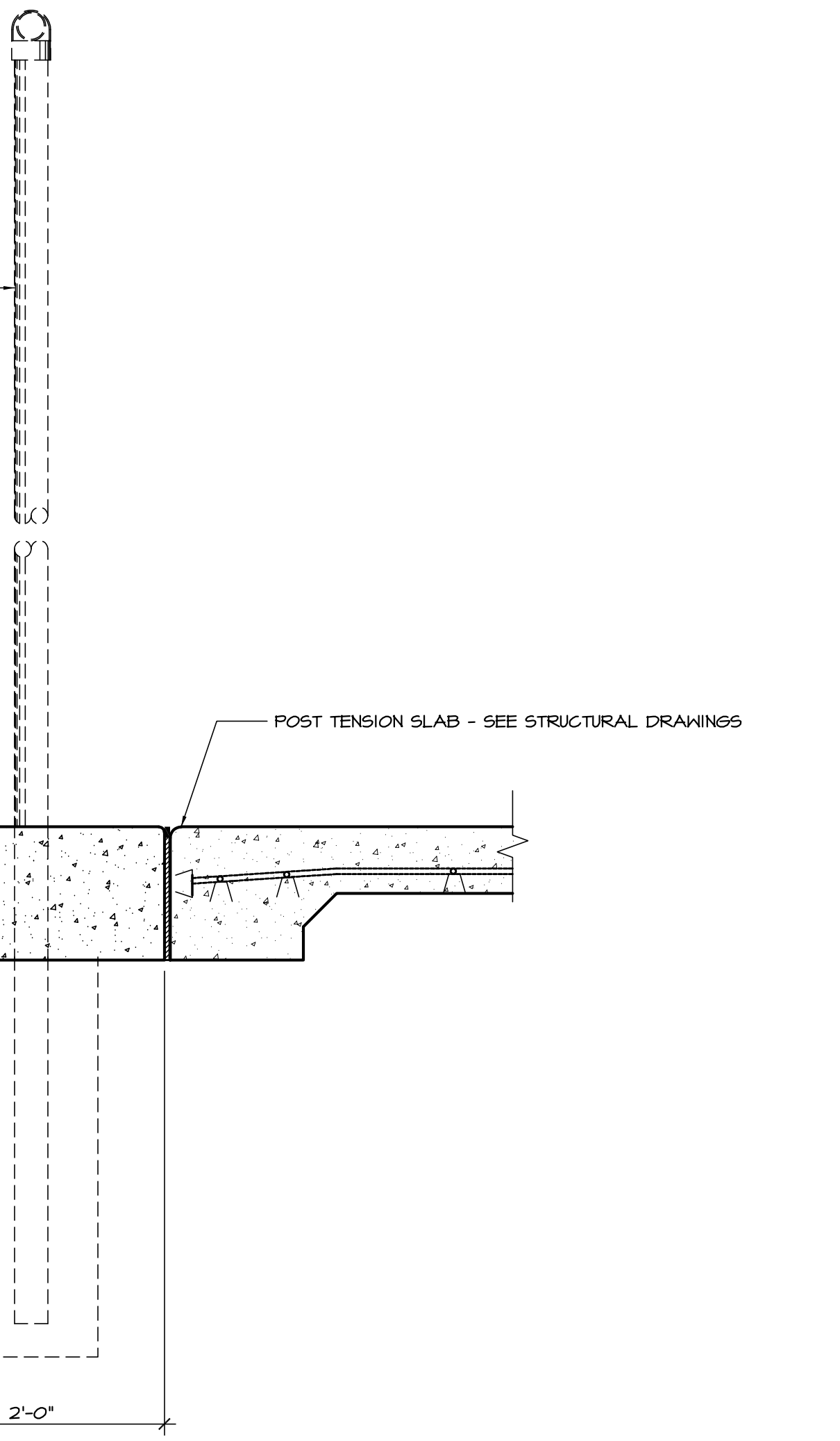


MOW CURB DETAIL BETWEEN POST TENSION SLABS SCALE: 1" = 1'-0" 3



MOW CURB DETAIL AT SIDEWALK SCALE: 1" = 1'-0" 4

APPROVALS

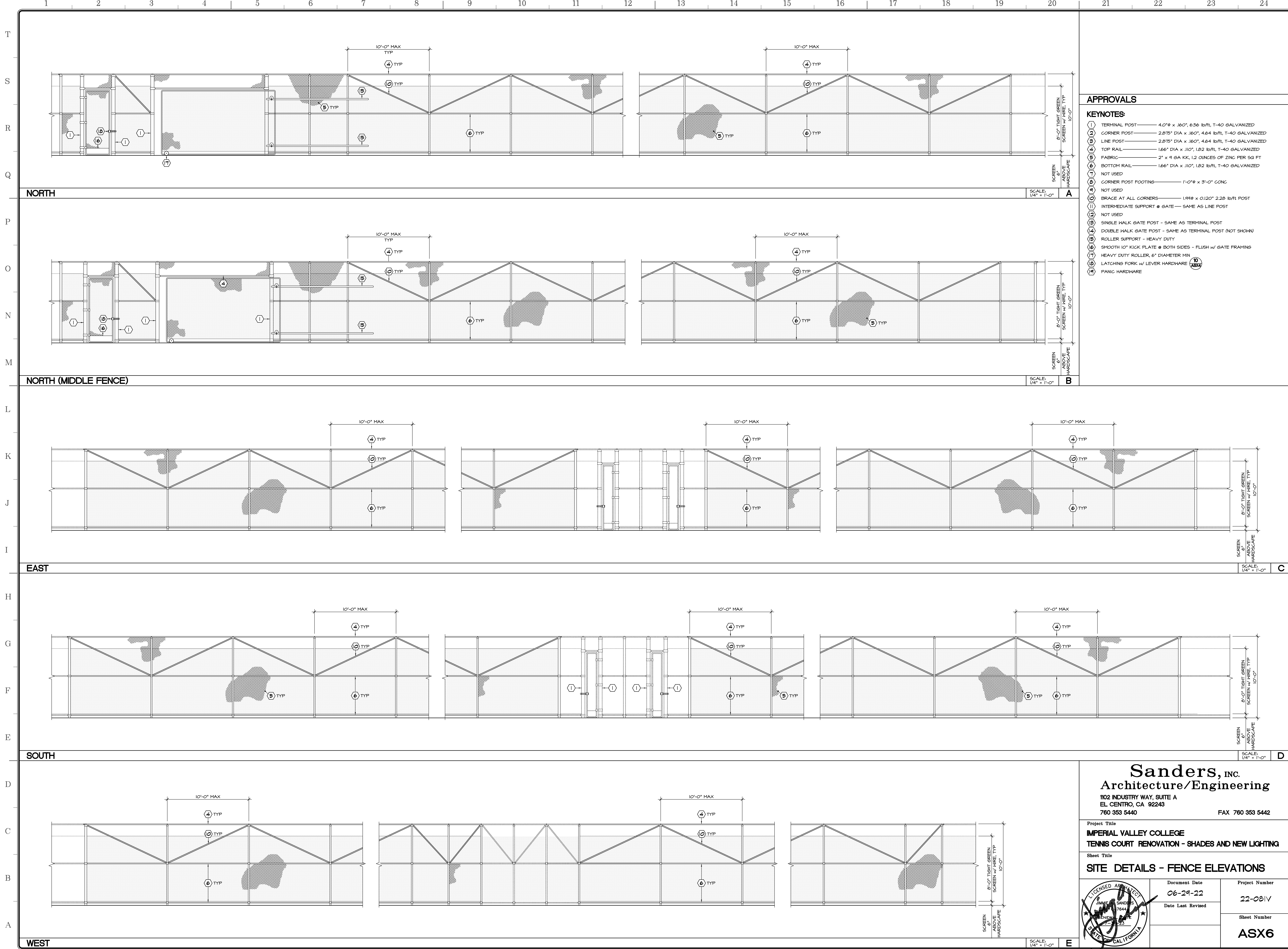


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Project Title  
**IMPERIAL VALLEY COLLEGE  
 TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

Sheet Title  
**SITE DETAILS - SECTIONS**

	Document Date 06-29-22	Project Number 22-081V
	Date Last Revised	Sheet Number <b>ASX5.1</b>



**APPROVALS**

**KEYNOTES:**

- ① TERMINAL POST — 4.0"ø x .160", 6.56 lb/ft, T-40 GALVANIZED
- ② CORNER POST — 2.875" DIA x .160", 4.64 lb/ft, T-40 GALVANIZED
- ③ LINE POST — 2.875" DIA x .160", 4.64 lb/ft, T-40 GALVANIZED
- ④ TOP RAIL — 1.66" DIA x .110", 1.82 lb/ft, T-40 GALVANIZED
- ⑤ FABRIC — 2" x 9 GA KK, 1.2 OUNCES OF ZINC PER SQ FT
- ⑥ BOTTOM RAIL — 1.66" DIA x .110", 1.82 lb/ft, T-40 GALVANIZED
- ⑦ NOT USED
- ⑧ CORNER POST FOOTING — 1'-0"ø x 3'-0" CONC
- ⑨ NOT USED
- ⑩ BRACE AT ALL CORNERS — 1.99ø x 0.120" 2.28 lb/ft POST
- ⑪ INTERMEDIATE SUPPORT @ GATE — SAME AS LINE POST
- ⑫ NOT USED
- ⑬ SINGLE WALK GATE POST — SAME AS TERMINAL POST
- ⑭ DOUBLE WALK GATE POST — SAME AS TERMINAL POST (NOT SHOWN)
- ⑮ ROLLER SUPPORT — HEAVY DUTY
- ⑯ SMOOTH 10" KICK PLATE @ BOTH SIDES - FLUSH W/ GATE FRAMING
- ⑰ HEAVY DUTY ROLLER, 6" DIAMETER MIN
- ⑱ LATCHING FORK W/ LEVER HARDWARE
- ⑲ PANIC HARDWARE

**NORTH**

SCALE: 1/4" = 1'-0" **A**

**NORTH (MIDDLE FENCE)**

SCALE: 1/4" = 1'-0" **B**

**EAST**

SCALE: 1/4" = 1'-0" **C**

**SOUTH**

SCALE: 1/4" = 1'-0" **D**

**WEST**

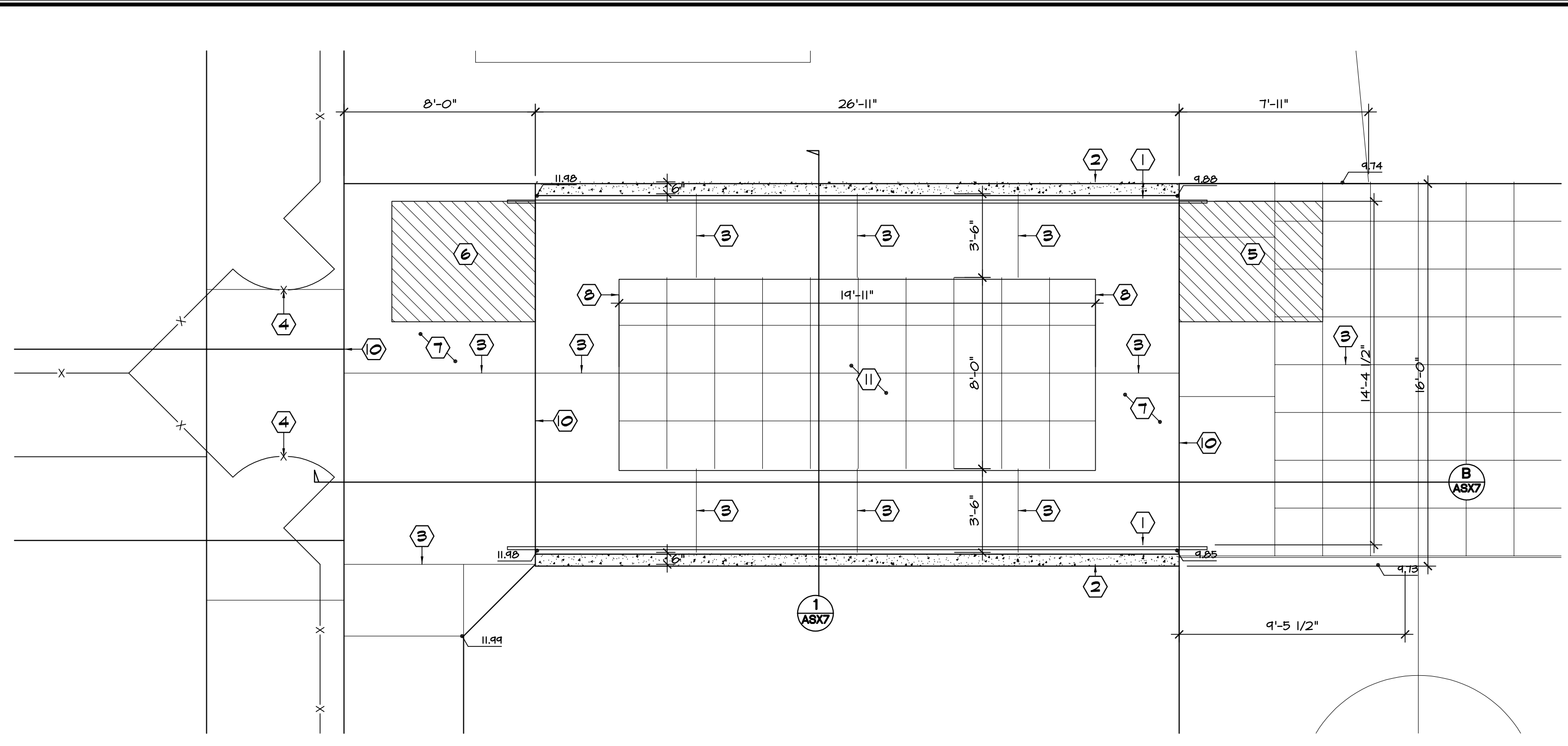
SCALE: 1/4" = 1'-0" **E**

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Project Title  
**IMPERIAL VALLEY COLLEGE  
 TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

Sheet Title  
**SITE DETAILS - FENCE ELEVATIONS**

	Document Date <b>06-29-22</b>	Project Number <b>22-081V</b>
	Date Last Revised	Sheet Number <b>ASX6</b>



FLOOR PLAN

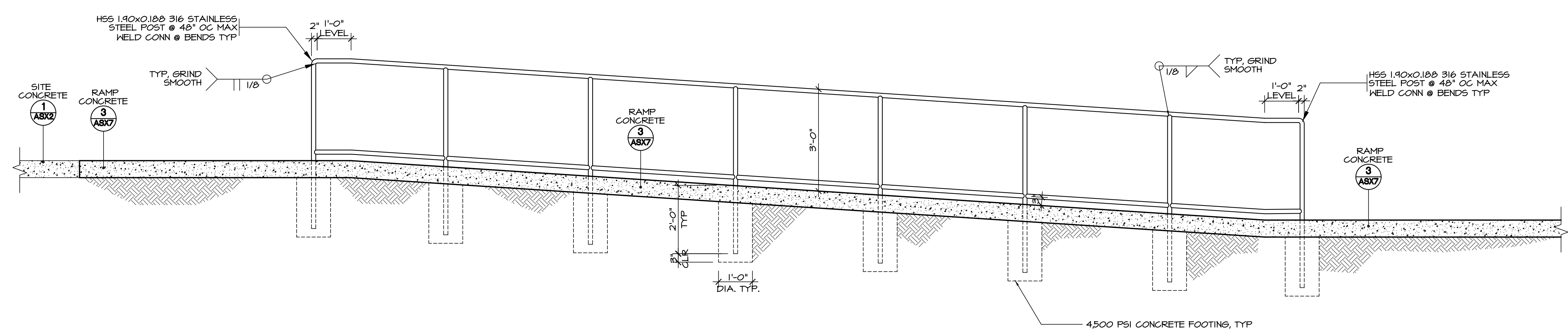
SCALE: 1/4" = 1'-0"

A

APPROVALS

KEYNOTES:

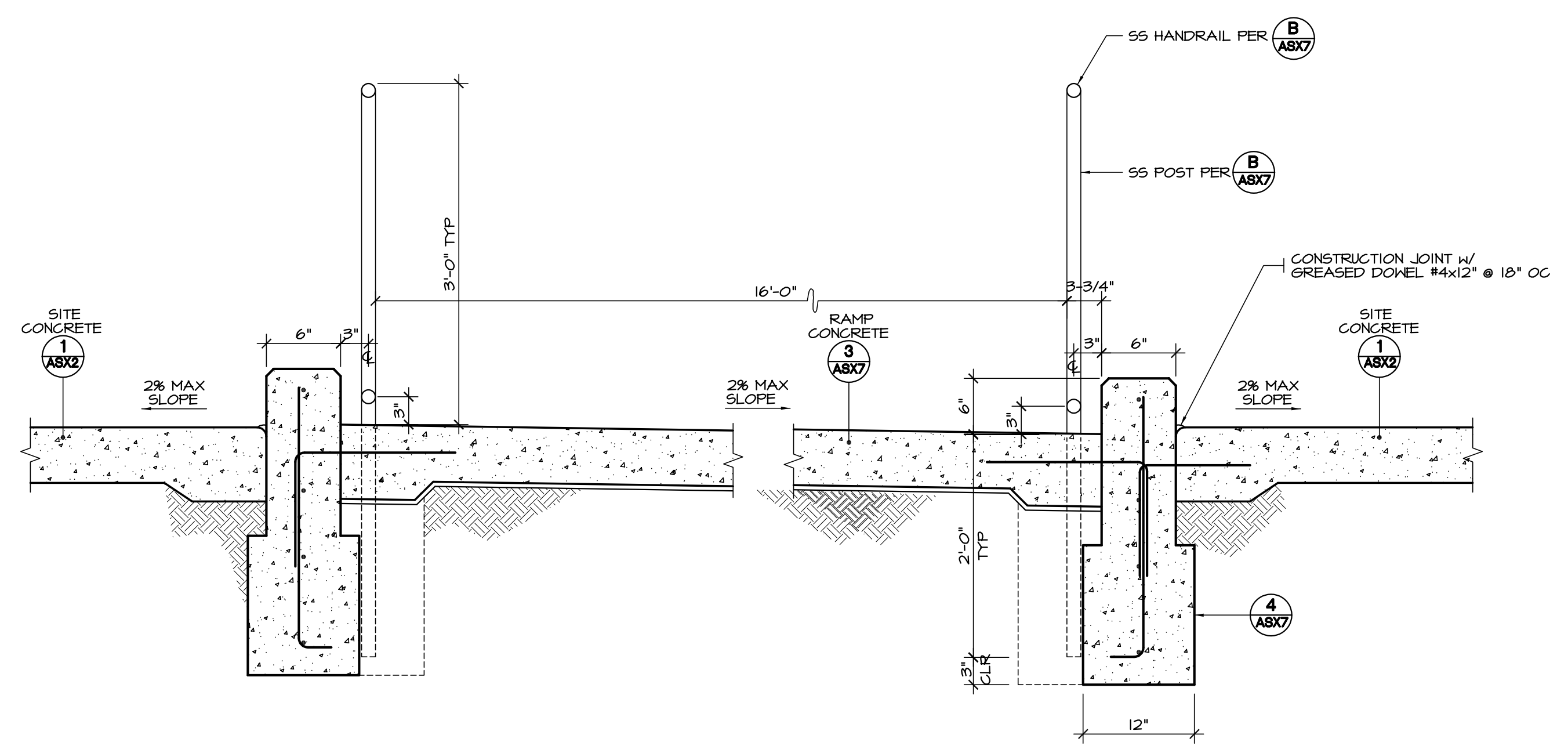
- 1 STAINLESS STEEL HANDRAIL
- 2 6" WIDE CONCRETE CURB
- 3 CONTROL JOINT
- 4 3'-0" ACCESS CHAIN LINK GATE
- 5 RAMP WIDTH (MIN 48") x 96" MIN CLEARANCE, MAX 2% SLOPE ALL AROUND
- 6 RAMP WIDTH (MIN 48") x 96" TO 113" MIN CLEARANCE, MAX 2% SLOPE ALL AROUND
- 7 RAMP CONCRETE
- 8 CONSTRUCTION JOINT
- 9 SITE CONCRETE
- 10 EXPANSION JOINT
- 11 6" THICK COLORED CONCRETE



RAMP SECTION

SCALE: 1/4" = 1'-0"

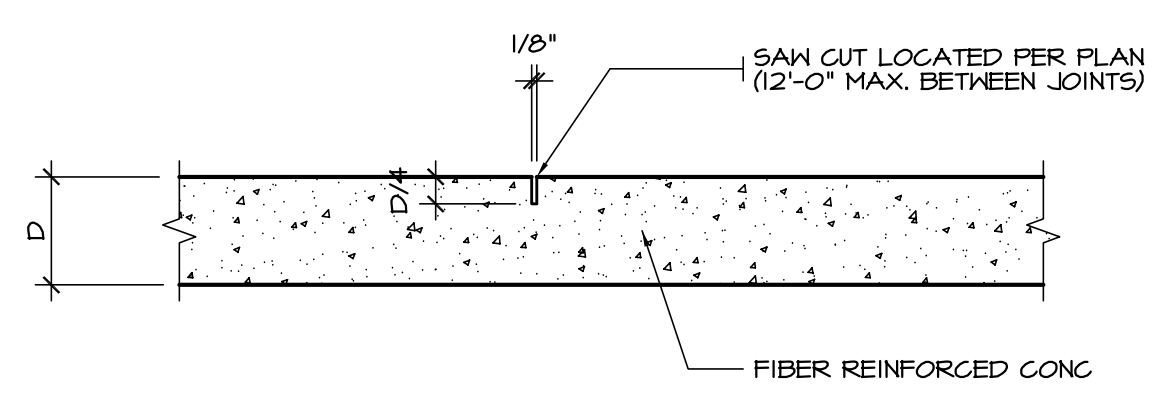
B



TYPICAL HANDRAIL SECTION AT RAMP

SCALE: 1" = 1'-0"

1

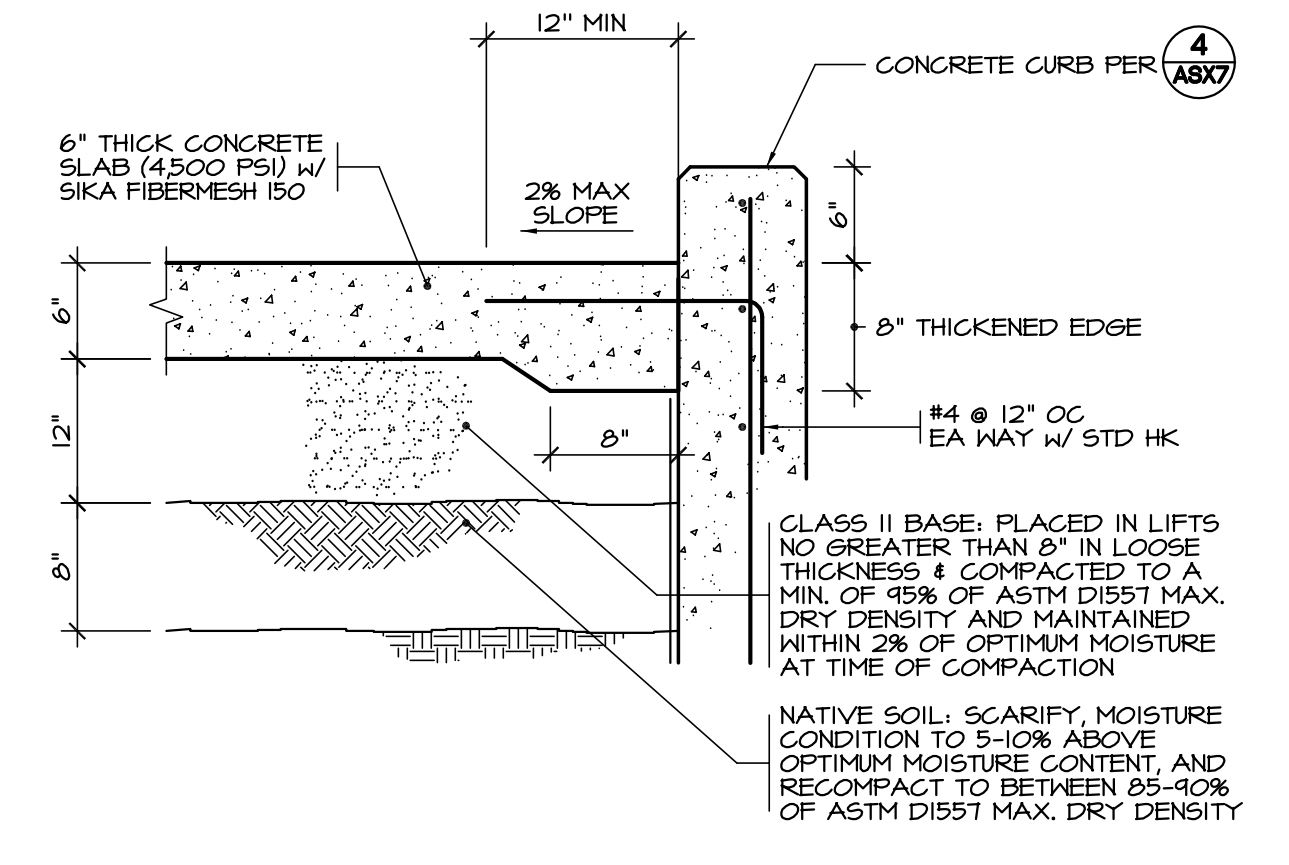


NOTE:  
SLAB MUST BE CUT WITHIN 8 HOURS OF PLACEMENT OF CONCRETE OR CONCRETE WILL BE REJECTED

CONTROL JOINT, SAW CUT

SCALE: 1 1/2" = 1'-0"

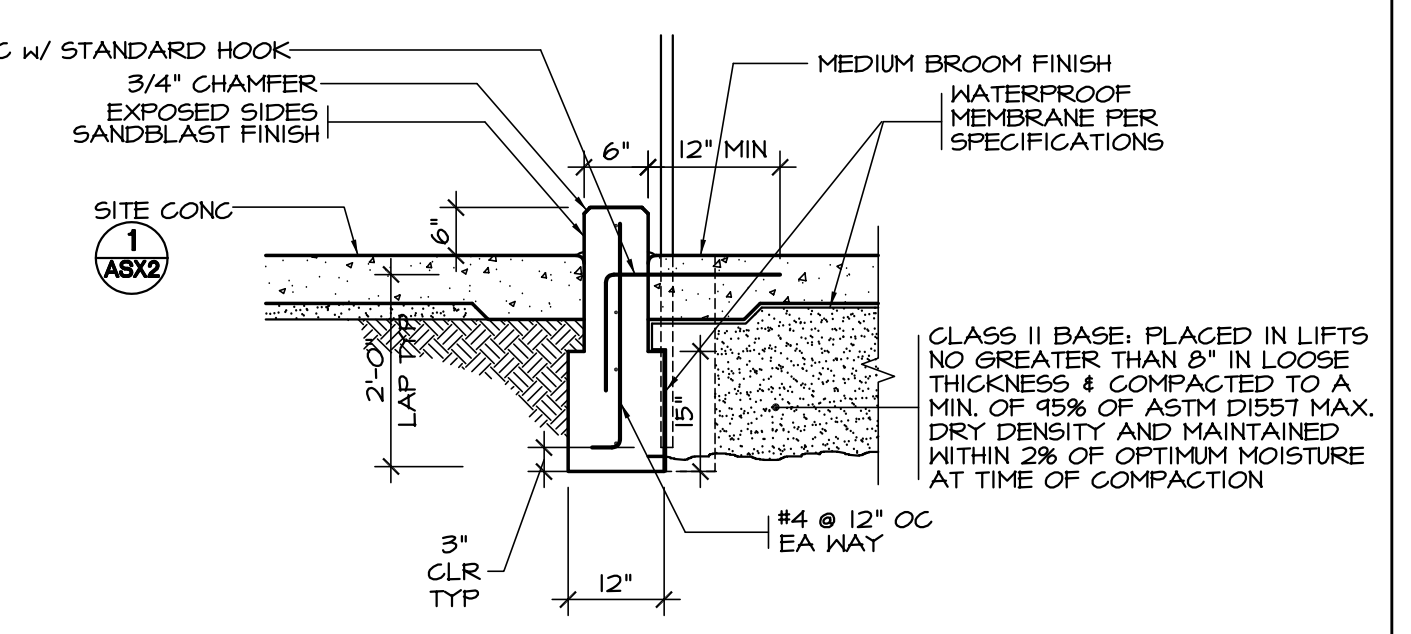
2



RAMP CONCRETE SECTION

SCALE: 1/4" = 1'-0"

3

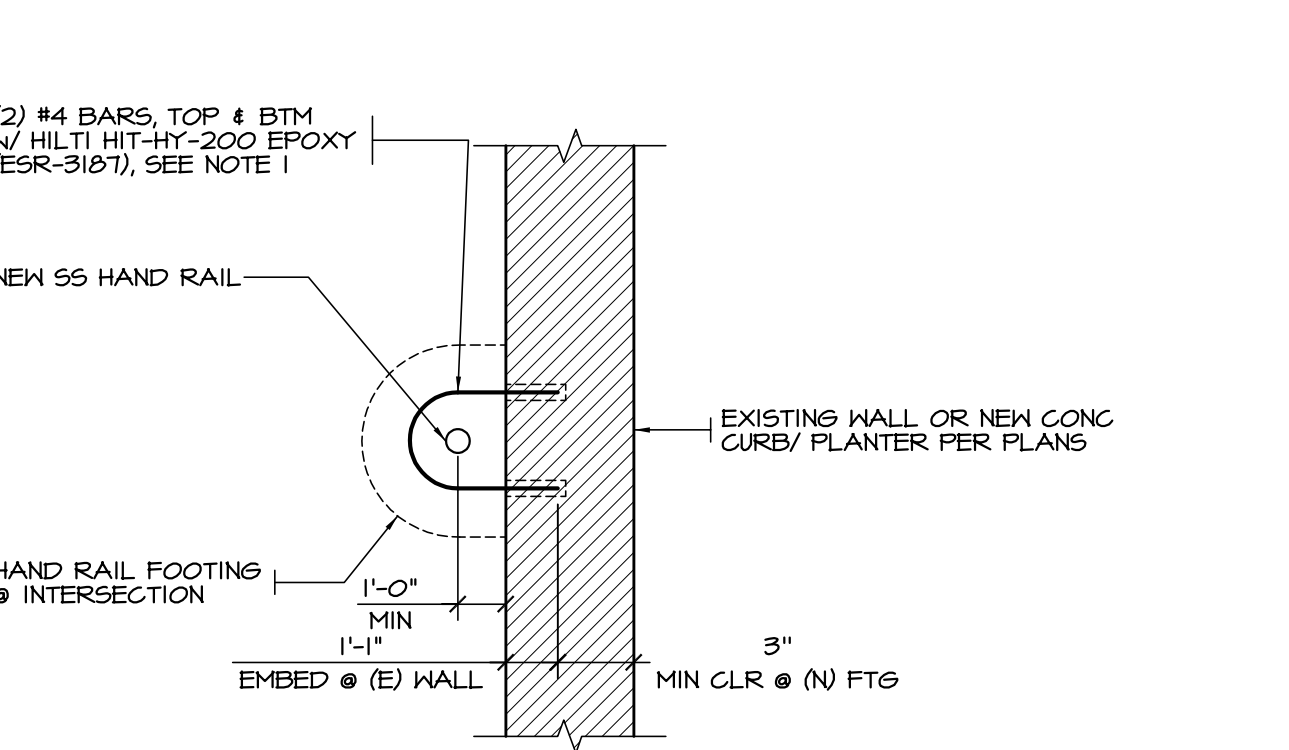


NOTE:  
SHORE WALLS UNTIL TOP SLAB IS CURED

CURB/RAMP SECTION

SCALE: 1/2" = 1'-0"

4



NOTE:  
1. EPOXY U-BARS MAY BE WET CAST @ NEW CONG FOOTING INTERSECTIONS.

PARTIAL HAND RAIL FOOTING

SCALE: NTS

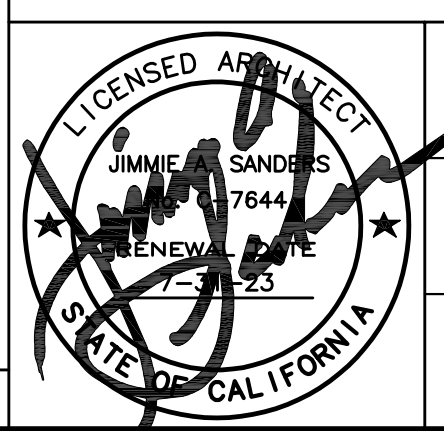
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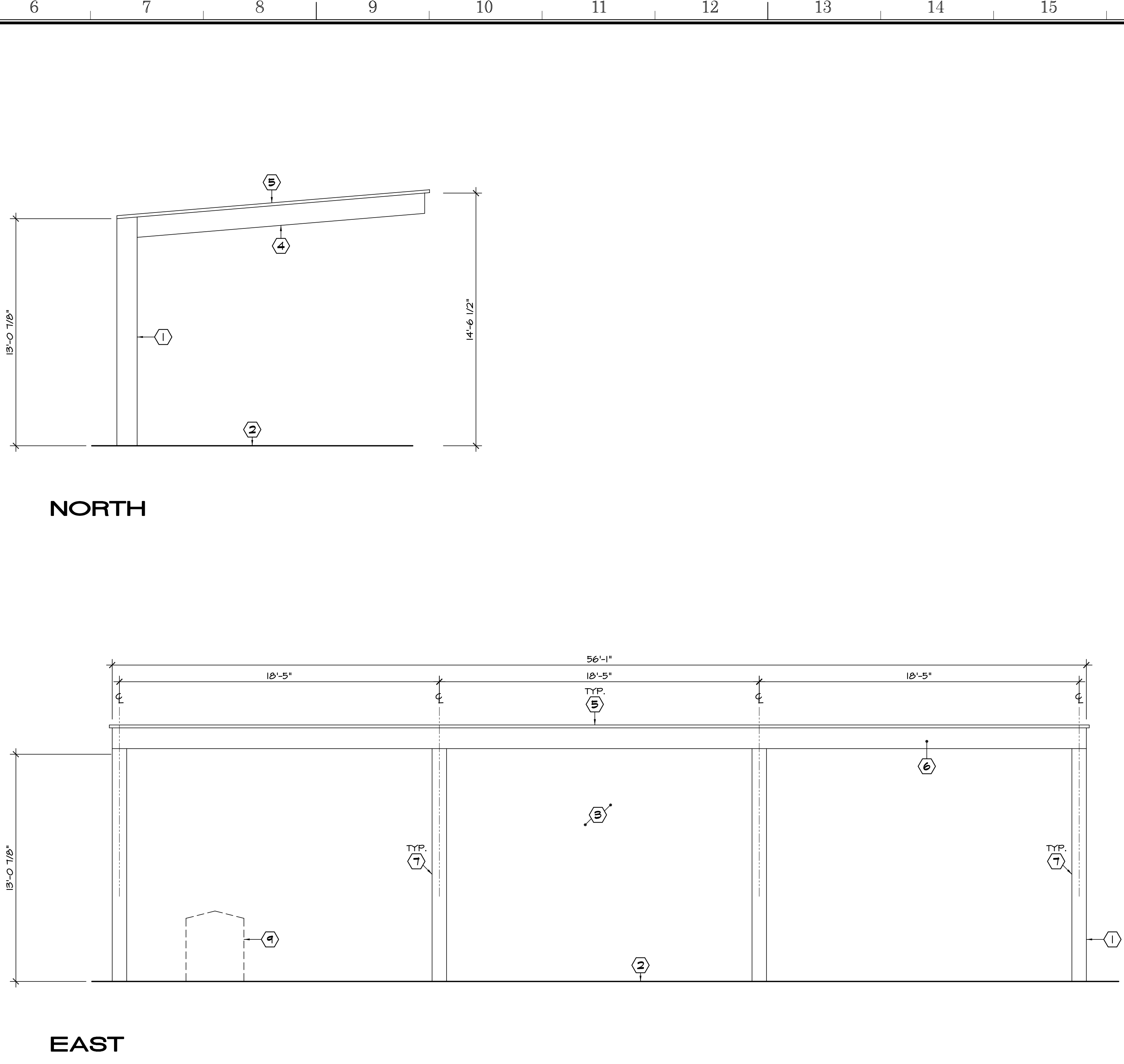
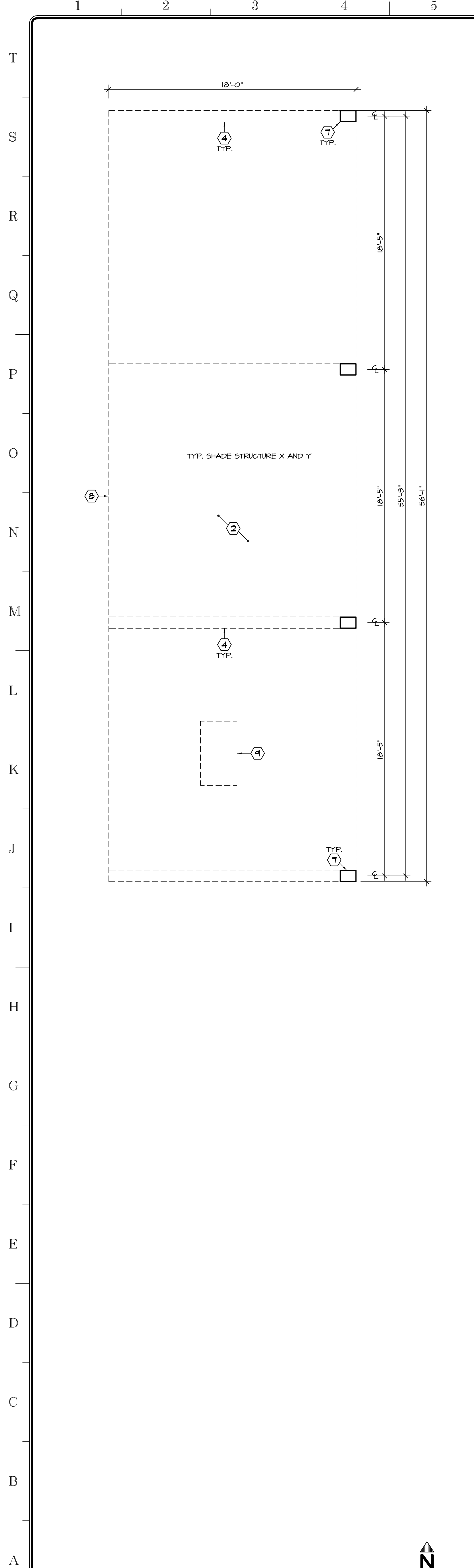
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Project Title  
**IMPERIAL VALLEY COLLEGE  
TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

Sheet Title  
**RAMP DETAILS**

Document Date 06-29-22	Project Number 22-081V
Date Last Revised	Sheet Number <b>ASX7</b>





**APPROVALS**

**SECTIONS KEYNOTES:**

- ① NEH 18'x56' SHADE STRUCTURE - PER MANUFACTURER, SEE SHEETS 1.0-4.0 (18'x56')
- ② NEH HARDSCAPE, SEE SHEET ASS
- ③ NOT USED
- ④ NEH RAFTER
- ⑤ ROOF MULTI RIB PANEL
- ⑥ NEH ROOF PURLIN
- ⑦ NEH SHADE STRUCTURE COLUMN
- ⑧ LINE OF COVERED AREA
- ⑨ NEH WATER STATION WITH CHILLER

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Project Title  
**IMPERIAL VALLEY COLLEGE  
 TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

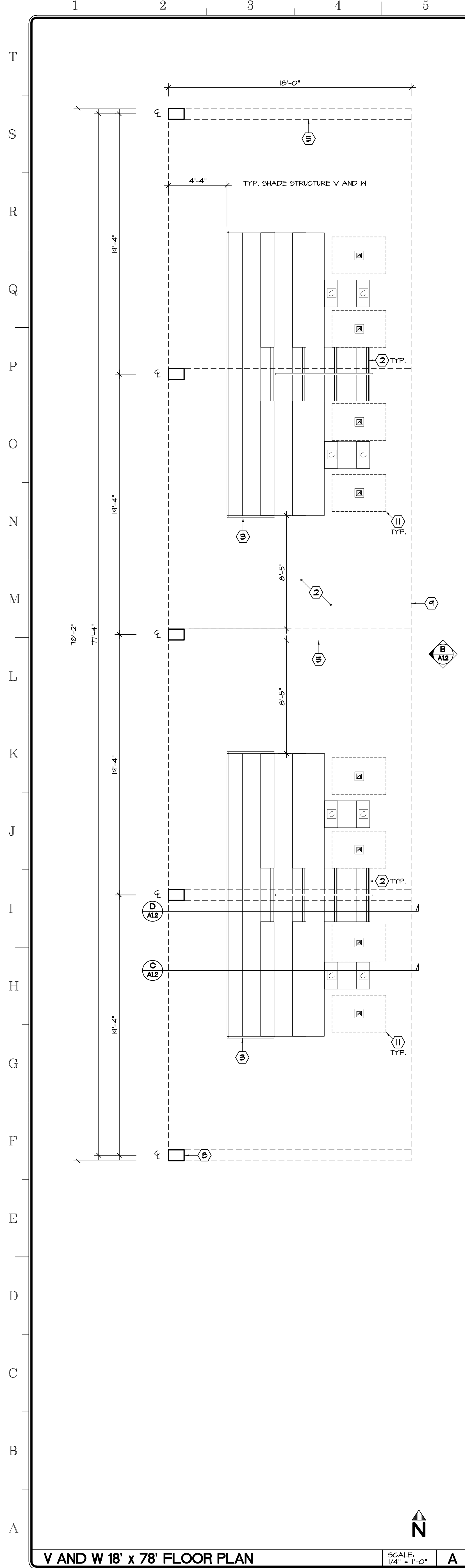
Sheet Title  
**FLOOR PLAN - ARCHITECTURAL  
 SHADE STRUCTURE X AND Y - 18'x56'**

	Document Date 06-29-22	Project Number 22-081V
	Date Last Revised	Sheet Number <b>A1.1</b>

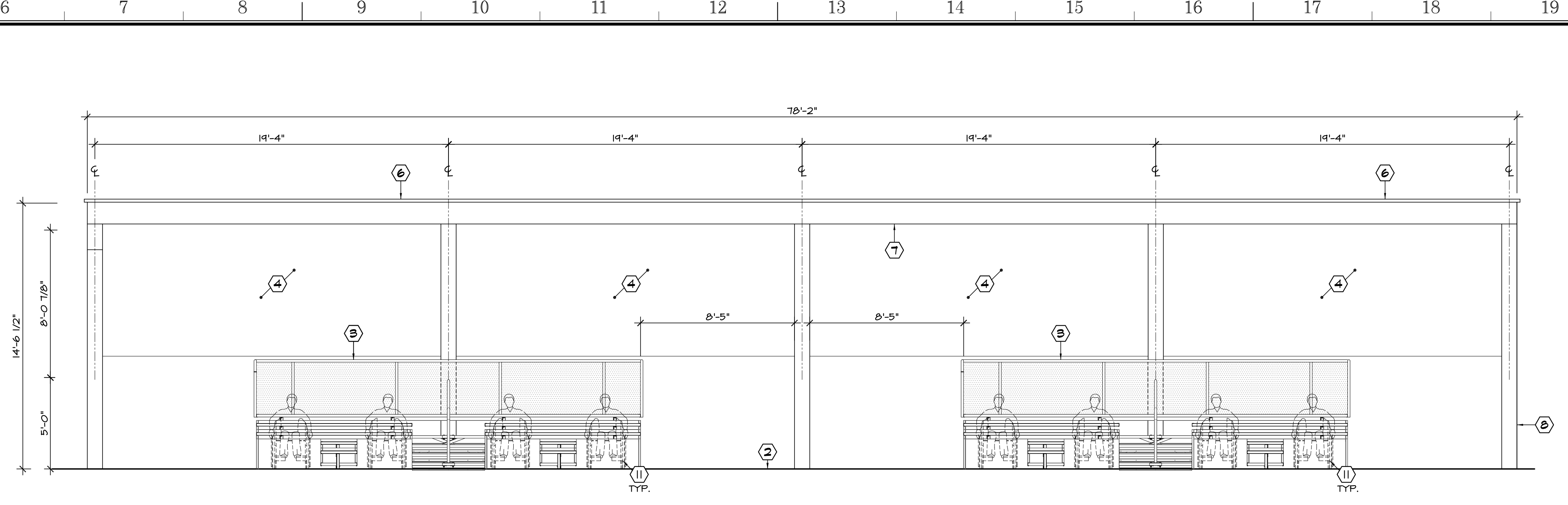
X AND Y 18' x 56' FLOOR PLAN SCALE: 1/4" = 1'-0" A

X AND Y 18' x 56' ELEVATIONS SCALE: 1/4" = 1'-0" B

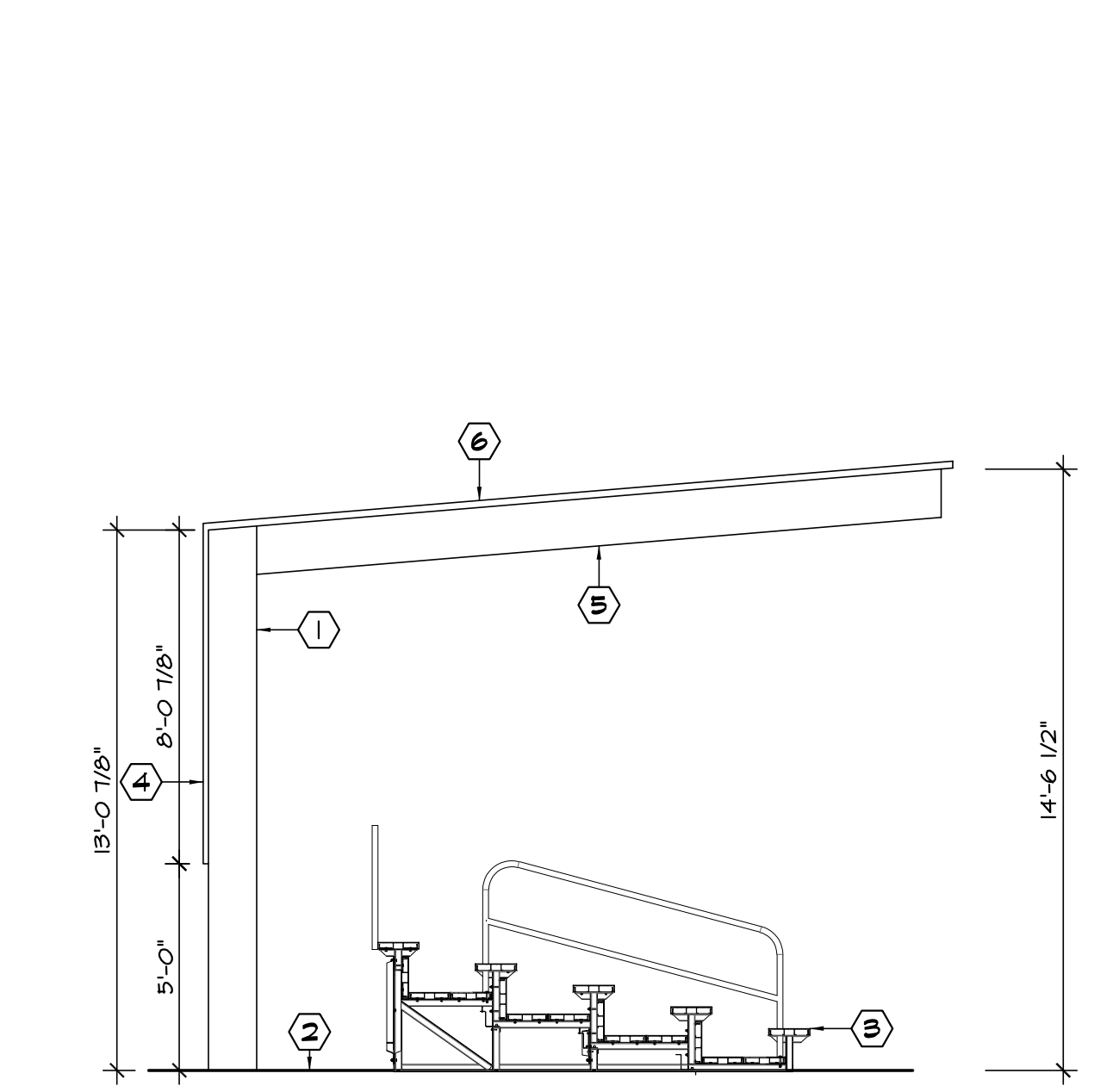




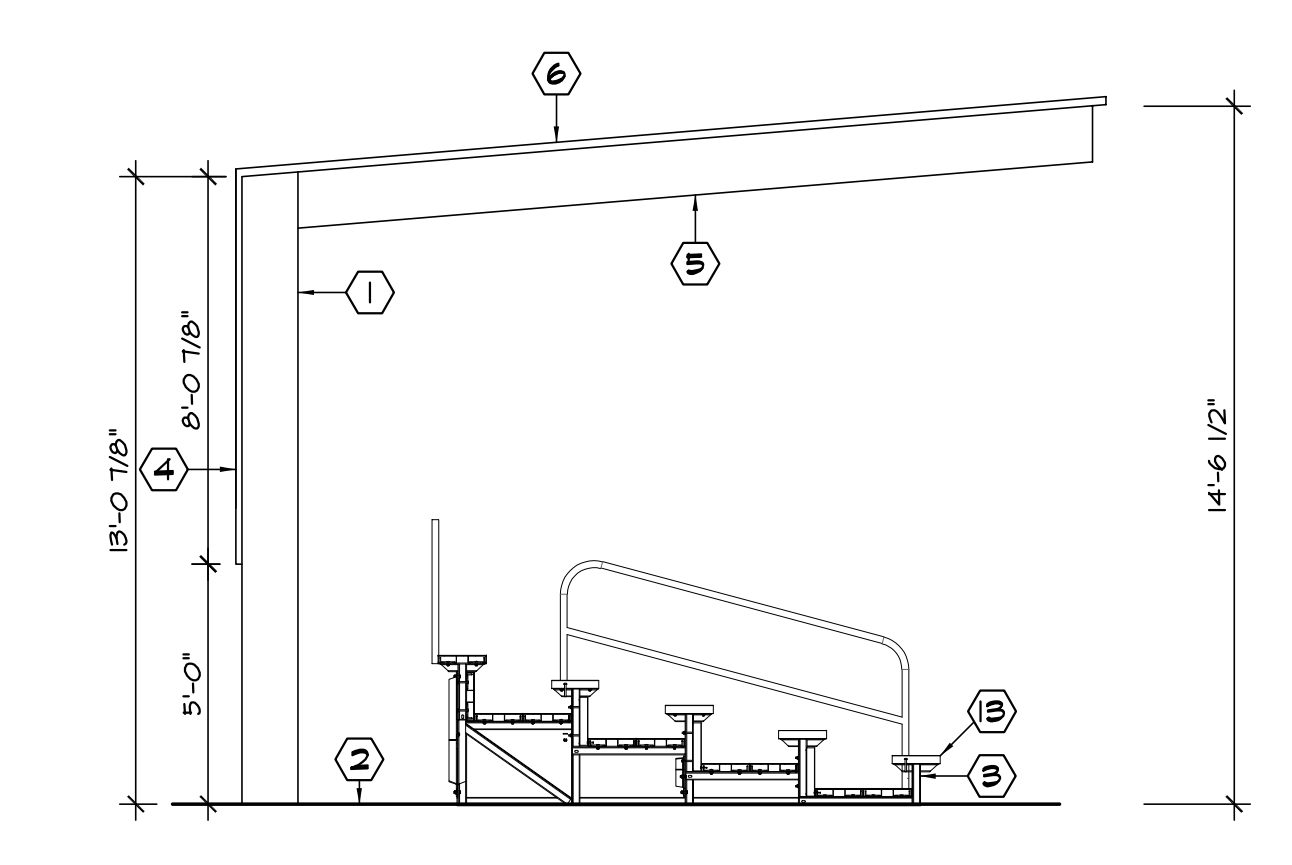
V AND W 18' x 78' FLOOR PLAN SCALE: 1/4" = 1'-0" A



ELEVATION B



SECTION C



SECTION D

V AND W 18' x 78' ELEVATIONS SCALE: 1/4" = 1'-0" B

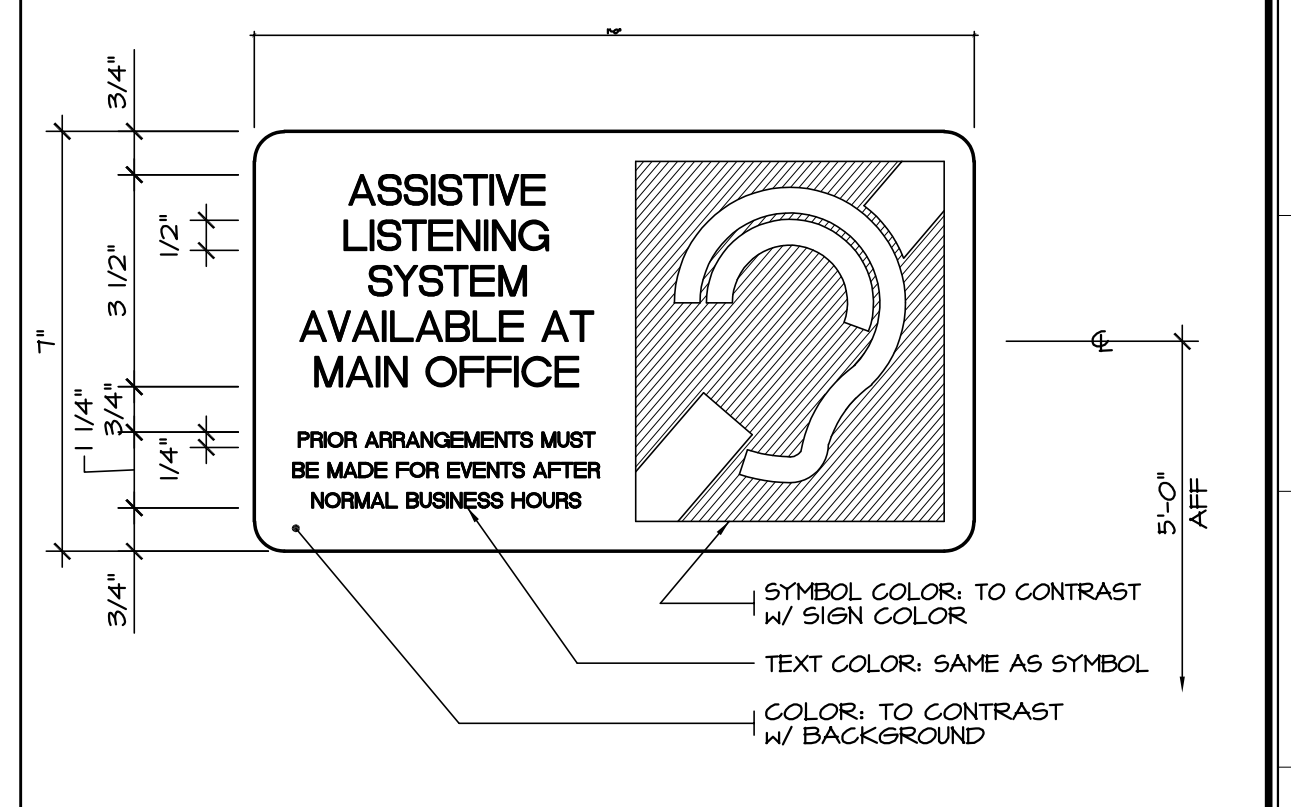
**APPROVALS**

**SECTIONS KEYNOTES:**

- ① NEH 18'x18' SHADE STRUCTURE - PER MANUFACTURER, SEE SHEETS 1.0 A - 4.0 A (18'x18') FOR TYPICAL OF 2
- ② NEH HARDSCAPE, SEE SHEET A55
- ③ NEH BLEACHERS PER MANUFACTURER, DELUXE SERIES 5-RON 21' BLEACHER (WITH AISLE, AND HAND RAIL) MODEL 1186-S21MESH 5-RON 21' ALUMINUM WITH MESH GUARDRAIL (NOT PART OF DSA 565 AND FLS REVIEW PER IR A-22 APPENDIX, PROJECT DESCRIPTION NO. 2)
- ④ NEH PERFORATED WINDSCREEN
- ⑤ NEH RAFTER
- ⑥ ROOF MULTI RIB PANEL
- ⑦ NEH ROOF FURLIN
- ⑧ NEH SHADE STRUCTURE COLUMN
- ⑨ LINE OF COVERED AREA
- ⑩ NOT USED
- ⑪ ACCESSIBLE WHEELCHAIR SPACE
- ⑫ 2" CONTRASTING WARNING STRIP
- ⑬ TYPICAL STAIR TREAD, NOISING SHALL BE 1/2" R MAX.

**NOTES:**

1. ACCESSIBLE BLEACHER SEATING:  
 OCCUPANT LOAD: 109  
 B WHEELCHAIR SPACE, 2 PROVIDED (4 MIN. CBC TABLE 11B-221.1.1)  
 C COMPANION SEAT, 2 PROVIDED (1 EA WHEELCHAIR LOCATION)  
 PROVIDE ISA SYMBOL THAT COMPLY WITH FIGURE 11B-103.1.2.1.
2. ASSISTIVE LISTENING SYSTEM REQUIRED FOR:  
 BLEACHER OCCUPANT LOAD: 109  
 ALS DEVICES REQUIRED, 9 DEVICES, 5 PROVIDED  
 (4% OF CAPACITY, 2 MIN)



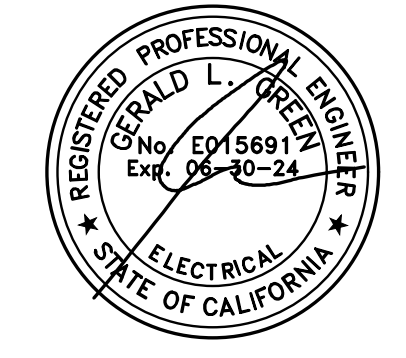
ASSISTIVE LISTENING SIGN SCALE: NTS C

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Project Title  
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 TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

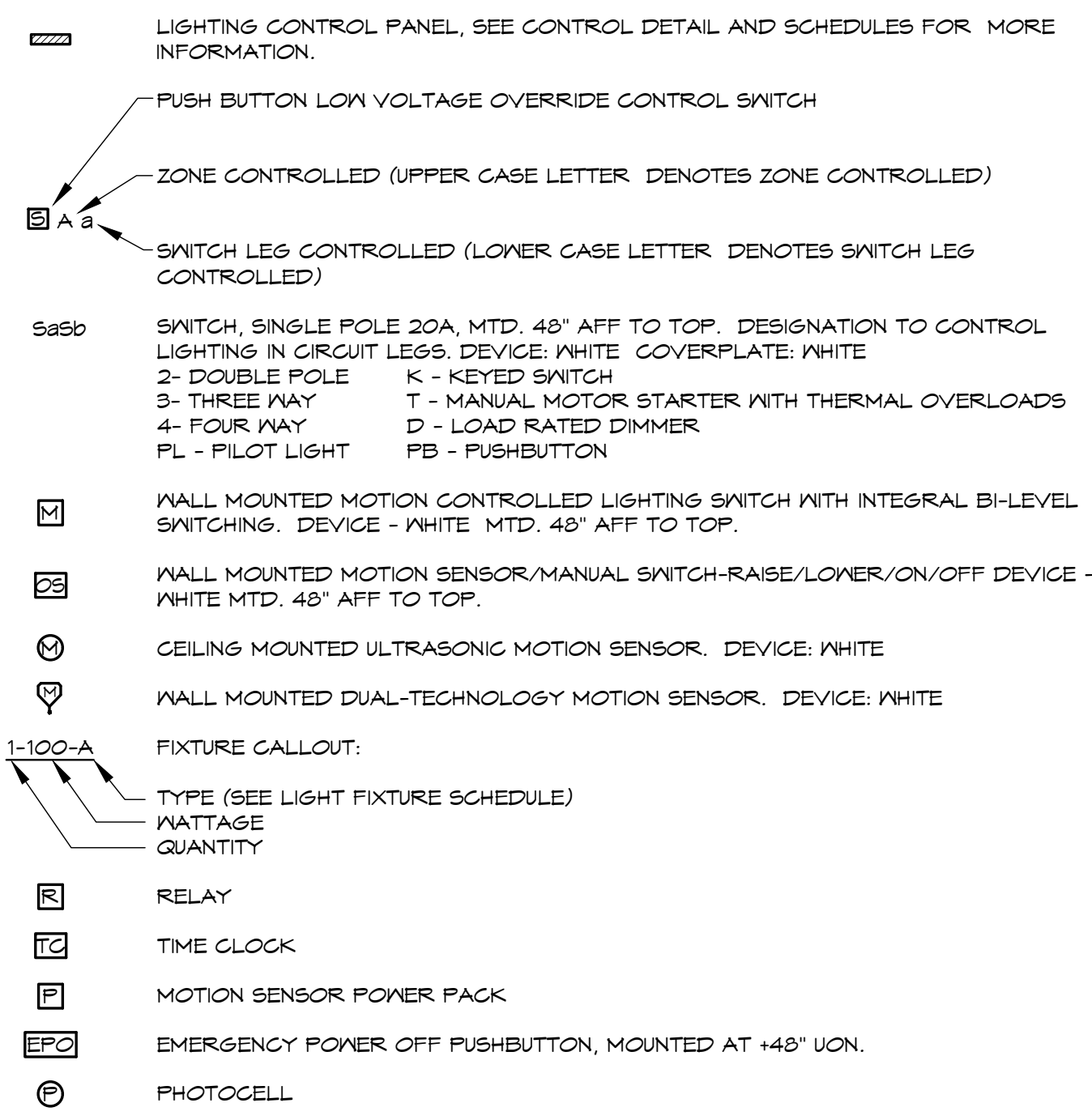
Sheet Title  
**FLOOR PLAN - ARCHITECTURAL - SHADE  
 STRUCTURE V AND W**

	Document Date <b>06-29-22</b>	Project Number <b>22-081V</b>
	Date Last Revised	Sheet Number <b>A1.2</b>

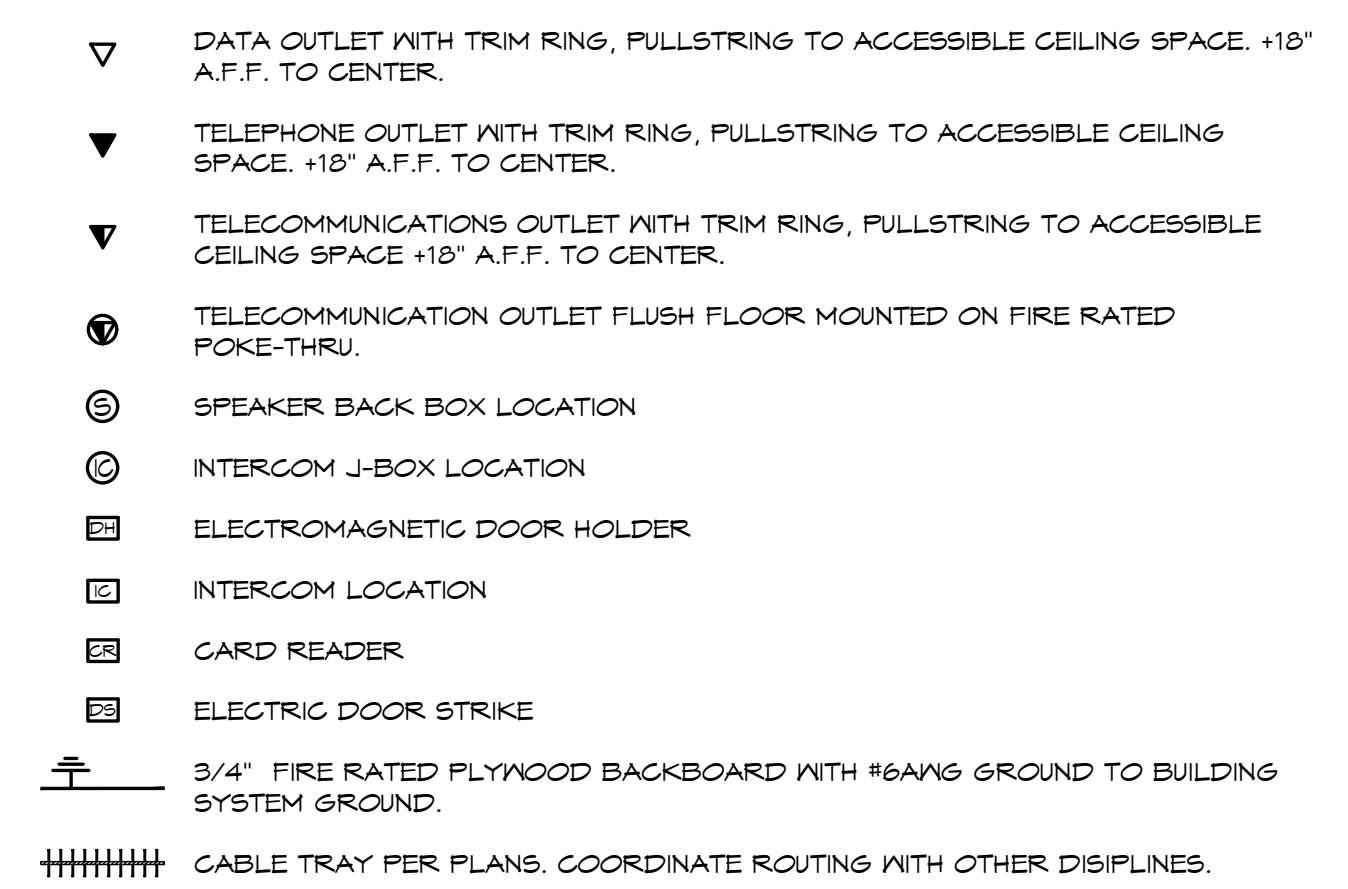


APPROVALS

LIGHTING/SWITCHING SYMBOLS



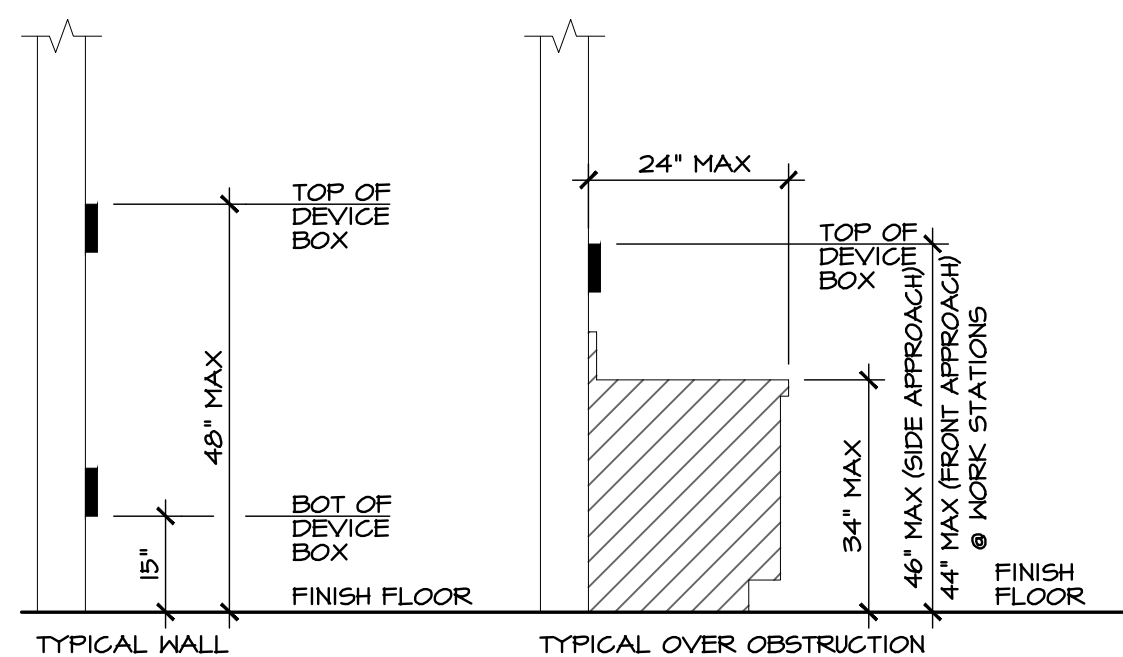
TEL/DATA SYMBOLS



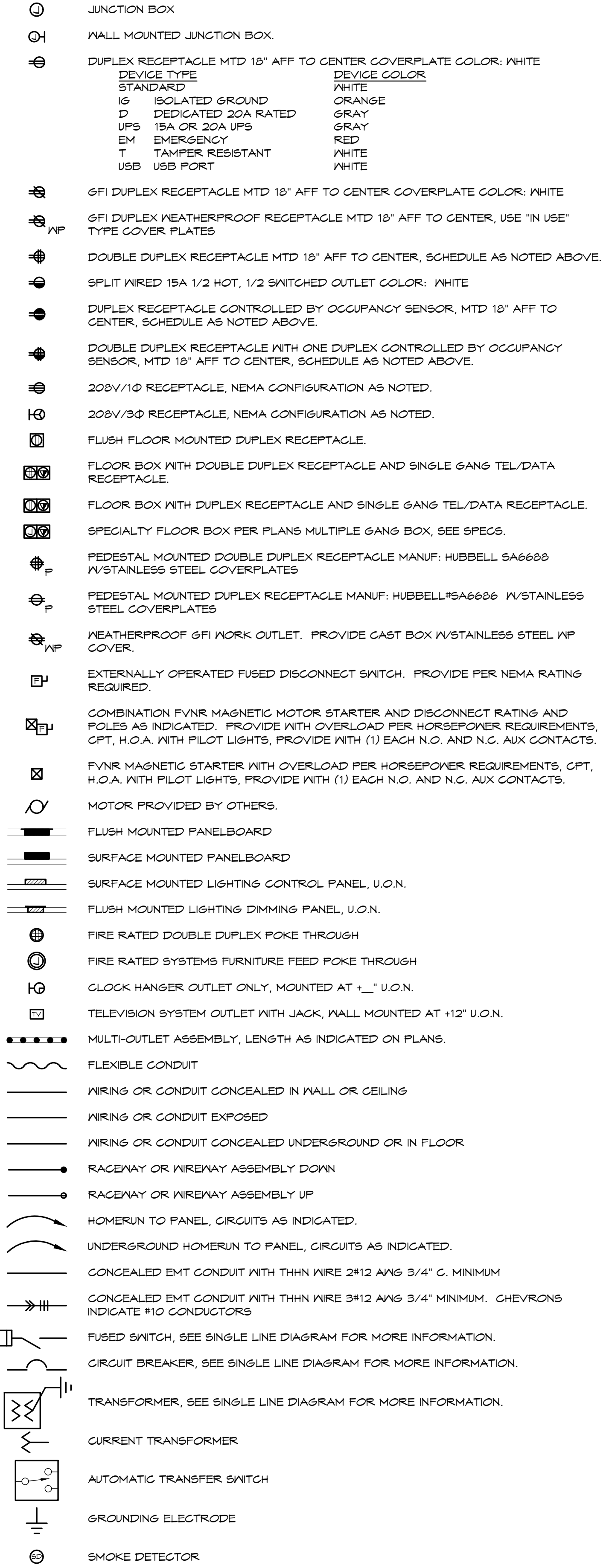
GENERAL NOTES

- 1. ALL ELECTRICAL DEVICES AND UTILIZATION EQUIPMENT SHALL BE LISTED BY AN APPROVED TESTING AGENCY.
2. ALL WORK TO COMPLY WITH THE LATEST EDITION OF THE CALIFORNIA ELECTRICAL CODE.
3. USE COPPER CONDUCTORS ONLY.
4. THERMOSTATS, SWITCHES AND/OR RECEPTACLES INSTALLED IN RESTROOMS OR OTHER AREAS EQUIPPED FOR THE DISABLED, SHALL BE LOCATED AT NOT TO EXCEED 48" TO CENTER OF DEVICE FROM THE FLOOR.
5. CONTRACTOR IS TO VERIFY MOUNTING HEIGHTS OF ALL DEVICES PRIOR TO MOUNTING.
6. VERIFY ROUTING OF ANY SURFACE MOUNTED CONDUITS PRIOR TO INSTALLATION.
7. REVIEW ALL PLANS BY OTHER TRADES AND PROVIDE ADDITIONAL WORK AS REQUIRED NOT OUTLINED IN THESE DOCUMENTS.
8. COORDINATE ALL DIMMING FLUORESCENT BALLASTS WITH DIMMING SYSTEM, PROVIDE WIRE COUNT AS REQUIRED. USE ADVANCE MARK X BALLASTS.
9. ELECTRICAL CONTRACTOR SHALL PROVIDE MULTI-POLE CIRCUIT BREAKERS WITH COMMON TRIP OR U.L. LISTED HANDLE TIES FOR ALL MULTI-POLE CIRCUITS WITH SHARED NEUTRAL.

TYPICAL MOUNTING HEIGHTS NO SCALE



POWER SYMBOLS



ABBREVIATIONS

Table of abbreviations including: AMPERES, ALTERNATING CURRENT, AMPERES INTERRUPTING CAPACITY, ABOVE FINISHED FLOOR, AMP FRAME/AMP FUSE, ALUMINUM, ARCHITECT OR ARCHITECTURAL, AMP SWITCH, AMP TRIP, AUTOMATIC TRANSFER SWITCH, AUXILIARY, AMERICAN WIRE GAUGE, BACKBOARD, CONDUIT WITH WIRE, CABLE TELEVISION, CLOSED CIRCUIT TELEVISION, CIRCUIT BREAKER, CURRENT LIMITING FUSE, CONDUIT ONLY WITH NYLON PULL CORD, CONTRACTOR, COPPER, CURRENT TRANSFORMER, GOLD WATER, DEDICATED OUTLET, DIRECT CURRENT, DRINKING FOUNTAIN, DIAMETER, DISCONNECT, DISTRIBUTION, DRAWINGS, EACH, 90-MINUTE BATTERY CONNECTED TO UNIT, ELECTRICAL CONTRACTOR, EMERGENCY GENERATOR CONNECTION, EXHAUST FAN, ELECTRICAL, ELEVATION/ELEVATOR, ELECTRO-METALLIC TUBING, EXIST, FIRE ALARM, FOOT CANDLE, FIXTURE, FLUORESCENT, FEET OR FOOT, GENERAL CONTRACTOR, GARBAGE DISPOSAL, GENERATOR, GROUND FAULT INTERRUPTER, GROUND FAULT RELAY, GROUND, HORIZONTAL, HIGH INTENSITY DISCHARGE, HORSEPOWER, HIGH PRESSURE SODIUM, HOUR, HEIGHT, HERTZ, ISOLATED GROUND BUS OR WIRE, INTERMEDIATE METAL CONDUIT, INCANDESCENT, JUNCTION BOX, KILO-VOLTAMPERE, KILO-WATT, KILOWATT-HOUR, LINEAL FEET, LIGHTING, LOW VOLTAGE, MANUFACTURER, MAXIMUM, MECHANICAL CONTRACTOR, MOTOR CONTROL CENTER, MECHANICAL, MINIMUM, METAL HALIDE, MAIN LUGS ONLY, MOUNTING, MERCURY VAPOR, NEUTRAL, NATIONAL ELECTRIC CODE, NOT IN CONTRACT, NIGHT LIGHT, NOT TO SCALE, ON CENTER, OWNER FURNISHED CONTRACTOR INSTALLED, OWNER FURNISHED OWNER INSTALLED, PEDESTAL MOUNT, PHOTOCELL CONTROL, PHOTOCELL/TIMECLOCK CONTROL, PHASE, POST INDICATING VALVE, PILOT LIGHT, POLYVINYL CHLORIDE, POWER, POWER POLE, FIXTURE WITH QUARTZ RESTRIKE, QUANTITY, RECEPTACLE, REFRIGERATOR, RIGID GALVANIZED STEEL, SMOKE DETECTOR, SPECIFICATION, SQUARE FEET OR SQUARE FOOT, SWITCH, SWITCHBOARD, TEMPERATURE OR TEMPORARY, TELEVISION, TELEPHONE, TIME CLOCK, TRANSFORMER, TYPICAL, UNDERGROUND FULL SECTION, UNDERWRITERS LABORATORIES, UNLESS NOTED OTHERWISE, UNINTERRUPTIBLE POWER SUPPLY, VOLTS, VOLT-AMPERE, WATER HEATER, WEATHER PROOF, TRANSFORMER.

MEP Component Anchorage Note

All mechanical, plumbing, and electrical components shall be anchored and installed per the details on the DSA approved construction documents. The following components shall be anchored or braced to meet the force and displacement requirements prescribed in the 2019 CBC, Sections 1617A.1.18 through 1617A.1.26 and ASCE 7-16, Chapter 13, 26, and 30.

- 1. All permanent equipment and components.
2. Temporary, movable or mobile equipment that is permanently attached (e.g. hard wired) to the building utility services such as electricity, gas or water. "Permanently attached" shall include all electrical connections except plugs for 110/220 volt receptacles having a flexible cable.
3. Temporary, movable or mobile equipment which heavier than 400 pounds or has a center mass located 4 feet or more above the adjacent floor or roof level that directly support the component is required to be restrained in a manner approved by DSA.

The following mechanical and electrical components shall be positively attached to the structure, but need not demonstrate design compliance with the references noted above. These components shall have flexible connections provided between the component and associated ductwork, piping, and conduit. Flexible connections must allow movement in both transverse and longitudinal directions:

- A. Components weighing less than 400 pounds and have a center of mass located 4 feet or less above the adjacent floor or roof level that directly support the component.
B. Components weighing less than 20 pounds, or in the case of distributed systems, less than 5 pounds per foot, which are suspended from a roof or floor or hung from a wall.

The anchorage of all mechanical, electrical and plumbing components shall be subject to the approval of the design professional in general responsible charge or structural engineer delegated responsibility and acceptance by DSA. The project inspector will verify that all components and equipment have been anchored in accordance with the above requirements.

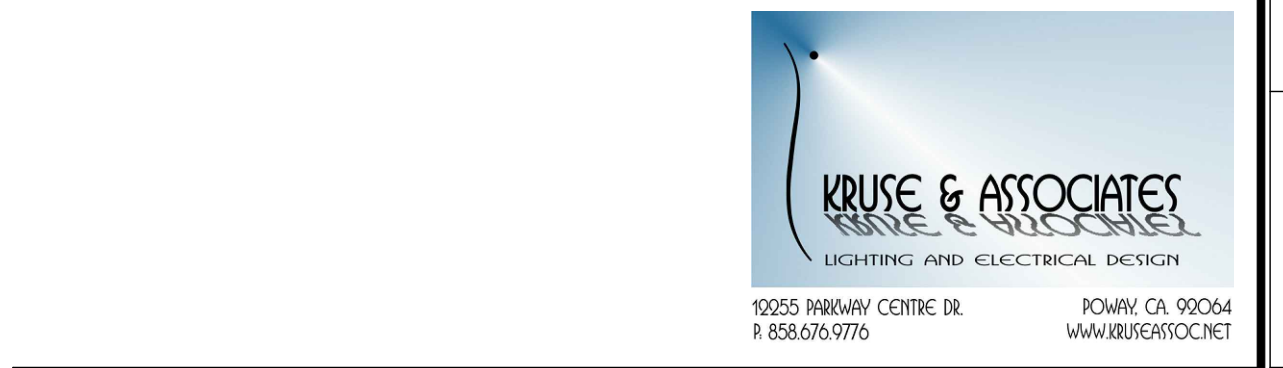
Piping, Ductwork, and Electrical Distribution System Bracing Note

Piping, ductwork and electrical distribution systems shall be braced to comply with the forces and displacements prescribed in ASCE 7-16 Section 13.3 as defined in ASCE 7-16 Section 13.6.5, 13.6.6, 13.6.7, 13.6.8, and 2019 CBC, Sections 1617A.1.24, 1617A.1.25, and 1617A.1.26.

The method of showing bracing and attachments to the structure for the identified distribution system are as noted below. When bracing and attachments are based on a preapproved installation guide (e.g., OSHPD OPM for 2013 CBC or later), copies of the bracing system installation guide or manual shall be available on the jobsite prior to the start of and during the hanging and bracing of the distribution systems. The Structural Engineer of Record shall verify the adequacy of the structure to support the hanger and brace loads.

Mechanical Piping (MP), Electrical Ducts (MD), Plumbing Piping (PP), Electrical Distribution Systems (E) shall comply with applicable OSHPD preapproved OPM# 0043-13.

- MP □ MD □ PP □ E □ OPTION 1: Detailed on the approved drawings with project specific notes and details.
MP □ MD □ PP □ E □ OPTION 2: Shall comply with the applicable OSHPD Pre-Approval (OPM#) # 0043-13.

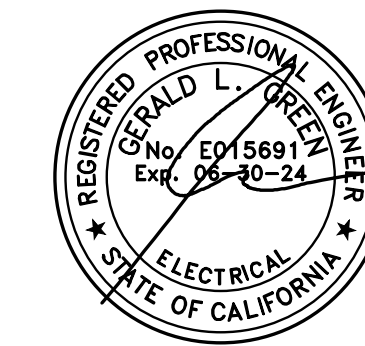


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Project Title
IMPERIAL VALLEY COLLEGE
TENNIS COURT SHADE AND LIGHTING

SYMBOLS LIST

Table with columns: Document Date (04-15-22), Date Last Revised (10-14-22), Project Number (22-081V), Sheet Number (E001).



APPROVALS

### MUSCO Lighting Control System Summary

Imperial Valley College Tennis / 202633 - 202633E Imperial - Page 2 of 4

**Project Information**

Project #: 202633  
 Project Name: Imperial Valley College Tennis  
 Date: 06/02/22  
 Project Engineer: Hunter Sabers  
 Sales Representative: Karin Anderson  
 Control System Type: Control-Link™ Control and Monitoring System  
 Communication Type: PowerLine-ST  
 Scans: 202633E  
 Document ID: 202633P1V3-0602113103  
 Distribution Panel Location or ID: Imperial  
 Total # of Distribution Panel Locations for Project: 1  
 Design Voltage/Hertz/Phase: 480/60/3  
 Control Voltage: 120

**Equipment Listing**

DESCRIPTION	APPROXIMATE SIZE
1 Control and Monitoring Cabinet	24 X 72
2 Control and Monitoring Cabinet	24 X 48
Total Contactors	14 30 AMP
Total OFF/ON/Auto Switches:	14

**Materials Checklist**  
 Contractor/Customer Supplied:

- A dedicated control circuit must be supplied per distribution panel location.
  - If the control voltage is NOT available, a control transformer is required.
- Electrical distribution panel to provide overcurrent protection for circuits.
  - HID rated or D-curve circuit breaker sized per full load amps on Circuit Summary by Zone Chart.
- Wiring
  - See chart on page 2 for wiring requirements.
  - Equipment grounding conductor and splices must be insulated (per circuit).
  - Lightning ground protection (per pole), if not Musco supplied.
- Electrical conduit wireway system
  - Entrance hubs rated NEMA 4, must be die-cast zinc, PVC, or copper-free die-cast aluminum.
- Mounting hardware for cabinets.
- Breaker lock-on device to prevent unauthorized power interruption to control power and powerline connection (if present).
- Anti-corrosion compound to apply to ends of wire, if necessary.

Call Control-Link Central™ operations center at 877-647-3319 to schedule activation of the control system upon completion of the installation.

Note: Activation may take up to 1 1/2 hours.

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### MUSCO Lighting Control System Summary

Imperial Valley College Tennis / 202633 - 202633E Imperial - Page 2 of 4

**Control-Link, Control and Monitoring System**

**Circuit Summary Table:**

Circuit ID	Description	# of Wires	Wires (AWG)	Conduit (in)	Max. Wire Length (ft)	MUSCO Supplied	Notes
1	Line power to contactors, and equipment grounding conductor	*A	*B	*C	N/A	No	A-E
2	Load power to lighting circuits, and equipment grounding conductor	*A	*B	*C	N/A	No	A-E
3	Control power (dedicated, 20A)	3	12	*C	N/A	No	C-E
4	Control harnesses	*F	12	2	*F	Yes	G,E,F

**Notes:**

- See voltage and phasing per the notes on cover page.
- Calculate per load and voltage drop.
- All conduit diameters should be per code unless otherwise specified to allow for conductor size.
- Equipment grounding conductor and any splices must be installed.
- Refer to control and monitoring system installation instructions for more details on equipment information and the installation requirements.
- Notes as provided in 4-4 length.

**IMPORTANT:** Control wires (3,4) must be in separate conduit from line and load power wires (1, 2).

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### MUSCO Lighting Control System Summary

Imperial Valley College Tennis / 202633 - 202633E Imperial - Page 3 of 4

**SWITCHING SCHEDULE**

Field/Zone Description	Zones
Tennis 1 - 3	1
Tennis 4 - 6	2
Cree Area	3

**CONTROL POWER CONSUMPTION**

120V Single Phase	VA loading of Musco Supplied Equipment	INRUSH: 3430.0 SEALED: 364.0
-------------------	--	---------------------------------

**CIRCUIT SUMMARY BY ZONE**

POLE	CIRCUIT DESCRIPTION	# OF FIXTURES	# OF DRIVERS	FULL LOAD AMPS	CONTACTOR SIZE (AMPS)	CONTACTOR ID	ZONE
P1	Tennis 1 - 3	4	4	6.6	30	C1	1
P2	Tennis 1 - 3	4	4	7.2	30	C2	1
P3	Tennis 1 - 3	4	4	6.6	30	C3	1
P4	Tennis 1 - 3	4	4	7.2	30	C4	1
P2	Tennis 4 - 6	4	4	7.2	30	C5	2
P4	Tennis 4 - 6	4	4	7.2	30	C6	2
P5	Tennis 4 - 6	4	4	6.6	30	C7	2
P6	Tennis 4 - 6	4	4	6.6	30	C8	2
P1	Area	1	1	0.9	30	C9	3
P2	Area	1	1	0.9	30	C10	3
P3	Area	1	1	0.9	30	C11	3
P4	Area	1	1	0.9	30	C12	3
P5	Area	1	1	0.9	30	C13	3
P6	Area	1	1	0.9	30	C14	3

Full Load Amps based on amps per driver.

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### MUSCO Lighting Control System Summary

Imperial Valley College Tennis / 202633 - 202633E Imperial - Page 4 of 4

**PANEL SUMMARY**

CABINET #	CONTROL MODULE LOCATION	CONTACTOR ID	CIRCUIT DESCRIPTION	FULL LOAD AMPS	DISTRIBUTION PANEL ID (BY OTHERS)	CIRCUIT BREAKER POSITION (BY OTHERS)
1	1	C1	Pole P1	6.59		
1	1	C2	Pole P2	7.23		
1	1	C3	Pole P3	6.59		
1	1	C4	Pole P4	7.23		
1	1	C5	Pole P2	7.23		
1	1	C6	Pole P4	7.23		
1	1	C7	Pole P5	6.59		
1	1	C8	Pole P6	6.59		
1	1	C9	Pole P1	0.87		
1	1	C10	Pole P2	0.87		
1	1	C11	Pole P3	0.87		
1	1	C12	Pole P4	0.87		
2	1	C13	Pole P5	0.87		
2	1	C14	Pole P6	0.87		

**ZONE SCHEDULE**

ZONE	SELECTOR SWITCH	ZONE DESCRIPTION	POLE ID	CIRCUIT DESCRIPTION	CONTACTOR ID
Zone 1	1	Tennis 1 - 3	P1	C1	
			P2	C2	
			P3	C3	
			P4	C4	
Zone 2	2	Tennis 4 - 6	P2	C5	
			P4	C6	
			P6	C7	
			P6	C8	
Zone 3	3	Area	P1	C9	
			P2	C10	
			P3	C11	
			P4	C12	
			P5	C13	
			P6	C14	

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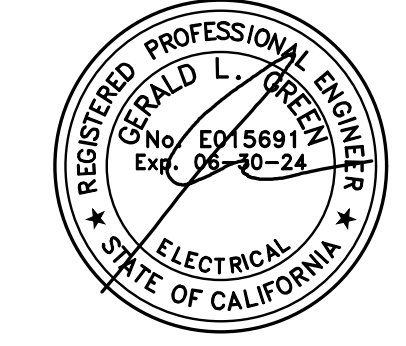
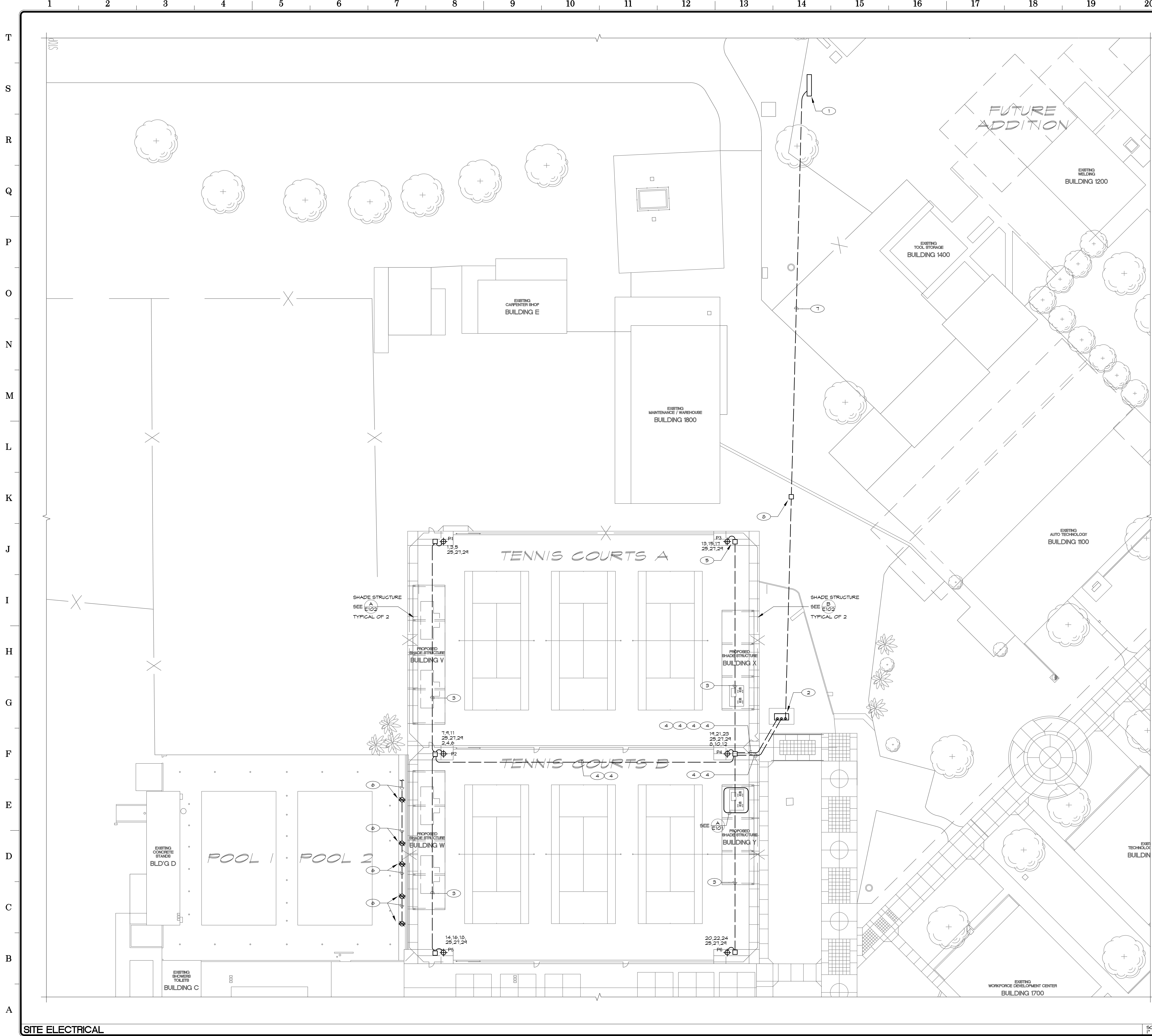


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Project Title  
**IMPERIAL VALLEY COLLEGE  
 TENNIS COURT SHADE AND LIGHTING**

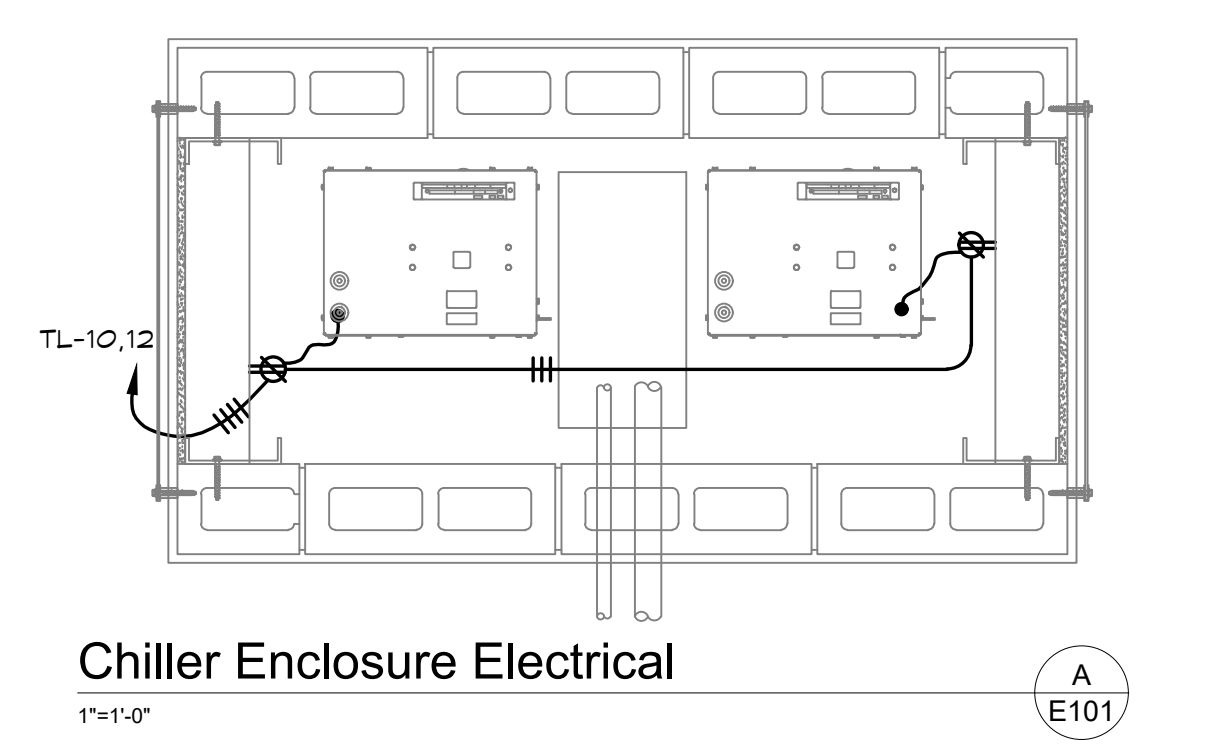
Sheet Title  
**MUSCO CONTROL SUMMARY**

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	Date Last Revised	Sheet Number
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	10-14-22	E002



**APPROVALS**

- NOTES**
- 1 EXISTING MAIN SWITCHBOARD
  - 2 NEW PANEL "T" AND MUSCO CONTROL PANEL
  - 3 1 1/2" PVC, C., 8#12 CU, 1#12 CU GND
  - 4 1 1/2" PVC, C., 8#12 CU, 1#12 CU GND
  - 5 12" x 18" x 12" DEEP CONCRETE PULLBOX FLUSH WITH DECK, TYPICAL OF 5
  - 6 EXISTING RECEPTACLE, CONDUIT AND CONDUCTORS TO BE REMOVED. INSTALL NEW RECEPTABLES AND RE-FEED EXISTING CIRCUIT(S)
  - 7 EXISTING FEEDER TO TRANSFORMER FOR EXISTING COURT LIGHTING. REMOVE EXISTING CONDUCTORS, EXTEND CONDUIT TO 2. PULL IN NEW 4#2, CU, 1#4 CU GND
  - 8 NEW PULLBOX AS REQUIRED



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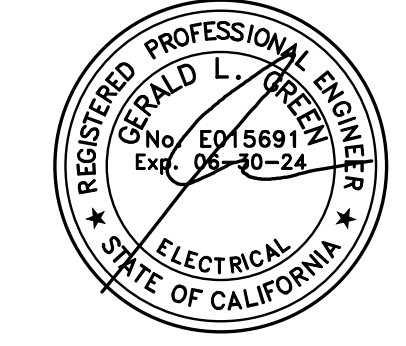
Project Title  
**IMPERIAL VALLEY COLLEGE  
TENNIS COURT SHADE AND LIGHTING**

Sheet Title  
**SITE ELECTRICAL PLAN**

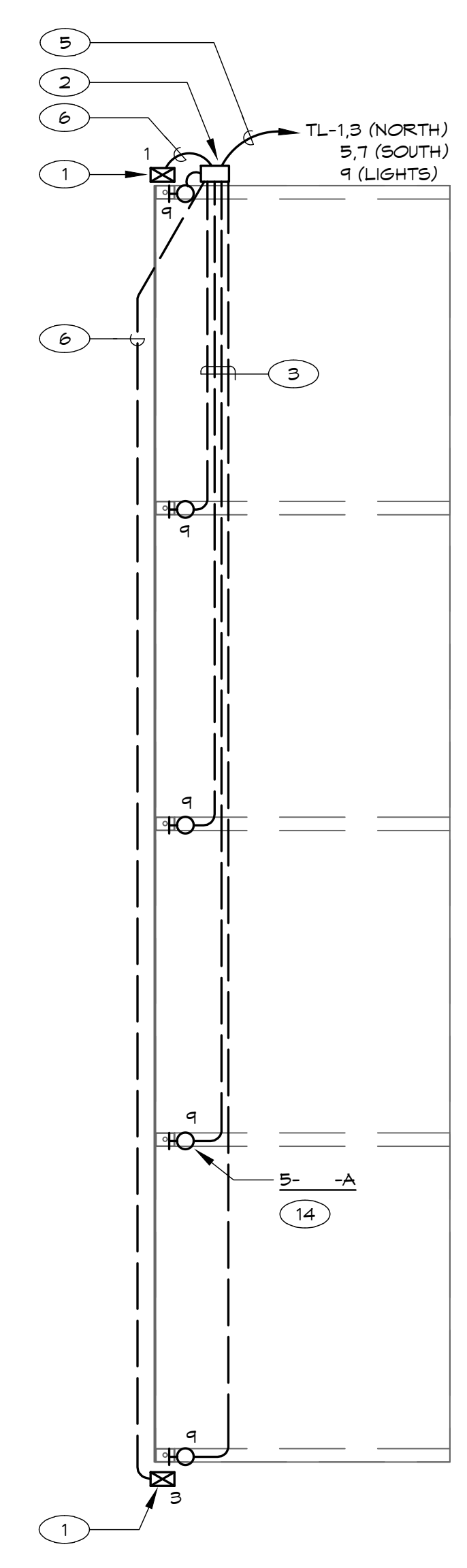
	Document Date 04-15-22	Project Number 22-081V
	Date Last Revised 10-14-22	Sheet Number <b>E101</b>

SCALE: 1" = 20'-0"

**SITE ELECTRICAL**

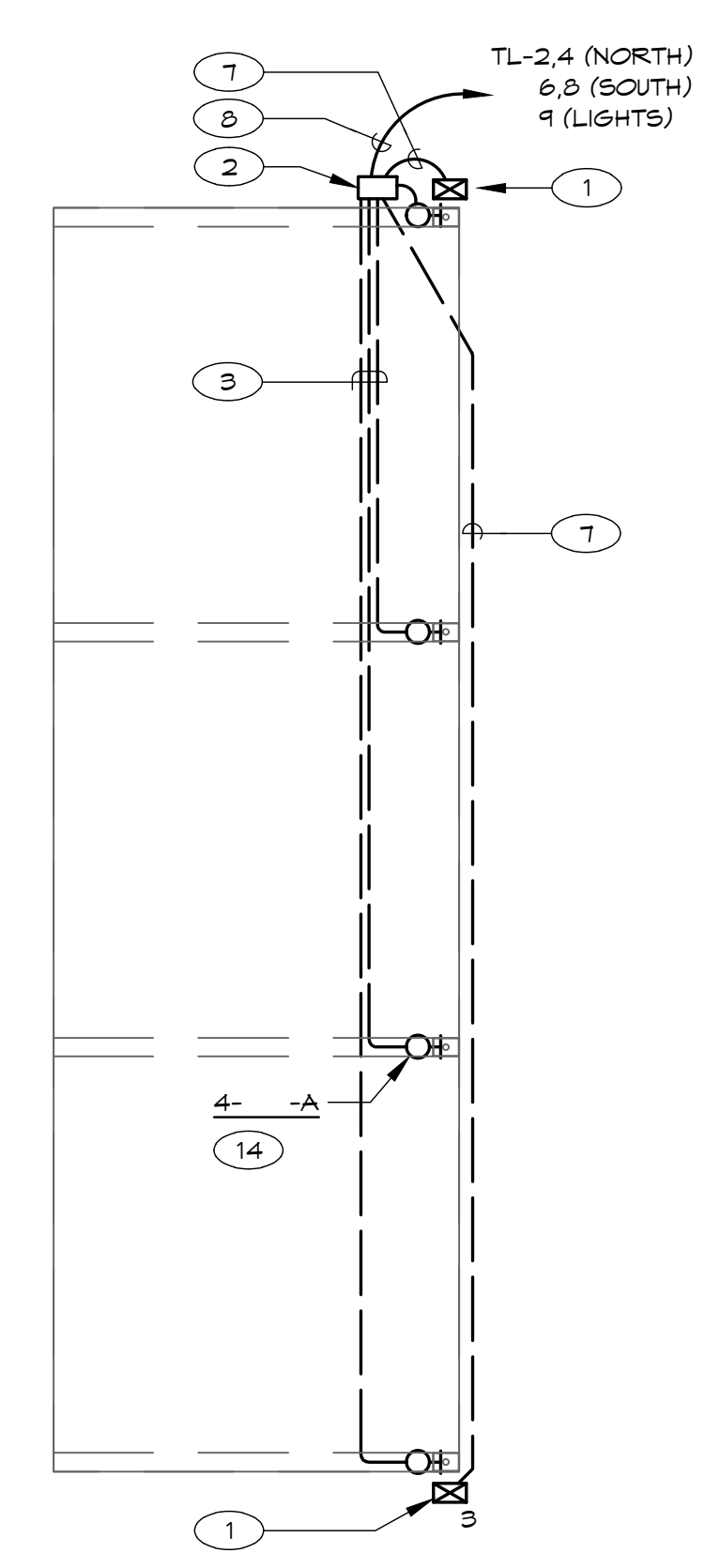


APPROVALS



ELECTRICAL FLOOR PLAN - 18' x 78' SHADE

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



ELECTRICAL FLOOR PLAN - 18' x 58' SHADE

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

- NOTES**
- 1 RECEPTACLE BOX, GOLD #TL210-WCS-PEN-GFCI
  - 2 12" x 18" x 12" DEEP CONCRETE PULLBOX, NORTH SIDE FOR BUILDING 10, SOUTH SIDE FOR BUILDING 6
  - 3 1 1/2" PVC, C., 2#12 CU, 1#12 CU GND
  - 4 MOUNT TOP OF FIXTURES AT TOP OF COLUMN
  - 5 1 1/2" PVC, C., #36 CU, 1#10 CU GND (RECEPTABLES), 2#12 CU, 1#12 CU GND (LIGHTS)
  - 6 3/4" PVC, C., 2#120 CU, 1#12 CU GND
  - 7 3/4" PVC, C., 2#12 CU, 1#12 CU GND
  - 8 1" PVC, C., 5#12 CU, 1#12 CU GND

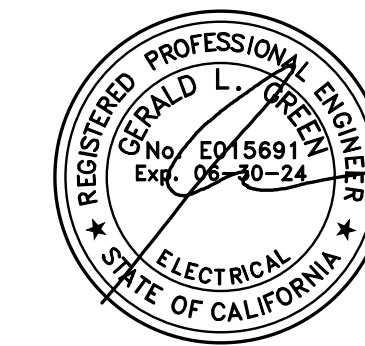


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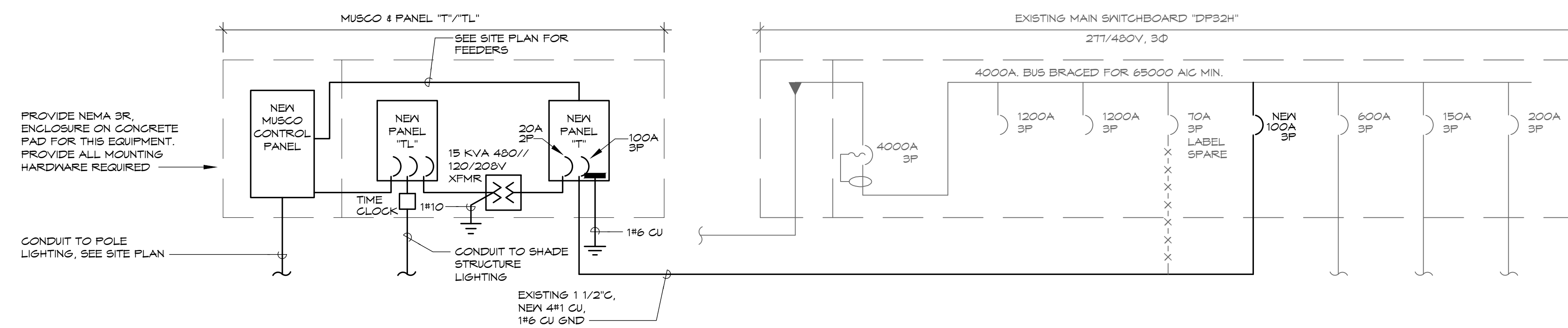
Project Title  
**IMPERIAL VALLEY COLLEGE  
 TENNIS COURT SHADE AND LIGHTING**

Sheet Title  
**ELECTRICAL SHADE STRUCTURE PLAN**

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	10-14-22	E102



APPROVALS



**POWER SINGLE LINE DIAGRAM**

NO SCALE

**NOTES**

ALL ITEMS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED

VOLTAGE	277/480	AIC		PANEL	"T" (WEATHERPROOF)	MOUNTING		MAINS	100A 3P
PHASE	3		14,000	LOCATION	SITE	SURFACE		BUSSING	100A
WIRE	4			FEDER	SEE SINGLE LINE			FEED	BOTTOM

LOCATION	WATTAGE												LOCATION			
	ΦA	ΦB	ΦC	LTG	REC	MS	BKR	CR	Φ	CR	MS	REC		LTG	ΦA	ΦB
POLE #P1	1820			1			15	1	A	2	15	1		1994		
---		1820					3	3	B	4					1994	
---			1820				5	5	C	5	3					1994
POLE #P2	1994			1			15	7	A	8	15	1		1994		
---		1994					9	9	B	10					1994	
---			1994				11	11	C	12	3					1994
POLE #P3	1820			1			15	13	A	14	15	1		1820		
---		1820					15	15	B	16					1820	
---			1820				17	17	C	18	3					1820
POLE #P4	1994			1			15	19	A	20	15	1		1820		
---		1994					21	21	B	22					1820	
---			1994				23	23	C	24	3					1820
AREA LIGHTING	1496			6			15	25	A	26	0					
---		1496					27	27	B	28	0					
---			1496				29	29	C	30	0					
SPACE ONLY							31	31	A	32	0					
SPACE ONLY							33	33	B	34	0					
SPACE ONLY							35	35	C	36	0					
SPACE ONLY							37	37	A	38	0					
SPACE ONLY							39	39	B	40	0					
SPACE ONLY							41	41	C	42	0					
SUBTOTAL	9140	9140	9140										7644	7644	7644	
TOTAL	ΦA	16784					ΦB	16784					ΦC	16784		
TOTAL LOAD							WATTS AT	277/480	V..3φ, 4W				60.6	A.		
HIGH PHASE	16784						WATTS AT	277	V..1φ, 4W				60.6	A.		
															DATE 6/24/2022	

VOLTAGE	120/240	AIC		PANEL	"TL"	MOUNTING		MAINS	60A 2P
PHASE	1		10,000	LOCATION	SITE	SURFACE		BUSSING	100A
WIRE	3			FEDER	SEE SINGLE LINE			FEED	BOTTOM

LOCATION	WATTAGE												LOCATION			
	ΦA	ΦB	ΦC	LTG	REC	MS	BKR	CR	Φ	CR	MS	REC		LTG	ΦA	ΦB
SHADE RECEPTACLE	1000			1			20	1	A	2	20	1		1000		
SHADE RECEPTACLE		1000					20	3	B	4	20	1			1000	
SHADE RECEPTACLE			1000				20	5	A	6	20	1				1000
SHADE RECEPTACLE	1000			1			20	7	B	8	20	1		1000		
* SHADE LIGHTING							20	9	A	10	15					700
WATER CHILLER							11	11	B	12	15					700
SPACE ONLY							13	13	A	14	0					
SPACE ONLY							15	15	B	16	0					
SPACE ONLY							17	17	A	18	0					
SUBTOTAL	2000	2000											2100	2100		
TOTAL	ΦA	4700					ΦB	4700					ΦC	4700		
TOTAL LOAD							WATTS AT	120/240	V..1φ, 3W				39.2	A.		

DATE 6/26/2022  
 \* \* ROUTE CIRCUIT THROUGH 20A 1P TIME CLOCK



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 TENNIS COURT SHADE AND LIGHTING**

Sheet Title  
**SINGLE LINE + PANEL SCHEDULES**


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**GENERAL**

- SPECIFIC NOTES & DETAILS ON THE SHADE STRUCTURE STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES & TYPICAL DETAILS.
- WHERE NO DETAILS ARE SHOWN OR NOTED IN ANY PART OF THE WORK THE DETAILS FOR OTHER SIMILAR WORK SHALL APPLY.
- DETAILS IDENTIFIED AS TYPICAL, SHALL APPLY IN ESTIMATING AND CONSTRUCTION TO EVERY LIKE CONDITION WHETHER OR NOT THE REFERENCE IS REPEATED.
- THE STRUCTURAL DRAWINGS SHALL NOT BE SCALED. COORDINATE DIMENSIONS WITH ARCHITECTURAL DRAWINGS.
- COORDINATE ELEVATIONS, SLOPES AND DRAINAGE REQUIREMENTS WITH THE ARCHITECTURAL DRAWINGS.
- STANDARDS REFERENCED ON THE STRUCTURAL DRAWINGS REFER TO THE EDITION APPLICABLE UNDER THE CURRENT BUILDING CODE.
- THE RESPONSIBILITY FOR THE REVIEW AND COORDINATION OF DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF RELATED CONSTRUCTION SHALL BEAR ON THE CONTRACTOR. DISCREPANCIES THAT EXIST SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN A TIMELY MANNER, PRIOR TO START OF RELATED CONSTRUCTION.
- WORK PERFORMED IN CONFLICT WITH THE STRUCTURAL DRAWINGS OR APPLICABLE BUILDING CODE REQUIREMENTS SHALL BE CORRECTED AT THE EXPENSE OF THE CONTRACTOR.
- DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS SHALL BE VERIFIED BEFORE STARTING RELATED WORK AND THE ENGINEER NOTIFIED OF DISCREPANCIES IN A TIMELY MANNER.
- SITE CONDITIONS THAT ARE NOT REFLECTED ON THE STRUCTURAL DRAWINGS OR THAT DEVIATE FROM THE MAXIMUM OR MINIMUM DIMENSIONS INDICATED SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN A TIMELY MANNER. SUCH CONDITIONS MAY INCLUDE CONFLICT IN GRADES, ADVERSE SOIL CONDITIONS, GROUND WATER PRESENT, DEEPENED FOOTINGS, UNCOVERED AND UNEXPECTED UTILITY LINES, ETC.
- MATERIALS AND WORKMANSHIP SHALL CONFORM TO REQUIREMENTS OF APPLICABLE REGULATIONS AND THE BUILDING CODE AS AMENDED AND ADOPTED BY THE BUILDING OFFICIAL.

**FOUNDATION**

- THE STRUCTURE WILL BE LOCATED ENTIRELY ON UNDISTURBED NATIVE SOIL. IF THE BUILDING INSPECTOR SUSPECTS FILL, EXPANSIVE SOILS OR ANY GEOLOGIC INSTABILITY BASED UPON OBSERVATION OF THE FOUNDATION EXCAVATION, A SOILS OR GEOLOGICAL REPORT, AND RESUBMITTAL OF PLANS TO PLAN CHECK TO VERIFY THAT THE REPORT RECOMMENDATIONS HAVE BEEN INCORPORATED, MAY BE REQUIRED.
- THE MAXIMUM ALLOWABLE SOIL BEARING PRESSURE SHALL BE 1500 psf. THE RESULTING ALLOWABLE BEARING VALUE MAY BE INCREASED BY 1/3 FOR WIND AND SEISMIC LOAD CASES.
- FOOTING DEPTHS INDICATED ON THE STRUCTURAL DRAWINGS ARE FOR BIDDING PURPOSES ONLY AND ARE ASSUMED TO BE IN SUITABLE BEARING MATERIALS.
- FOOTING ELEVATIONS SHALL BE LOCATED SUCH THAT THEIR BEARING IS A MINIMUM HORIZONTAL DISTANCE OF 10 FEET FROM THE DAYLIGHT OF AN ADJACENT SLOPE.
- ANCHOR BOLTS, DOWELS AND HOLD-DOWN ANCHORS SHALL BE TIED IN PLACE PRIOR TO FOUNDATION INSPECTION.

SIGNATURE:  TIMOTHY K. JAQUESS, SE LICENSED ENGINEER

**SUBMITTALS**

- THE CONTRACTOR SHALL MAKE SUBMITTALS PRIOR TO FABRICATION AS REQUIRED BY THE WRITTEN SPECIFICATIONS AND SHALL INCLUDE AS A MINIMUM THE FOLLOWING SUBMITTALS:
  - CONCRETE MIX DESIGNS
  - REINFORCING STEEL DRAWINGS
  - STRUCTURAL STEEL DRAWINGS
  - METAL DECK DRAWINGS
  - WELDING PROCEDURES (SHOP AND FIELD WELDING).
- THE FOLLOWING SHOP DRAWINGS ARE NOT REQUIRED FOR SUBMISSION FOR STRUCTURAL REVIEW:
  - SHORING AND BRACING
  - UNPLUCKED REBAR AT SLAB-ON-GRADE AND FOOTINGS
  - FORMWORK
  - STRUCTURAL STEEL MILL REPORTS
- STEEL REINFORCING LISTS AND QUANTITIES AND LENGTHS OF ALL MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ASSURE COMPLIANCE WITH THE PLANS. ENGINEER WILL NOT REVIEW.
- SHOP DRAWINGS SUBMITTED TO THE ENGINEER FOR REVIEW SHALL BE STAMPED AND SIGNED BY THE CONTRACTOR INDICATING THE CONTRACTORS PRIOR REVIEW AND THAT THE SUBMITTAL IS IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- AS AN ALTERNATE TO MULTIPLE PAPER COPIES, SHOP DRAWINGS MAY BE SUBMITTED IN ELECTRONIC (PDF) FORMAT. WHERE SUBMITTED ELECTRONICALLY, SHOP DRAWINGS WILL BE PROCESSED AND RETURNED ELECTRONICALLY.

**REINFORCING STEEL**

- DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS SHALL FOLLOW ACI 315, "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT".
- REINFORCING BARS SHALL CONFORM TO ASTM A 615, GRADE 60, U.O.N.
- WELDED REINFORCING BARS SHALL CONFORM TO ASTM A 706, GRADE 80. BARS TO BE WELDED CONFORMING TO ASTM A 615, GRADE 80 MAY BE SUBSTITUTED PROVIDED THAT THE WELDING OF BARS COMPLIES WITH AWS D1.4 AND THE MINIMUM SPECIFICATIONS FOR WELDING OF REINFORCING STEEL INCLUDED HEREIN.
- REINFORCING BAR LAP SPLICES SHALL BE CLASS B, (18" MIN.) FOR CONCRETE. U.O.N.
- DETAILS OF REINFORCEMENT SHALL COMPLY WITH ACI 318, CHAPTER 25.
- REINFORCING BARS FOR CONCRETE SHALL BE PROVIDED WITH THE FOLLOWING MINIMUM COVER:
 

CONC. CAST AGAINST EARTH	3"
FORMED CONC. EXPOSED TO EARTHWEATHER:	
#5 OR SMALLER	1-1/2"
#6 OR LARGER	2"
SLABS (#11 AND SMALLER)	3/4"
BEAMS & GIRDERS	1-1/2"
- #3 SPACER TIES SHALL BE INSTALLED AT 30" ON CENTER IN ALL BEAMS AND FOOTINGS TO SECURE REINFORCING BARS IN PLACE. U.O.N.
- AT THE CONTRACTOR'S OPTION, INTERNALLY-THREADED LENTON A2 COUPLERS (APMO UES-0129) MAY BE USED IN LIEU OF LAP SPLICES. MECHANICAL BAR SPLICES MAY BE TYPE 1 OR TYPE 2 AS DEFINED IN ACI 318.

**REINFORCED CONCRETE**

- CONCRETE CONSTRUCTION SHALL CONFORM WITH CHAPTER 19A OF THE BUILDING CODE AND TO THE PROVISIONS OF ACI 318, LATEST EDITION.
- READY MIX CONCRETE SHALL BE MIXED AND DELIVERED IN ACCORDANCE WITH ASTM C 94.
- CEMENT SHALL CONFORM TO ASTM C 150 TYPE I OR II, LOW ALKALI, OR TYPE V FOR SULFATE EXPOSURE CLASS S2 AND S3.
- AGGREGATES FOR NORMAL WEIGHT CONCRETE SHALL CONFORM TO ASTM C 33.
- NORMAL WEIGHT CONCRETE SHALL HAVE A MAXIMUM DRY DENSITY OF 150 PCF.
- CONCRETE MIXES SHALL BE DESIGNED BY A QUALIFIED TESTING LABORATORY AND APPROVED BY THE ENGINEER. MIX DESIGN METHODS (TEST HISTORY OR TRIAL BATCH METHOD) IN ACCORDANCE WITH ACI 318, SECTION 26.4 SHALL BE USED TO PROPORTION CONCRETE.
- MINIMUM CONCRETE COMPRESSIVE STRENGTHS AT 28 DAYS, MAXIMUM SLUMPS, AND MAXIMUM WATER/CEMENT RATIOS SHALL BE AS FOLLOWS:

DESCRIPTION	MIN 28 DAY F <sub>c</sub>	SLUMP	MAX. W/C RATIO
FOOTINGS	3000 PSI	4"+1"	0.50
ALL OTHER CONCRETE	3000 PSI	4"+1"	0.50

- AD MIXTURES SHALL BE APPROVED IN ADVANCE.
- SLUMPS INDICATED ARE PRIOR TO PLASTICIZER ADDITIVES.
- CONCRETE ADMIXTURES CONTAINING CHLORIDE OR CHLORIDE SALTS SHALL NOT BE USED EXCEPT WHERE APPROVED IN WRITING BY THE ENGINEER.
- FLYASH SHALL BE LIMITED TO NO MORE THAN 20% OF THE TOTAL WEIGHT OF CEMENTITIOUS MATERIALS IN THE CONCRETE, U.O.N.
- WATER MAY BE ADDED ON SITE TO OBTAIN SPECIFIED SLUMPS PROVIDED THAT IT IS ADDED WITHIN ONE HOUR OF BATCHING AND SITE-ADDED WATER IS SPECIFIED ON THE BATCH REPORT. SITE-ADDED WATER SHALL NOT COMPROMISE THE STRENGTH OR SLUMP OF THE CONCRETE.
- CONCRETE SHALL NOT BE PLACED BEYOND 1-1/2 HOURS FOLLOWING BATCHING.
- CONDUIT OR PIPES LARGER THAN 4" NOMINAL DIAMETER SHALL NOT BE PLACED IN CONCRETE. SLEEVES FOR OPENINGS IN CONCRETE SHALL BE INSTALLED BEFORE PLACING REINFORCING WHICH MAY CONFLICT SHALL NOT BE CUT UNLESS APPROVED IN WRITING BY THE ENGINEER.
- STEEL COLUMNS, BEAMS PURLINS & PANELS MAY BE ERECTED 24 HOURS AFTER FOUNDATION CONCRETE PLACEMENT OR AFTER CONCRETE REACHES A COMPRESSIVE STRESS OF 1000 PSI, WHICHEVER COMES FIRST.

**STRUCTURAL STEEL**

- STRUCTURAL STEEL WORK SHALL BE PERFORMED IN ACCORDANCE WITH CHAPTER 22 OF THE BUILDING CODE, AISC 360 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" AND ALSO 303 "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES".
- STRUCTURAL STEEL STRENGTHS AND GRADES SHALL BE AS FOLLOWS, U.O.N.:
 

DESCRIPTION	YIELD F <sub>y</sub> (ksi)	ASTM GRADE
ANGLES, CHANNELS & OTHER SHAPES	36ksi	A36
HSS SECTIONS	48ksi	A500, GR B
CONNECTION PLATES & MISC., U.O.N.	50ksi	A572 GR 50
- ANCHOR RODS SHALL CONFORM TO ASTM F 1554, GRADE 105, UNLESS OTHERWISE NOTED. NUTS FOR ANCHOR RODS SHALL CONFORM TO ASTM A 563, GRADE C HEX (HEAVY HEX WHERE ANCHOR ROD DIAMETER IS GREATER THAN 1 1/2").
- MAIN MEMBER SHALL HAVE HIGH STRENGTH BOLTS CONFORMING TO AISC SPECS FOR ASTM A 325N BOLTS, U.O.N. OTHER BOLTS SHALL CONFORM TO ASTM A 307. NUTS FOR HIGH STRENGTH BOLTS SHALL BE HEAVY HEX GRADE C CONFORMING TO ASTM A563.
- EXTERIOR STRUCTURAL STEEL PERMANENTLY EXPOSED TO THE WEATHER SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION. ZINC COATING SHALL CONFORM TO ASTM A123 (G60, U.O.N.).
- TIGHTEN ASTM A 325N BOLTS TO "SNUG-TIGHT" CONDITION PER AISC SPECIFICATION FOR STRUCTURAL JOINTS. TEST ASTM A 325SC BOLTS WITH A CALIBRATED WRENCH UNLESS LOAD INDICATOR BOLTS ARE USED.
- WELDING DONE AFTER GALVANIZING SHALL BE PROTECTED ACCORDING TO ASTM A798.
- PROVIDE BEVELED WASHERS PER ANSI B18.23.1 AS REQUIRED ON SLOPED SURFACES.
- FAYING SURFACES OF HOT-DIPPED GALVANIZED MEMBERS AND CONNECTORS SHALL BE ROUGHENED WITH A HAND WIRE-BRUSH PRIOR TO ERECTION. ROUGHENING PROCESS SHALL VISIBLY ALTER THE GALVANIZED SURFACE WITHOUT DISRUPTING THE CONTINUITY OF GALVANIZATION. POWER WIRE-BRUSHING NOT ALLOWED.

**WELDING**

- WELDING SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF THE AMERICAN WELDING SOCIETY (AWS D1.1).
- WELDING OF METAL DECK AND LIGHT GAUGE METAL FRAMING SHALL BE DONE BY CERTIFIED LIGHT GAUGE WELDERS IN ACCORDANCE WITH AWS SPECIFICATIONS FOR WELDING SHEET STEEL IN STRUCTURES, AWS D1.3.
- WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS.
- WELDING ELECTRODE FOR THE SHIELDED METAL ARC WELDING (SMAW) PROCESS AND WELDING ELECTRODE SHALL CONFORM TO AWS A5.1 "SPECIFICATION FOR CARBON STEEL ELECTRODES FOR SHIELDED METAL ARC WELDING."
- ELECTRODES FILLER MATERIAL SHALL BE A MINIMUM OF E70XX U.O.N. EXCEPT E80XX MAY BE USED FOR WELDING OF METAL DECK AND LIGHT GAUGE FRAMING.
- WELDS SHALL HAVE WELD CONTROLLED SEQUENCE AND TECHNIQUE IN ORDER TO MINIMIZE SHRINKAGE STRESSES AND DISTORTION.

**METAL DECK**

- METAL DECK SHALL BE OF THE TYPE AND GAUGE AS INDICATED ON THE DRAWINGS AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND PUBLISHED ICC REPORT.
- METAL DECK AND ACCESSORIES SHALL BE FORMED FROM STEEL SHEETS CONFORMING TO ASTM A 653, WITH COATING DESIGNATION G60 (509).
- DECK SHALL BE CONTINUOUS OVER THREE SPANS WHEREVER POSSIBLE. SHORE DECK IF RECOMMENDED BY THE MANUFACTURER, MINIMUM BEARING AT ENDS IS 2".
- WHERE 3/4" DIAMETER SHEAR STUDS ARE TO BE WELDED TO SUPPORTS, 18 GAUGE (OR THICKER) DECKING SHALL NOT BE LAPPED.
- CONTRACTOR SHALL CUT DECK PER STRUCTURAL DETAILS AT ALL OPENINGS, COLUMNS, AND REQUIRED PENETRATIONS AND SHALL SUPPLY NECESSARY ACCESSORY ITEMS SUCH AS CLOSURES, CLIPS, ETC.

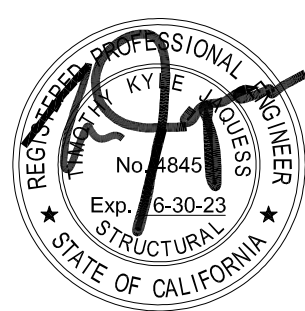
**SHEET METAL SCREWS**

- SCREWS SHALL BE ITW BUILDEX "TEKS" PER ICC ESR-1976 AND SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.
- SCREWS TO CONFORM TO THE REQUIREMENTS OF ASTM C1513. UNLESS OTHERWISE NOTED, SCREWS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
  - SIZE #12
  - ZINC-PLATED HARDENED STEEL
  - SELF-TAPPING
  - HEX-HEAD
- DURING INSTALLATION OF SCREWS, THE SCREW SHALL PENETRATE BOTH PLIES OF MATERIAL TO BE ATTACHED, WITH A MINIMUM OF 3 THREADS OF SCREW TIP EXPOSED.
- SCREWS SHALL BE TIGHTENED IN SUCH A MANNER THAT THE WASHER FACE OF SCREW HEADS FLUSH WITH ADJACENT PLY, AND PLIES OF MATERIAL TO BE FASTENED ARE DRAWN TOGETHER SNUGLY.
- SCREWS SHALL MEET THE FOLLOWING MINIMUM STRUCTURAL REQUIREMENTS:
 

THINNER OF PLIES TO BE JOINED	ALLOWABLE SHEAR	ALLOWABLE PULL-OUT
20 GA.	200#	99#
18 GA.	308#	132#
16 GA.	430#	165#
14 GA.	618#	207#
12 GA.	724#	289#

DESIGN CRITERIA	
DESCRIPTION	DESIGN VALUES
<b>DEAD &amp; LIVE LOADS</b>	
ROOF LIVE LOAD	20 PSF
ROOF PANEL DEAD LOAD	1.1 PSF
<b>WIND DESIGN</b>	
BASIC WIND SPEED (3 SECOND GUST), Vult	98 MPH
RISK CATEGORY	II
EXPOSURE CATEGORY	C
FACTORS: K <sub>z</sub> , K <sub>zT</sub> (1 MINIMUM) K <sub>d</sub>	0.85 / 1.0 / 0.85
q <sub>h</sub> = 0.00256 K <sub>z</sub> K <sub>zT</sub> K <sub>d</sub> V <sup>2</sup>	17.74 PSF
CLEAR WIND FLOW	[ ] NO [X] YES
OBSTRUCTED WIND FLOW	[ ] NO [X] YES
<b>SEISMIC DESIGN</b>	
LATERAL FORCE-RESISTING SYSTEM	STEEL - ORDINARY CANTILEVER COLUMN
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE
SEISMIC DESIGN CATEGORY (SDC)	E
SEISMIC SITE CLASS	D
SEISMIC IMPORTANCE FACTOR, I <sub>e</sub>	1
DESIGN BASE SHEAR, V	C <sub>s</sub> x W = 1.10 X 1.414 = 1.56 PSF
SEISMIC RESPONSE COEFFICIENT, C <sub>s</sub>	1.414
RESPONSE MODIFICATION FACTOR, R	1.25
OVERSTRENGTH FACTOR, Ω	1.25
SHORT-PERIOD SITE COEFFICIENT, F <sub>a</sub>	1.2
DESIGN SPECTRAL RESPONSE ACCELERATION AT SHORT PERIOD, S <sub>ds</sub> -USED TO DETERMINE C <sub>s</sub> (WITH CAP PER CBC 1616.10.00)	1.767
MAPPED SPECTRAL RESPONSE ACCELERATION AT 1 SECOND PERIOD, S <sub>1</sub>	0.786
LONG PERIOD SITE COEFFICIENT, F <sub>v</sub>	1.70
HORIZONTAL OR VERTICAL IRREGULARITIES TYPE (S)	NONE
ALLOWABLE SHAFT RESISTANCE FOR FOUNDATIONS CBC TABLE 1806A-2	125 PSF DOWN, 100 PSF UP 1500 PSF VERTICAL, 100 PSF/FT LATERAL
FLOOD DESIGN - DESIGN ASSUMED TO NOT BE IN FLOOD HAZARD AREA	
IF PROJECT IS LOCATED IN A FLOOD ZONE OTHER THAN ZONE X, A LETTER STAMPED & SIGNED FROM A SOILS ENGINEER IS REQUIRED TO VALIDATE THE ALLOWABLE SOIL VALUES SPECIFIED	
ARCHITECTURAL REQUIREMENTS	
DESCRIPTION	DESIGN VALUES
TYPE OF CONSTRUCTION	II-B
OCCUPANCY CLASSIFICATION	A-3
NUMBER OF STORIES	1

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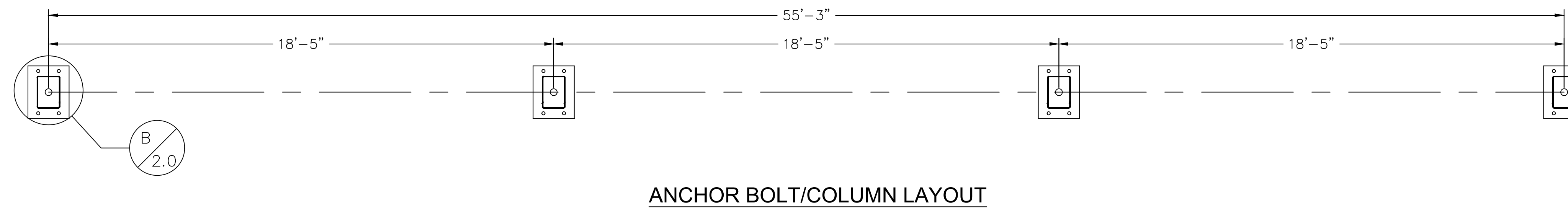
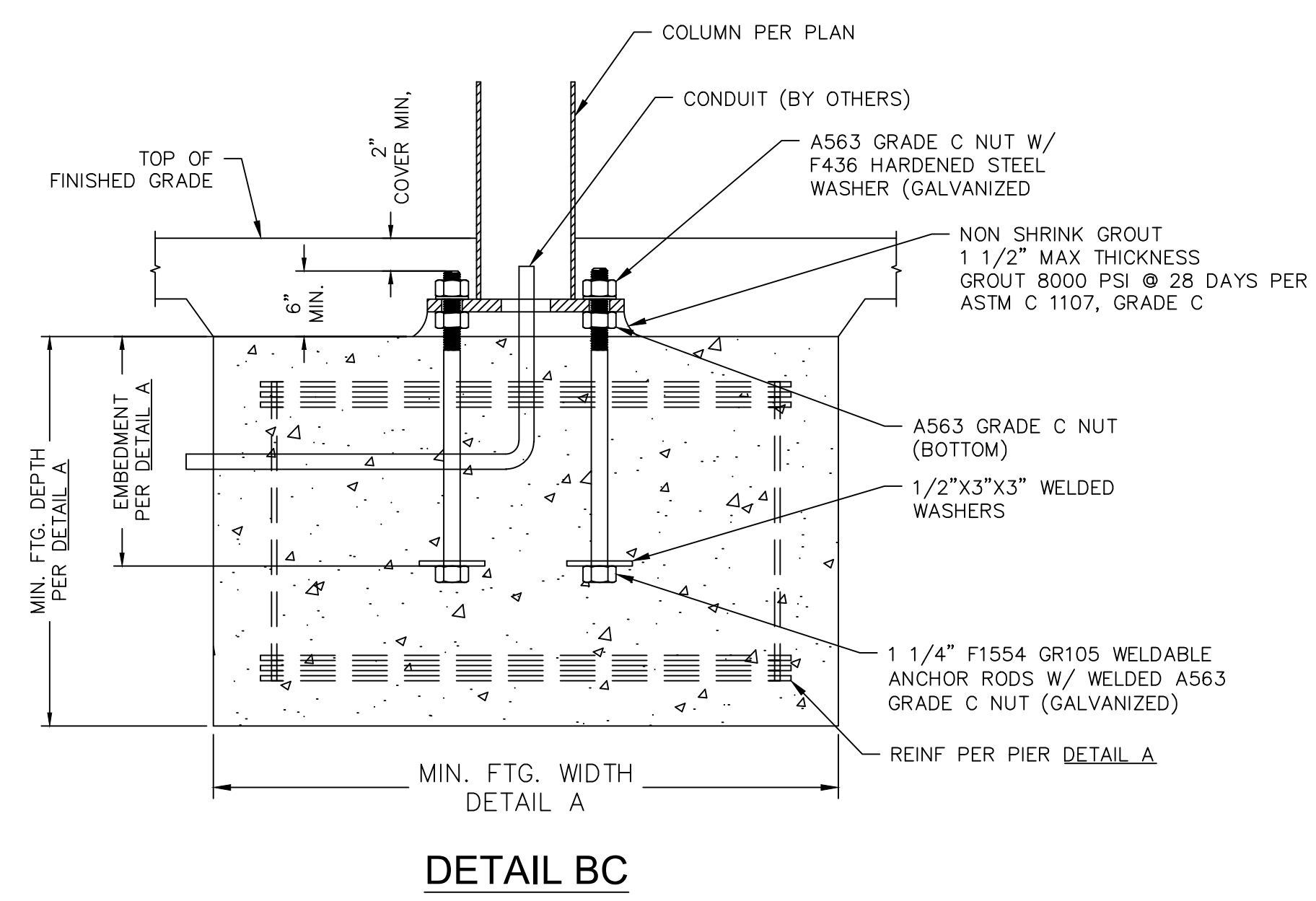
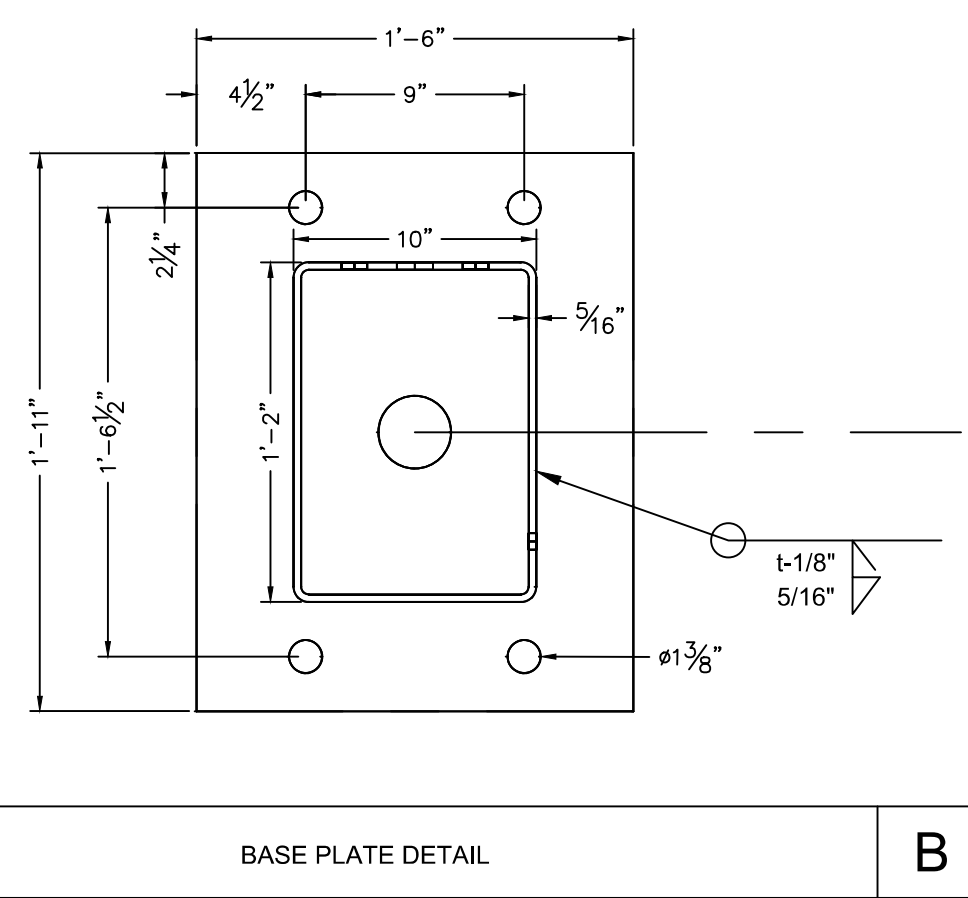
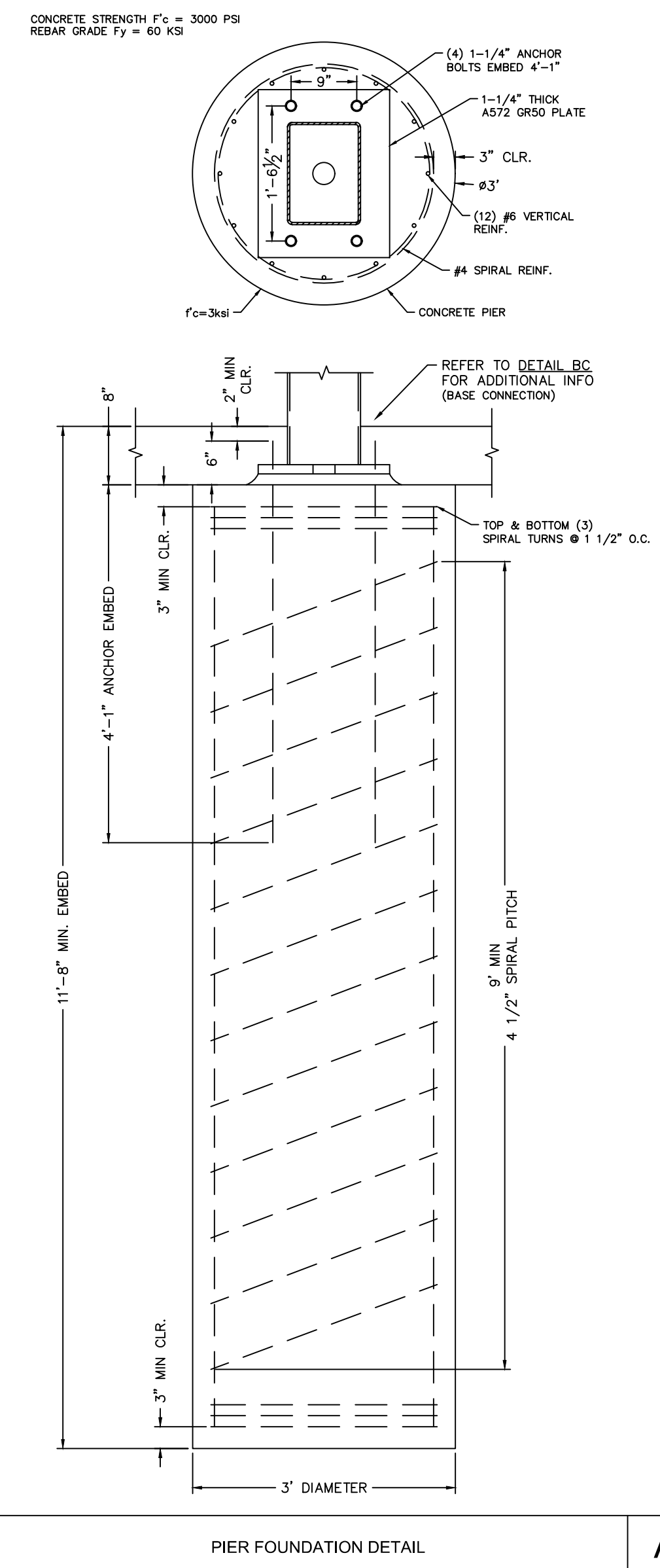
IVC - IMPERIAL VALLEY COLLEGE  
980 E ATEN RD.  
IMPERIAL, CA 92251

PROJECT: IMPERIAL VALLEY COLLEGE  
PRODUCT: MPC18X66M-P1  
NOTES: [ ]  
DATE: 5/31/22  
DRAWN BY: SH REV: [ ]  
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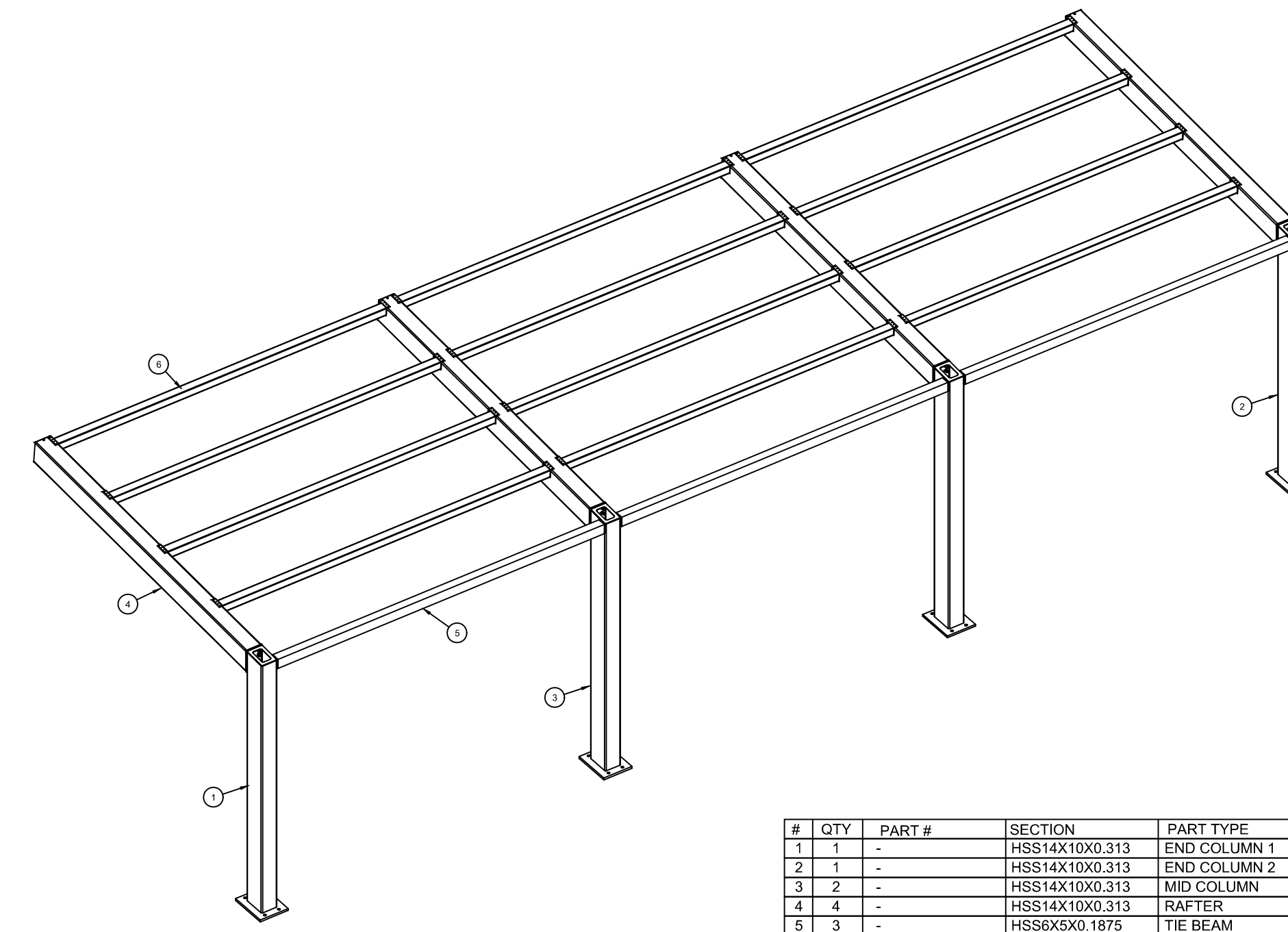
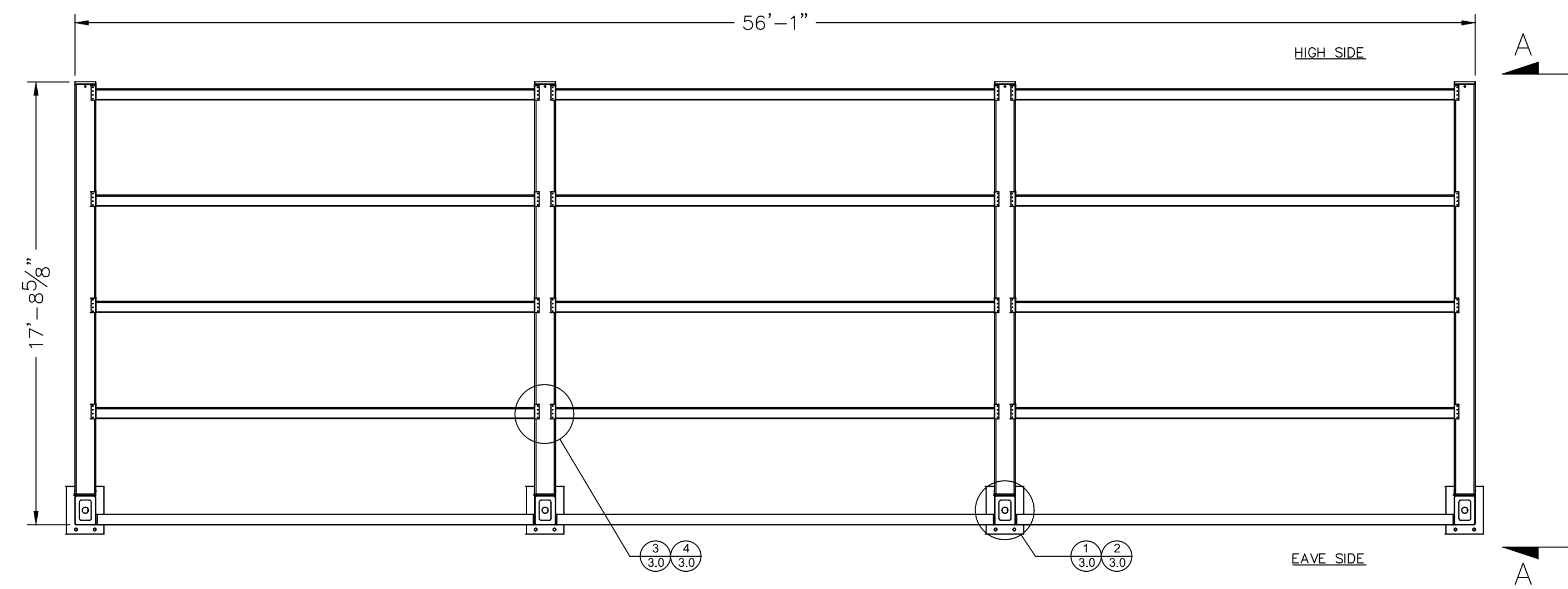


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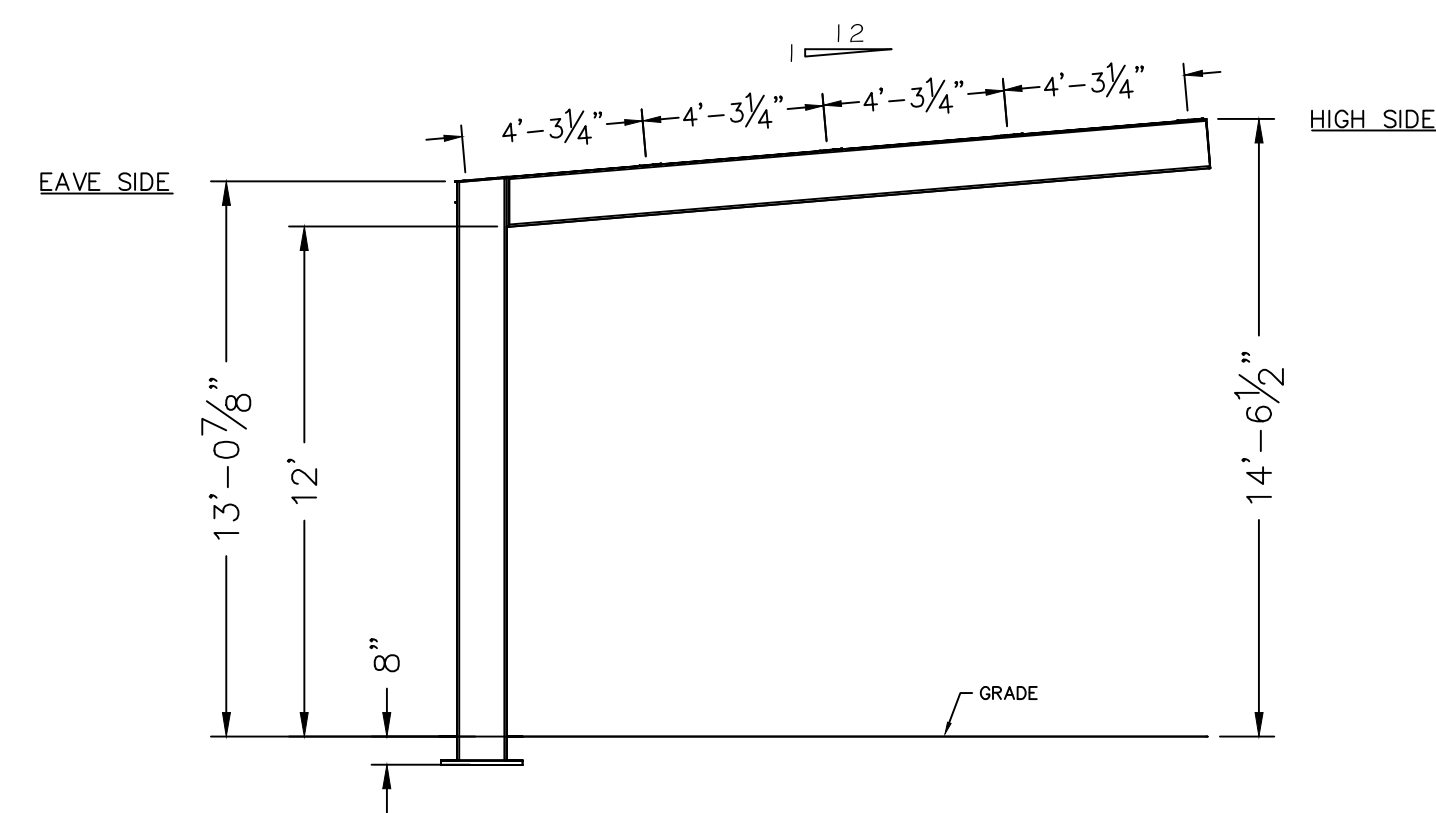
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PRODUCT: MPC18X6M-P1	REV: SH
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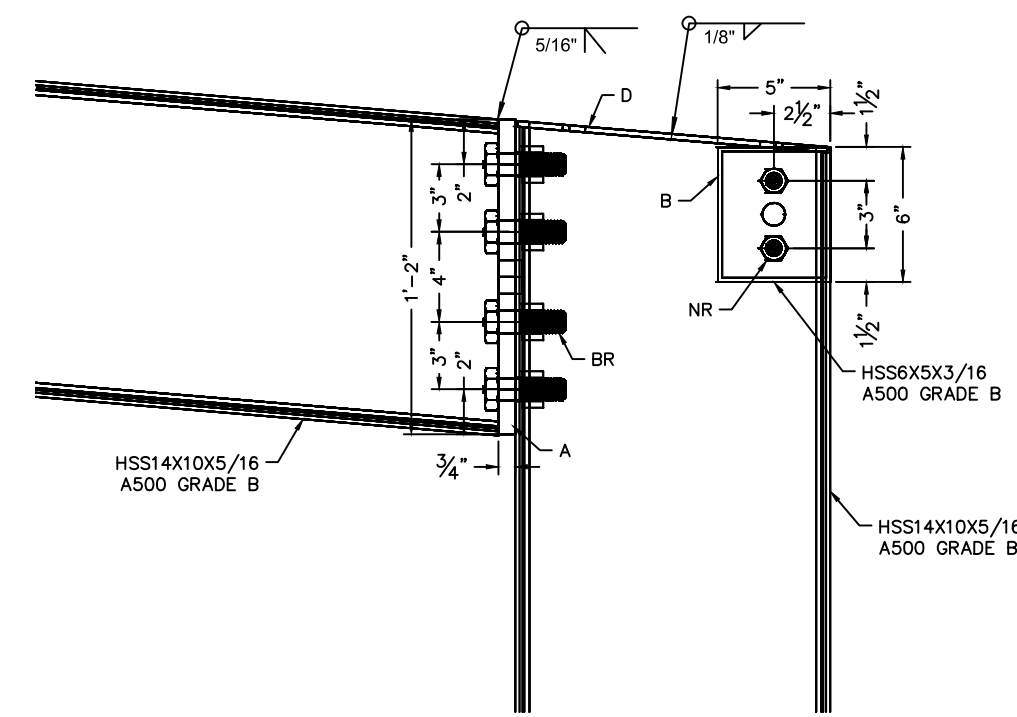




#	QTY	PART #	SECTION	PART TYPE	LENGTH
1	1	-	HSS14X10X0.313	END COLUMN 1	-
2	1	-	HSS14X10X0.313	END COLUMN 2	-
3	2	-	HSS14X10X0.313	MID COLUMN	-
4	4	-	HSS14X10X0.313	RAFTER	-
5	3	-	HSS6X6X0.1875	TIE BEAM	-
6	12	-	HSS6X6X0.125	PURLIN	-

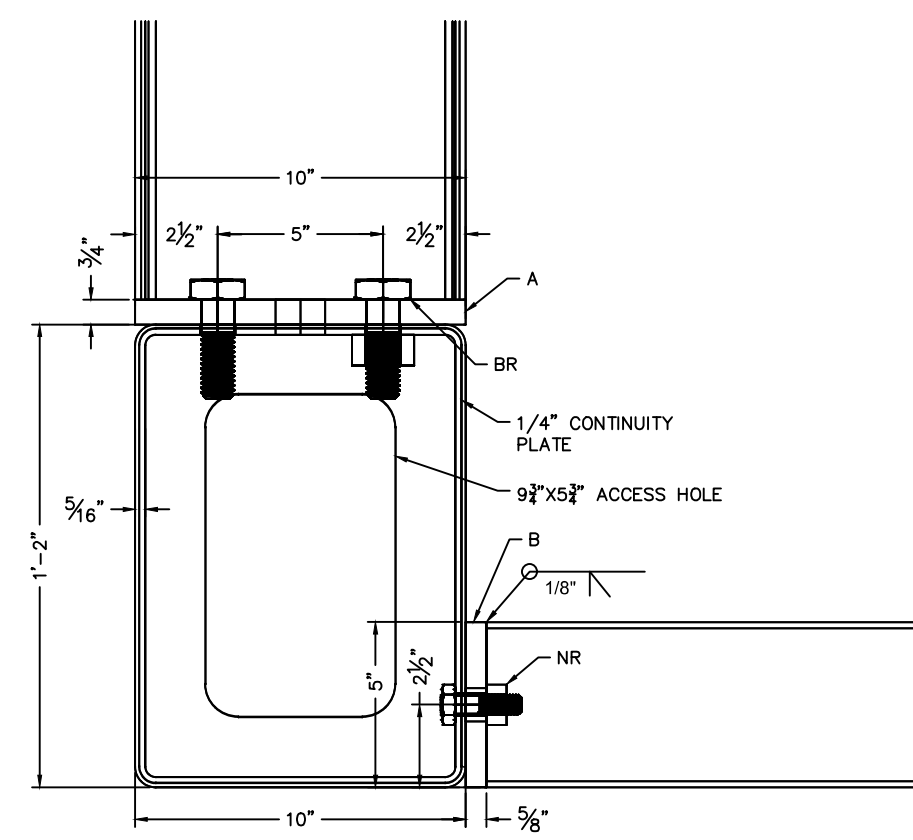


CONNECTION SCHEDULE			
CONNECTION	CAP PLATE (LxWxT)GR50	BOLTS (ASTM A325)	SELF DRILLING SCREW
A	14"X10"X3/4"	(8) 1"X2 1/2"	-
B	6"X5"X3/8"	(2) 3/8"X2"	-
C	7"X5 1/2"X1/2ga	-	(8) 12-24x1/2"
D	13 3/4"X9 1/2"X1/2"	-	-



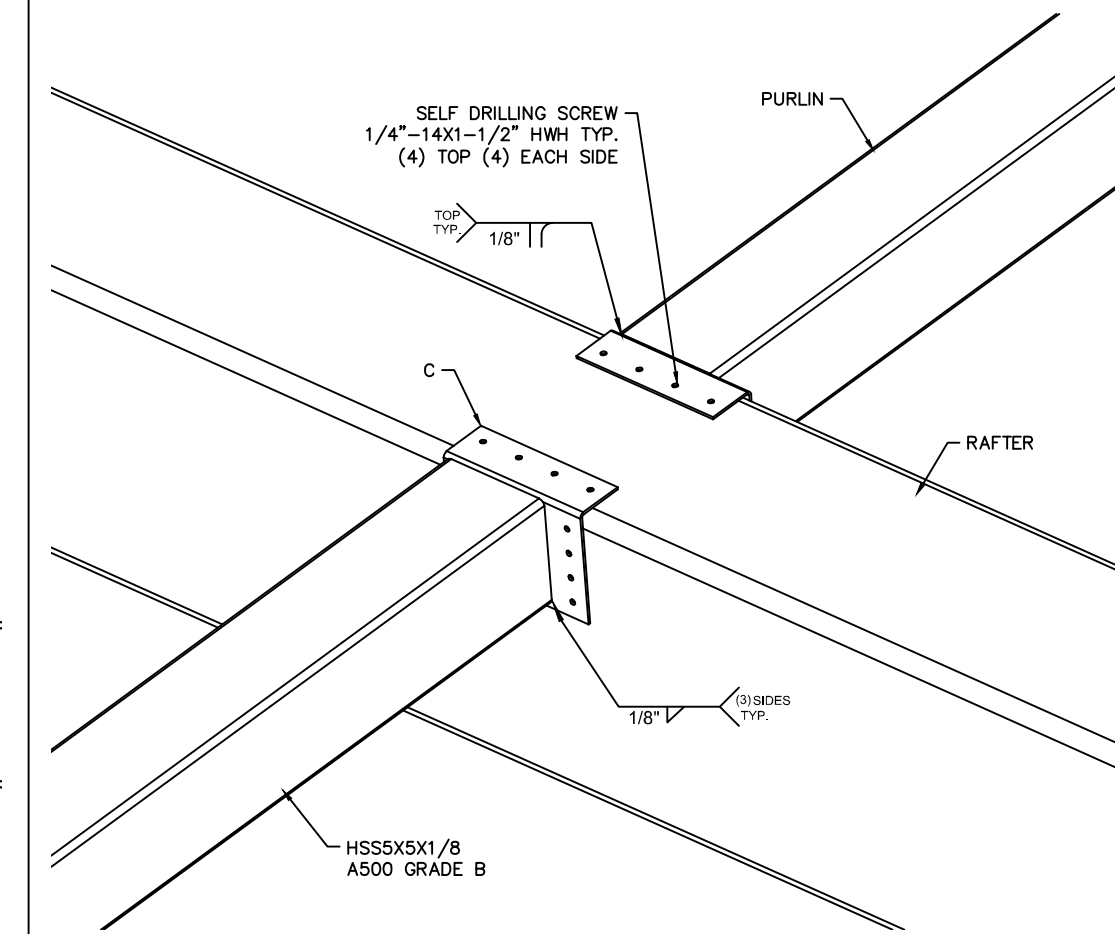
COLUMN @ RAFTER CONNECTION SIDE VIEW

1



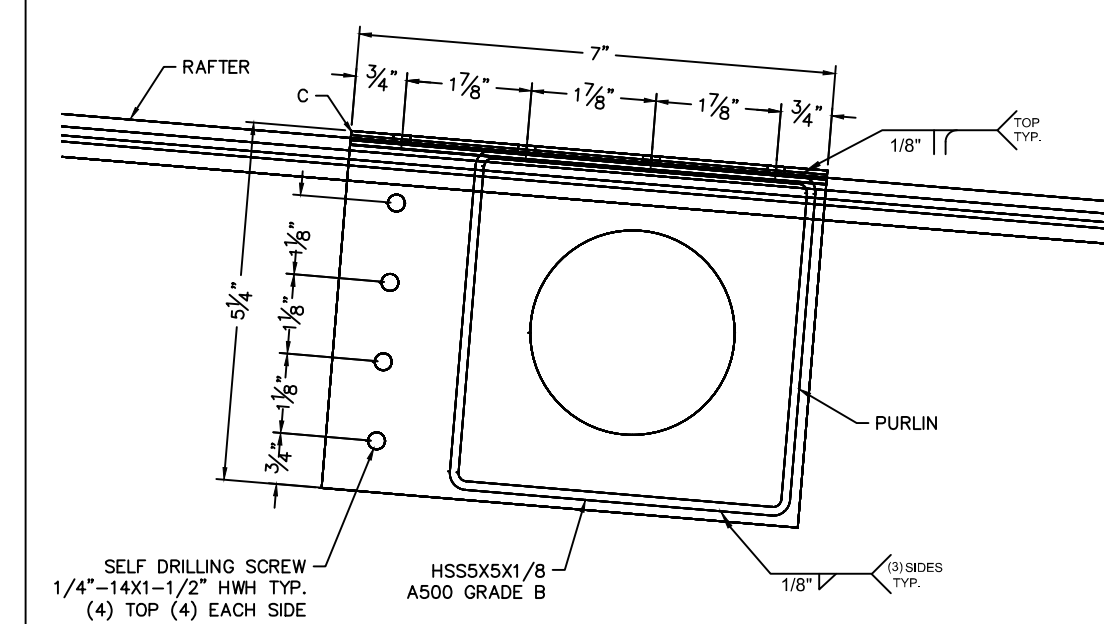
COLUMN @ RAFTER CONNECTION TOP VIEW

2



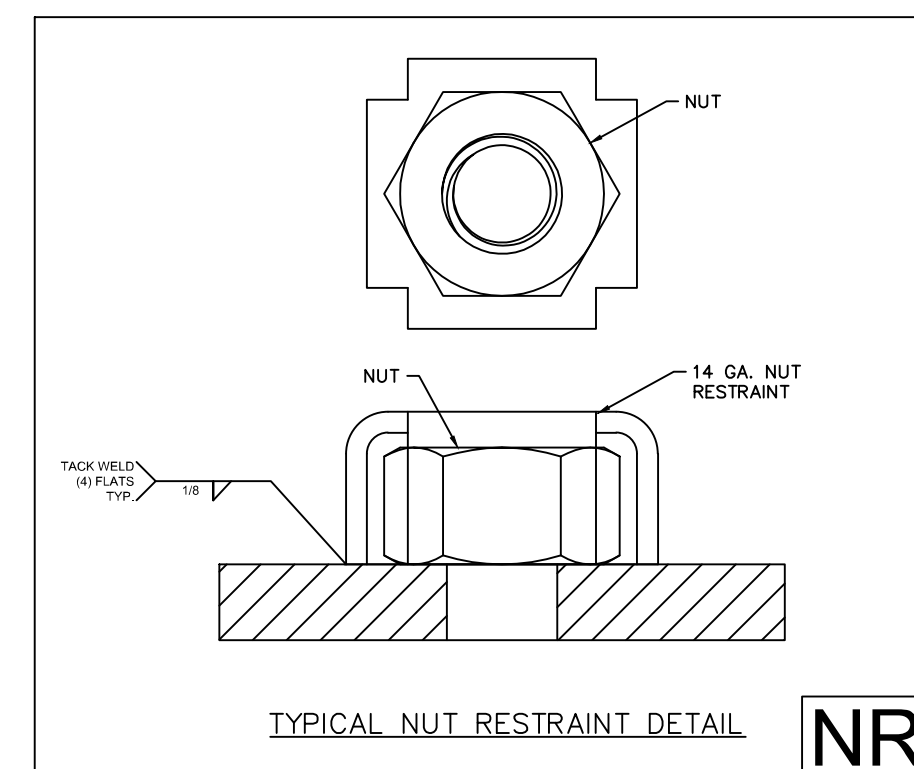
PURLIN @ RAFTER CONNECTION ISOMETRIC VIEW

3



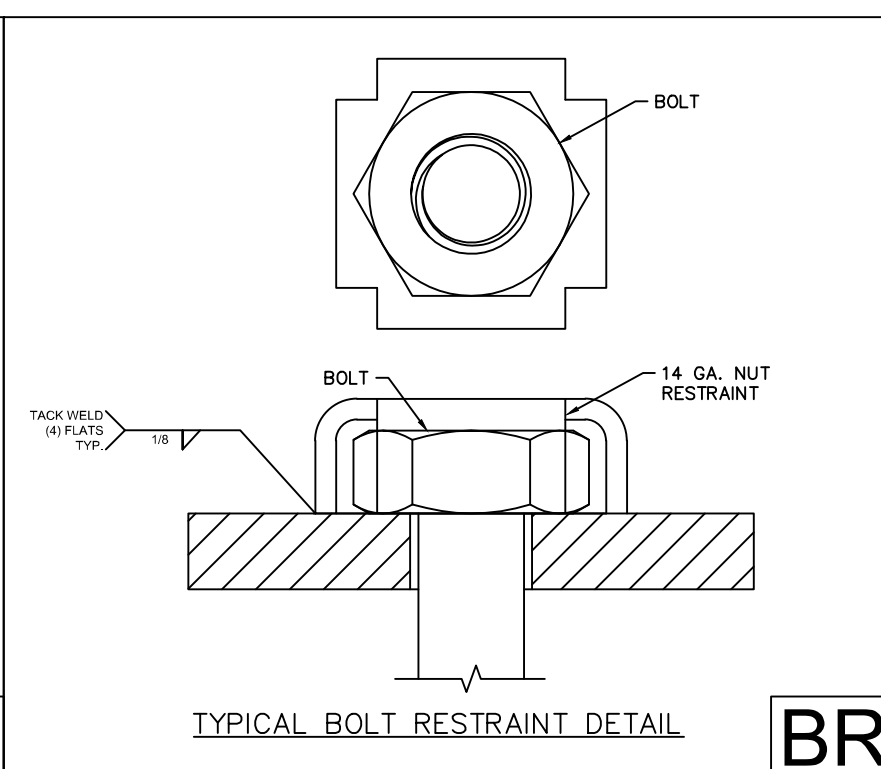
PURLIN @ RAFTER CONNECTION SIDE VIEW

4



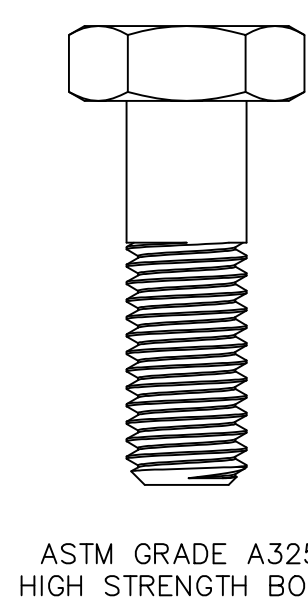
TYPICAL NUT RESTRAINT DETAIL

NR

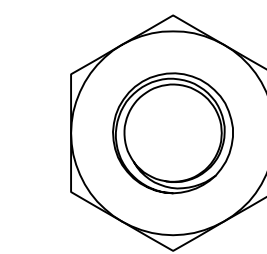


TYPICAL BOLT RESTRAINT DETAIL

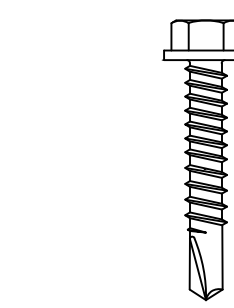
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ASTM GRADE A325 HIGH STRENGTH BOLT

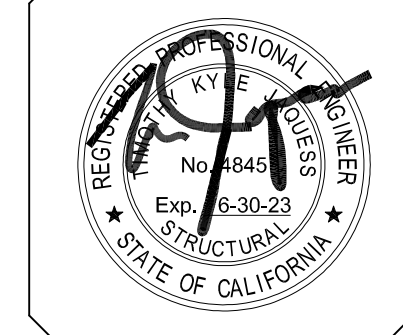


ASTM A563 GRADE C HIGH STRENGTH NUT



1/4-14X1-1/2" HWH TYPE ICC ES ESR-1976

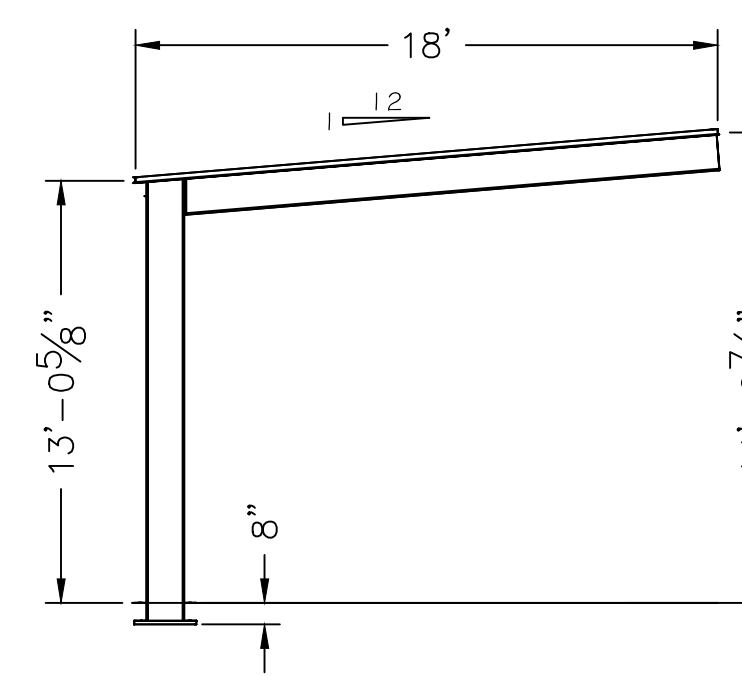
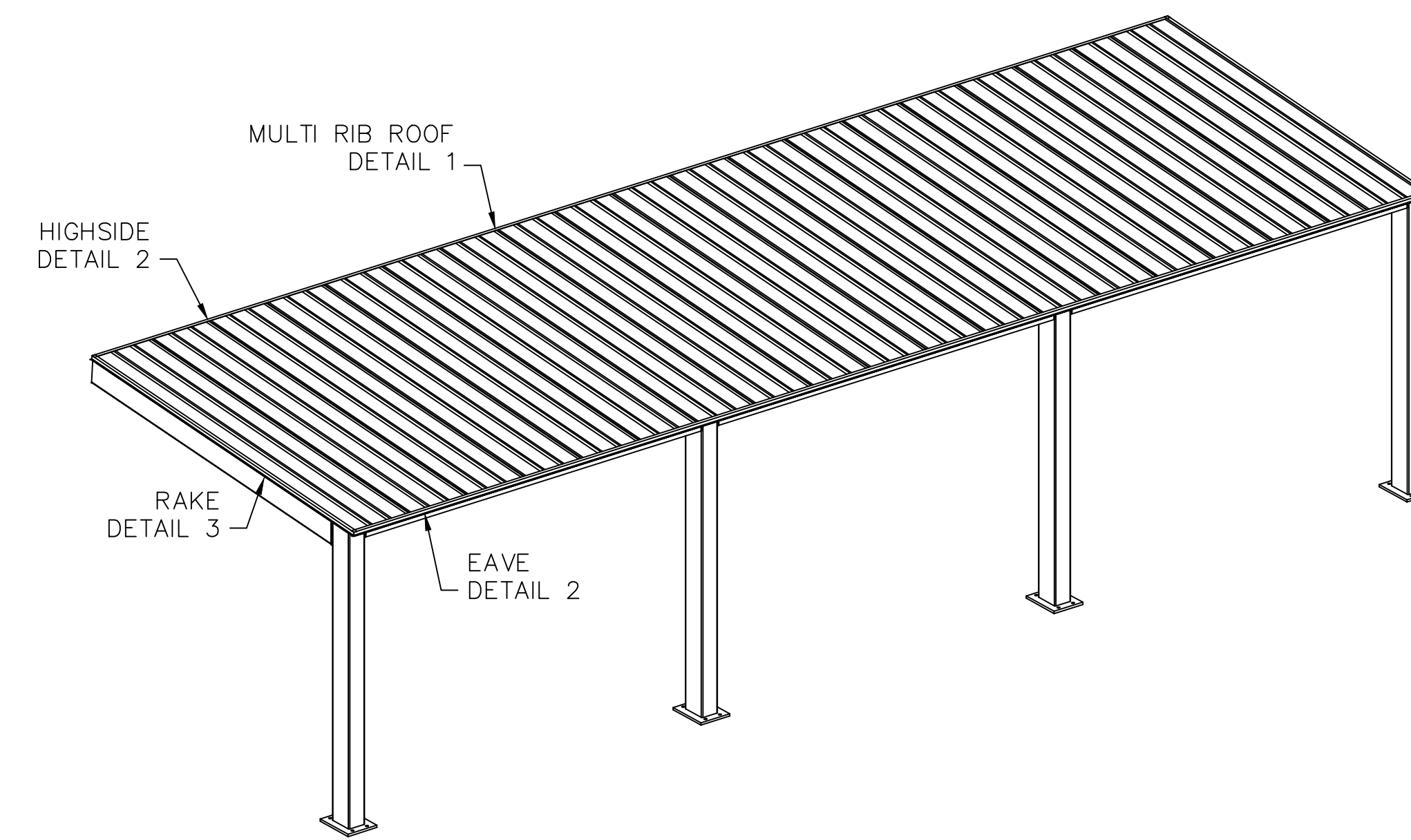
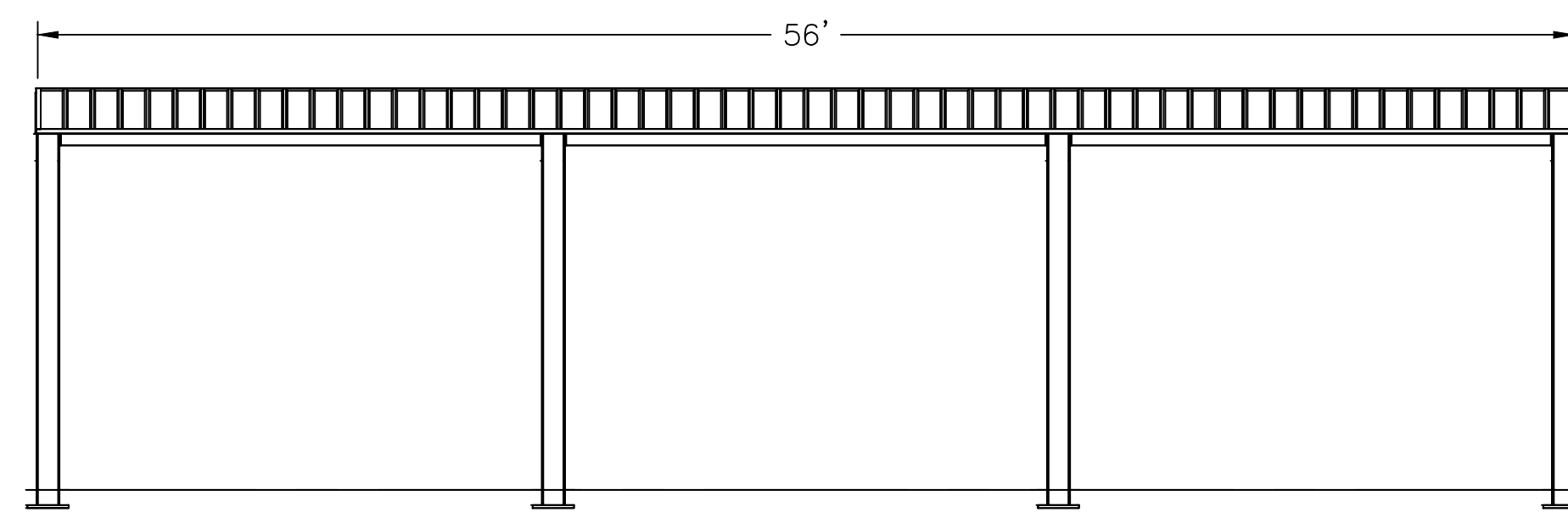
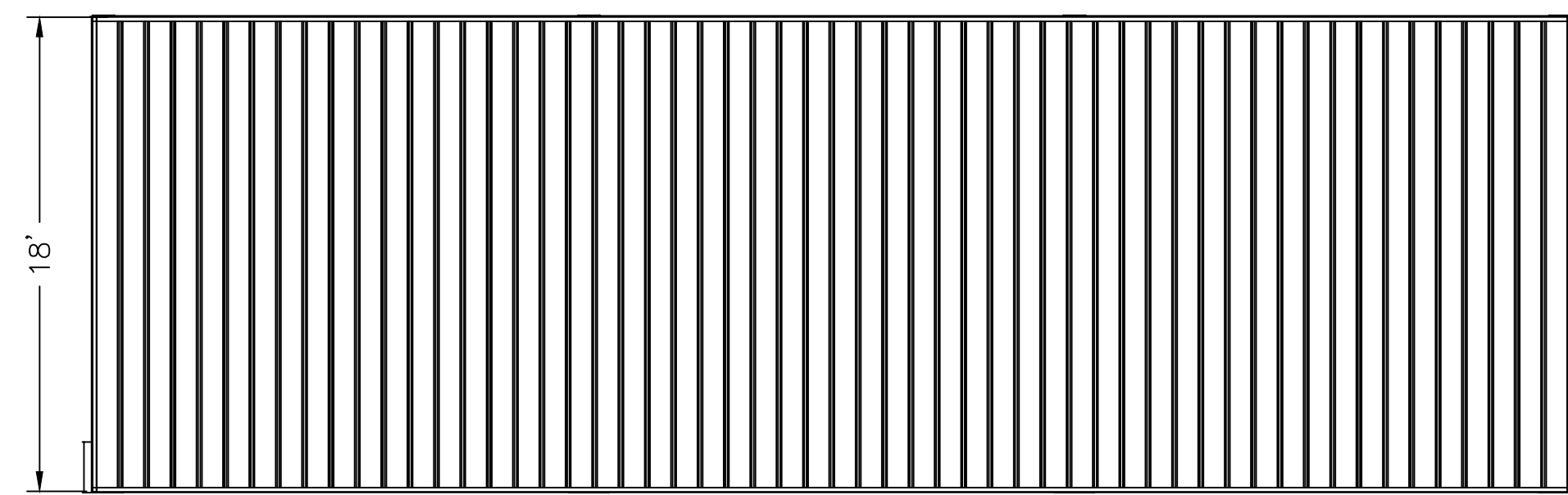
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PROJECT: IMPERIAL VALLEY COLLEGE	DATE: 5/31/22
PRODUCT: MPC18X66M-P1	REV: SH
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FRAME LAYOUT  
SHEET:  
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**MULTI RIB NOTES:**

THE DETAILS SHOWN ARE SUGGESTIONS OR GUIDELINES ON HOW TO ERECT THE SYSTEMS. THE INFORMATION SHOWN IS ACCURATE, BUT IT IS NOT INTENDED TO COVER ALL INSTANCES, BUILDING REQUIREMENTS, DESIGNS OR CODES. THE DETAILS MAY REQUIRE CHANGES OR REVISIONS DUE TO FIELD CONDITIONS.

IT SHALL BE THE RESPONSIBILITY OF THE ERECTOR TO ENSURE THAT THE DETAILS MEET PARTICULAR BUILDING REQUIREMENTS AND TO ASSURE ADEQUATE WATER TIGHTNESS.

THE ERECTOR SHOULD THOROUGHLY FAMILIARIZE HIMSELF/HERSELF WITH ALL ERECTION INSTRUCTIONS BEFORE STARTING WORK.

THE PANELS SHOULD BE INSTALLED PLUMB, STRAIGHT, AND ACCURATELY TO THE ADJACENT WORK.

FLASHING AND TRIM SHALL BE INSTALLED TRUE, AND IN PROPER ALIGNMENT, WITH ANY EXPOSED FASTENERS EQUALLY SPACED FOR THE BEST APPEARANCE.

SEALANT SHALL BE FIELD APPLIED ON DRY, CLEAN SURFACES. SOME FIELD CUTTING AND FITTING OF PANELS AND FLASHING IS TO BE EXPECTED BY THE ERECTOR AND MINOR FIELD CORRECTIONS ARE A PART OF NORMAL ERECTION WORK.

WORKMANSHIP SHALL BE OF THE BEST INDUSTRY STANDARDS AND INSTALLATION SHALL BE PERFORMED BY EXPERIENCED METAL CRAFTSMEN.

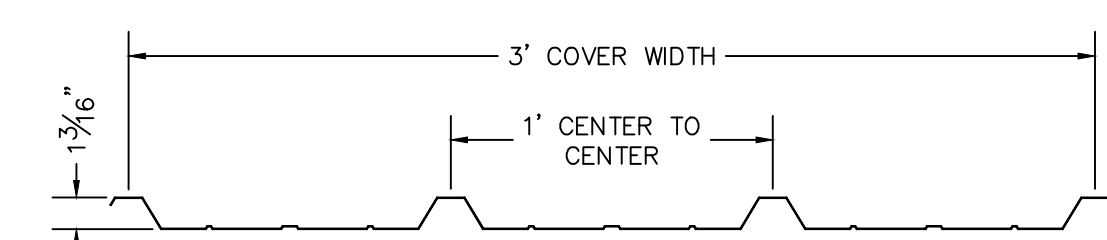
METAL SHAVINGS FROM DRILLING OR INSTALLATION OF ROOF FASTENERS MUST BE CAREFULLY REMOVED FROM THE ROOF BY BRUSHING OR SWEEPING AT THE END OF EACH DAY DURING INSTALLATION. SHAVINGS LEFT ON THE ROOF WILL QUICKLY RUST AND STAIN THE ROOF FINISH.

COVER ACCESS HOLES WITH GRACE ICE AND WATER SHIELD BEFORE ATTACHING ROOF DECK.

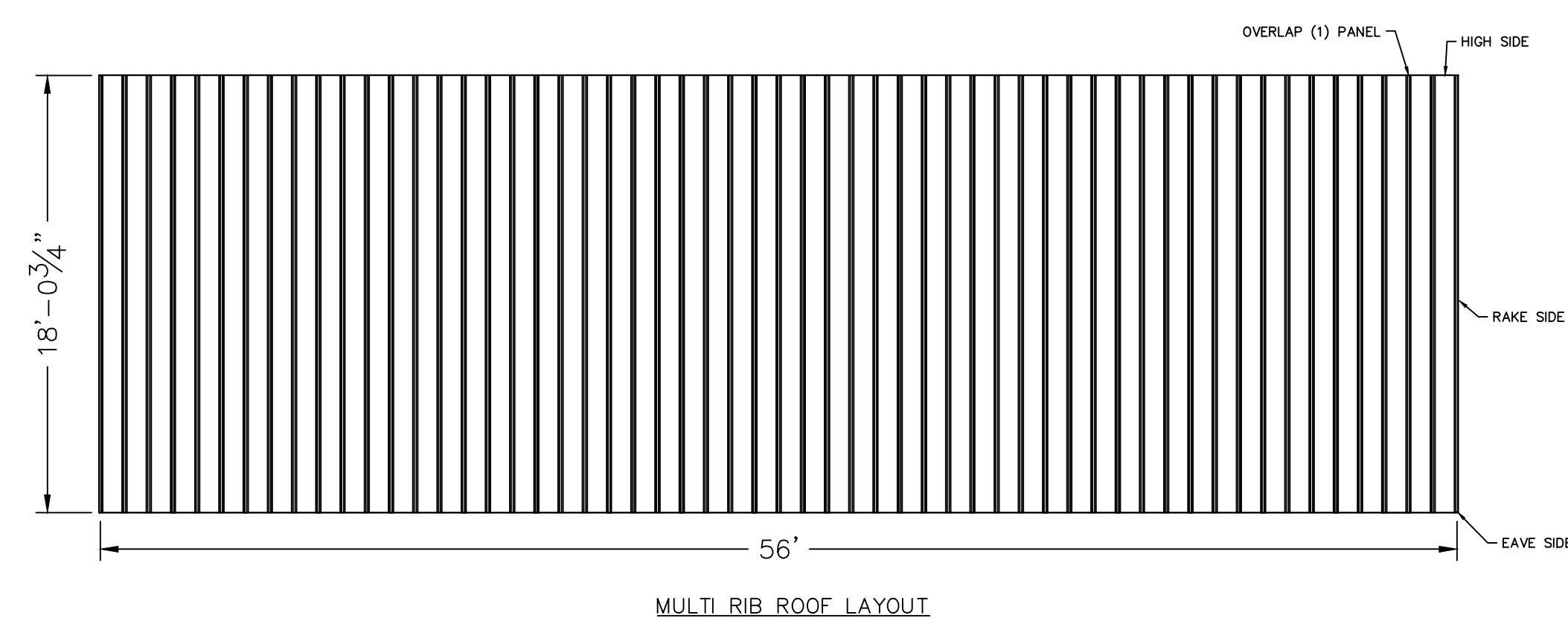
**SECTION PROPERTIES (PER FT. OF WIDTH)**

**TOP IN COMPRESSION**  
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 $S_x = 0.0575 \text{ in}^3$   
 $M_x = 1.723 \text{ in-kips}$

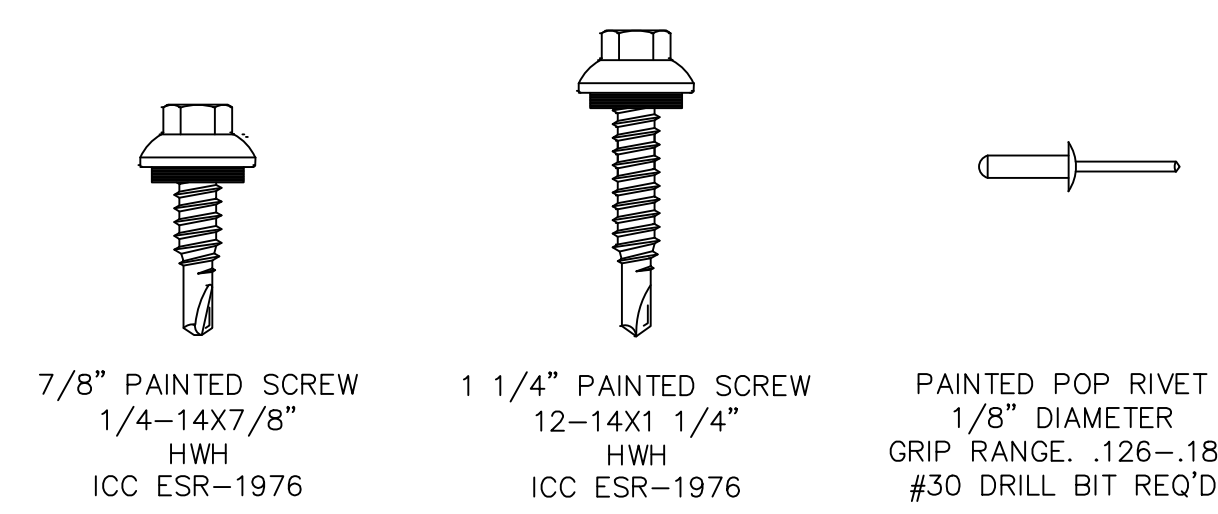
**BOTTOM IN COMPRESSION**  
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 $S_x = 0.0495 \text{ in}^3$   
 $M_x = 1.483 \text{ in-kips}$



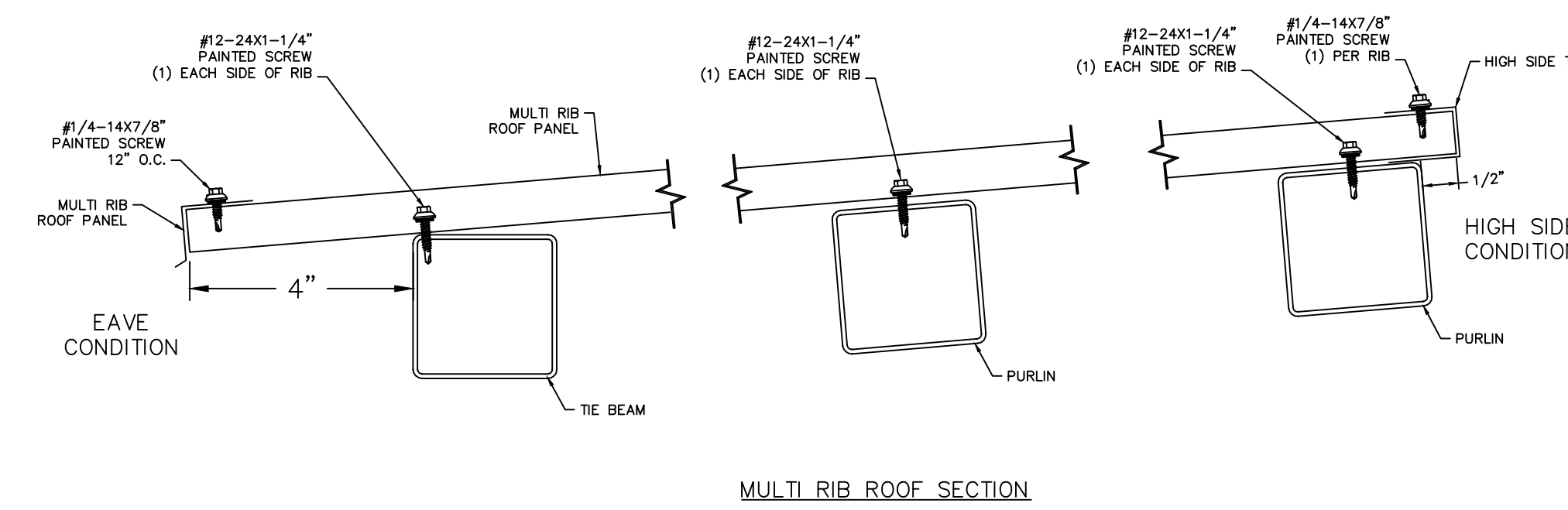
**MULTI RIB PANEL SECTION**  
 24GA. F<sub>y</sub>=50 ksi F<sub>u</sub>=65ksi



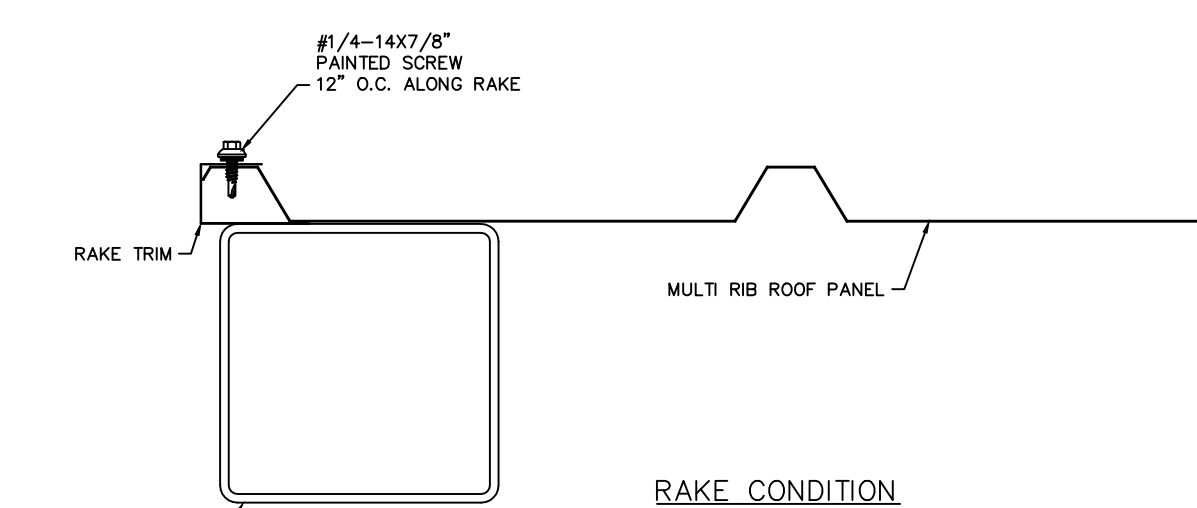
1



CORRECT	TOO LOOSE	TOO TIGHT
SEALANT MATERIAL SLIGHTLY VISIBLE AROUND METAL WASHER	SEALANT MATERIAL NOT VISIBLE AROUND METAL WASHER	SEALANT MATERIAL DEFORMED BEYOND EDGE OF METAL WASHER



2



3

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PROJECT: IMPERIAL VALLEY COLLEGE	DATE: 5/31/22
PRODUCT: MFC18X65M-P1	REV: SH
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 ROOF LAYOUT  
**SHEET:**  
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**GENERAL**

- SPECIFIC NOTES & DETAILS ON THE SHADE STRUCTURE STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES & TYPICAL DETAILS.
- WHERE NO DETAILS ARE SHOWN OR NOTED IN ANY PART OF THE WORK THE DETAILS FOR OTHER SIMILAR WORK SHALL APPLY.
- DETAILS IDENTIFIED AS TYPICAL, SHALL APPLY IN ESTIMATING AND CONSTRUCTION TO EVERY LIKE CONDITION WHETHER OR NOT THE REFERENCE IS REPEATED.
- THE STRUCTURAL DRAWINGS SHALL NOT BE SCALED. COORDINATE DIMENSIONS WITH ARCHITECTURAL DRAWINGS.
- COORDINATE ELEVATIONS, SLOPES AND DRAINAGE REQUIREMENTS WITH THE ARCHITECTURAL DRAWINGS.
- STANDARDS REFERENCED ON THE STRUCTURAL DRAWINGS REFER TO THE EDITION APPLICABLE UNDER THE CURRENT BUILDING CODE.
- THE RESPONSIBILITY FOR THE REVIEW AND COORDINATION OF DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF RELATED CONSTRUCTION SHALL BEAR ON THE CONTRACTOR. DISCREPANCIES THAT EXIST SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN A TIMELY MANNER, PRIOR TO START OF RELATED CONSTRUCTION.
- WORK PERFORMED IN CONFLICT WITH THE STRUCTURAL DRAWINGS OR APPLICABLE BUILDING CODE REQUIREMENTS SHALL BE CORRECTED AT THE EXPENSE OF THE CONTRACTOR.
- DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS SHALL BE VERIFIED BEFORE STARTING RELATED WORK AND THE ENGINEER NOTIFIED OF DISCREPANCIES IN A TIMELY MANNER.
- SITE CONDITIONS THAT ARE NOT REFLECTED ON THE STRUCTURAL DRAWINGS OR THAT DEVIATE FROM THE MAXIMUM OR MINIMUM DIMENSIONS INDICATED SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN A TIMELY MANNER. SUCH CONDITIONS MAY INCLUDE CONFLICT IN GRADES, ADVERSE SOIL CONDITIONS, GROUND WATER PRESENT, DEEPEMED FOOTINGS, UNCOVERED AND UNEXPECTED UTILITY LINES, ETC.
- MATERIALS AND WORKMANSHIP SHALL CONFORM TO REQUIREMENTS OF APPLICABLE REGULATIONS AND THE BUILDING CODE AS AMENDED AND ADOPTED BY THE BUILDING OFFICIAL.

**FOUNDATION**

- THE STRUCTURE WILL BE LOCATED ENTIRELY ON UNDISTURBED NATIVE SOIL. IF THE BUILDING INSPECTOR SUSPECTS FILL, EXPANSIVE SOILS OR ANY GEOLOGIC INSTABILITY BASED UPON OBSERVATION OF THE FOUNDATION EXCAVATION, A SOILS OR GEOLOGICAL REPORT, AND RESUBMITTAL OF PLANS TO PLAN CHECK TO VERIFY THAT THE REPORT RECOMMENDATIONS HAVE BEEN INCORPORATED, MAY BE REQUIRED.
- THE MAXIMUM ALLOWABLE SOIL BEARING PRESSURE SHALL BE 1500 PSI. THE RESULTING ALLOWABLE BEARING VALUE MAY BE INCREASED BY 1/3 FOR WIND AND SEISMIC LOAD CASES.
- FOOTING DEPTHS INDICATED ON THE STRUCTURAL DRAWINGS ARE FOR BIDDING PURPOSES ONLY AND ARE ASSUMED TO BE IN SUITABLE BEARING MATERIALS.
- FOOTING ELEVATIONS SHALL BE LOCATED SUCH THAT THEIR BEARING IS A MINIMUM HORIZONTAL DISTANCE OF 10 FEET FROM THE DAYLIGHT OF AN ADJACENT SLOPE.
- ANCHOR BOLTS, DOWELS AND HOLD-DOWN ANCHORS SHALL BE TIED IN PLACE PRIOR TO FOUNDATION INSPECTION.

*Timothy K. Jacques*  
 SIGNATURE: Timothy K. Jacques, SE  
 LICENSED ENGINEER

**SUBMITTALS**

- THE CONTRACTOR SHALL MAKE SUBMITTALS PRIOR TO FABRICATION AS REQUIRED BY THE WRITTEN SPECIFICATIONS AND SHALL INCLUDE AS A MINIMUM THE FOLLOWING SUBMITTALS:
  - CONCRETE MIX DESIGNS
  - REINFORCING STEEL DRAWINGS
  - STRUCTURAL STEEL DRAWINGS
  - METAL DECK DRAWINGS
  - WELDING PROCEDURES (SHOP AND FIELD WELDING).
- THE FOLLOWING SHOP DRAWINGS ARE NOT REQUIRED FOR SUBMISSION FOR STRUCTURAL REVIEW:
  - SHORING AND BRACING
  - UNPLUCKED REBAR AT SLAB-ON-GRADE AND FOOTINGS
  - FORMWORK
  - STRUCTURAL STEEL MILL REPORTS
- STEEL REINFORCING LISTS AND QUANTITIES AND LENGTHS OF ALL MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ASSURE COMPLIANCE WITH THE PLANS. ENGINEER WILL NOT REVIEW.
- SHOP DRAWINGS SUBMITTED TO THE ENGINEER FOR REVIEW SHALL BE STAMPED AND SIGNED BY THE CONTRACTOR INDICATING THE CONTRACTORS PRIOR REVIEW AND THAT THE SUBMITTAL IS IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- AS AN ALTERNATE TO MULTIPLE PAPER COPIES, SHOP DRAWINGS MAY BE SUBMITTED IN ELECTRONIC (PDF) FORMAT, WHERE SUBMITTED ELECTRONICALLY. SHOP DRAWINGS WILL BE PROCESSED AND RETURNED ELECTRONICALLY.

**REINFORCING STEEL**

- DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS SHALL FOLLOW ACI 318, "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT".
- REINFORCING BARS SHALL CONFORM TO ASTM A 615, GRADE 60, U.O.N.
- WELDED REINFORCING BARS SHALL CONFORM TO ASTM A 706, GRADE 80. BARS TO BE WELDED CONFORMING TO ASTM A 615, GRADE 80 MAY BE SUBSTITUTED PROVIDED THAT THE WELDING OF BARS COMPLIES WITH AWS D1.4 AND THE MINIMUM SPECIFICATIONS FOR WELDING OF REINFORCING STEEL INCLUDED HEREIN.
- REINFORCING BAR LAP SPLICES SHALL BE CLASS B, (18" MIN), FOR CONCRETE, U.O.N.
- DETAILS OF REINFORCEMENT SHALL COMPLY WITH ACI 318, CHAPTER 25.
- REINFORCING BARS FOR CONCRETE SHALL BE PROVIDED WITH THE FOLLOWING MINIMUM COVER:
 

CONC. CAST AGAINST EARTH	3"
FORMED CONC. EXPOSED TO EARTH/WEATHER:	
#5 OR SMALLER	1-1/2"
#6 OR LARGER	2"
SLABS (#11 AND SMALLER)	3/4"
BEAMS & GIRDER	1-1/2"
- #3 SPACER TIES SHALL BE INSTALLED AT 30" ON CENTER IN ALL BEAMS AND FOOTINGS TO SECURE REINFORCING BARS IN PLACE, U.O.N.
- AT THE CONTRACTOR'S OPTION, INTERNALLY-THREADED LENTON A2 COUPLERS (APMO UES-0128) MAY BE USED IN LIEU OF LAP SPLICES. MECHANICAL BAR SPLICES MAY BE TYPE 1 OR TYPE 2 AS DEFINED IN ACI 318.

**REINFORCED CONCRETE**

- CONCRETE CONSTRUCTION SHALL CONFORM WITH CHAPTER 19A OF THE BUILDING CODE AND TO THE PROVISIONS OF ACI 318, LATEST EDITION.
- READY MIX CONCRETE SHALL BE MIXED AND DELIVERED IN ACCORDANCE WITH ASTM C 94.
- CEMENT SHALL CONFORM TO ASTM C 150 TYPE I OR II, LOW ALKALI OR TYPE V FOR SULFATE EXPOSURE CLASS S2 AND S3.
- AGGREGATES FOR NORMAL WEIGHT CONCRETE SHALL CONFORM TO ASTM C 33.
- NORMAL WEIGHT CONCRETE SHALL HAVE A MAXIMUM DRY DENSITY OF 150 PCF.
- CONCRETE MIXES SHALL BE DESIGNED BY A QUALIFIED TESTING LABORATORY AND APPROVED BY THE ENGINEER. MIX DESIGN METHODS (TEST HISTORY OR TRIAL BATCH METHOD) IN ACCORDANCE WITH ACI 318, SECTION 26.4 SHALL BE USED TO PROPORTION CONCRETE.
- MINIMUM CONCRETE COMPRESSIVE STRENGTHS AT 28 DAYS, MAXIMUM SLUMPS, AND MAXIMUM WATER/CEMENT RATIOS SHALL BE AS FOLLOWS:
 

DESCRIPTION	MIN 28 DAY FC	SLUMP	MAX. W/C RATIO
FOOTINGS	3000 PSI	4"-4-1/2"	0.50
ALL OTHER CONCRETE	3000 PSI	4"-4-1/2"	0.50
- ADMIXTURES SHALL BE APPROVED IN ADVANCE.
- SLUMPS INDICATED ARE PRIOR TO PLASTICIZER ADDITIVES.
- CONCRETE ADMIXTURES CONTAINING CHLORIDE OR CHLORIDE SALTS SHALL NOT BE USED EXCEPT WHERE APPROVED IN WRITING BY THE ENGINEER.
- FLYASH SHALL BE LIMITED TO NO MORE THAN 20% OF THE TOTAL WEIGHT OF CEMENTITIOUS MATERIALS IN THE CONCRETE, U.O.N.
- WATER MAY BE ADDED ON SITE TO OBTAIN SPECIFIED SLUMPS PROVIDED THAT IT IS ADDED WITHIN ONE HOUR OF BATCHING AND SITE-ADDED WATER IS SPECIFIED ON THE BATCH REPORT. SITE-ADDED WATER SHALL NOT COMPROMISE THE STRENGTH OR SLUMP OF THE CONCRETE.
- CONCRETE SHALL NOT BE PLACED BEYOND 1-1/2 HOURS FOLLOWING BATCHING.
- CONDUIT OR PIPES LARGER THAN 4" NOMINAL DIAMETER SHALL NOT BE PLACED IN CONCRETE. SLEEVES FOR OPENINGS IN CONCRETE SHALL BE INSTALLED BEFORE PLACING REINFORCING WHICH MAY CONFLICT SHALL NOT BE CUT UNLESS APPROVED IN WRITING BY THE ENGINEER.
- STEEL COLUMNS, BEAMS PURLSINS & PANELS MAY BE ERECTED 24 HOURS AFTER FOUNDATION CONCRETE PLACEMENT OR AFTER CONCRETE REACHES A COMPRESSIVE STRESS OF 1000 PSI, WHICHEVER COMES FIRST.

**STRUCTURAL STEEL**

- STRUCTURAL STEEL WORK SHALL BE PERFORMED IN ACCORDANCE WITH CHAPTER 22 OF THE BUILDING CODE, AISC 360 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" AND ALSO 303 "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES".
- STRUCTURAL STEEL STRENGTHS AND GRADES SHALL BE AS FOLLOWS, U.O.N.:
 

DESCRIPTION	YIELD Fy (ksi)	ASTM GRADE
ANGLES, CHANNELS & OTHER SHAPES	36ksi	A36
HSS SECTIONS	48ksi	A500, GR B
CONNECTION PLATES & MISC., U.O.N.	50ksi	A572 GR 50
- ANCHOR RODS SHALL CONFORM TO ASTM F 1554, GRADE 105, UNLESS OTHERWISE NOTED. NUTS FOR ANCHOR RODS SHALL CONFORM TO ASTM A 563, GRADE C HEX (HEAVY HEX WHERE ANCHOR ROD DIAMETER IS GREATER THAN 1 1/2").
- MAIN MEMBER SHALL HAVE HIGH STRENGTH BOLTS CONFORMING TO AISC SPECS FOR ASTM A 325N BOLTS, U.O.N. OTHER BOLTS SHALL CONFORM TO ASTM A 307. NUTS FOR HIGH STRENGTH BOLTS SHALL BE HEAVY HEX GRADE C CONFORMING TO ASTM A 563.
- EXTERIOR STRUCTURAL STEEL PERMANENTLY EXPOSED TO THE WEATHER SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION. ZINC COATING SHALL CONFORM TO ASTM A123 (G60, U.O.N.).
- TIGHTEN ASTM A 325N BOLTS TO "SNUG-TIGHT" CONDITION PER AISC SPECIFICATION FOR STRUCTURAL JOINTS. TEST ASTM A 325SC BOLTS WITH A CALIBRATED WRENCH UNLESS LOAD INDICATOR BOLTS ARE USED.
- WELDING DONE AFTER GALVANIZING SHALL BE PROTECTED ACCORDING TO ASTM A798.
- PROVIDE BEVELED WASHERS PER ANSI B18.23.1 AS REQUIRED ON SLOPED SURFACES.
- FAYING SURFACES OF HOT-DIPPED GALVANIZED MEMBERS AND CONNECTORS SHALL BE ROUGHENED WITH A HAND WIRE-BRUSH PRIOR TO ERECTION. ROUGHENING PROCESS SHALL VISIBLY ALTER THE GALVANIZED SURFACE WITHOUT DISRUPTING THE CONTINUITY OF GALVANIZATION. POWER WIRE-BRUSHING NOT ALLOWED.

**WELDING**

- WELDING SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF THE AMERICAN WELDING SOCIETY (AWS D1.1).
- WELDING OF METAL DECK AND LIGHT GAUGE METAL FRAMING SHALL BE DONE BY CERTIFIED LIGHT GAUGE WELDERS IN ACCORDANCE WITH AWS SPECIFICATIONS FOR WELDING SHEET STEEL IN STRUCTURES, AWS D1.3.
- WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS.
- WELDING ELECTRODE FOR THE SHIELDED METAL ARC WELDING (SMAW) PROCESS AND WELDING ELECTRODE SHALL CONFORM TO AWS A5.1 "SPECIFICATION FOR CARBON STEEL ELECTRODES FOR SHIELDED METAL ARC WELDING."
- ELECTRODES FILLER MATERIAL SHALL BE A MINIMUM OF E70XX U.O.N. EXCEPT E80XX MAY BE USED FOR WELDING OF METAL DECK AND LIGHT GAUGE FRAMING.
- WELDS SHALL HAVE WELD CONTROLLED SEQUENCE AND TECHNIQUE IN ORDER TO MINIMIZE SHRINKAGE STRESSES AND DISTORTION.

**METAL DECK**

- METAL DECK SHALL BE OF THE TYPE AND GAUGE AS INDICATED ON THE DRAWINGS AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND PUBLISHED ICC REPORT.
- METAL DECK AND ACCESSORIES SHALL BE FORMED FROM STEEL SHEETS CONFORMING TO ASTM A 653, WITH COATING DESIGNATION G60 (599).
- DECK SHALL BE CONTINUOUS OVER THREE SPANS WHEREVER POSSIBLE. SHORE DECK IF RECOMMENDED BY THE MANUFACTURER. MINIMUM BEARING AT ENDS IS 2".
- WHERE 3/4" DIAMETER SHEAR STUDS ARE TO BE WELDED TO SUPPORTS, 18 GAUGE (OR THICKER) DECKING SHALL NOT BE LAPPED.
- CONTRACTOR SHALL CUT DECK PER STRUCTURAL DETAILS AT ALL OPENINGS, COLUMNS, AND REQUIRED PENETRATIONS AND SHALL SUPPLY NECESSARY ACCESSORY ITEMS SUCH AS CLOSURES, CLIPS, ETC.

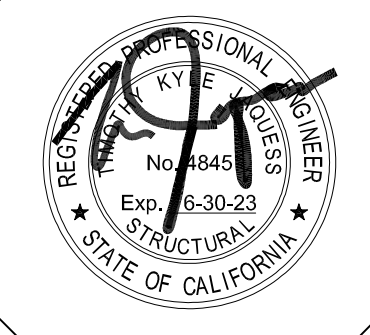
**SHEET METAL SCREWS**

- SCREWS SHALL BE ITW BUILDEX "TEKS" PER ICC ESR-1976 AND SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.
- SCREWS TO CONFORM TO THE REQUIREMENTS OF ASTM C1513.
- UNLESS OTHERWISE NOTED, SCREWS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
  - SIZE #12
  - ZINC-PLATED HARDENED STEEL
  - SELF-TAPPING
  - HEX-HEAD
- DURING INSTALLATION OF SCREWS, THE SCREW SHALL PENETRATE BOTH PLIES OF MATERIAL TO BE ATTACHED, WITH A MINIMUM OF 3 THREADS OF SCREW TIP EXPOSED.
- SCREWS SHALL BE TIGHTENED IN SUCH A MANNER THAT THE WASHER FACE OF SCREW HEAD IS FLUSH WITH ADJACENT PLY, AND PLIES OF MATERIAL TO BE FASTENED ARE DRAWN TOGETHER SNUGLY.
- SCREWS SHALL MEET THE FOLLOWING MINIMUM STRUCTURAL REQUIREMENTS:
 

THINNER OF PLIES TO BE JOINED	ALLOWABLE SHEAR	ALLOWABLE PULL-OUT
20 GA.	200#	99#
18 GA.	308#	132#
16 GA.	430#	165#
14 GA.	621#	207#
12 GA.	724#	289#

DESIGN CRITERIA	
DESCRIPTION	DESIGN VALUES
<b>DEAD &amp; LIVE LOADS</b>	
ROOF LIVE LOAD	20 PSF
ROOF PANEL DEAD LOAD	1.1 PSF
<b>WIND DESIGN</b>	
BASIC WIND SPEED (3 SECOND GUST), Vult	98 MPH
RISK CATEGORY	II
EXPOSURE CATEGORY	C
FACTORS: Kz, KzT (1 MINIMUM) Kd	0.85 / 1.0 / 0.85
qh = 0.00256 Kz KzT Kd V2	17.74 PSF
CLEAR WIND FLOW	[ ] NO [X] YES
OBSTRUCTED WIND FLOW	[ ] NO [X] YES
<b>SEISMIC DESIGN</b>	
LATERAL FORCE-RESISTING SYSTEM	STEEL - ORDINARY CANTILEVER COLUMN
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE
SEISMIC DESIGN CATEGORY (SDC)	E
SEISMIC SITE CLASS	D
SEISMIC IMPORTANCE FACTOR, Ie	1
DESIGN BASE SHEAR, V	Cs x W = 1.10 x 1.414 = 1.56 PSF
SEISMIC RESPONSE COEFFICIENT, Cs	1.414
RESPONSE MODIFICATION FACTOR, R	1.25
OVERSTRENGTH FACTOR, O	1.25
SHORT-PERIOD SITE COEFFICIENT, Fa	1.2
DESIGN SPECTRAL RESPONSE ACCELERATION AT SHORT PERIOD, Sds-USED TO DETERMINE Cs (WITH CAP PER CBC 16.16.10.00)	1.767
MAPPED SPECTRAL RESPONSE ACCELERATION AT 1 SECOND PERIOD, S1	0.786
LONG PERIOD SITE COEFFICIENT, Fv	1.70
HORIZONTAL OR VERTICAL IRREGULARITIES TYPE (S)	NONE
ALLOWABLE SHAFT RESISTANCE FOR FOUNDATIONS CBC TABLE 1806A.2	125 PSF DOWN, 100 PSF UP 1500 PSF VERTICAL, 100 PSF/FT LATERAL
FLOOD DESIGN - DESIGN ASSUMED TO NOT BE IN FLOOD HAZARD AREA	
IF PROJECT IS LOCATED IN A FLOOD ZONE OTHER THAN ZONE X, A LETTER STAMPED & SIGNED FROM A SOILS ENGINEER IS REQUIRED TO VALIDATE THE ALLOWABLE SOIL VALUES SPECIFIED	
<b>ARCHITECTURAL REQUIREMENTS</b>	
DESCRIPTION	DESIGN VALUES
TYPE OF CONSTRUCTION	II-B
OCCUPANCY CLASSIFICATION	A-3
NUMBER OF STORIES	1

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 TULSA, OK  
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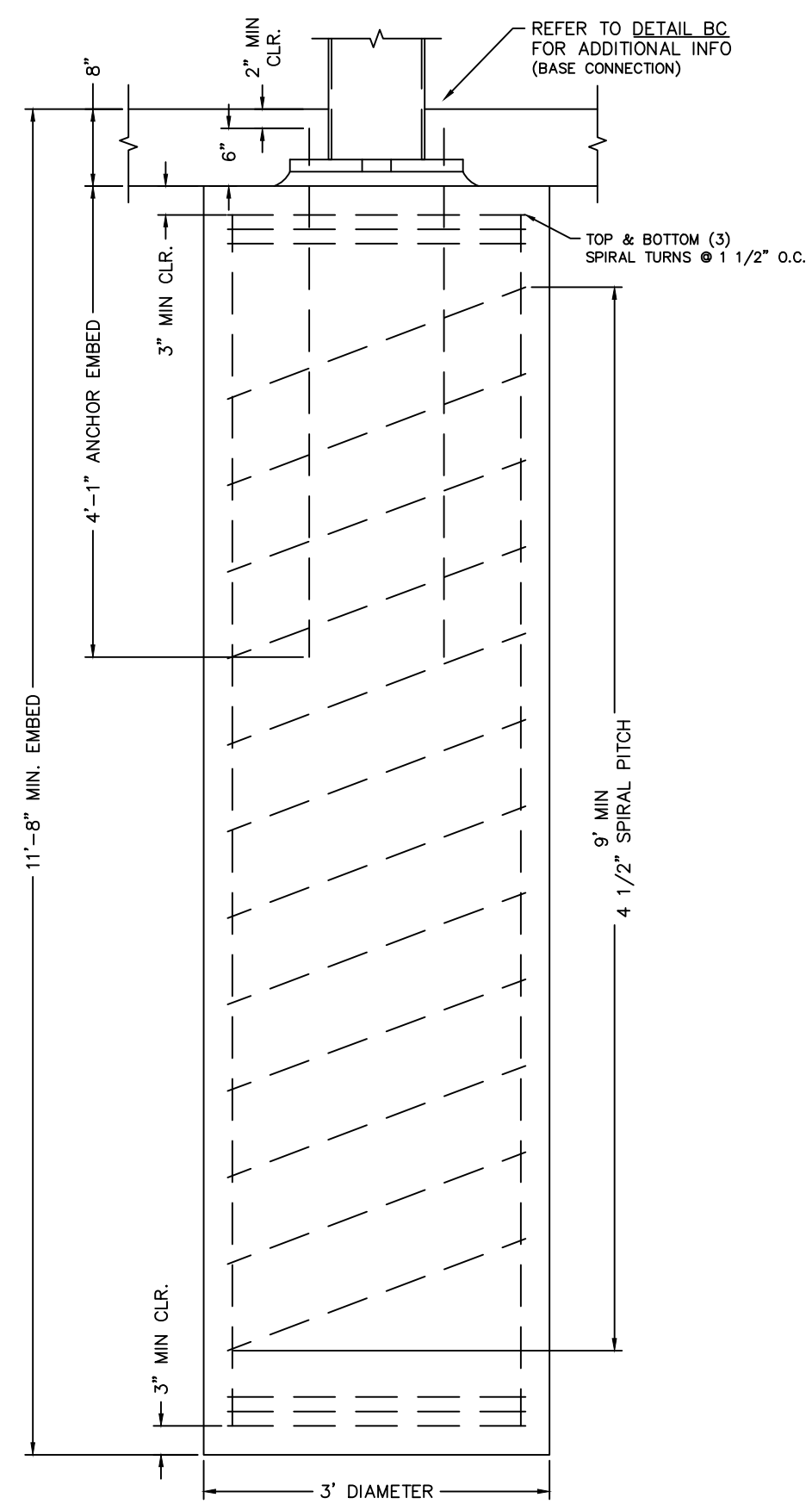
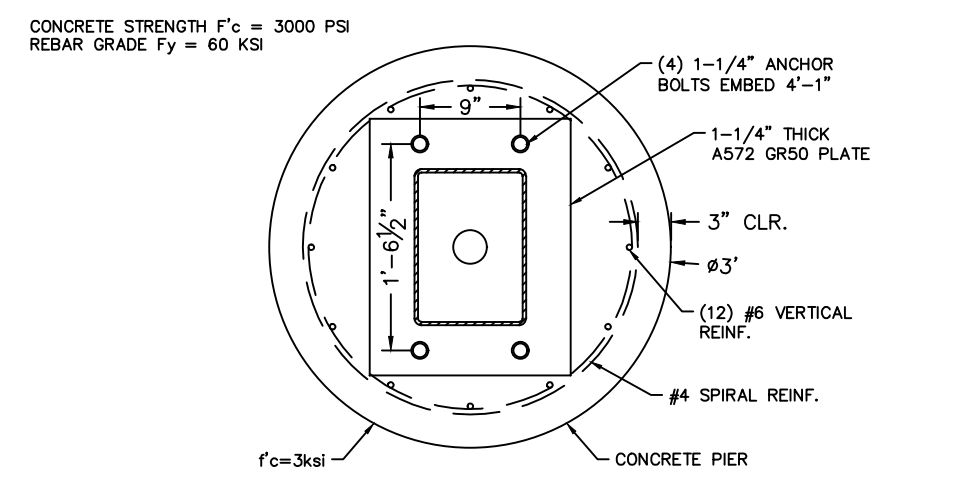


IVC - IMPERIAL VALLEY COLLEGE  
 980 E ATEN RD.  
 IMPERIAL, CA 92251

PROJECT: IMPERIAL VALLEY COLLEGE  
 PRODUCT: MPC18X78M-P1  
 NOTES:  
 DRAWN BY: SH REV: DATE: 5/31/22  
 FILE PATH:

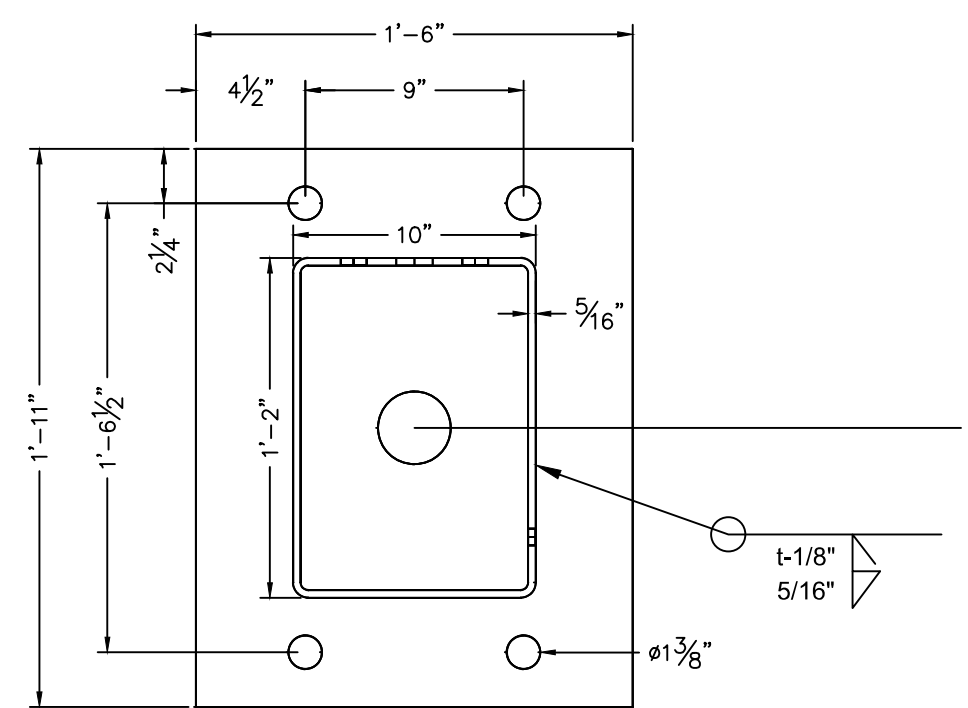
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 COVER PAGE

SHEET:  
 1.0A



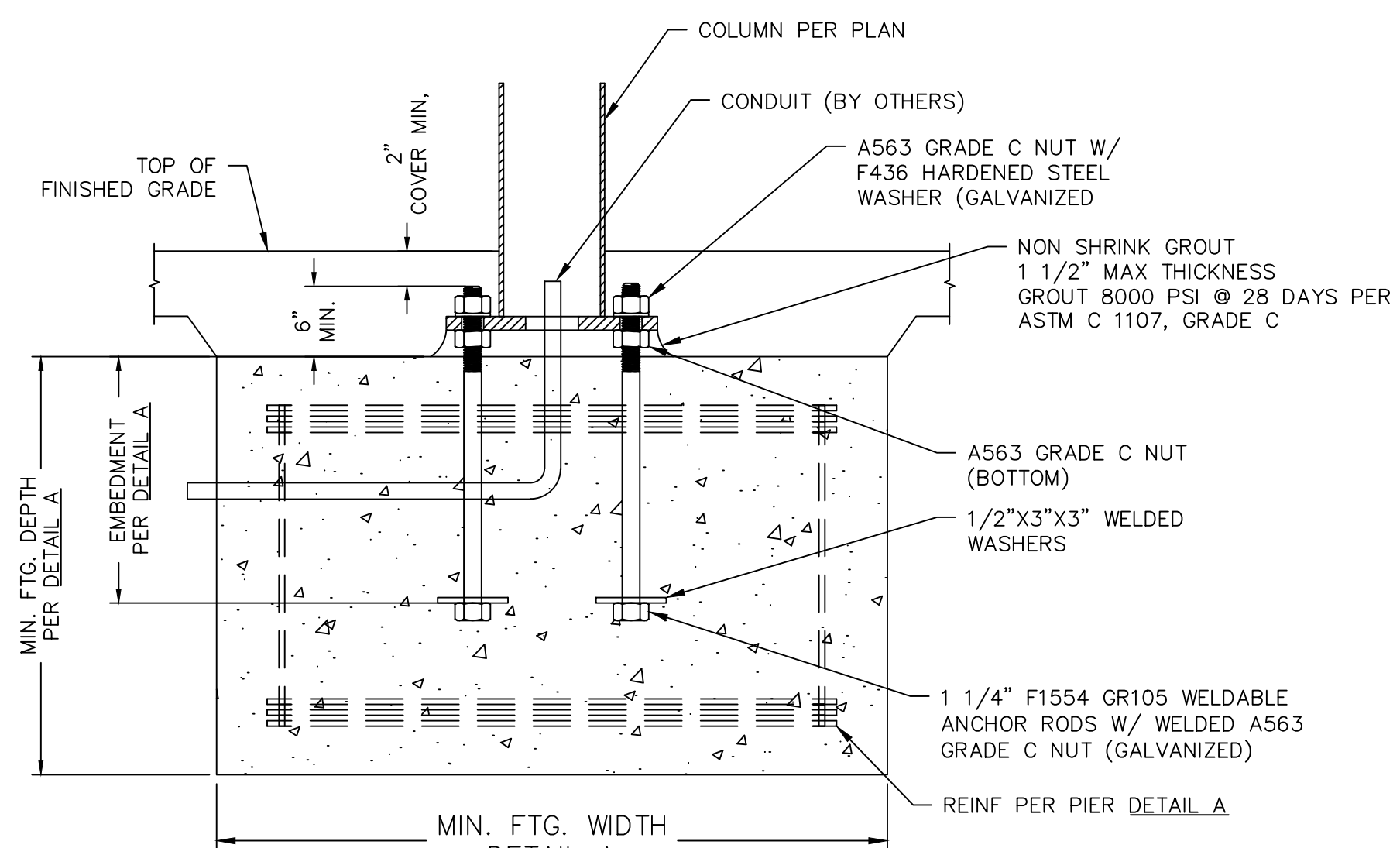
PIER FOUNDATION DETAIL

A

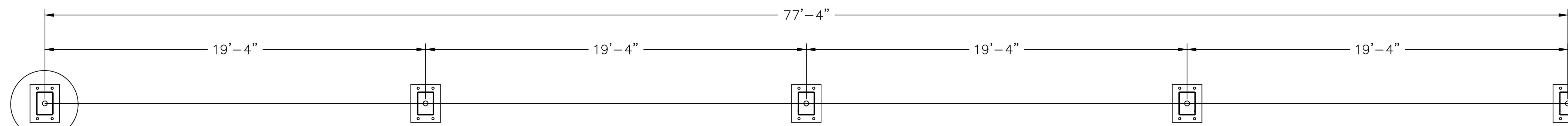


BASE PLATE DETAIL

B

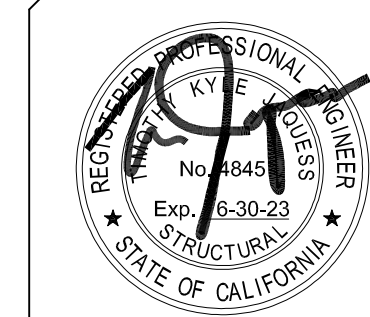


DETAIL BC



ANCHOR BOLT/COLUMN LAYOUT

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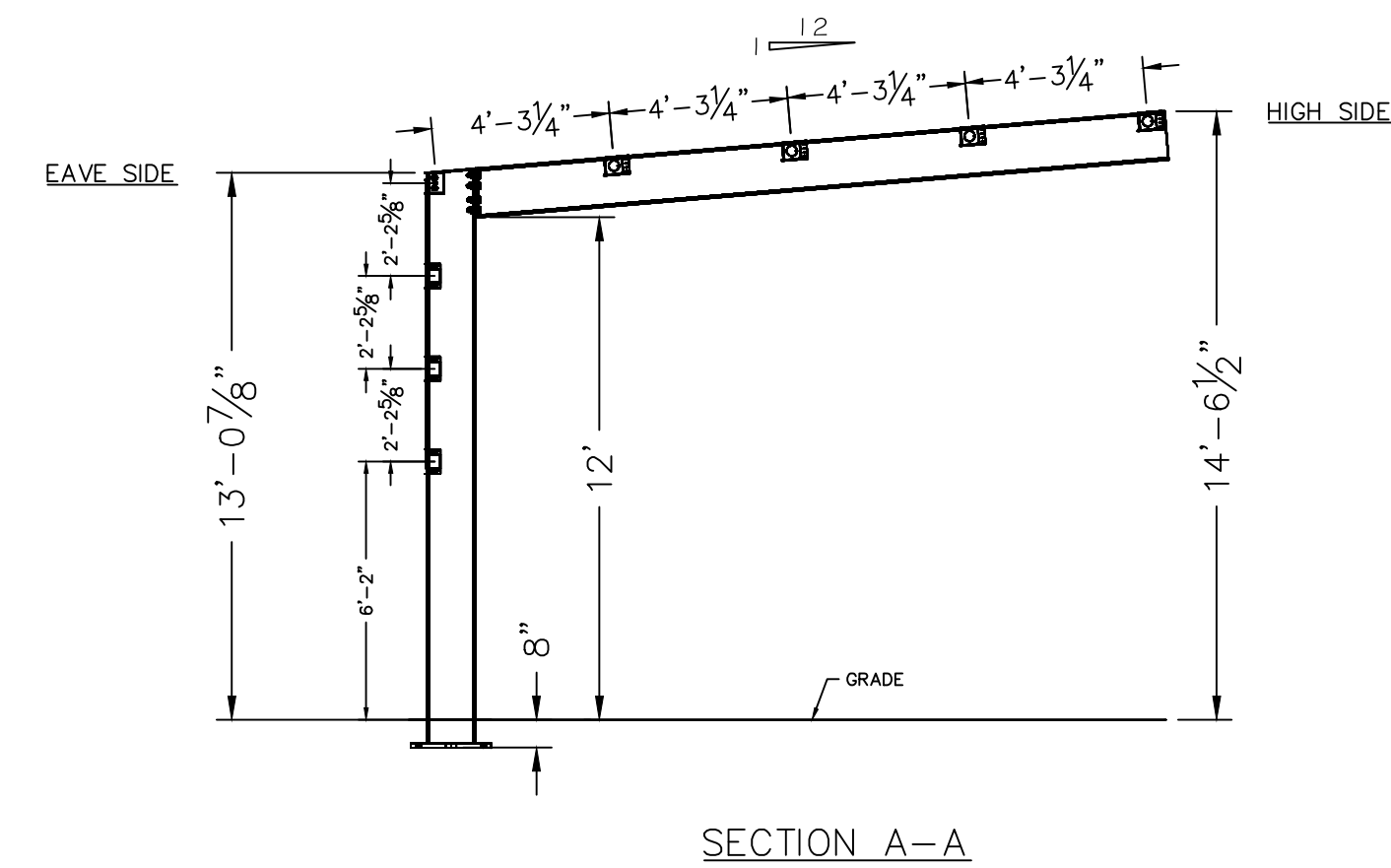
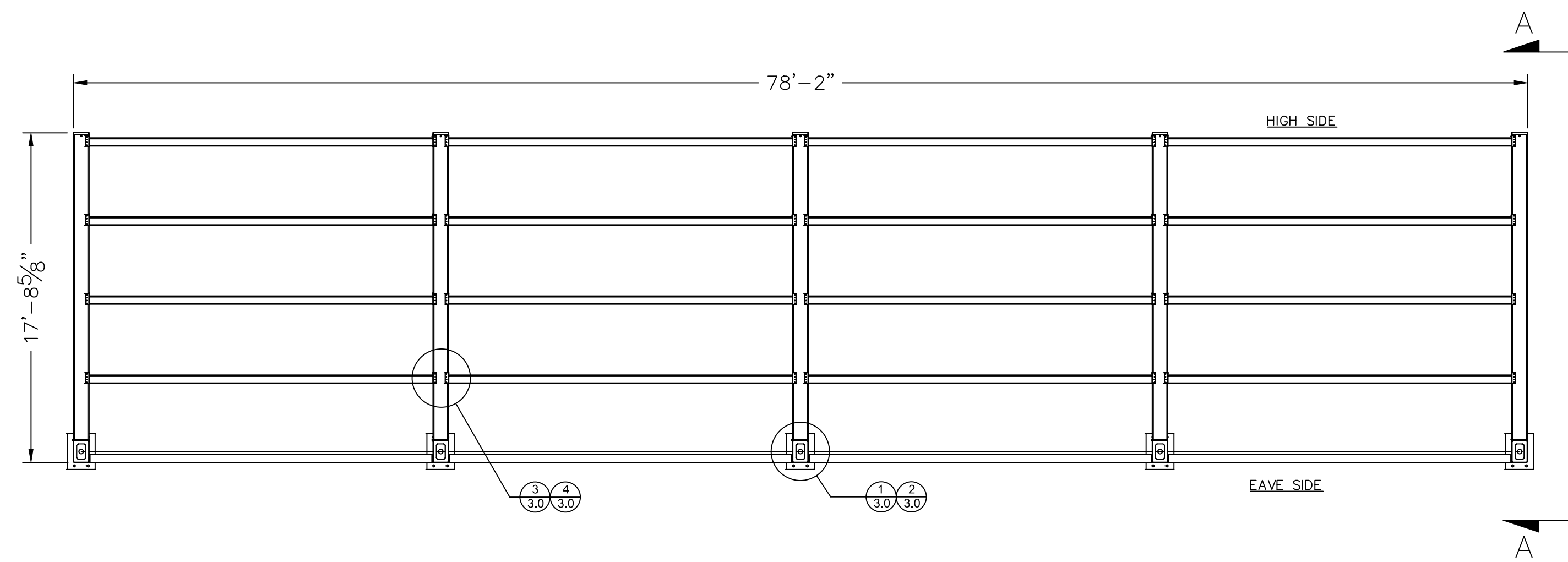
IVC - IMPERIAL VALLEY COLLEGE  
 980 E ATEN RD,  
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PROJECT: IMPERIAL VALLEY COLLEGE	DATE: 5/31/22
PRODUCT: MPC18X78M-P1	REV: SH
NOTES:	FILE PATH:
DATE: 5/31/22	

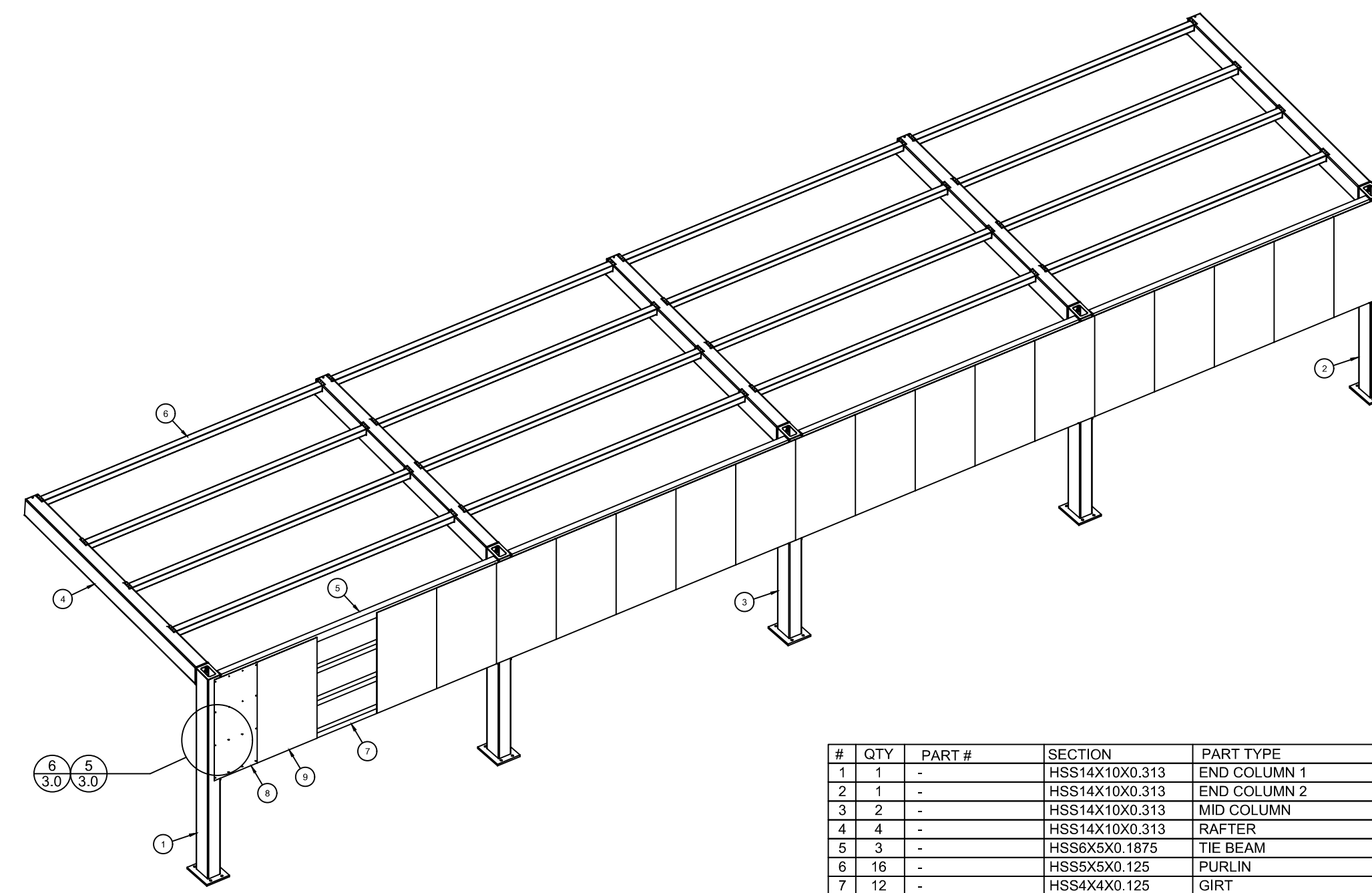
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SHEET:

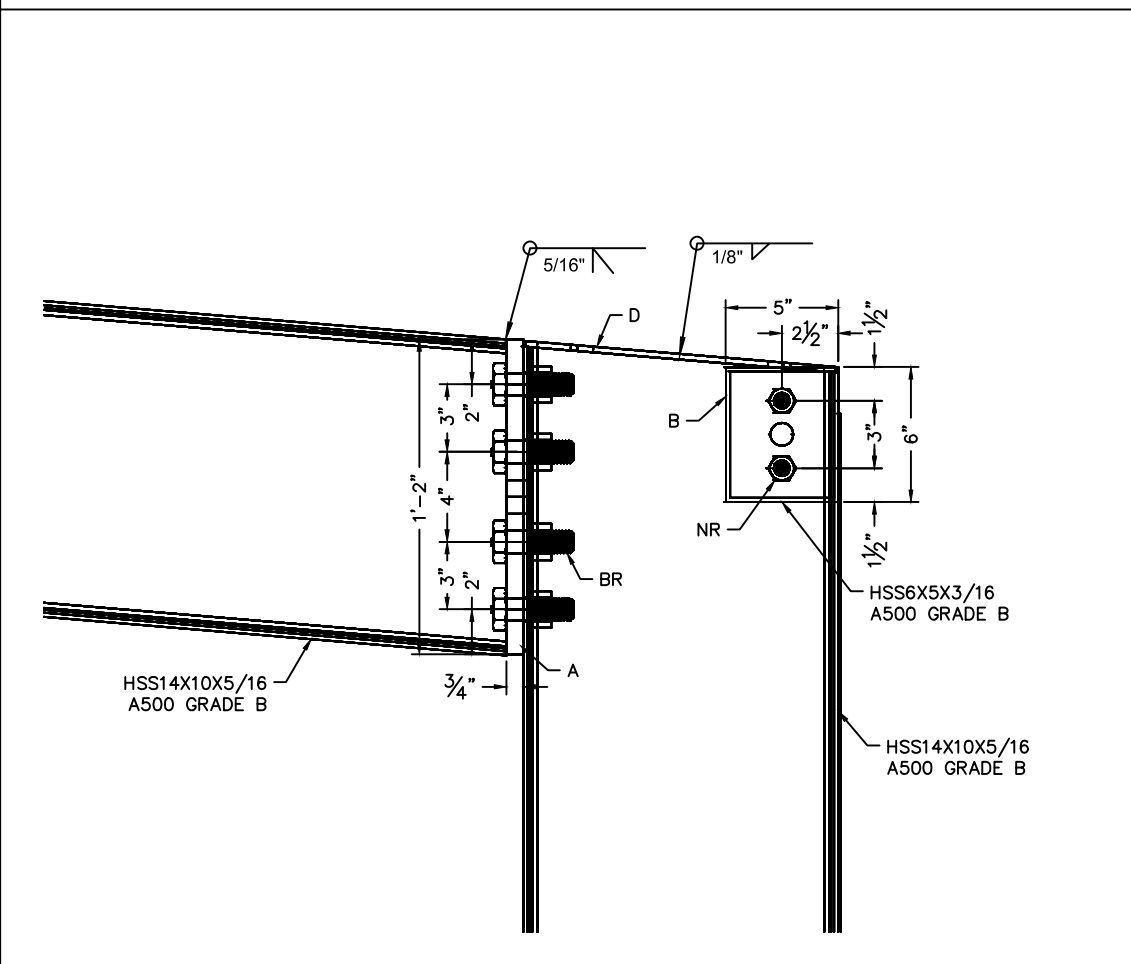
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CONNECTION SCHEDULE			
CONNECTION	CAP PLATE (LxWxT)GR50	BOLTS (ASTM A325)	SELF DRILLING SCREW
A	14"x10"x3/4"	(8) 1"x2 1/2"	—
B	6"x5"x3/8"	(2) 3/8"x2"	—
C	7"x5 1/4"x12ga	—	(8) 12-24x2"
D	13 3/8"x9 3/4"x1"	—	—
E	7"x4"x12ga	—	(16) 12-24x2"

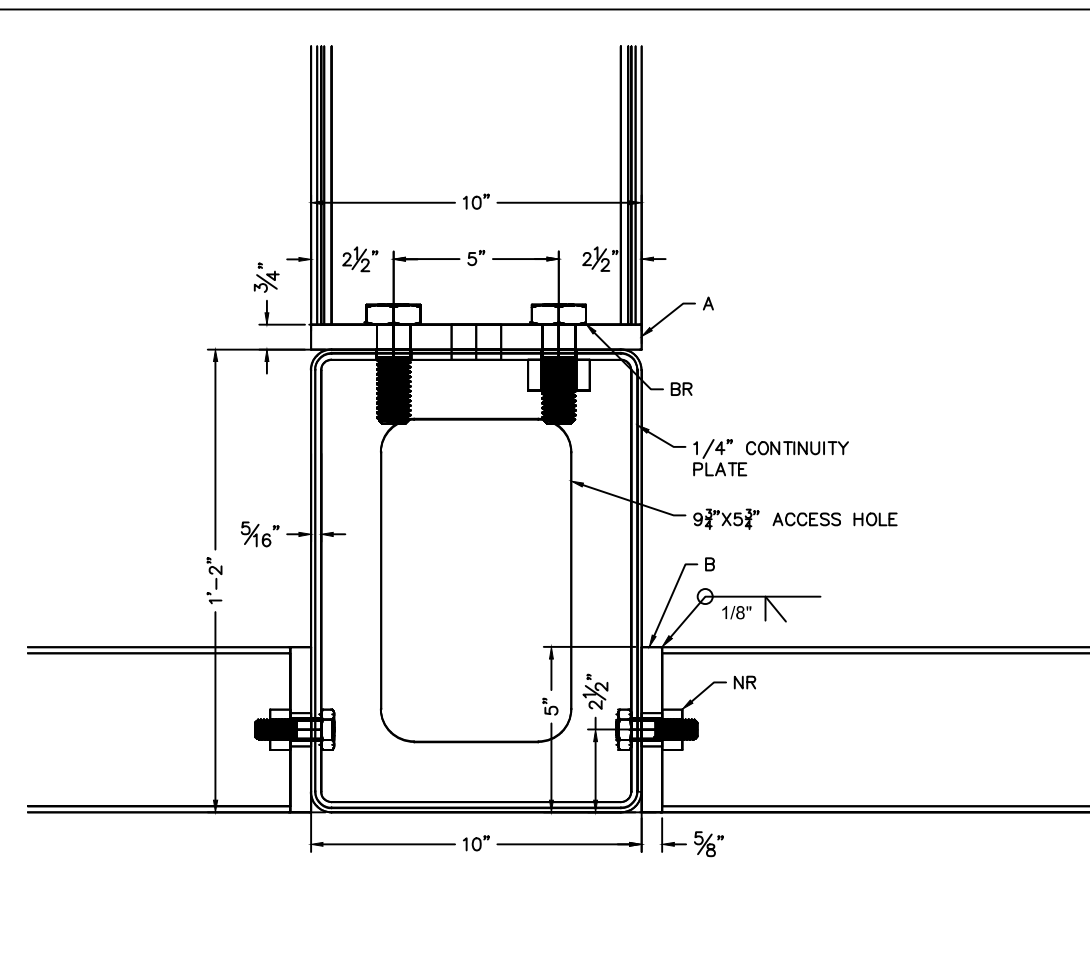


#	QTY	PART #	SECTION	PART TYPE	LENGTH
1	1		HSS14X10X0.313	END COLUMN 1	-
2	1		HSS14X10X0.313	END COLUMN 2	-
3	2		HSS14X10X0.313	MID COLUMN	-
4	4		HSS14X10X0.313	RAFTER	-
5	3		HSS6X5X0.1875	TIE BEAM	-
6	16		HSS6X3X0.125	PURLIN	-
7	12		HSS4X4X0.125	GIRT	-
8	2		12 GAUGE	PERFORATED WINDSCREEN	-
9	19		12 GAUGE	PERFORATED WINDSCREEN	-



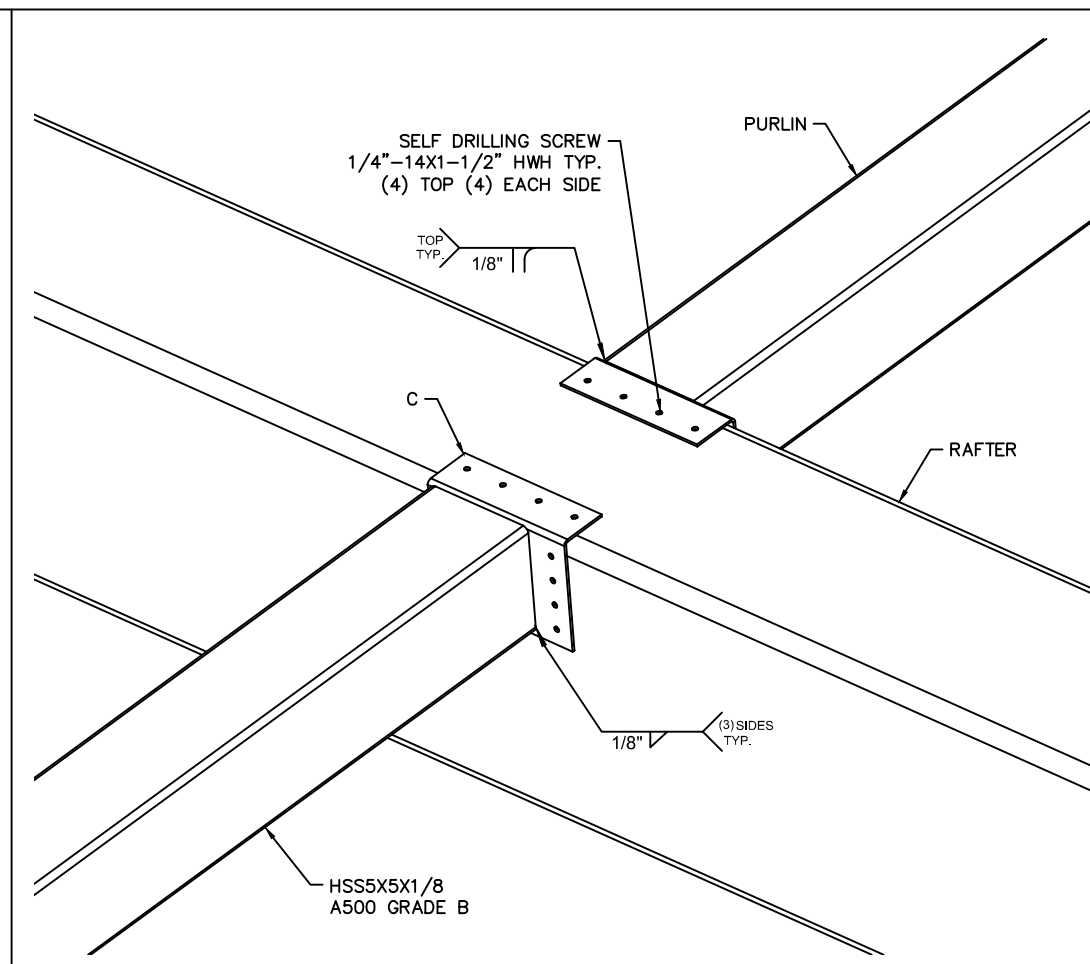
COLUMN @ RAFTER CONNECTION SIDE VIEW

1



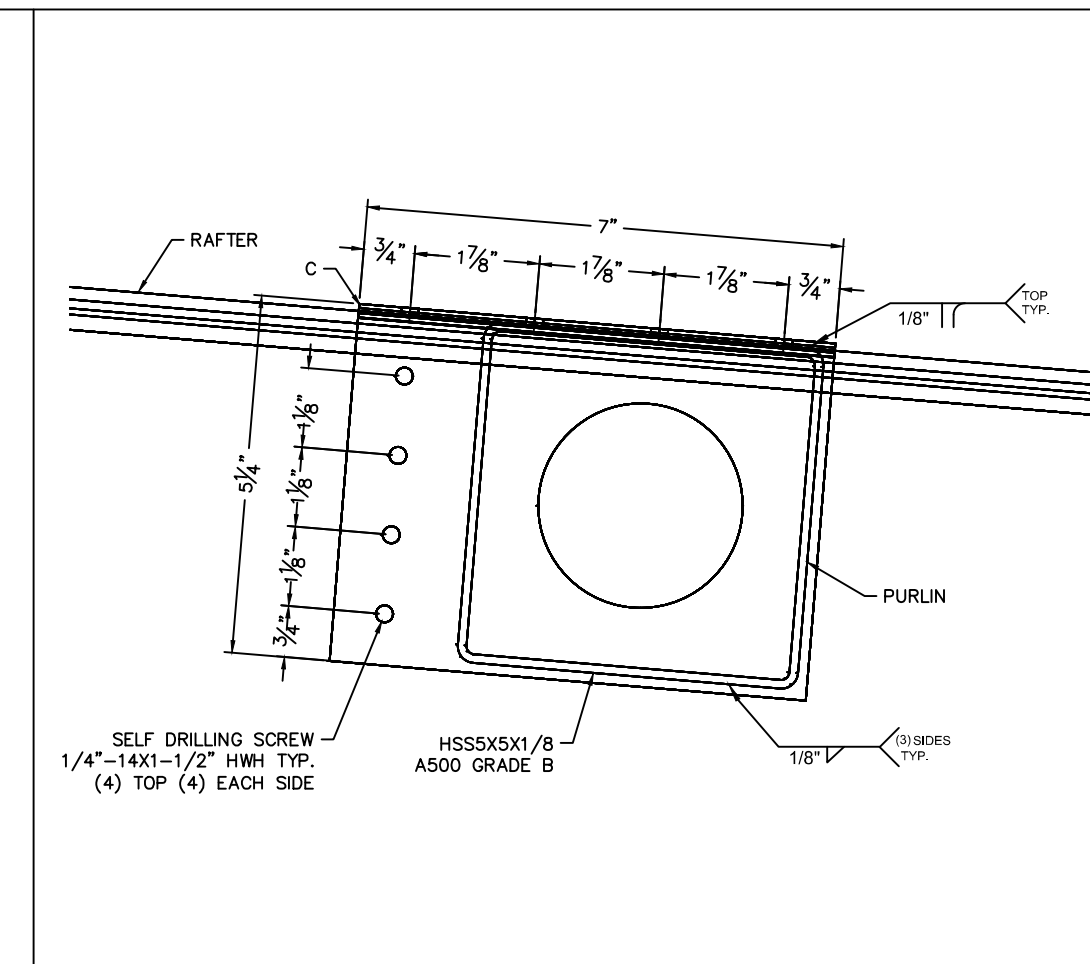
COLUMN @ RAFTER CONNECTION TOP VIEW

2



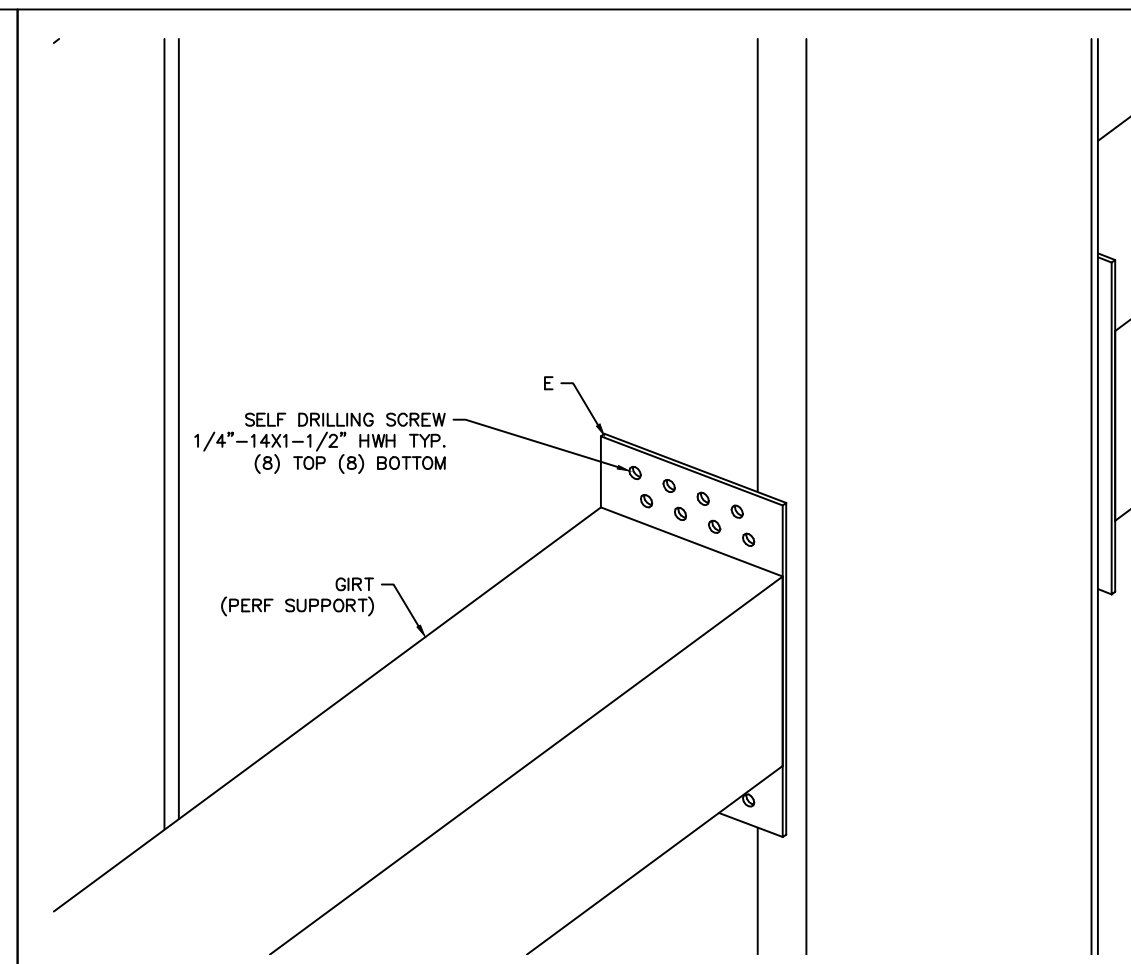
PURLIN @ RAFTER CONNECTION ISOMETRIC VIEW

3



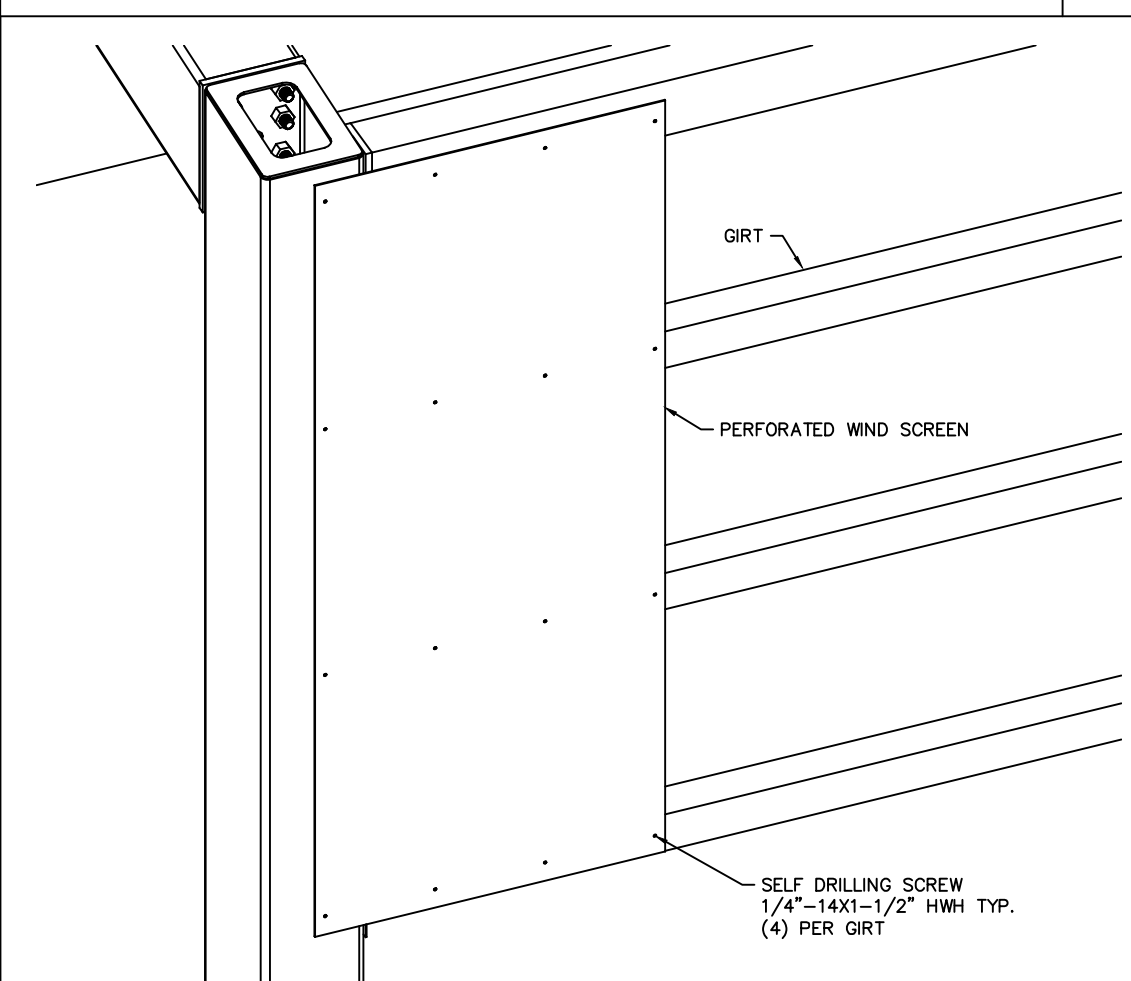
PURLIN @ RAFTER CONNECTION SIDE VIEW

4



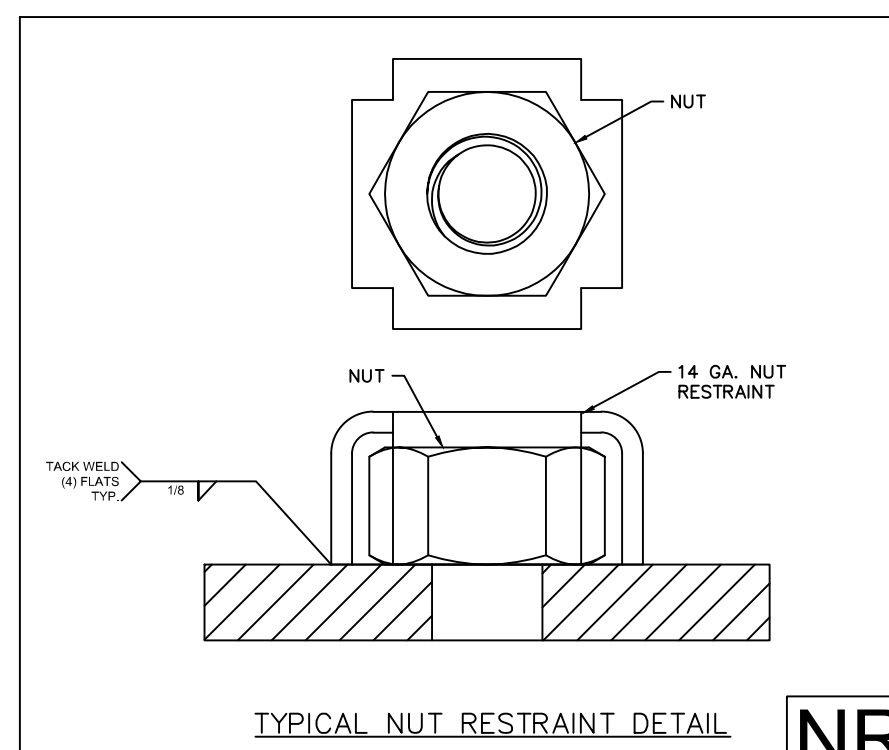
GIRT CONNECTION @ COLUMN

5



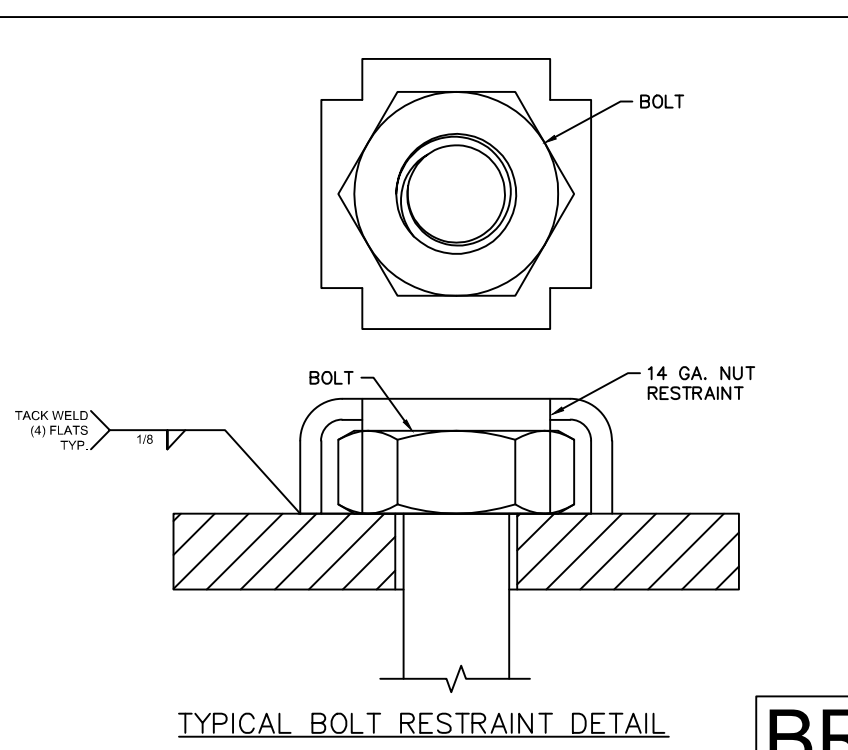
PERF CONNECTION @ GIRTS

6



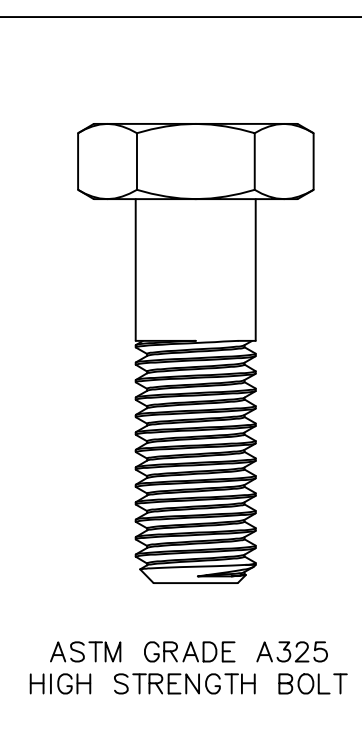
TYPICAL NUT RESTRAINT DETAIL NR

NR

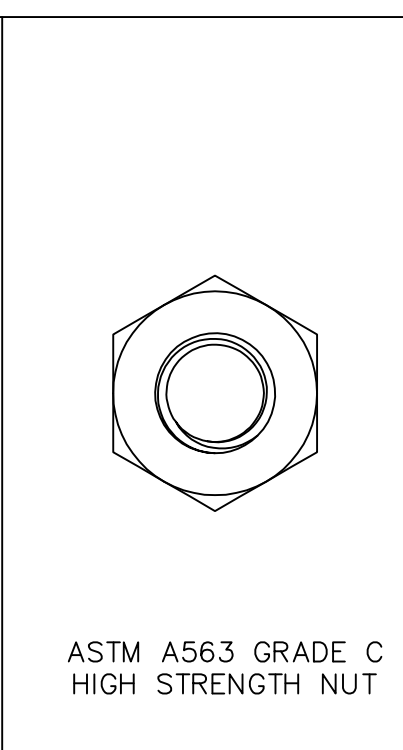


TYPICAL BOLT RESTRAINT DETAIL BR

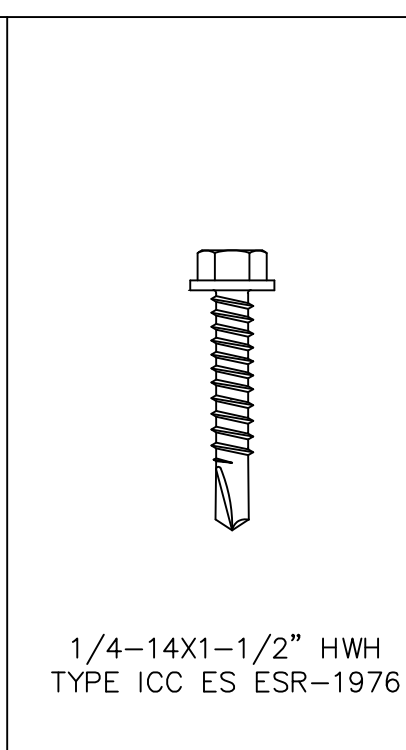
BR



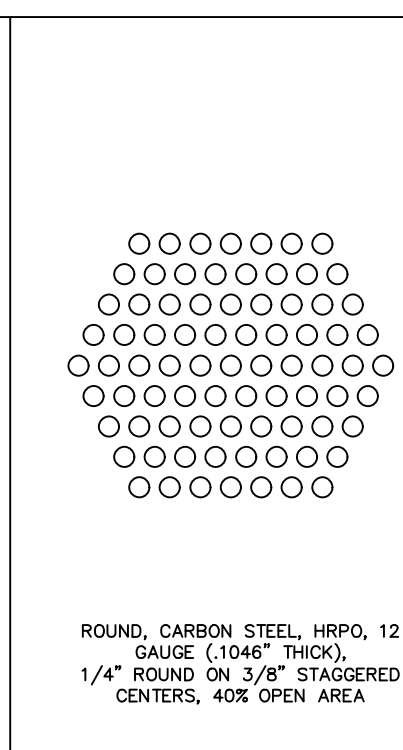
ASTM GRADE A325 HIGH STRENGTH BOLT



ASTM A563 GRADE C HIGH STRENGTH NUT



1/4-14X1-1/2 HWH TYPE ICC ES ESR-1976



ROUND CARBON STEEL 18G12 GAUGE (10467 THICK) 1/4" ROUND ON 3/8" STAGGERED CENTERS, 40% OPEN AREA

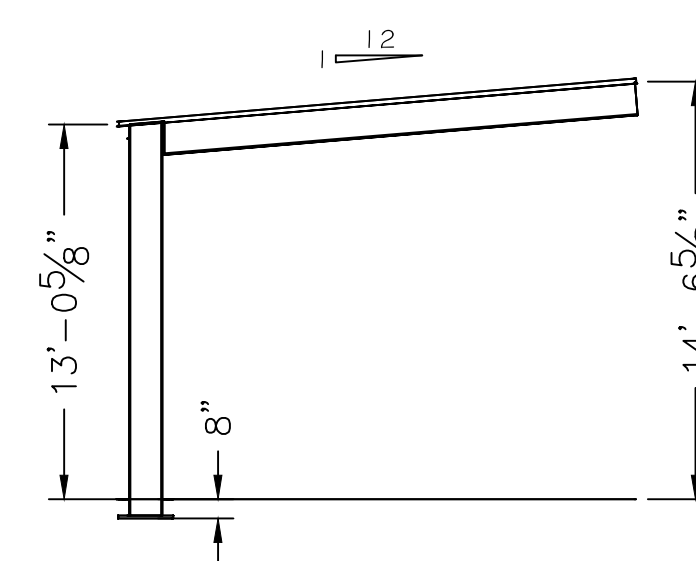
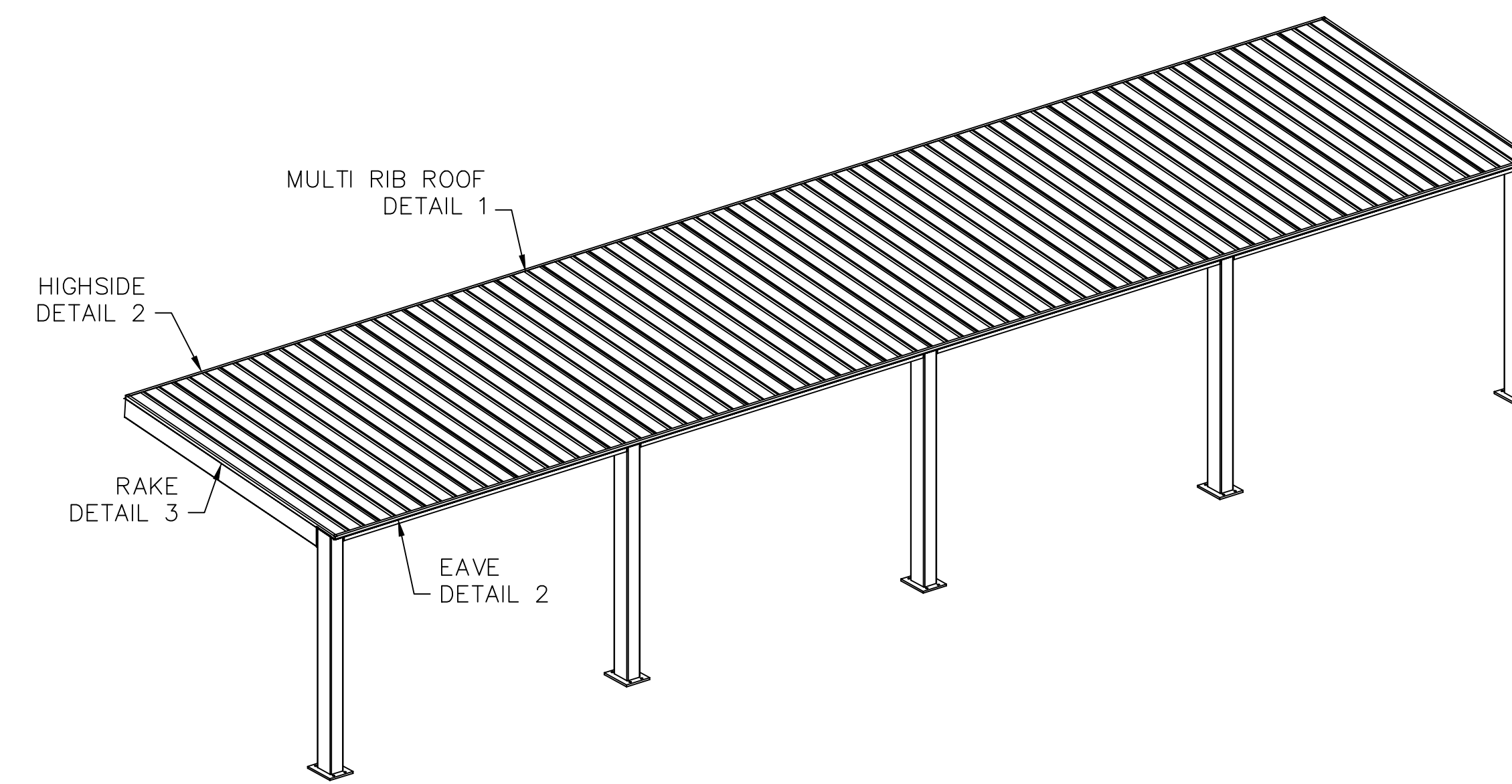
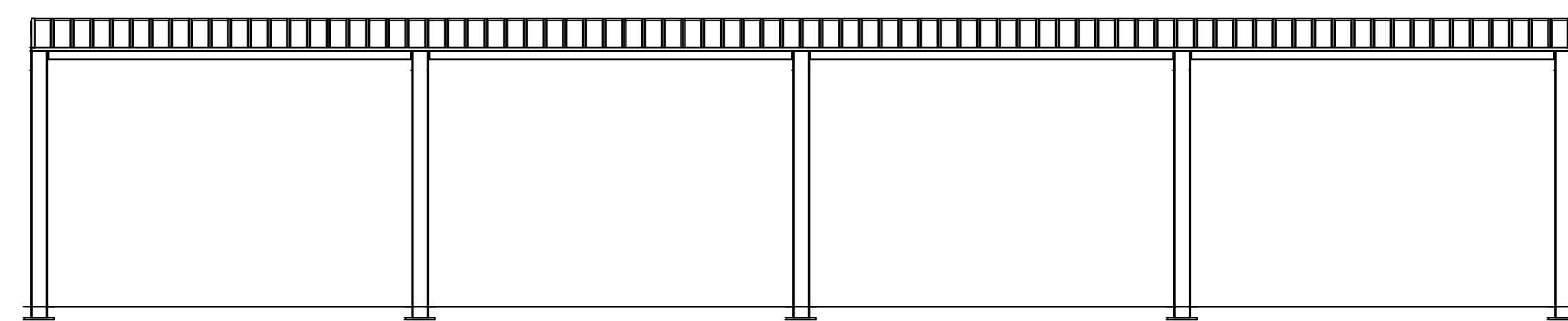
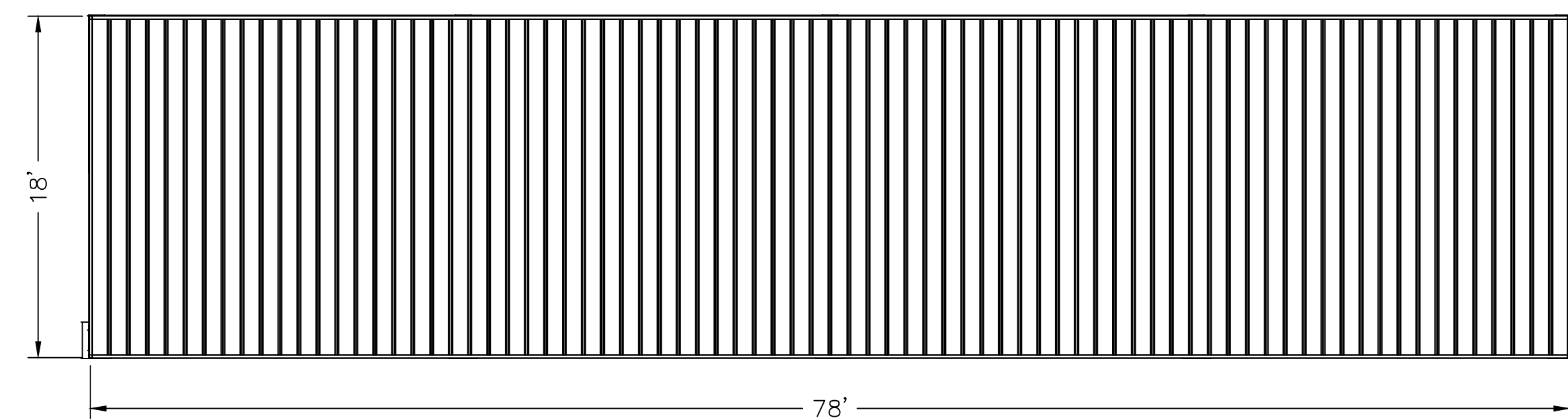
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SHELTERS & STEEL CONCEPTS  
TULSA, OK  
PHONE: 877-473-7619



IVC - IMPERIAL VALLEY COLLEGE  
980 E ATEN RD,  
IMPERIAL, CA 92251

PROJECT: IMPERIAL VALLEY COLLEGE	DATE: 5/31/22
PRODUCT: MPC18X78M-P1	REV: SH
NOTES:	FILE PATH:
NOTES:	

TITLE:  
FRAME LAYOUT  
SHEET:  
**3.0A**



**MULTI RIB NOTES:**

THE DETAILS SHOWN ARE SUGGESTIONS OR GUIDELINES ON HOW TO ERECT THE SYSTEMS. THE INFORMATION SHOWN IS ACCURATE, BUT IT IS NOT INTENDED TO COVER ALL INSTANCES, BUILDING REQUIREMENTS, DESIGNS OR CODES. THE DETAILS MAY REQUIRE CHANGES OR REVISIONS DUE TO FIELD CONDITIONS.

IT SHALL BE THE RESPONSIBILITY OF THE ERECTOR TO ENSURE THAT THE DETAILS MEET PARTICULAR BUILDING REQUIREMENTS AND TO ASSURE ADEQUATE WATER TIGHTNESS.

THE ERECTOR SHOULD THOROUGHLY FAMILIARIZE HIMSELF/HERSELF WITH ALL ERECTION INSTRUCTIONS BEFORE STARTING WORK.

THE PANELS SHOULD BE INSTALLED PLUMB, STRAIGHT, AND ACCURATELY TO THE ADJACENT WORK.

FLASHING AND TRIM SHALL BE INSTALLED TRUE, AND IN PROPER ALIGNMENT, WITH ANY EXPOSED FASTENERS EQUALLY SPACED FOR THE BEST APPEARANCE.

SEALANT SHALL BE FIELD APPLIED ON DRY, CLEAN SURFACES. SOME FIELD CUTTING AND FITTING OF PANELS AND FLASHING IS TO BE EXPECTED BY THE ERECTOR AND MINOR FIELD CORRECTIONS ARE A PART OF NORMAL ERECTION WORK.

WORKMANSHIP SHALL BE OF THE BEST INDUSTRY STANDARDS AND INSTALLATION SHALL BE PERFORMED BY EXPERIENCED METAL CRAFTSMEN.

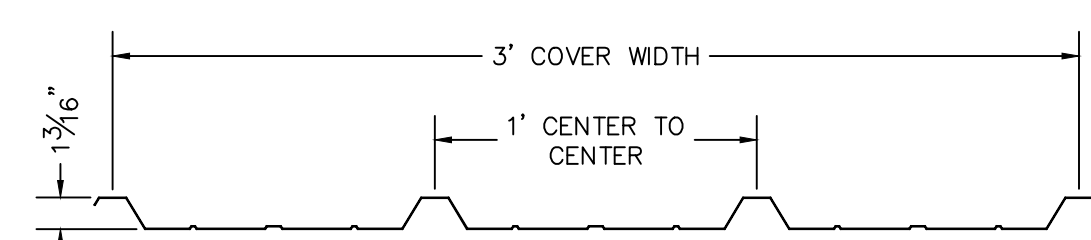
METAL SHAVINGS FROM DRILLING OR INSTALLATION OF ROOF FASTENERS MUST BE CAREFULLY REMOVED FROM THE ROOF BY BRUSHING OR SWEEPING AT THE END OF EACH DAY DURING INSTALLATION. SHAVINGS LEFT ON THE ROOF WILL QUICKLY RUST AND STAIN THE ROOF FINISH.

COVER ACCESS HOLES WITH GRACE ICE AND WATER SHIELD BEFORE ATTACHING ROOF DECK.

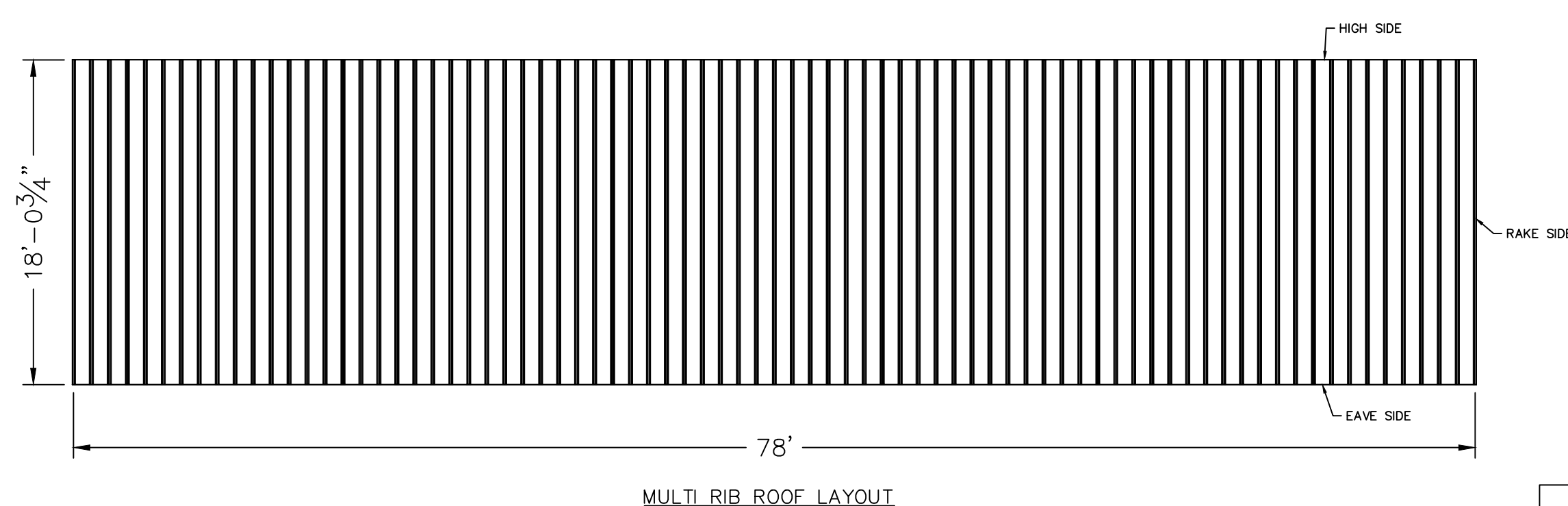
**SECTION PROPERTIES (PER FT. OF WIDTH)**

**TOP IN COMPRESSION**  
 $I_x = 0.052 \text{ in}^4$   
 $S_x = 0.0575 \text{ in}^3$   
 $M_x = 1.723 \text{ in-kips}$

**BOTTOM IN COMPRESSION**  
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 $S_x = 0.0495 \text{ in}^3$   
 $M_x = 1.483 \text{ in-kips}$

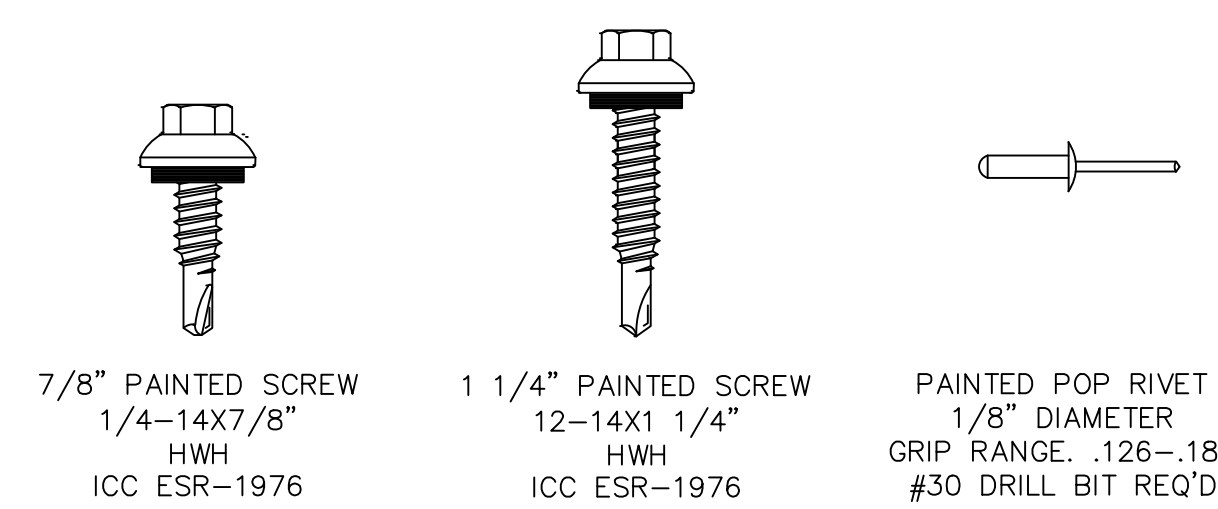


**MULTI RIB PANEL SECTION**  
 24GA. FY=50 ksi Fu=65ksi

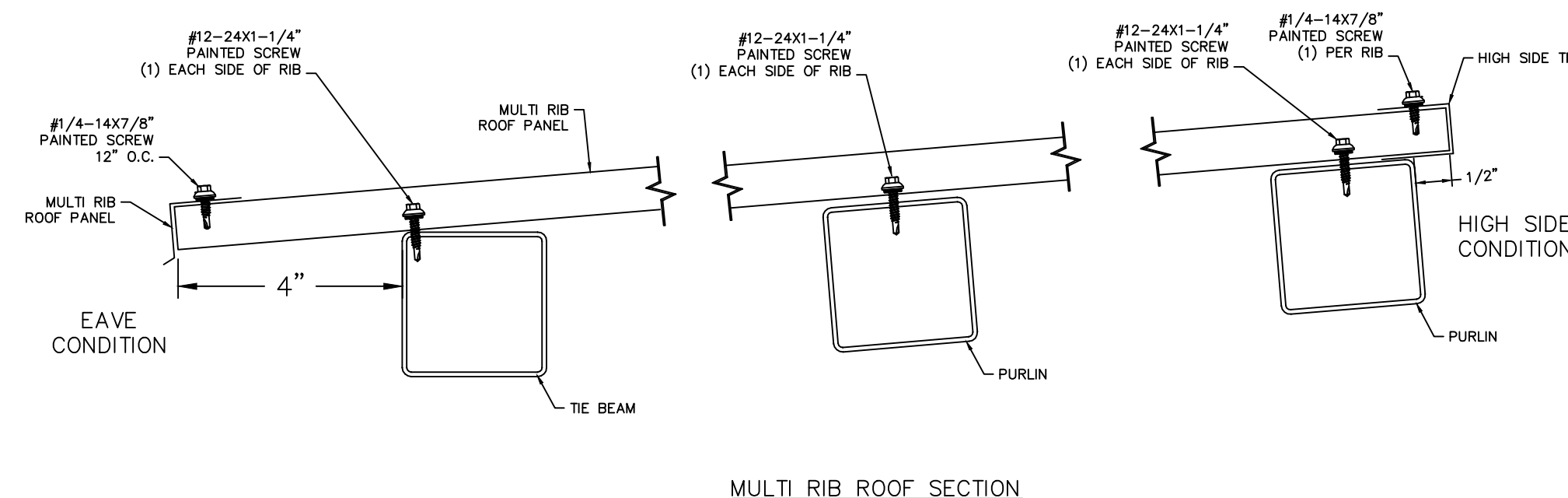


MULTI RIB ROOF LAYOUT

1

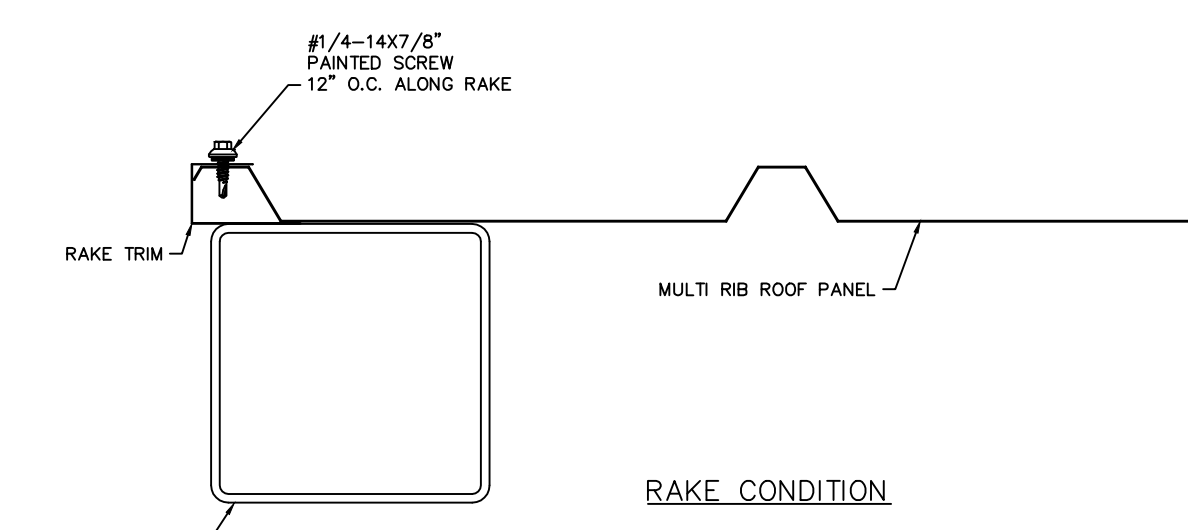


CORRECT	TOO LOOSE	TOO TIGHT
SEALANT MATERIAL SLIGHTLY VISIBLE AROUND METAL WASHER	SEALANT MATERIAL NOT VISIBLE AROUND METAL WASHER	SEALANT MATERIAL DEFORMED BEYOND EDGE OF METAL WASHER



MULTI RIB ROOF SECTION

2



RAKE CONDITION

3

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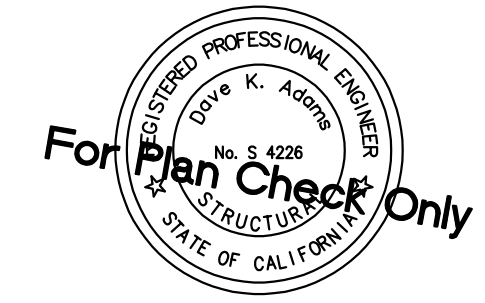


IVC - IMPERIAL VALLEY COLLEGE  
 980 E ATEN RD,  
 IMPERIAL, CA 92251

PROJECT: IMPERIAL VALLEY COLLEGE	DATE: 5/31/22
PRODUCT: MPC18X78M-P1	REV: SH
NOTES:	FILE PATH:
NOTES:	

TITLE:  
 ROOF LAYOUT  
 SHEET:  
 4.0A





**APPROVALS**

**KEYNOTES:**

- 1 POST TENSION SLAB (1 SXL)
- 2 SHADE STRUCTURE PIER FOOTING - 3'-0" DIA (A, A, A)
- 3 LIGHT POLE PIER FOOTING - 3'-0" DIA (M1, M2, S)
- 4 POST NET POLE PIER FOOTING - 1'-6" DIA (S)
- 5 CORNER CHAIN-LINK FENCE POST PIER FOOTING - 1'-6" DIA (5 ASX)
- 6 TERMINAL CHAIN-LINK FENCE POST PIER FOOTING - 1'-6" DIA (5 ASX)
- 7 POST TENSION CABLES ADJUST PER PLAN
- 8 KEY-FORMED CONSTRUCTION JOINT WITH INTERMEDIATE STRESSING POINTS
- 9 SAWCUT/TOOLED CONTROL JOINT
- 10 CONCRETE SLAB (1 ASX)

**NOTES:**

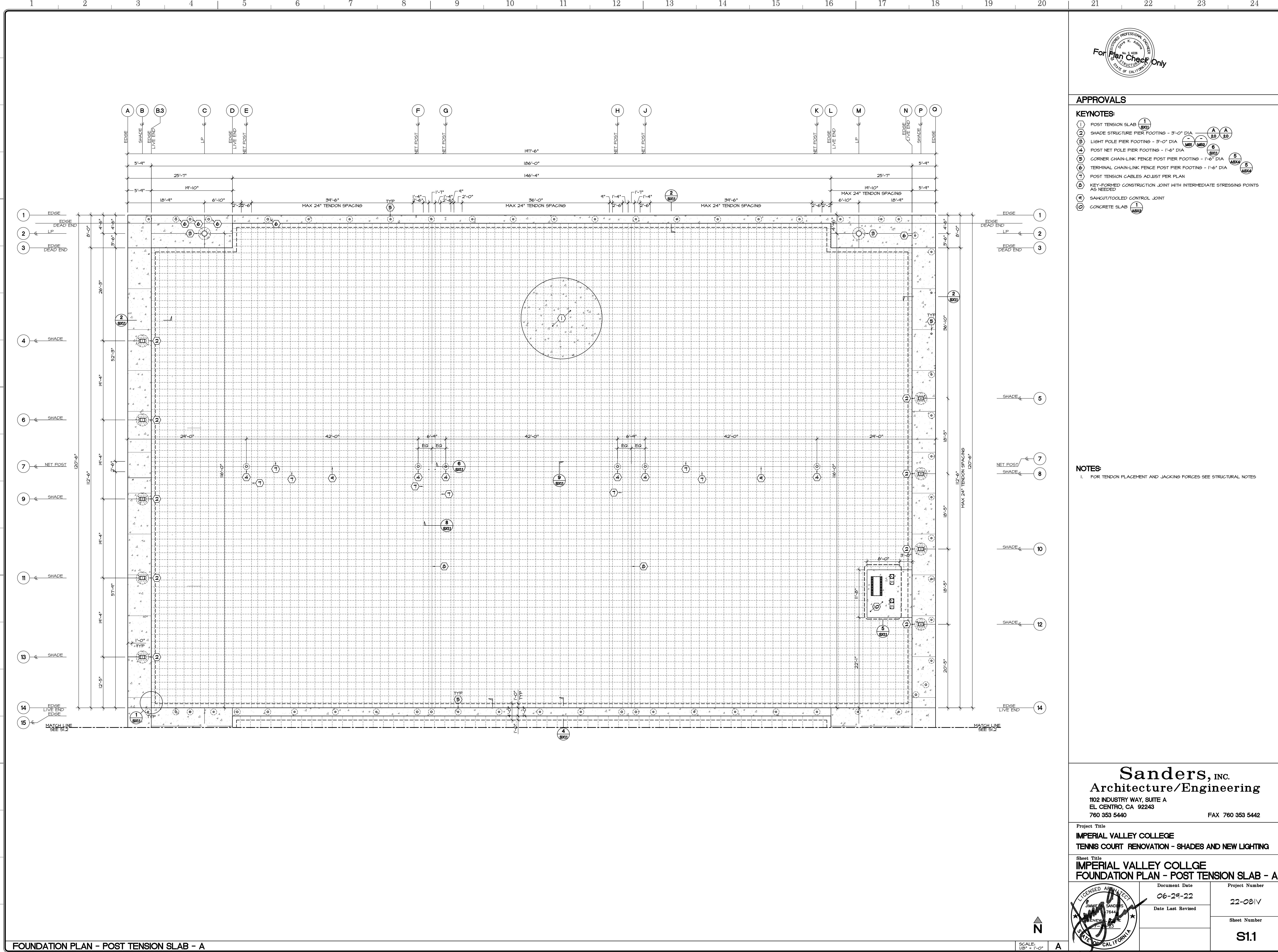
- 1. FOR TENDON PLACEMENT AND JACKING FORCES SEE STRUCTURAL NOTES

**Sanders, INC.**  
 Architecture/Engineering  
 102 INDUSTRY WAY, SUITE A  
 EL CENTRO, CA 92243  
 760 353 5440 FAX 760 353 5442

Project Title  
**IMPERIAL VALLEY COLLEGE  
 TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

Sheet Title  
**IMPERIAL VALLEY COLLEGE  
 FOUNDATION PLAN - POST TENSION SLAB - A**

	Document Date 06-29-22	Project Number 22-081V
	Date Last Revised	Sheet Number <b>S1.1</b>

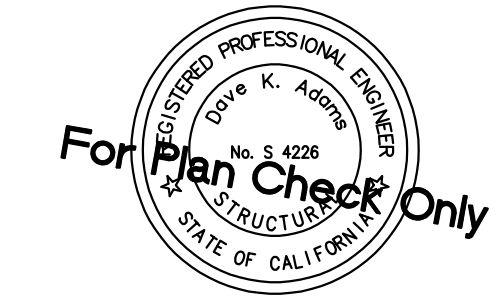


FOUNDATION PLAN - POST TENSION SLAB - A

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



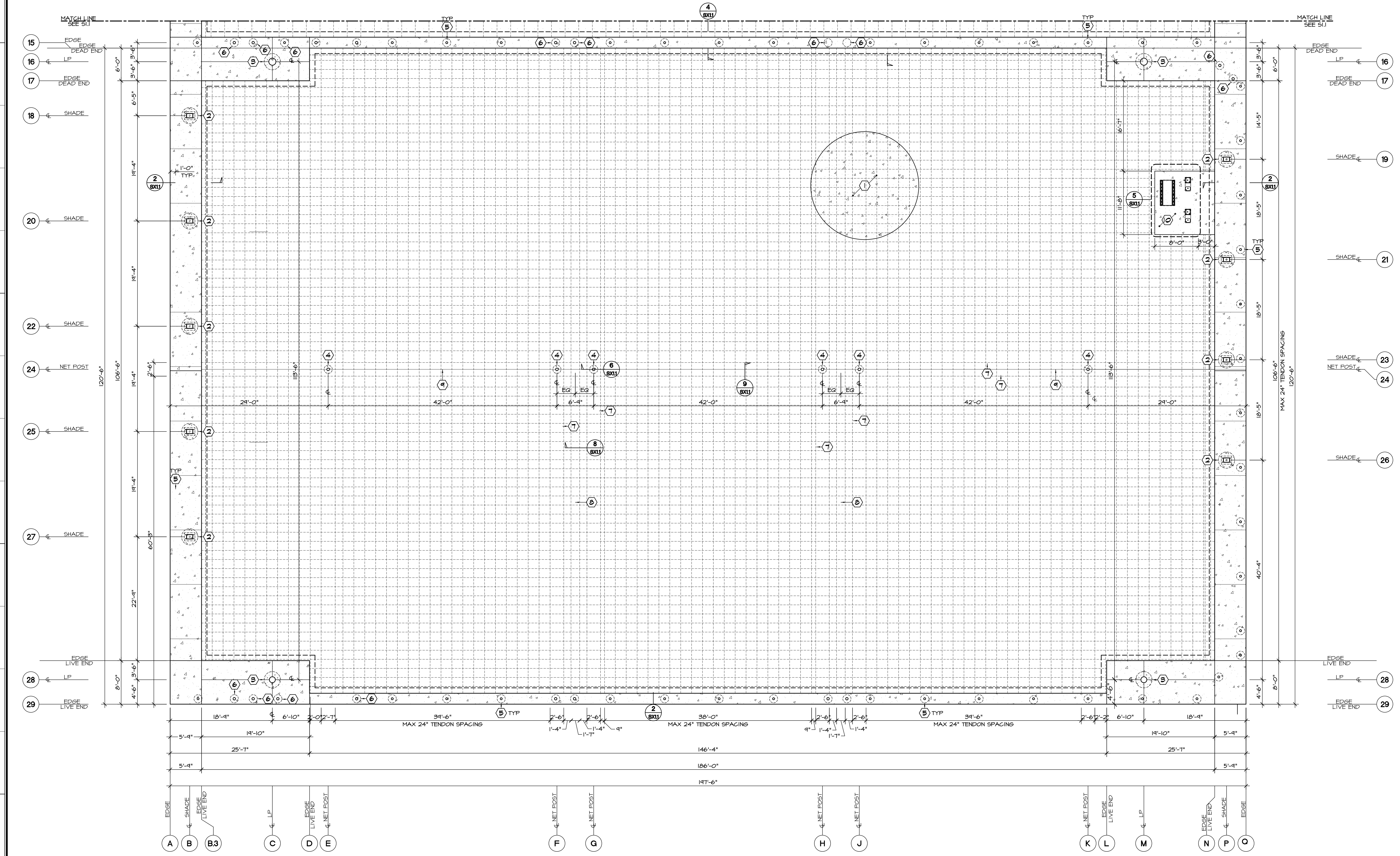




**APPROVALS**

**KEYNOTES:**

- ① POST TENSION SLAB (S11)
- ② SHADE STRUCTURE PIER FOOTING - 3'-0" DIA (A, A, 20, 20)
- ③ LIGHT POLE PIER FOOTING - 3'-0" DIA (M1, M2, 6, 6)
- ④ POST NET POLE PIER FOOTING - 1'-6" DIA (5, 5, 5, 5)
- ⑤ CORNER CHAIN-LINK FENCE POST PIER FOOTING - 1'-6" DIA (5, 5, 5, 5)
- ⑥ TERMINAL CHAIN-LINK FENCE POST PIER FOOTING - 1'-6" DIA (5, 5, 5, 5)
- ⑦ POST TENSION CABLES ADJUST PER PLAN
- ⑧ KEY-FORMED CONSTRUCTION JOINT WITH INTERMEDIATE STRESSING POINTS AS NEEDED
- ⑨ SAWCUT/TOOLED CONTROL JOINT
- ⑩ CONCRETE SLAB (AS12)



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 102 INDUSTRY WAY, SUITE A  
 EL CENTRO, CA 92243  
 760 353 5440 FAX 760 353 5442

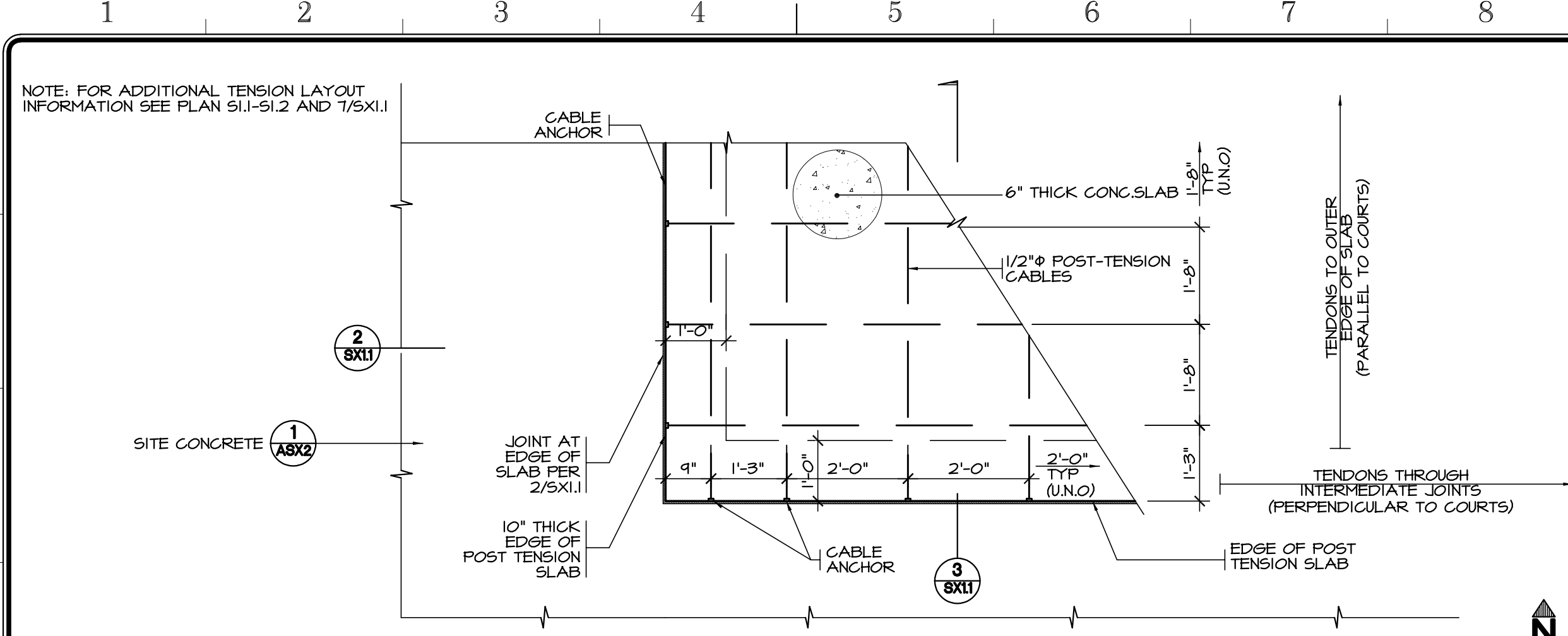
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**IMPERIAL VALLEY COLLEGE  
 TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

Sheet Title  
**IMPERIAL VALLEY COLLEGE  
 FOUNDATION PLAN - POST TENSION SLAB - B**

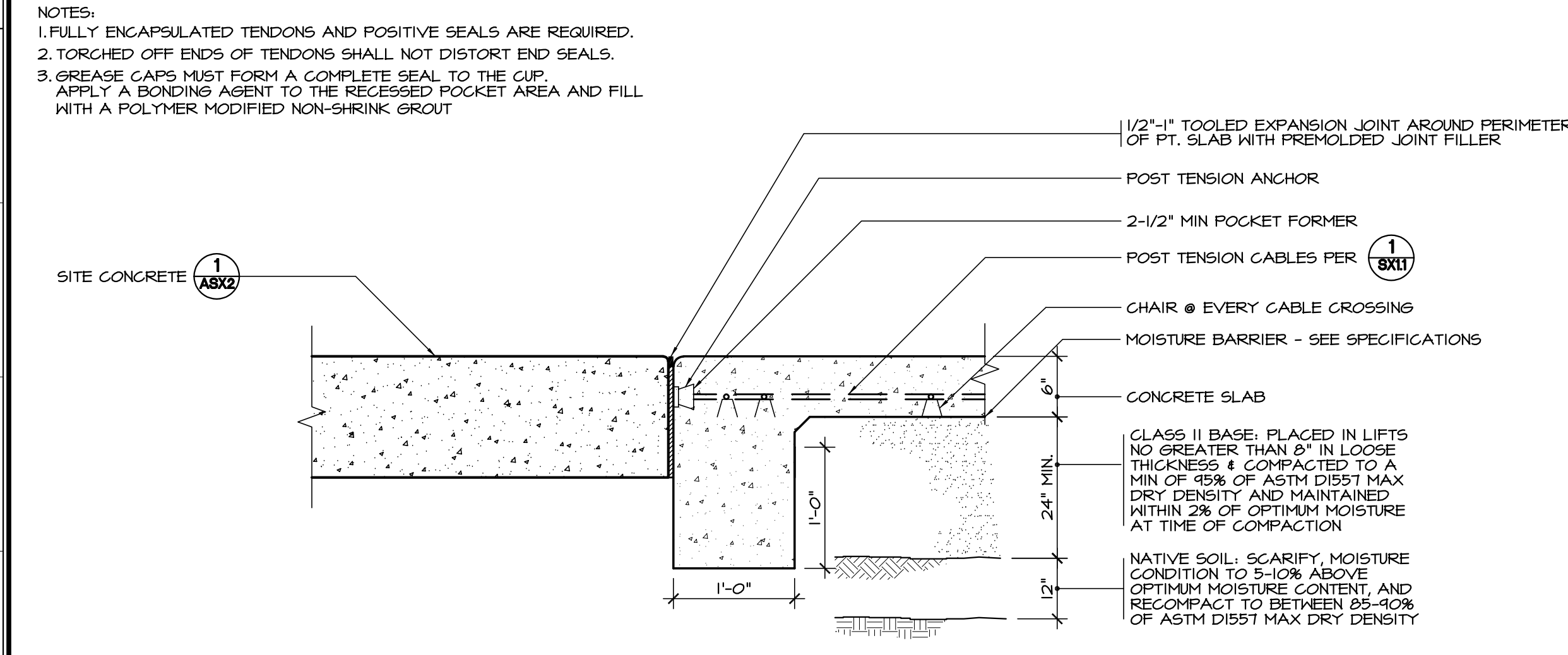
	Document Date	Project Number
	Date Last Revised	Sheet Number
	06-29-22	22-081V
		<b>S1.2</b>

**FOUNDATION PLAN - POST TENSION SLAB - B**

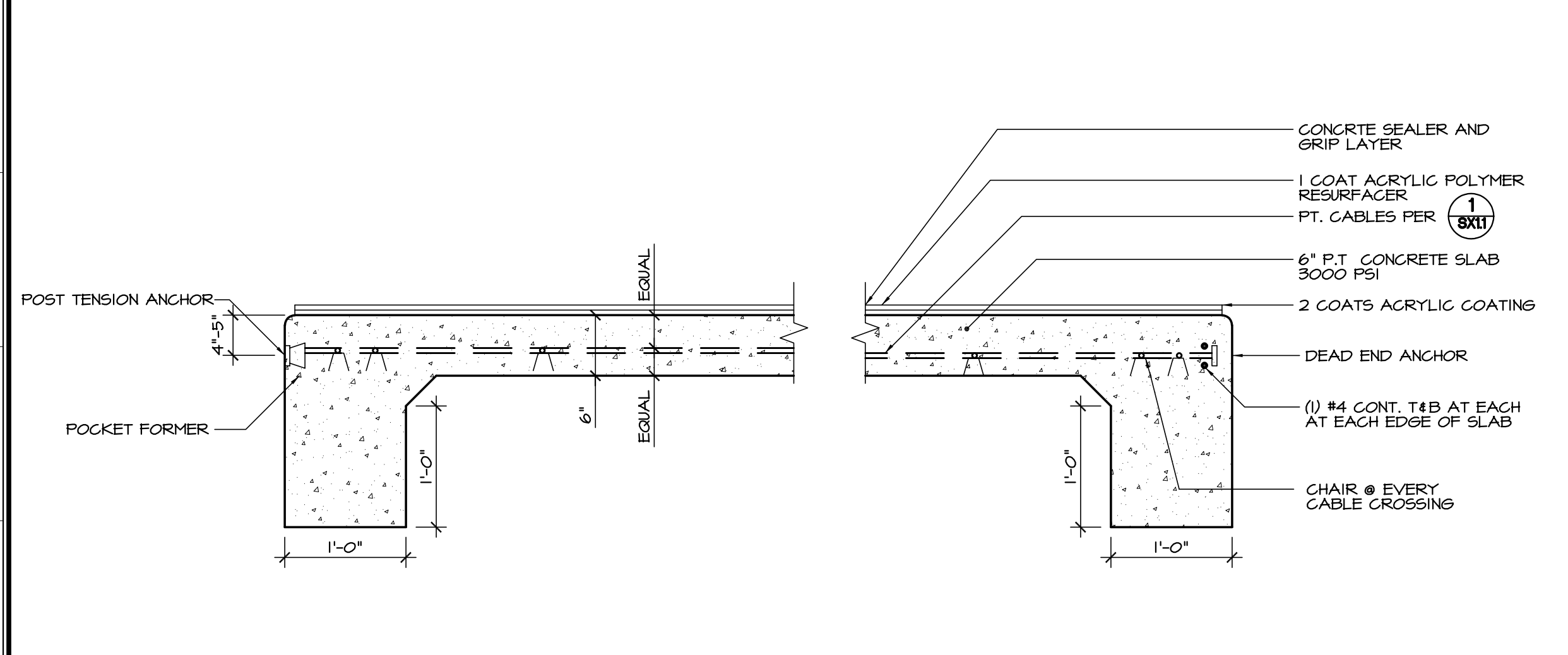
SCALE: 1/8" = 1'-0"



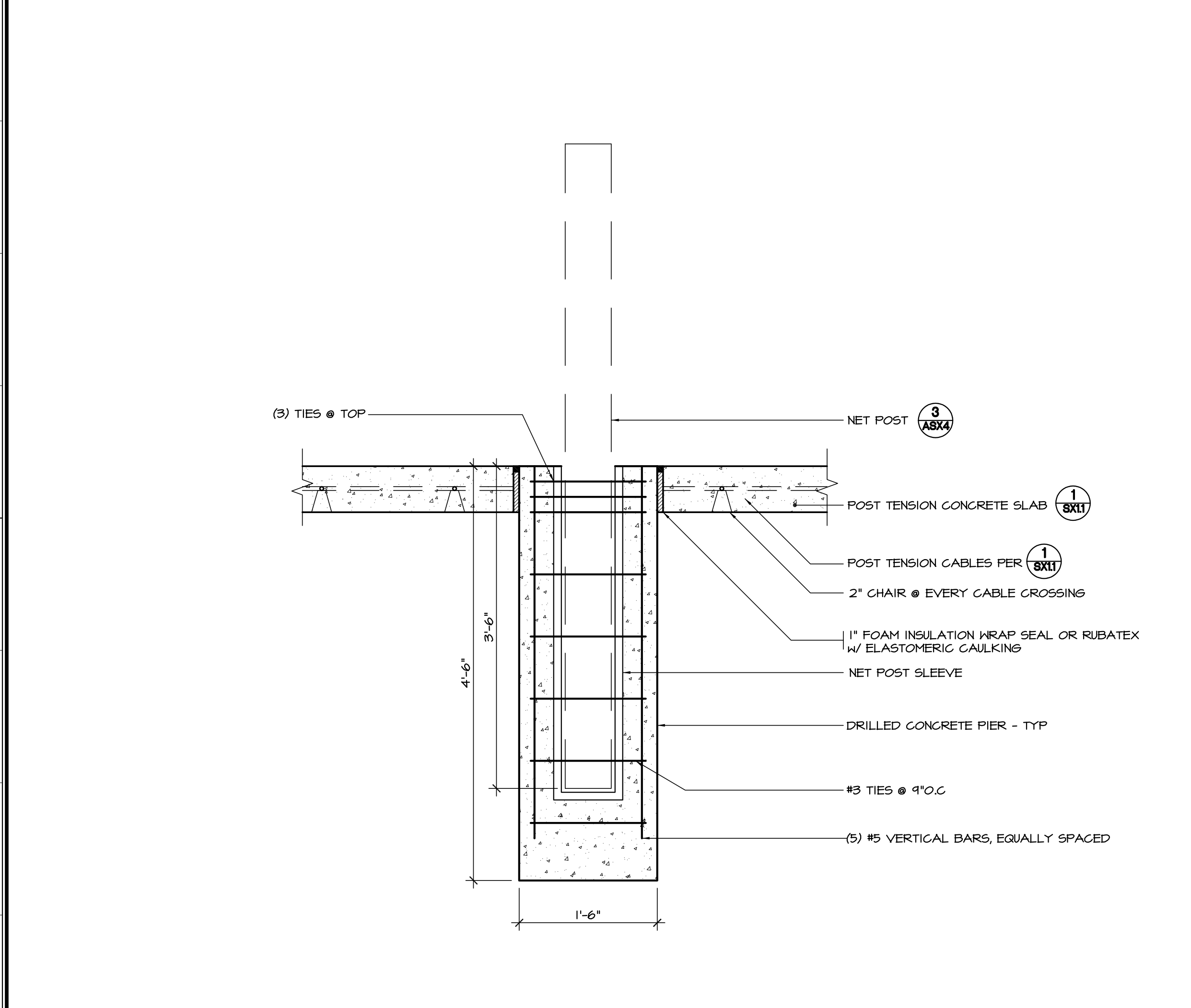
**POST TENSION SLAB PLAN** SCALE: 1/2" = 1'-0" 1



**POST TENSION SLAB SECTION** SCALE: 1/2" = 1'-0" 2

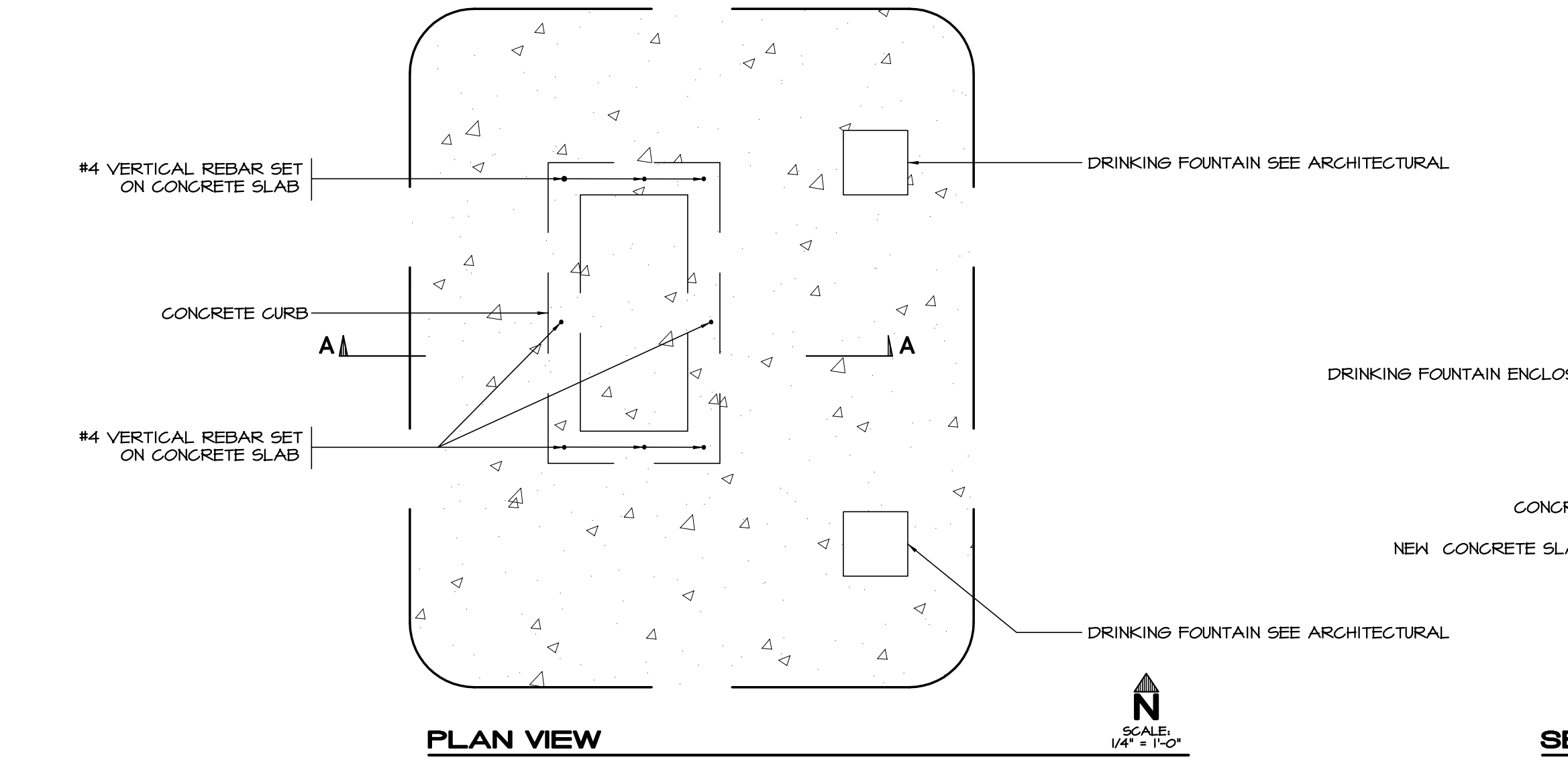


**POST TENSION SLAB SECTION** SCALE: 1" = 1'-0" 3

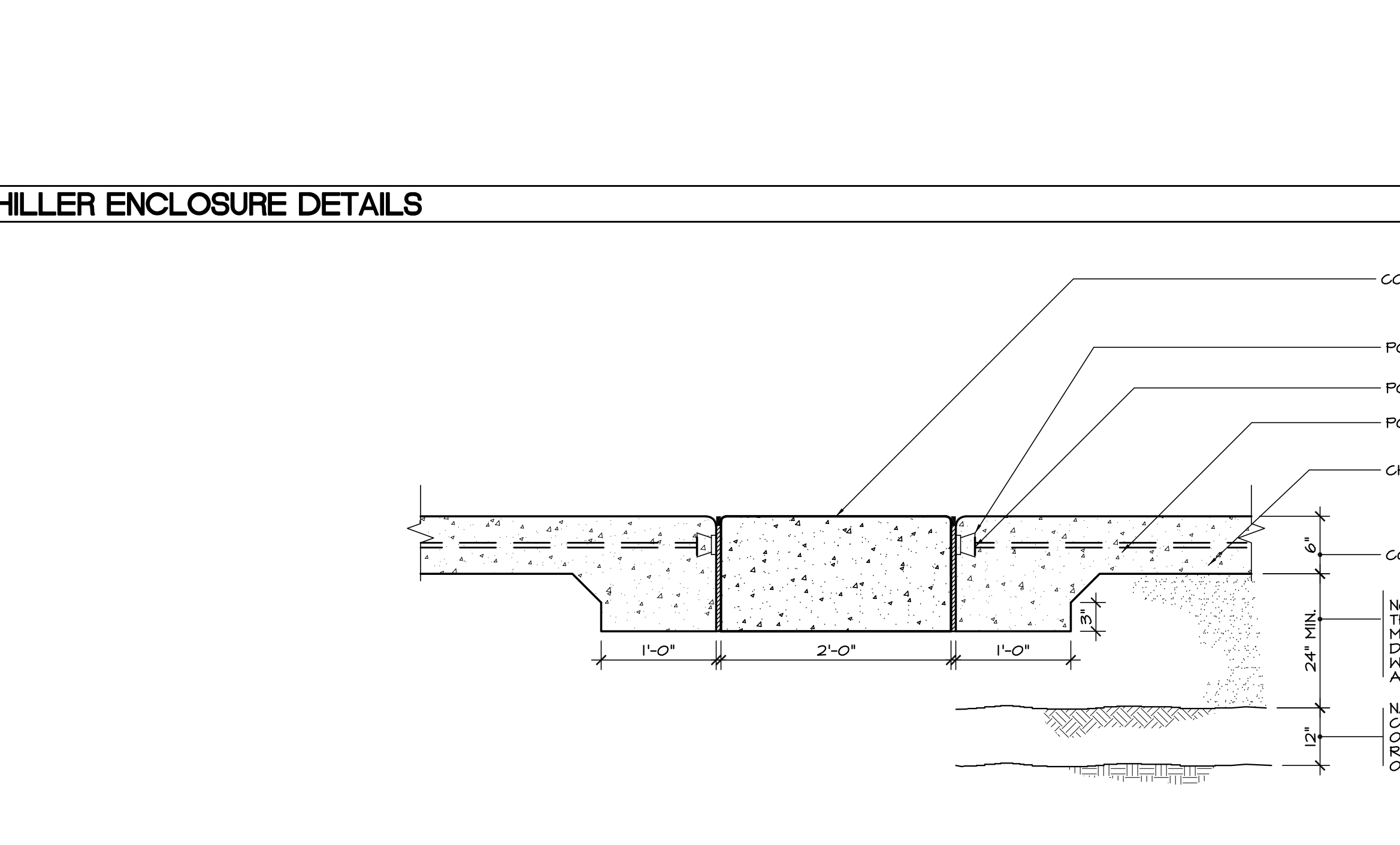


**NET POST FOOTING AT POST TENSION SLAB** SCALE: 1" = 1'-0" 6

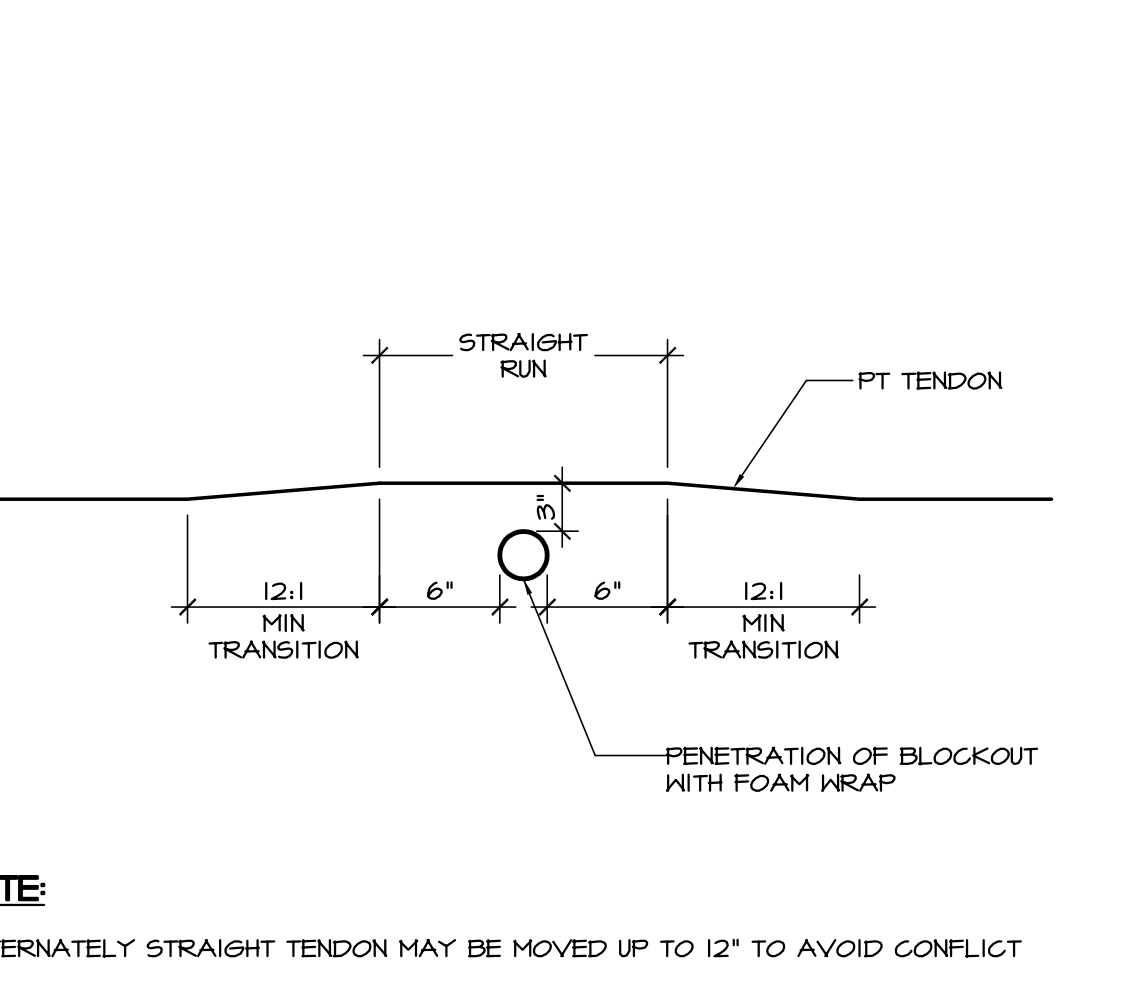
NOTES:  
 1. HOLES FOR POST-INSTALLED DONNELLS SHALL NOT BE DRILLED INTO THE POST-TENSION SLAB UNTIL 14 DAYS (MIN) HAVE ELAPSED SINCE THE CONCLUSION OF STRESSING OPERATIONS.  
 2. DRILLED IN ANCHORS SHALL NOT BE PLACED CLOSER THAN 6" FROM A POST TENSION TENDON LOCATION OF TENDONS SHALL BE ACCURATELY DETERMINED.



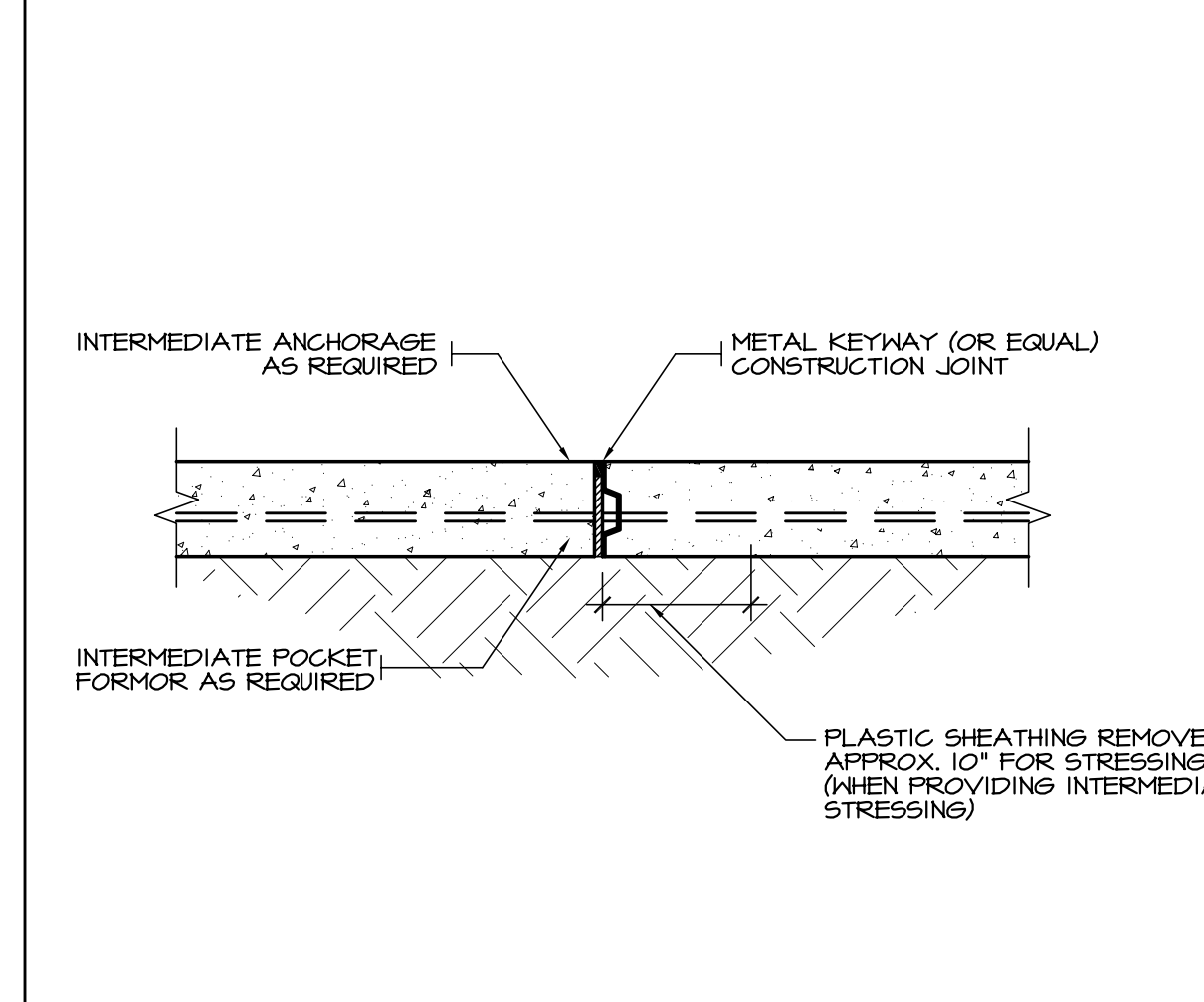
**CHILLER ENCLOSURE DETAILS** SCALE: NONE 5



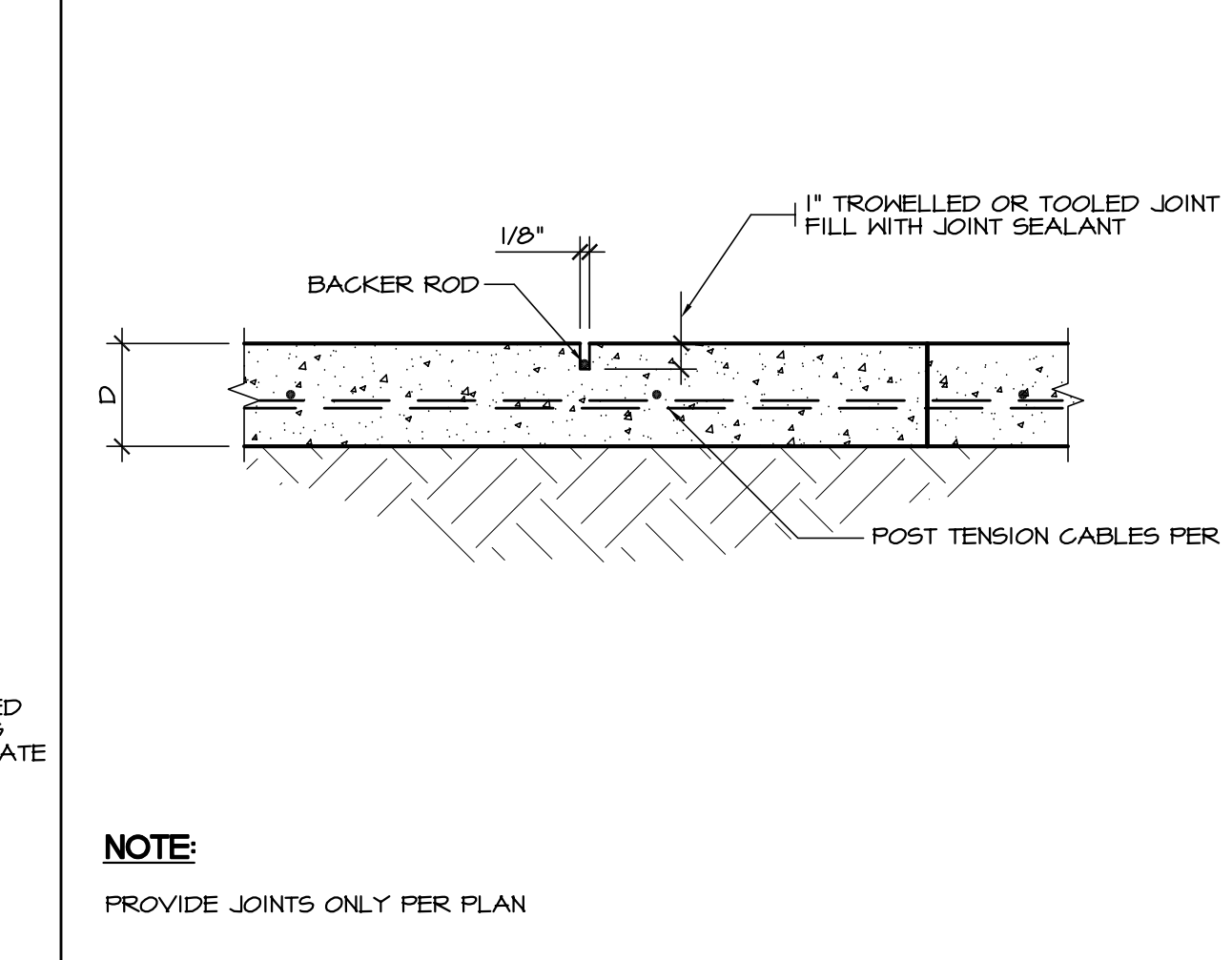
**POUR STRIP BETWEEN PST TENSIONED SLABS** SCALE: 1" = 1'-0" 4



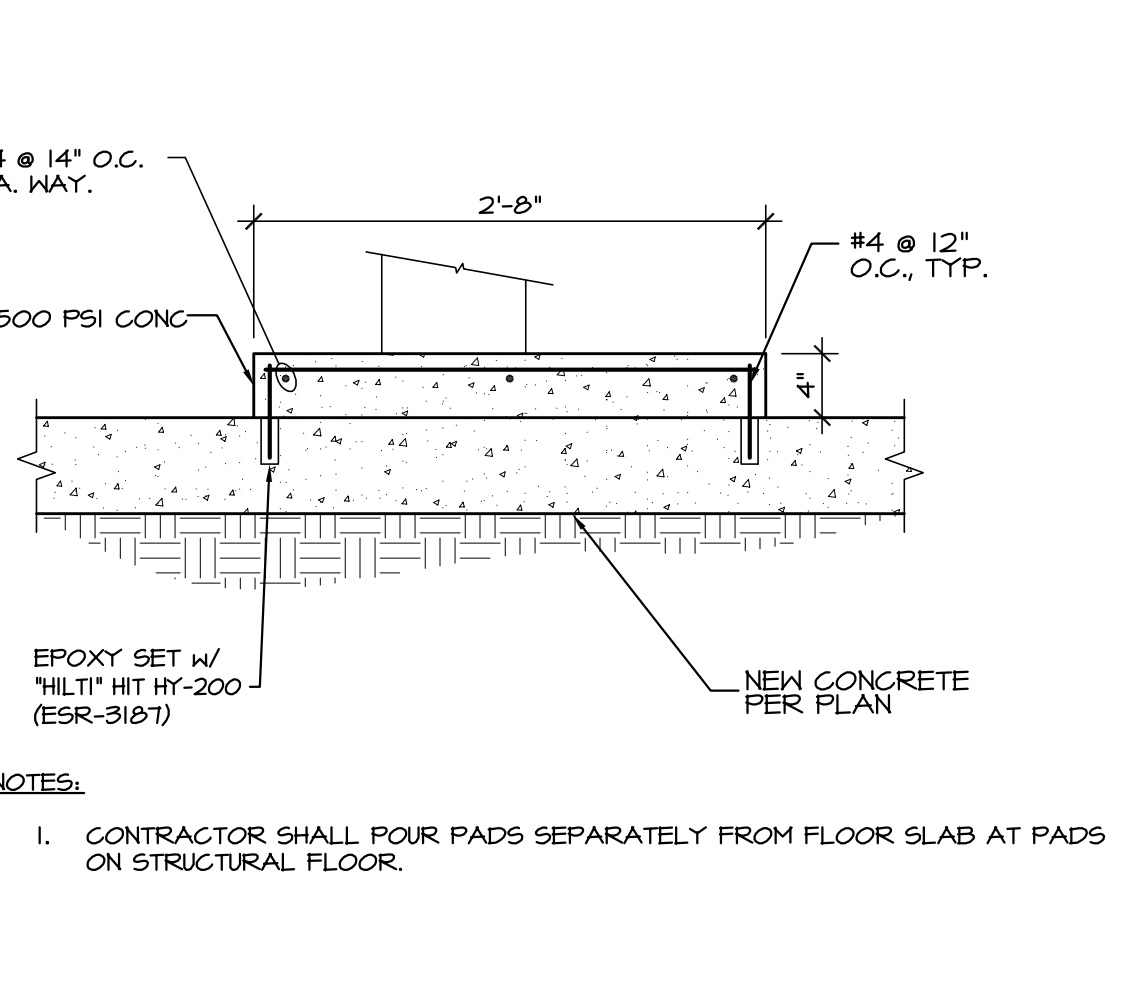
**DEVIATION OF TENDONS** SCALE: 1/2" = 1'-0" 7



**INTERMEDIATE CONSTRUCTION JOINT** SCALE: 1/2" = 1'-0" 8



**CRACK CONTROL JOINT** SCALE: 1/2" = 1'-0" 9



**TYPICAL PAD ON SLAB** SCALE: 1" = 1'-0" 10

**APPROVALS**

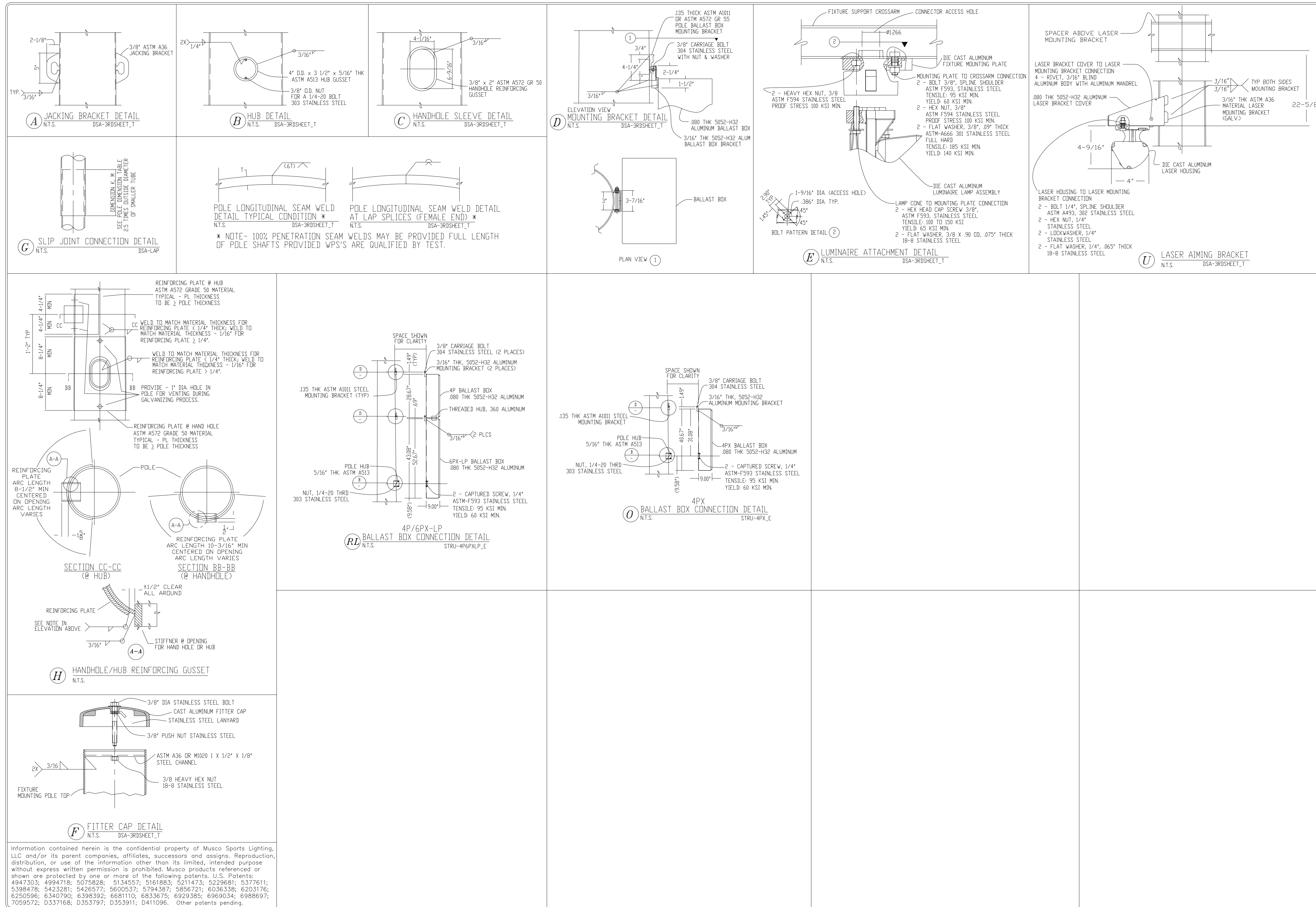
APPROVALS

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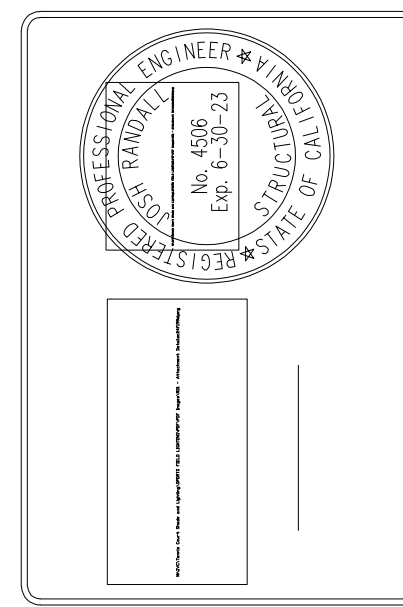
Project Title  
**IMPERIAL VALLEY COLLEGE  
 TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

**STRUCTURAL DETAILS**

	Document Date 06-29-22	Project Number 22-081V
	Date Last Revised	Sheet Number SX11



Imperial Valley College Tennis  
FIELD LIGHTING  
Imperial, CA



**MUSCO**  
Lighting

CORPORATE OFFICE:  
P.O. Box 808  
100 1st Avenue West  
Oskaloosa, Iowa 52577  
800/825-6020

PROJECT NO.	202633
DATE:	06/24/2022
DRAWN BY:	H.Sabers
DRAWING NO.	MD1

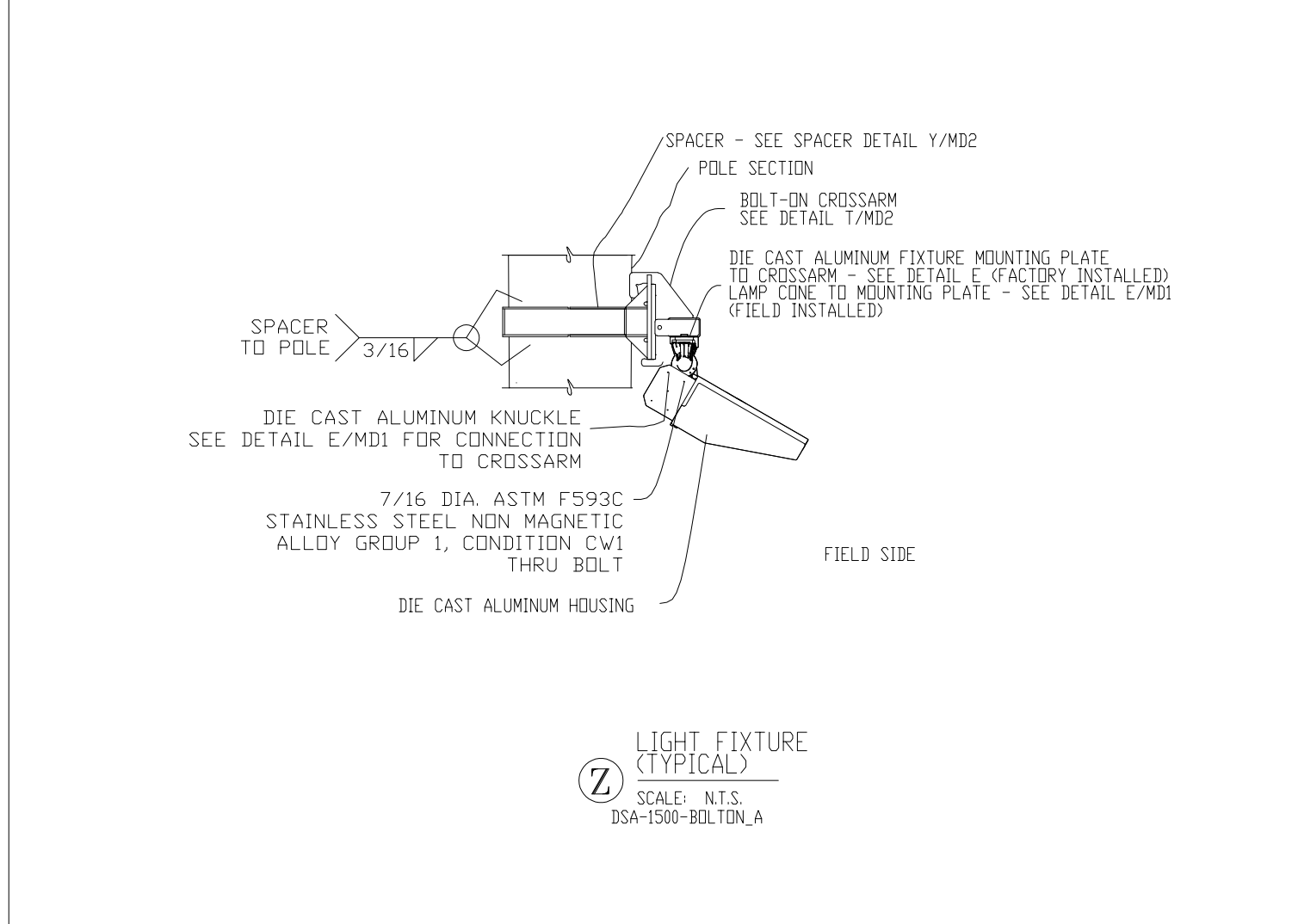
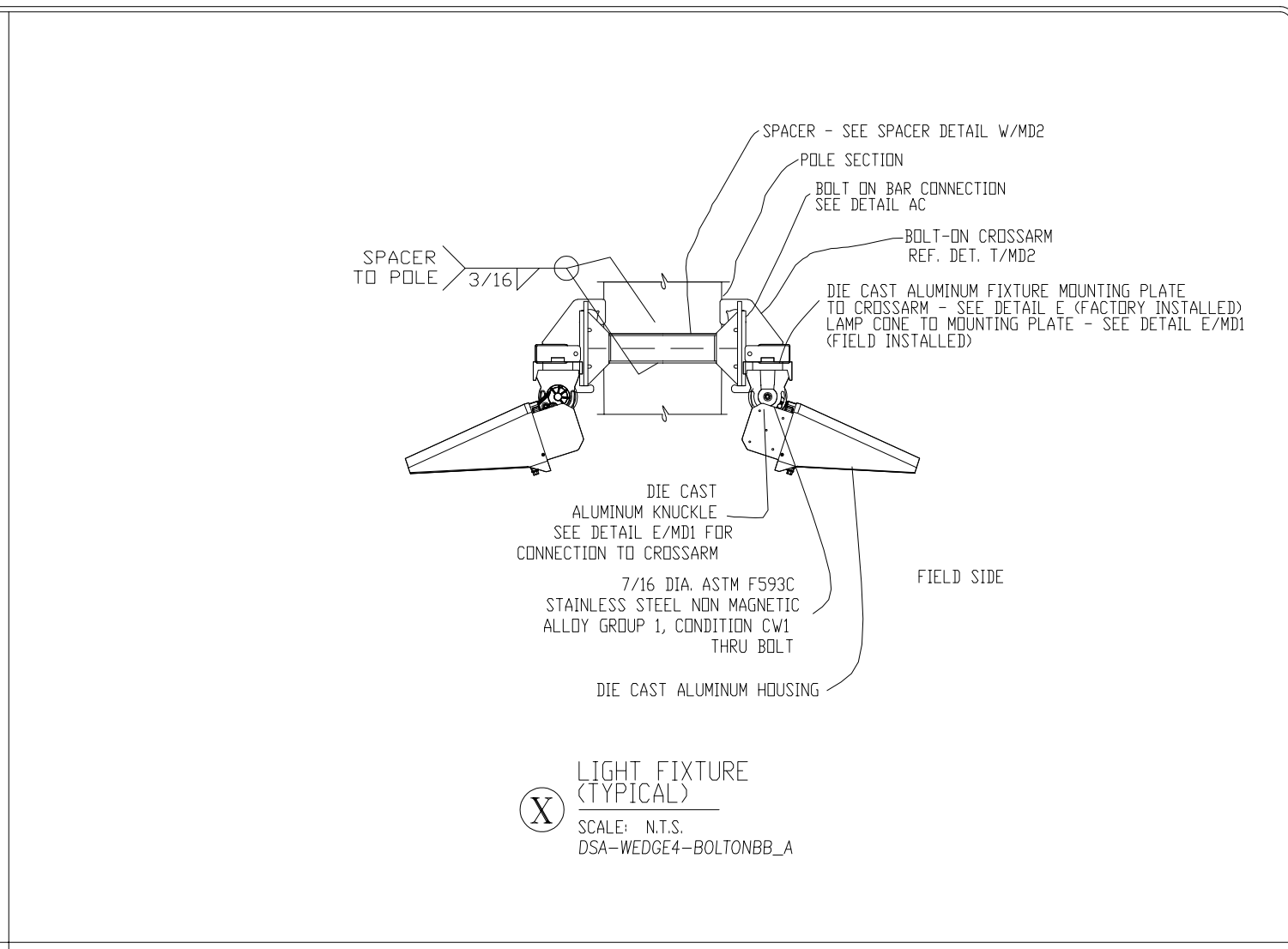
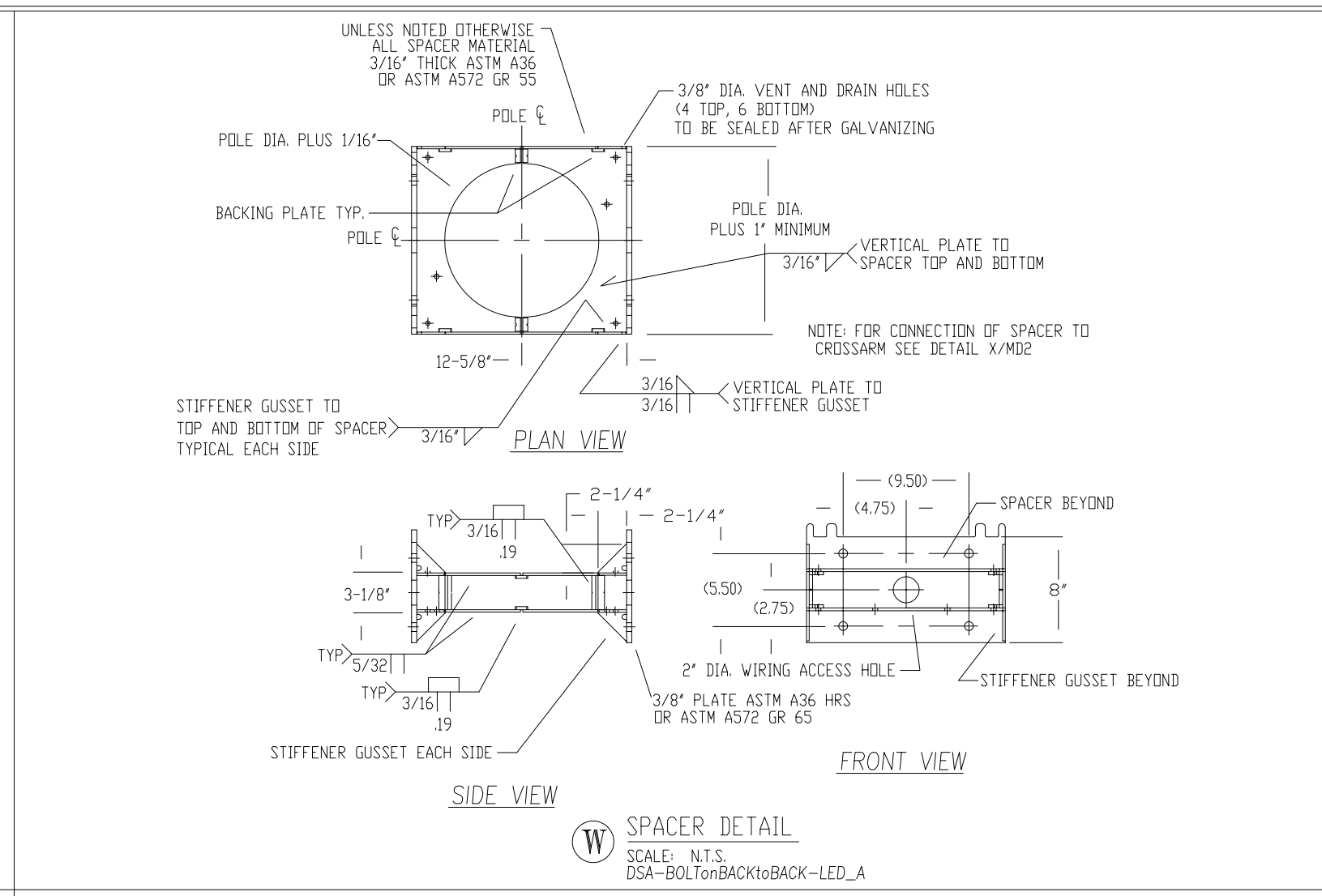
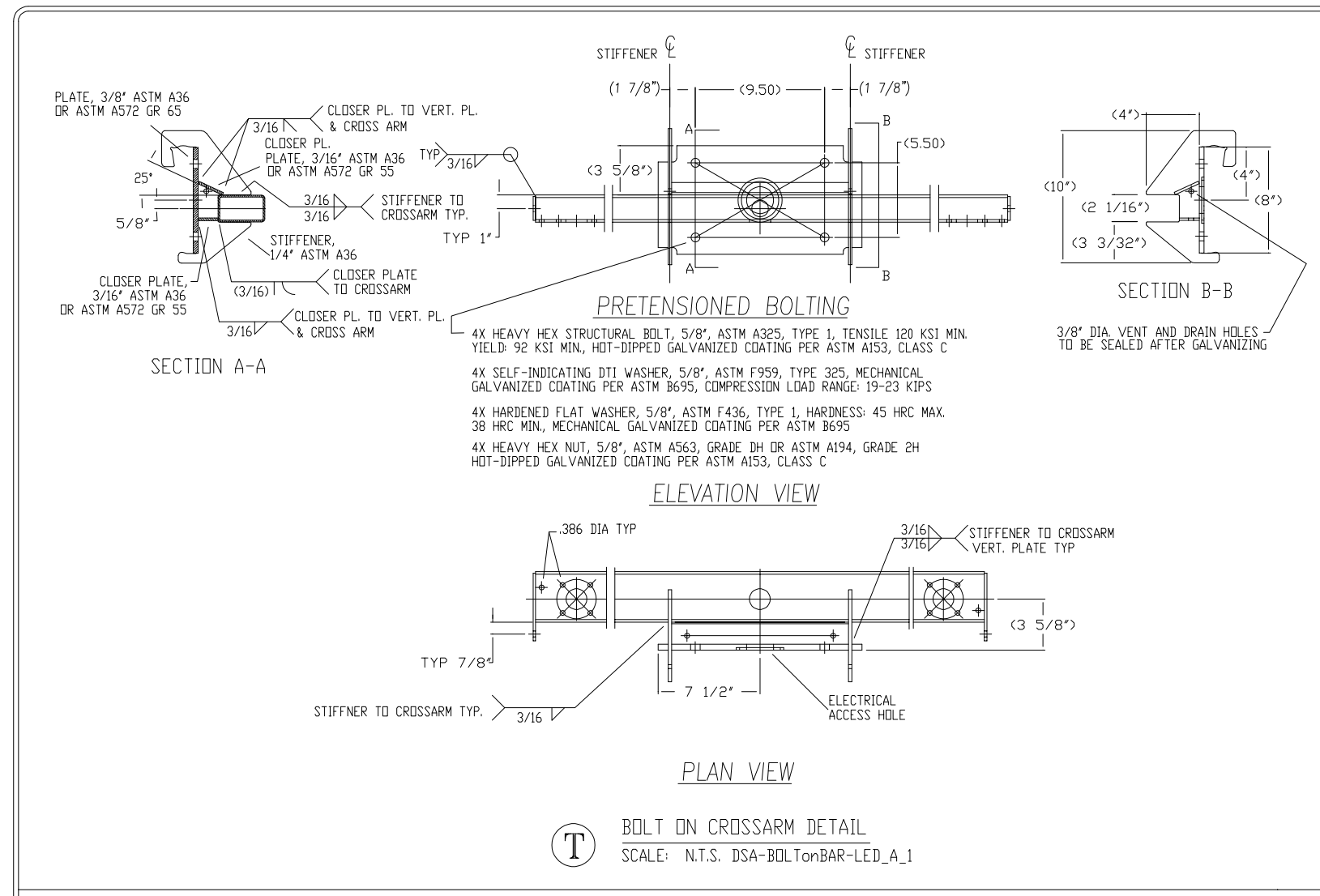
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Project Title  
**IMPERIAL VALLEY COLLEGE  
TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

Sheet Title  
**ATTACHMENT DETAILS**

	Document Date	Project Number
	06-24-22	22-081V
Date Last Revised		Sheet Number
		MD1



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Imperial, CA



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Lighting

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PROJECT NO: 202633

DATE: 06/24/2022

DRAWN BY: H.Sabers

DRAWING NO: 5 of 6

MD2

**APPROVALS**

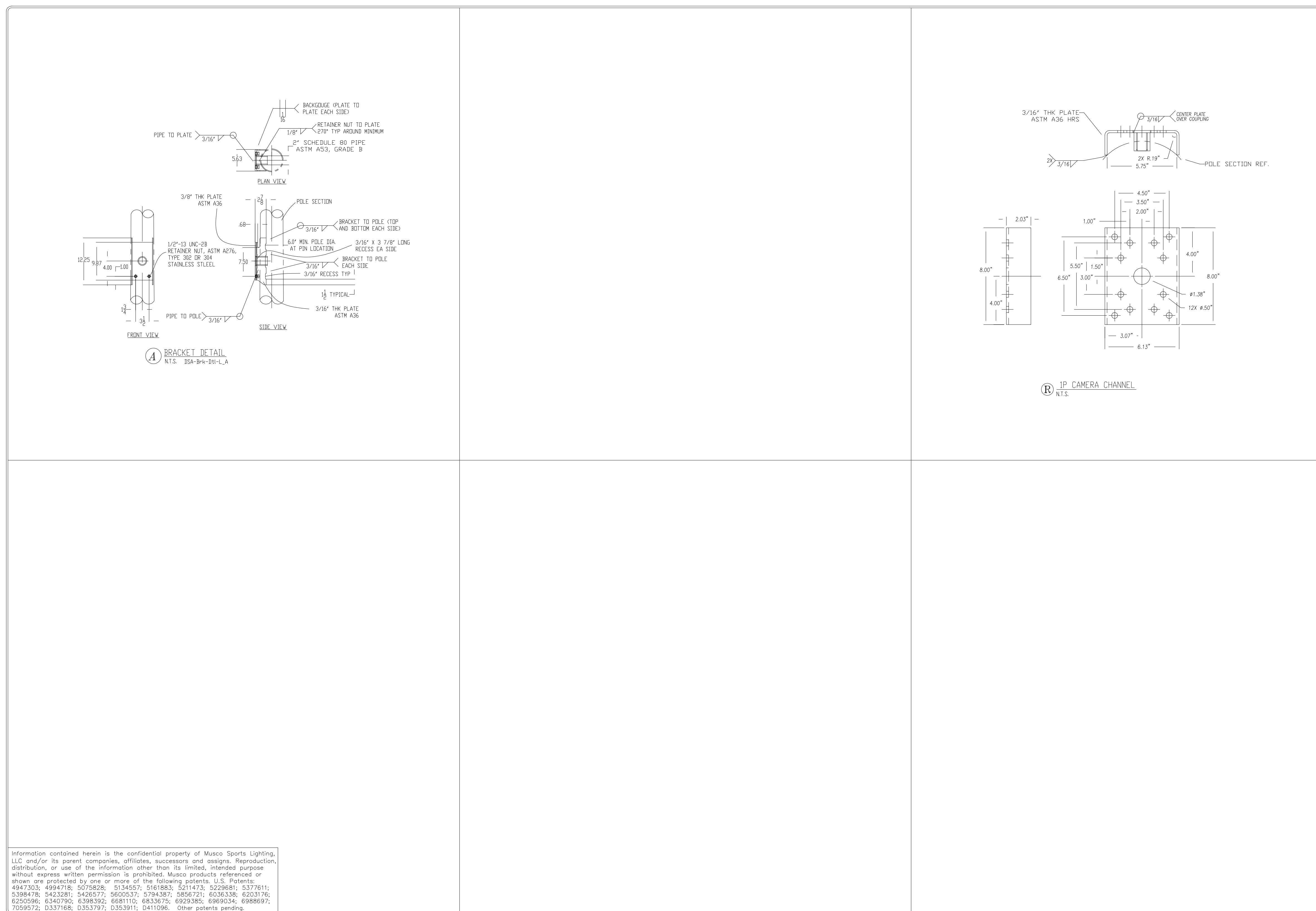
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760 353 5440 FAX 760 353 5442

Project Title  
**IMPERIAL VALLEY COLLEGE  
TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

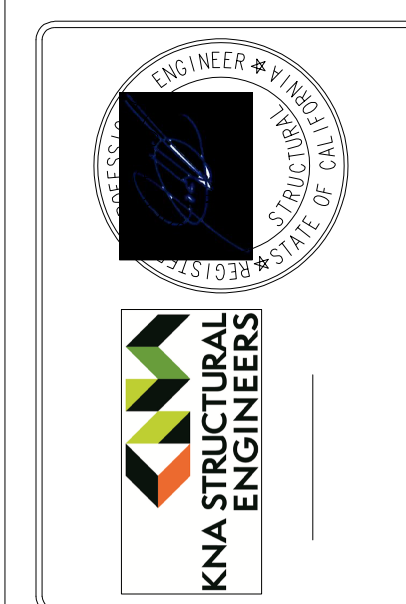
**ATTACHEMENT DETAILS**

	Document Date 06-24-22	Project Number 22-081V
	Date Last Revised	Sheet Number MD2

APPROVALS



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FIELD LIGHTING  
Imperial, CA



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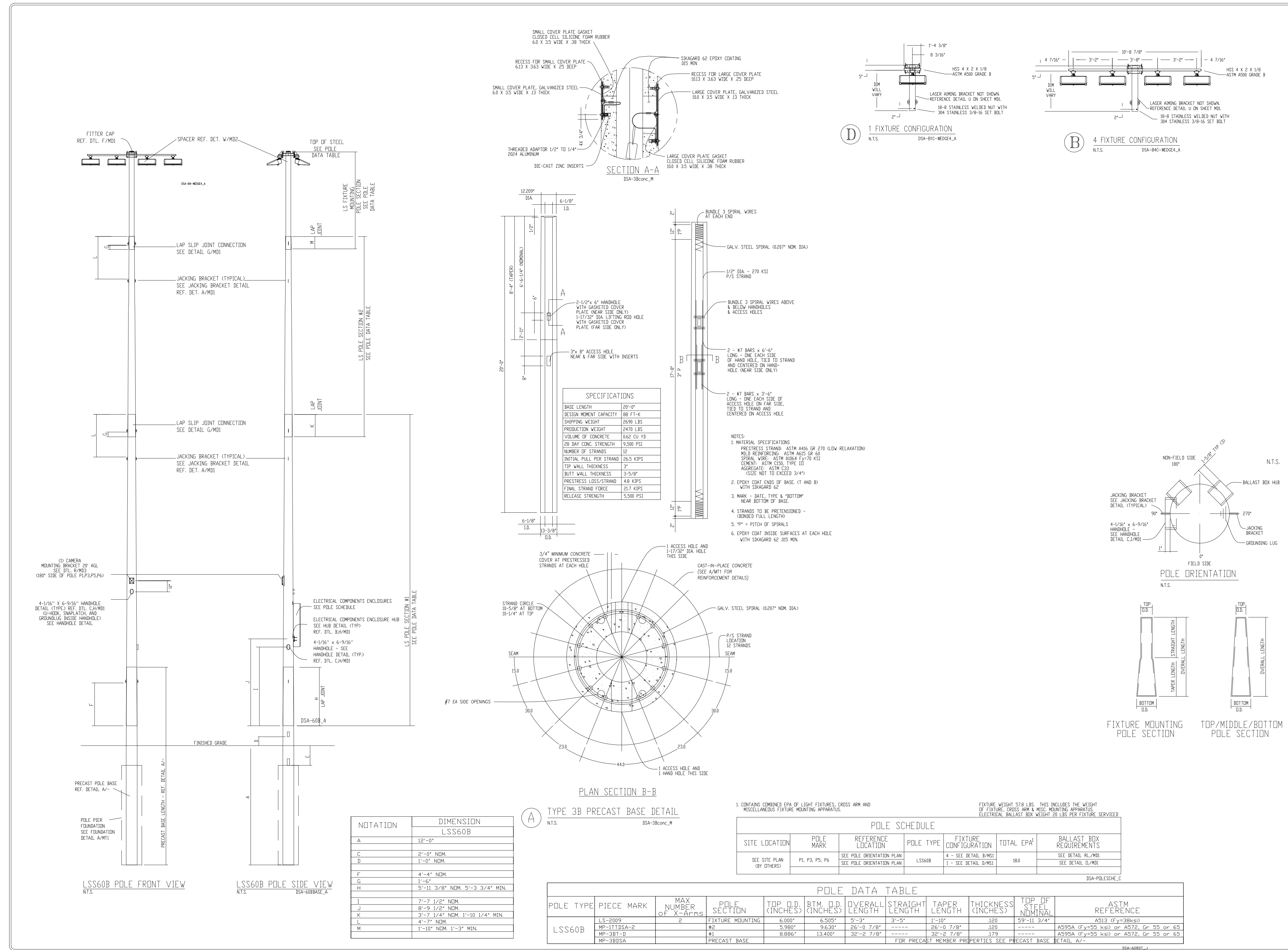
PROJECT NO.	202633
DATE	06/24/2022
DRAWN BY	H.Sabers
DRAWING NO.	MD3

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Project Title  
**IMPERIAL VALLEY COLLEGE  
TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

Sheet Title  
**ATTACHMENT DETAILS**

	Document Date <i>06-29-22</i>	Project Number 22-081V
	Date Last Revised	Sheet Number <b>MD3</b>



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PROJECT NO: 202633  
DATE: 06/24/2022  
DRAWN BY: H.Sabers  
DRAWING NO: MS1  
2 OF 6

**APPROVALS**

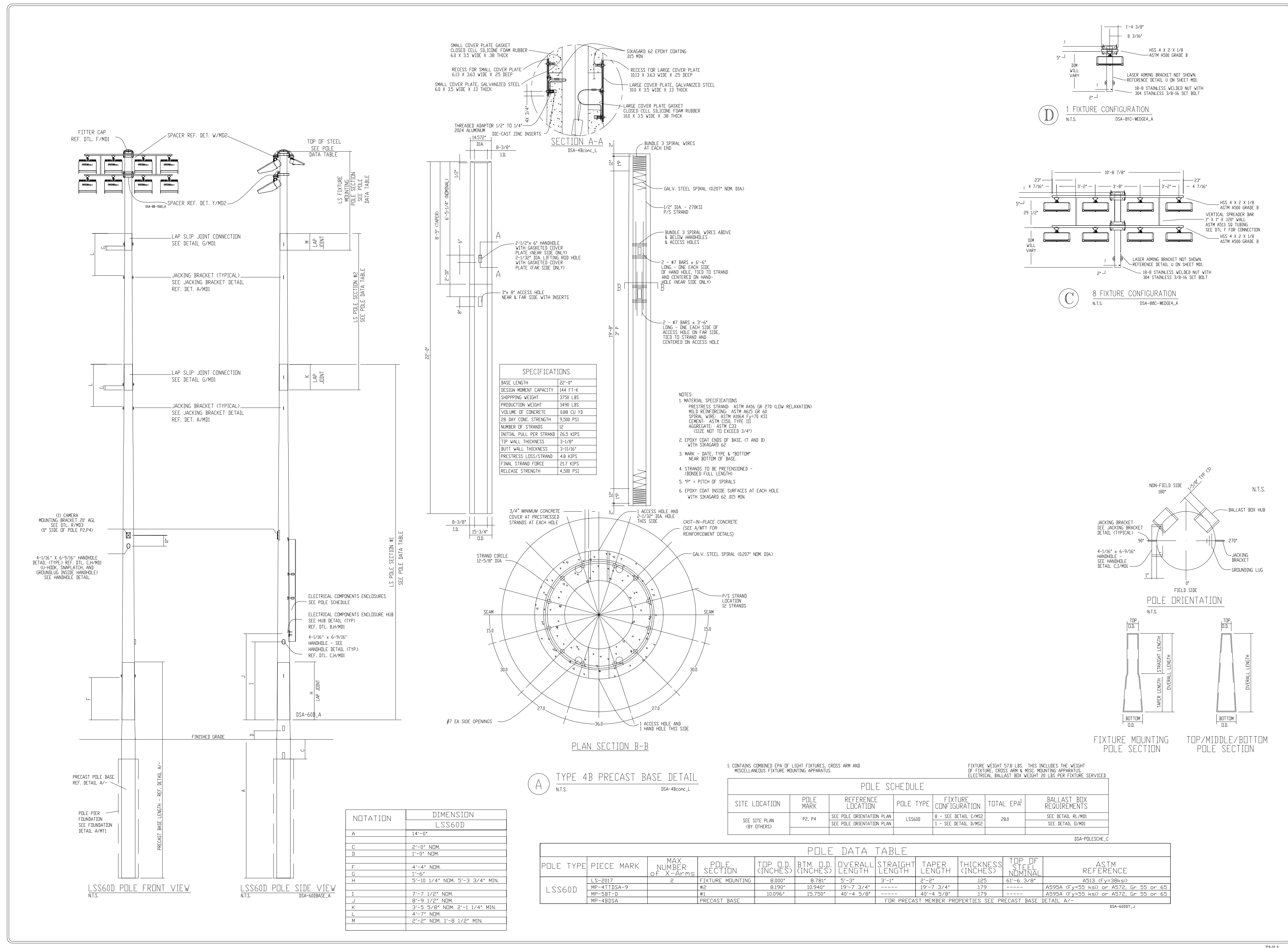
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Project Title  
**IMPERIAL VALLEY COLLEGE  
TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

Sheet Title  
**POLE DETAIL**

Document Date	Project Number
06-29-22	22-081V
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	<b>MS1</b>

LICENSED ARCHITECT  
JAMES SANDERS  
NEWCASTLE, CALIFORNIA  
STATE OF CALIFORNIA



Imperial Valley College Tennis FIELD LIGHTING Imperial, CA

**KNA STRUCTURAL ENGINEERS**

**Musco Lighting**

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Oskaloosa, Iowa 52577  
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PROJECT NO: 202633

DATE: 06/24/2022

DRAWN BY: H.Sobers

BRANDING NO: 3 OF 6

MS2

**APPROVALS**

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Project Title  
**IMPERIAL VALLEY COLLEGE TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

Sheet Title  
**POLE DETAIL**

Document Date	Project Number
06-24-22	22-081V
Date Last Revised	Sheet Number
	MS2

LICENSED ARCHITECT  
JIMMIE SANDERS  
7644  
RENEWAL  
STATE OF CALIFORNIA

**GENERAL NOTES:**

**APPLICABLE BUILDING CODE**  
All construction and workmanship shall conform to the 2019 California Building Code, California Code of Regulations - Title 24, Parts 1 & 2.  
This pole and foundation standard has been designed for lateral loads on the completed structure as follows:  
Wind Design Data:  
WIND = 95 MPH (Exposure C); VWD = 76 MPH (Exposure C)  
Risk Category = B  
See Pole Foundation Schedule for maximum pole wind forces.

**Seismic Design Data:**  
Risk Category = II (Self Supporting Pole)  
S<sub>s</sub> = 0.166  
Site Class = D - DEFAULT  
S<sub>w</sub> = 1.517  
S<sub>u</sub> = 0.891  
Seismic Design Category = E  
Basic Seismic-Resisting System = Non-Building Structure, not similar to buildings  
S<sub>s</sub> = 0.572 (P1,P2,P5,P6) & DSA (P2,P4)  
S<sub>w</sub> = 1.5  
S<sub>u</sub> = 1.5  
Analysis Procedure = Equivalent Lateral Force Procedure  
See Pole Foundation Schedule for maximum pole seismic forces.

**GENERAL CONSTRUCTION**  
These notes shall be used in conjunction with the plans and any discrepancies shall be brought to the attention of the Registered Design Professional (RDP) in Responsible Charge.  
Contractor must check all dimensions, clearances and job conditions before starting work. The RDP in Responsible Charge shall be notified immediately of any discrepancies or possible deficiencies.  
The drawings and specifications represent the finished structure. All bracing, temporary supports, shoring, etc., is the sole responsibility of the Contractor. Observation visits to the job site by the RDP in Responsible Charge do not include inspection of construction procedures. The Contractor is solely responsible for all construction methods and for safety conditions at the worksite. These visits by RDP in Responsible Charge shall not be construed as continuous or detailed inspections.  
Design, material, equipment, and products other than those described below or indicated on the drawings may be considered for use, provided prior approval is obtained from the School District, the RDP in Responsible Charge, and DSA.  
All changes to the approved plans after a contract for construction has been awarded, affecting structural, access or life-safety portions of the project, shall be made by means of construction change documents (CCD) approved by DSA, as required by Section 4-336, Part 1, Title 24, CCR. All CCD shall be prepared and signed by the RDP in general Responsible Charge.  
Substitutions shall be considered as a CCD and shall be approved by DSA prior to fabrication or use.  
A Class 1 or Class 2 Project Inspector employed by the School District (Owner) and approved by DSA shall provide continuous inspection of the work, the duties of the Inspector are defined in Section 4-342, Part 1, Title 24, CCR.  
All Tests And Inspections shall be performed by an independent lab employed by the School District and approved by DSA.  
Reference pole location on the Architectural, Structural, and/or Electrical drawings for actual pole placement and site location. Pole shall be located 5'-0" min. from adjacent structures below 50'-0" A.G.L., unless noted otherwise.

**LIGHT POLE FOUNDATIONS**  
Reference chapter 18A, sections 1806A, 1807A, and 1810A of the California Building Code, assume class 5 soils.  
Assumed allowable end bearing soil pressure: 1,500 psf (table 1806A.2) or 250 psf skin friction (section 1810A.3.1.4)  
Assumed allowable lateral passive soil bearing pressure: 200 psf/ft for isolated poles not adversely affected by a 0.25 inch motion of the ground surface (section 1806A.3.4)  
Assumed design soil parameters are as noted. Actual allowable soil design parameters at level or sloping conditions (if any) must be verified by a geotechnical engineer.  
The Contractor must familiarize himself with the complete geotechnical report, and borings and contact the above firm to understand the soil conditions and the possibility of ground water pumping and excavation stabilization or bracing during the foundation installation and placement of concrete.  
Soil formations that will require special design considerations or excavation procedures may exist. Pole foundations may need to be reinstalled according to the soil conditions that exist.  
If any discrepancies or inconsistencies arise, notify the RDP in Responsible Charge of such discrepancies.  
All piers and concrete must bear on and against firm undisturbed soil as determined by the Geotechnical Engineer.  
Place plywood collar around perimeter at the top of foundation excavation to prevent soil from entering pier.  
All excavations must be free of loose soil, and debris prior to foundation installation and placement of concrete. Dosing or dishing slurry may be required if saving occurs. Review and approval of the Geotechnical Engineer and DSA is required.  
All excavations must be free of water or concrete shall be placed by the Tremie Method in accordance with ACI standard 330. Concrete placed by the Tremie Method shall have a minimum ultimate strength of 1,000 PSI greater than required under "Concrete Cast-in-Place".  
**CONCRETE (CAST-IN-PLACE)**  
Concrete pier foundations with steel reinforcement shall attain a minimum ultimate compressive strength at 28 days test of 4,000 psi. Each pier inspection not required.  
All concrete shall attain a minimum strength of 2,500 psi prior to steel pole erection.  
Use Type V Portland cement or as directed by the Geotechnical Engineer. 0.45 max. water to cement ratio by weight.  
Portland Cement ASTM C-150.  
Aggregate ASTM C-33. 1" maximum aggregate size. ¾" max. agg. size not permitted at reinforced piers.  
Mix in conformance with ASTM C-94, ACI 318 SECTIONS 19.2 and 26.4.  
Place concrete immediately after completion of excavation and inspection by the Geotechnical Engineer and the DSA Inspector. Under no circumstances shall piers be allowed to remain open for more than 12 hours without the approval of the Geotechnical Engineer. Excavations shall be covered and protected until filled with concrete.  
Concrete shall be placed in one continuous operation (no construction joint) with special equipment to ensure a maximum freefall of 5 ft to prevent concrete from striking the sides of the excavation.  
Freefall of concrete is unacceptable through water or drilling slurry.  
Vibrate concrete full depth, except for concrete with slump greater than 6", then vibrate only upper 10"-0". Concrete placed under water shall have a slump of 6"-8".

**STEEL POLE**  
Steel pole sections conform to the California Code of Regulations 1.24, Part 2, Chapter 22A.  
All steel conforms to referenced ASTM specifications. (See Pole Data Table for each pole type).  
All weldment conforms with AWS D1.1-15 specification for GMAW fillet utilizing E70S-X filler metal or SAW (See welding E70S-X20 or E70S-X24).  
GMAW procedure conforms to AWS A5.23.  
SAW procedure conforms to AWS A5.23.  
Longitudinal seam welds for pole sections shall have 60% minimum penetration. Except longitudinal seam welds on the female section of telescopic, field splices shall be full penetration groove welds for a length equal to the minimum splice length plus 6 inches. See drawing number MD1 for seam weld details.  
Pole sections not dipped galvanized to ASTM A123 latest standards.  
All miscellaneous structural steel items conform to AISC 360-16.  
Steel pole sections shall be assembled in the field by attaching two 1.5 ton "come alongs" to jacking ears, using full effort on each simultaneously, to ensure minimum overlaps as indicated on the "MS" sheet(s) and detail G.MD1.

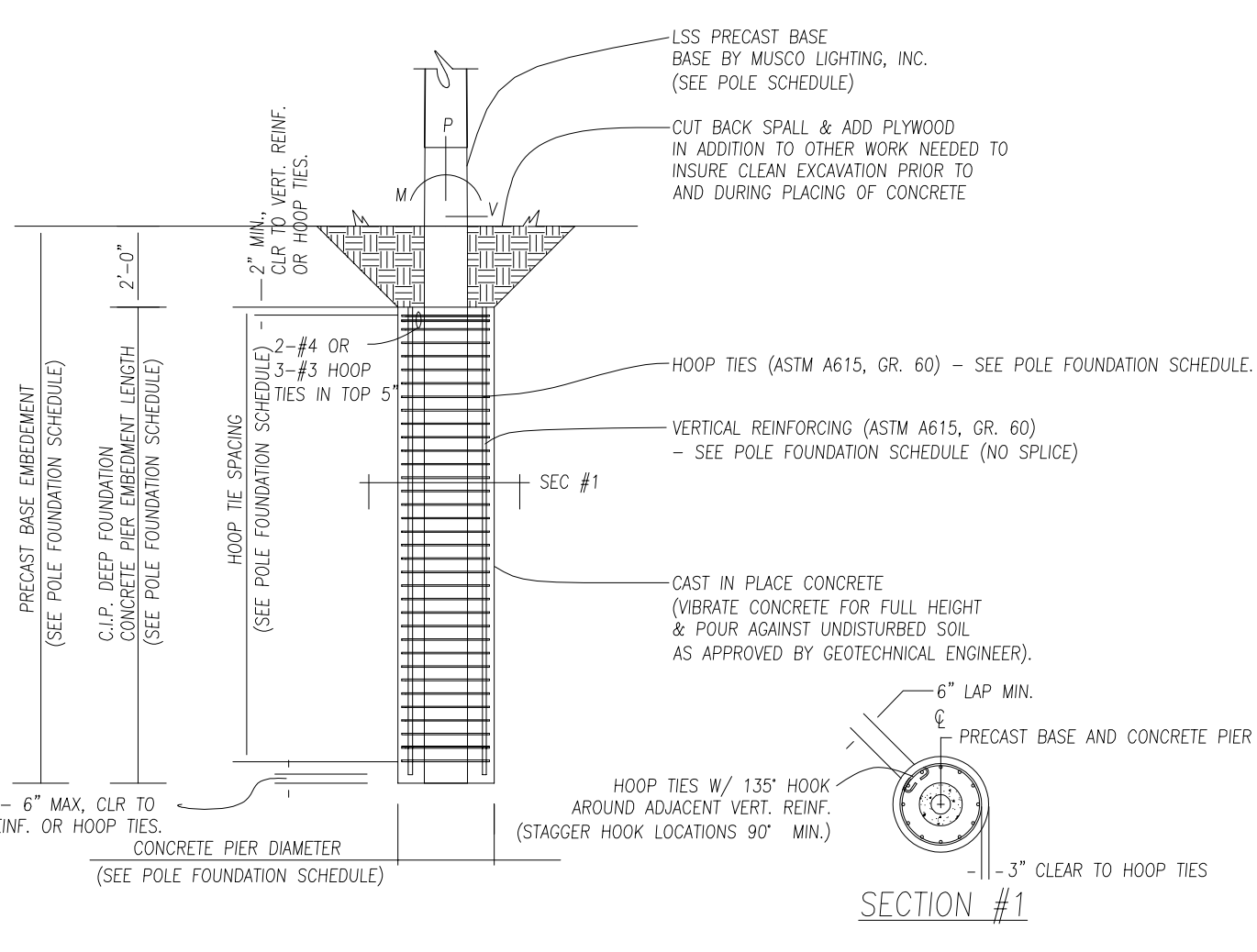
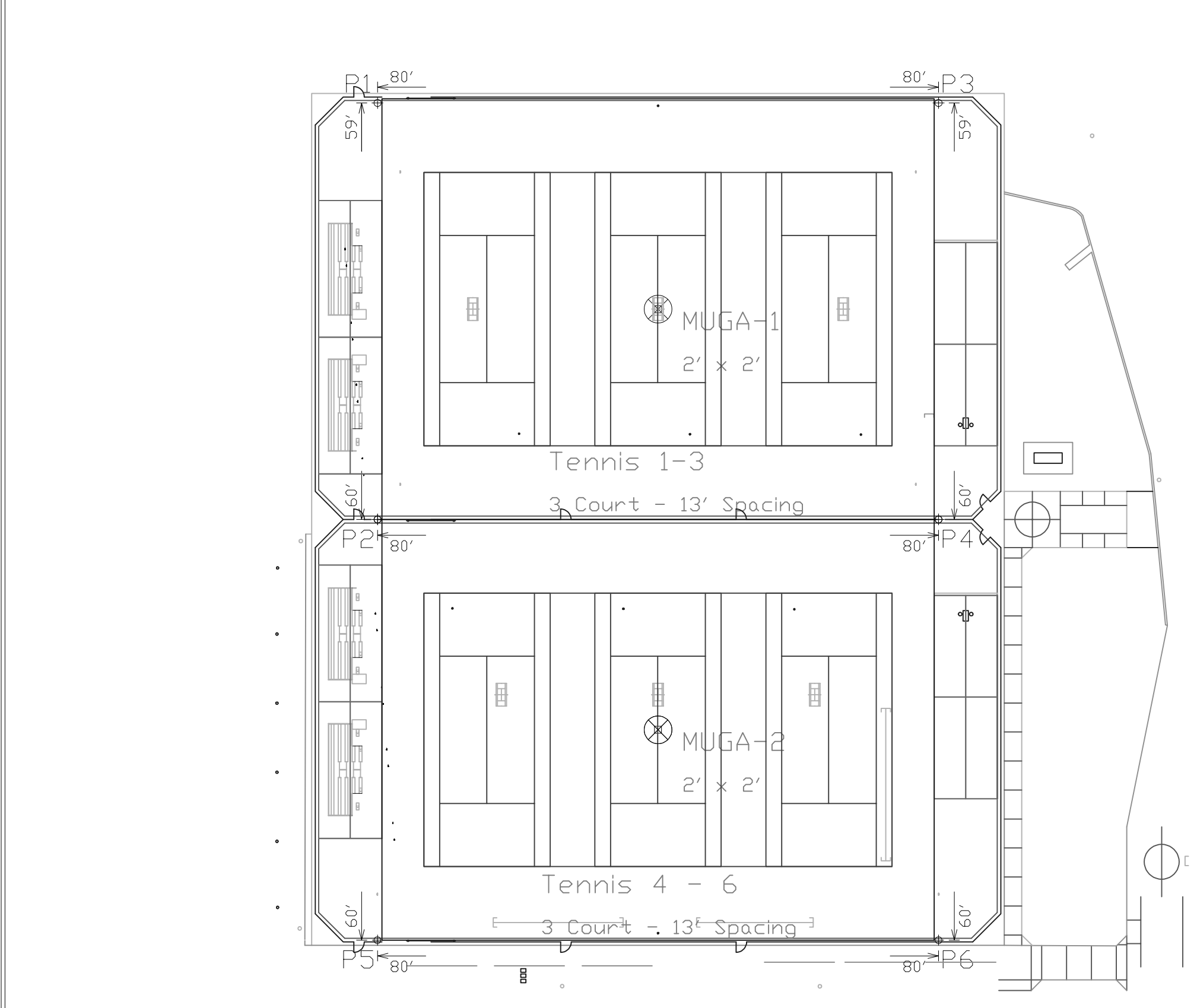
**PRECAST BASE**  
The precast concrete base conforms to California Code of Regulations, T.24, part 2, Chapter 19A and to Building Code Requirements for Reinforced Concrete, ACI 318-14.  
See detail "A" on "MS" sheet(s) for material strengths and specifications.

**TESTING AND INSPECTION**  
Testing and Inspection in accordance with Title 24, Part 1 & Part 2 of project OSA 103 form.  
**EXCAVATIONS & FOUNDATIONS:**  
Inspection of cast-in-place deep foundations - 1705A.8 & Table 1705A.8  
**CONCRETE MATERIALS:** 1910A.1  
Portland cement - 1910A.1  
Concrete aggregate - 1903A.5  
Reinforcing bars - 1910A.2 & DSA IR 17-10  
Prestressing steel and enclosures - 1910A.3  
**CONCRETE QUALITY:**  
Proportions of concrete - Reference ACI 318 Section 26.4.3.1 Through 26.4.4.1  
Strength tests of concrete - 1950A.115 and ACI 318 Section 26.12 & 26.5.3.2  
**CONCRETE INSPECTION:** 1705A.3 & Table 1705A.3  
Job size - Reference ACI 318 Section 26.5.1.26.5.2.1(a) & (b), 26.6.1.2(a), 26.11.1.1(a).  
Batch Plant Inspection Not Required - 1705A.3.3.2  
Prestressed concrete - 1704A.2.2, 1705A.3.4  
**STEEL MATERIALS:**  
Structural steel - 2205A.1 & 2205A.1  
Cold formed steel - 2210A.1  
Identification - 2205A.1  
High strength bolt identification - table 1705A.2.1 & DSA IR 17-9  
**STEEL QUALITY:**  
Tests of structural steel & cold formed steel - 2205A.1  
Tests of high strength bolts, nuts, & washers - 2210A.1 & DSA IR 17-8  
**STRUCTURAL STEEL INSPECTIONS:** Table 1705A.2.1  
Shear Reinforcement - 1704A.2  
Welding - 1705A.2.5, DSA IR 17-3 and AWS D1.1  
High strength bolt installation - Table 1705A.2.1 & DSA IR 17-9  
(Including Skidmore-Wilhelm bolt tension pre-installation verification testing)  
(NOTE: ALL WELDING SHALL BE CONTINUOUSLY INSPECTED BY AN AWS CWI CERTIFIED INSPECTOR APPROVED BY DSA)

These plans are for construction approval. An application number and approval of these drawings by the Division of The State Architect of California must be secured to build from these plans.

**INDEX OF SHEETS**

MT	NOTES, FOUNDATION DETAIL
MS1	60B POLE DETAILS
MS2	60D POLE DETAILS
MD1	ATTACHMENT DETAILS
MD2	ATTACHMENT DETAILS
MD3	ATTACHMENT DETAILS



**POLE FOUNDATION SCHEDULE**

POLE TYPE - # OF FIXTURES (MAX) (LESS-LIGHT STRUCTURE)	MARK (SEE POLE ORIENTATION PLAN)	WIND OR SEISMIC FORCE (INCLUDES OVERSTRENGTH FACTOR=1.5)	ASD LEVEL FORCES (MAX)			C.I.P. DEEP FOUNDATION		PRECAST BASE EMBEDMENT FEET		
			MOMENT (M) FT-LBS*	SHEAR (V) LBS	VERTICAL (P) LBS**	DIAMETER INCHES	EMBEDMENT FEET (SEE NOTE BELOW)		VERTICAL REINFORCING (ASTM A615 OR 60)	
LSS60B-5	P1,P3,P5,P6	SEISMIC	56,400	1,399	2,527	36"	10'-0"	8-#8	#4 @ 8" O.C. TOP 9'-0" & #4 @ 12" O.C. BELOW	12'-0"
		WIND	45,700	1,077	1,433					
LSS60D-9	P2,P4	SEISMIC	82,700	1,924	3,328	36"	12'-0"	8-#8	#4 @ 8" O.C. TOP 9'-0" & #4 @ 12" O.C. BELOW	14'-0"
		WIND	65,800	1,485	2,150					

\*Moment (M) computed below grade at Shear (V) = 0.  
\*\*Vertical (P) load includes steel pole, light fixtures, and attachments. Vertical (P) load for wind is the dressed pole weight for erection purposes. Vertical (P) load for seismic also includes weight of precast base above groundline. Reference Detail "A" on MS Sheet(s) for precast base weight.  
PNSI Embedment to be determined in the field by the Geotechnical Engineer of Record

Imperial Valley College Tennis FIELD LIGHTING Imperial, CA

**Musco Lighting**  
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REINFORCED FOUNDATION DETAIL  
N.T.S. DSA-A2-CASPNB-A

PROJECT NO: 202633  
DATE: 06/24/2022  
DRAWN BY: H. Sobers  
DRAWING NO: MT1  
1 OF 6

**APPROVALS**

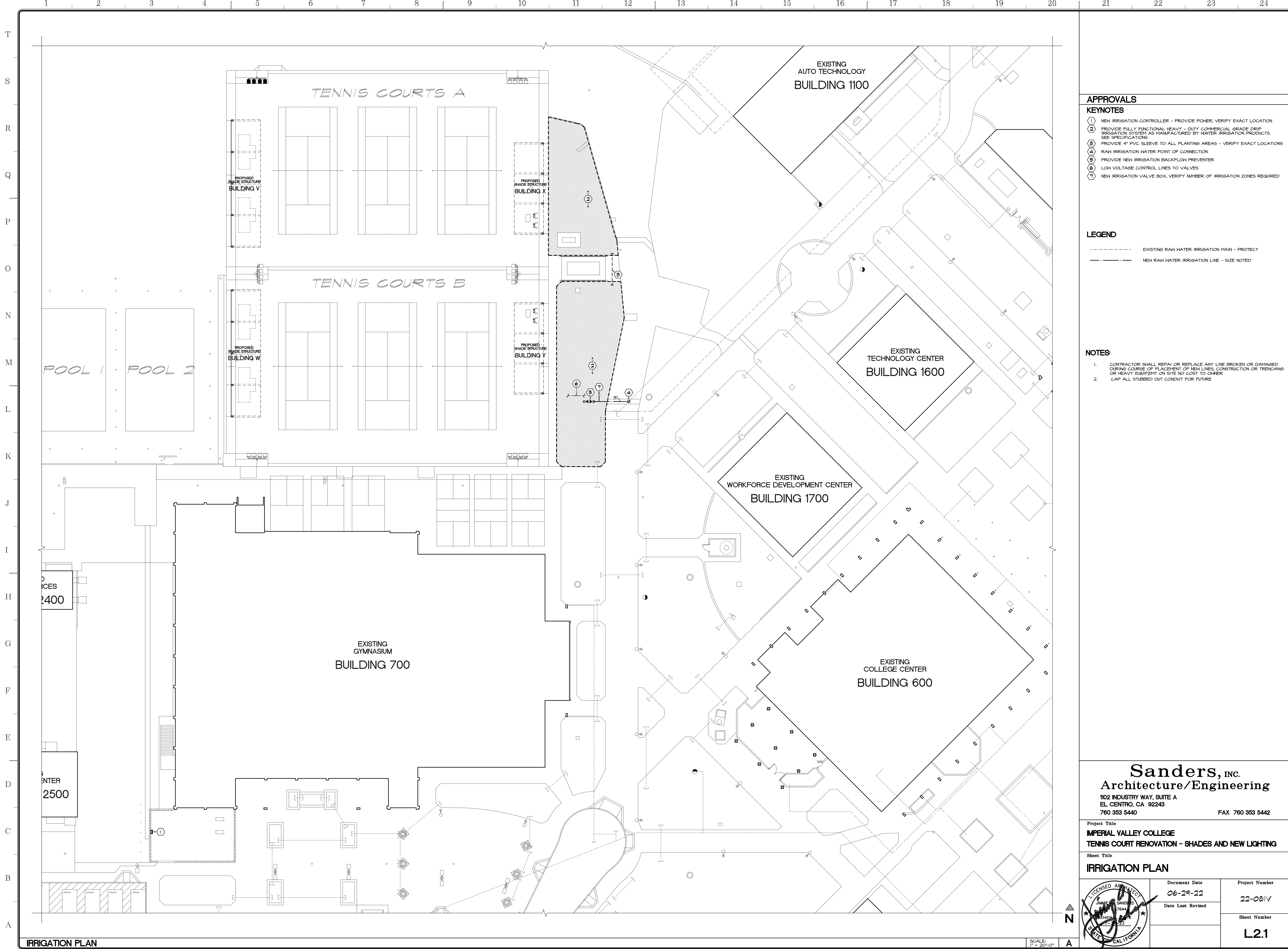
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Project Title  
**IMPERIAL VALLEY COLLEGE  
TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

Sheet Title  
**NOTES, FOUNDATION DETAIL**

	Document Date	Project Number
	Date Last Revised	Sheet Number
	06-24-22	22-081V
		<b>MT1</b>





**APPROVALS**

**KEYNOTES**

- ① NEW IRRIGATION CONTROLLER - PROVIDE POWER, VERIFY EXACT LOCATION
- ② PROVIDE FULLY FUNCTIONAL HEAVY - DUTY COMMERCIAL GRADE DRIP IRRIGATION SYSTEM AS MANUFACTURED BY HUNTER IRRIGATION PRODUCTS - SEE SPECIFICATIONS
- ③ PROVIDE 4" PVC SLEEVE TO ALL PLANTING AREAS - VERIFY EXACT LOCATIONS
- ④ RAW IRRIGATION WATER POINT OF CONNECTION
- ⑤ PROVIDE NEW IRRIGATION BACKFLOW PREVENTER
- ⑥ LOW VOLTAGE CONTROL LINES TO VALVES
- ⑦ NEW IRRIGATION VALVE BOX, VERIFY NUMBER OF IRRIGATION ZONES REQUIRED

**LEGEND**

- - - - - EXISTING RAW WATER IRRIGATION MAIN - PROTECT
- NEW RAW WATER IRRIGATION LINE - SIZE NOTED

**NOTES:**

- 1. CONTRACTOR SHALL REPAIR OR REPLACE ANY LINE BROKEN OR DAMAGED DURING COURSE OF PLACEMENT OF NEW LINES, CONSTRUCTION OR TRENCHING OR HEAVY EQUIPMENT ON SITE NO COST TO OWNER.
- 2. CAP ALL STUBBED OUT CONDUIT FOR FUTURE.

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Project Title  
**IMPERIAL VALLEY COLLEGE  
 TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

Sheet Title  
**IRRIGATION PLAN**

	Document Date 06-29-22	Project Number 22-081V
	Date Last Revised	Sheet Number L2.1

TENNIS COURTS A

TENNIS COURTS B

BUILDING

PROPOSED SHADE STRUCTURE BUILDING X

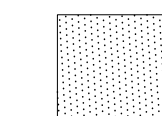
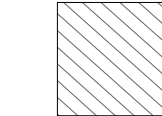
PROPOSED SHADE STRUCTURE BUILDING Y

EXISTING WORKFORCE DEVELOPMENT CENTER BUILDING 1700

APPROVALS

KEYNOTES

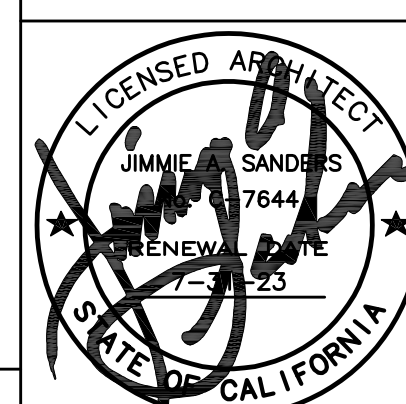
LEGEND

-  XEROSCAPE  
PROVIDE DECOMPOSED GRANITE  
DECOMPOSED GRANITE (DG) - "DESERT GOLD" 4" THICK  
MOISTURE CONDITION: COMPACT TO 95% MAX DENSITY
-  XEROSCAPE  
PROVIDE DECOMPOSED GRANITE  
DECOMPOSED GRANITE (DG) - "BLOND" 4" THICK  
MOISTURE CONDITION: COMPACT TO 95% MAX DENSITY

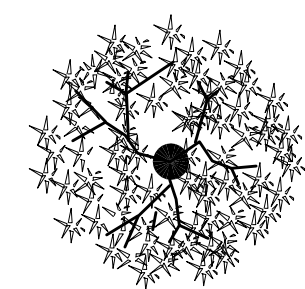
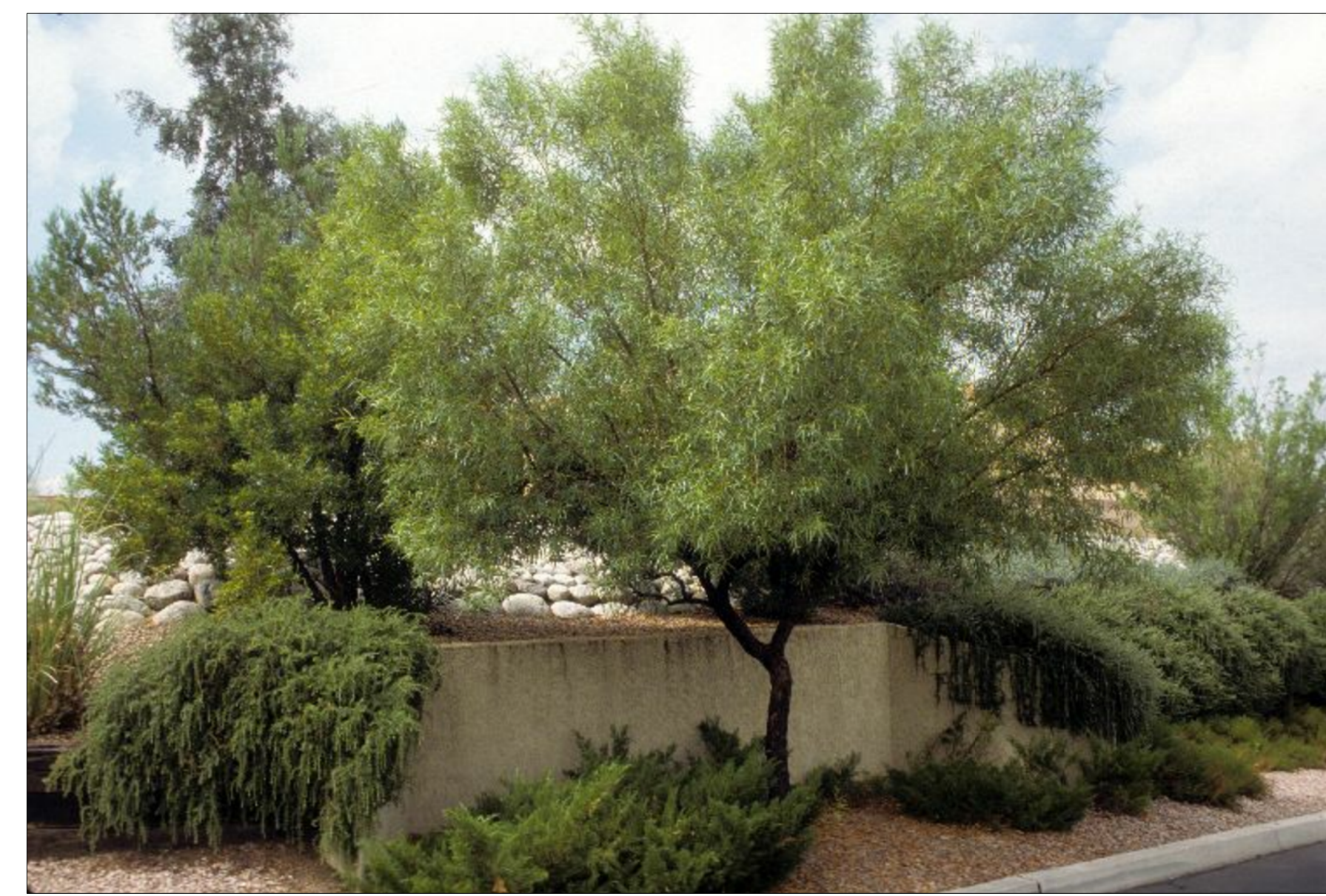
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 EL CENTRO, CA 92243  
 760 353 5440 FAX 760 353 5442

Project Title  
**IMPERIAL VALLEY COLLEGE  
 TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

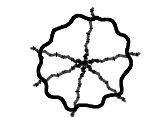
Sheet Title  
**PLANTING PLAN**

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**AFRICAN SUMAC**  
RHS LANCEA | 3 | 24" BOX



**OCOTILLO**  
FOUGIERIA SPLENDENS | 1 | 15 GALLON



**RED YUCCA**  
HESPERALOE PARVIFLORA | 17 | 15 GALLON



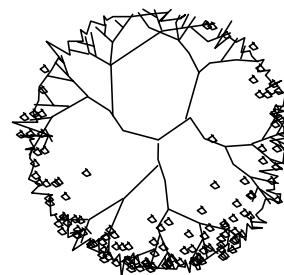
**BOXWOOD BEAUTY SHRUB**  
CARISSA MACROCARPA | 17 | 15 gal.



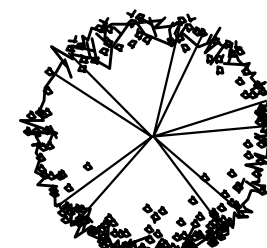
**DWARF BOTTLE BRUSH**  
CALLISTEMON VIGNALIS 'LITTLE JOHN' | 14 | 15 gal.



**DEER GRASS**  
HELENBERGIA RIGENS | 11 | 15 gal.



**OLIVE TREE - FRUITLESS**  
OLEA EUROPAEA 'MOTHER' PILSONI MULTI-TRUNK | 1 | 24" BOX



**PALO VERDE - MULTI-TRUNK HYBRID 'DESERT MUSEUM'**  
PARKINSONIA ACLEATA | 1 | 24" BOX

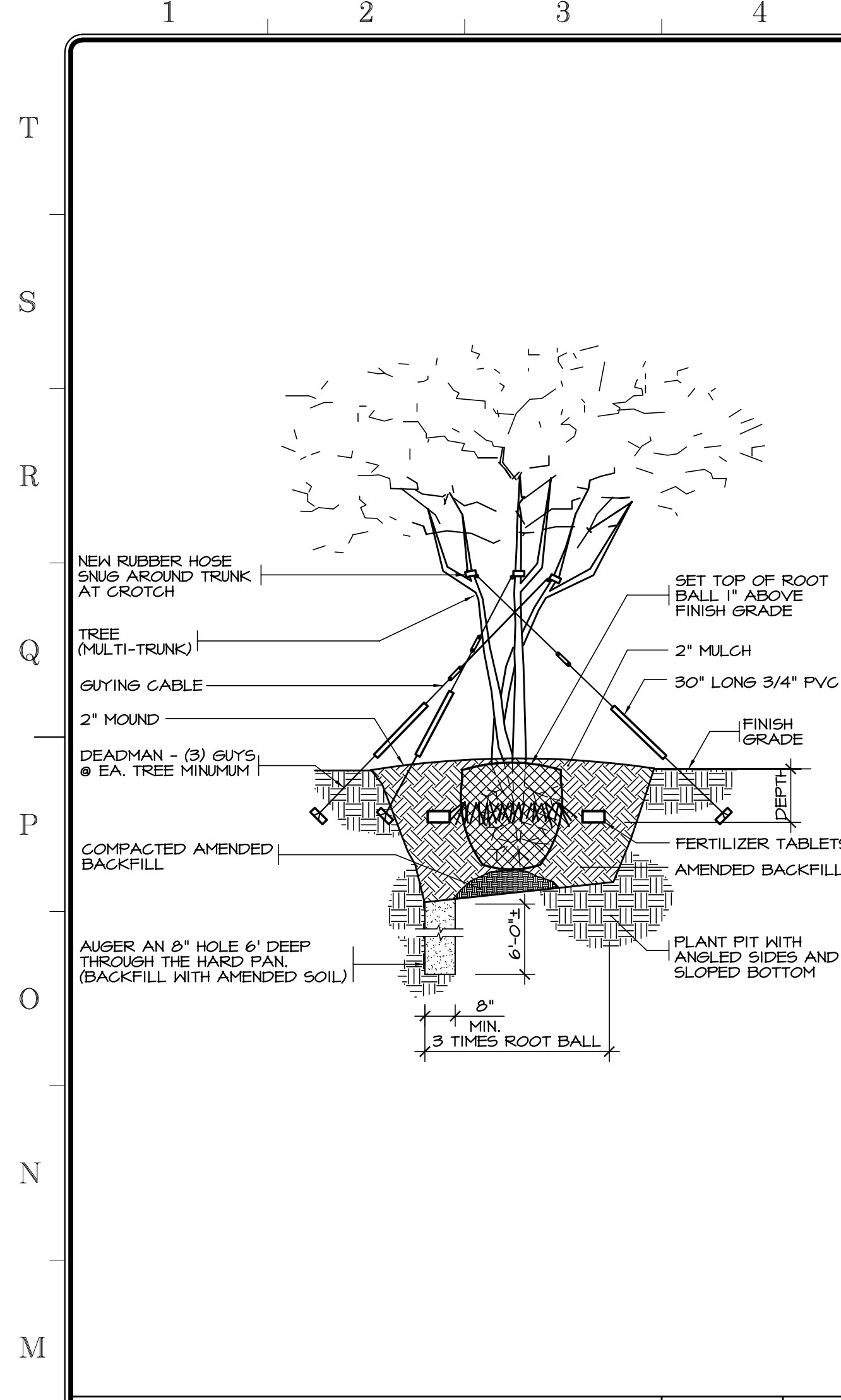
**APPROVALS**

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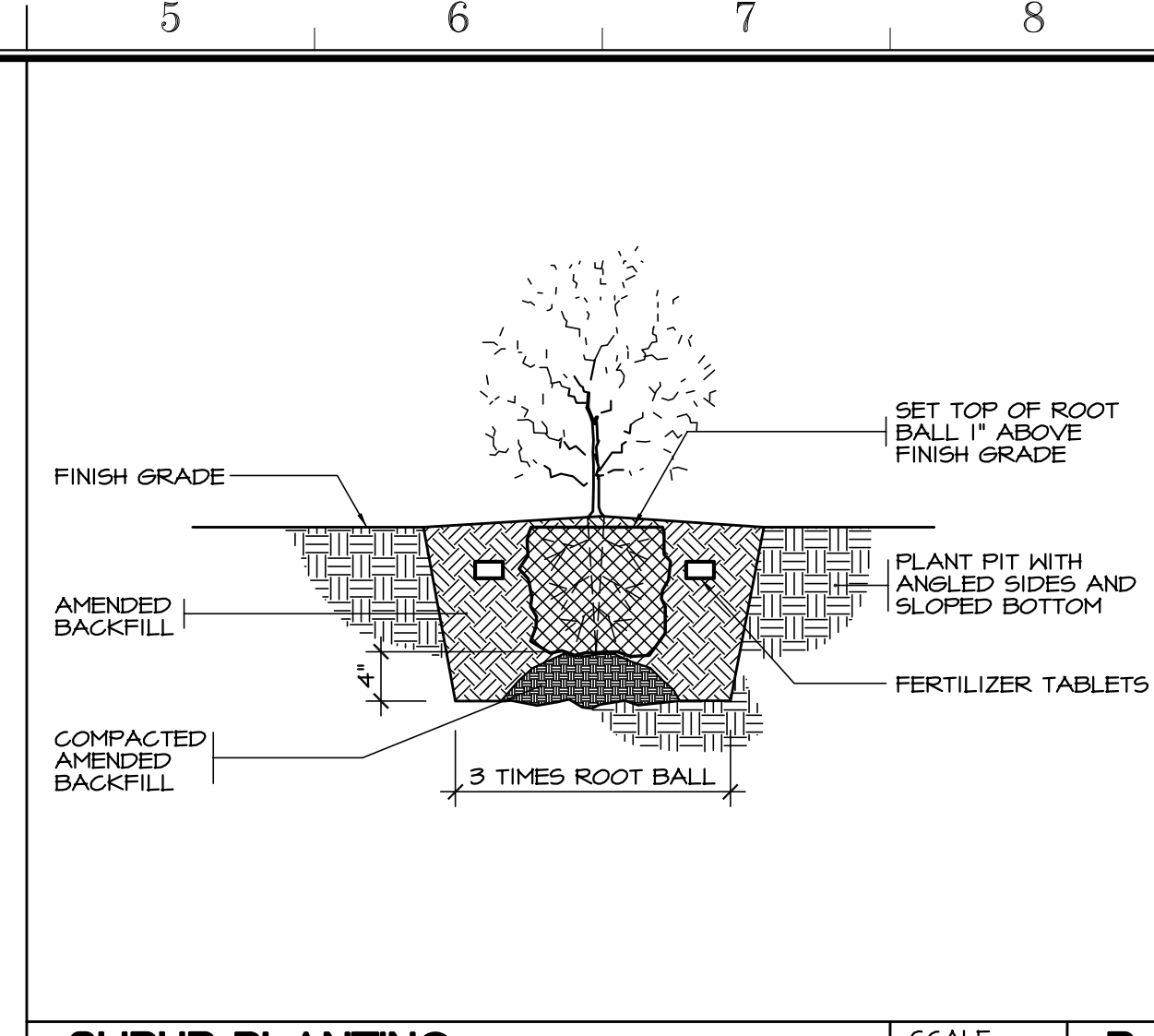
Project Title  
**IMPERIAL VALLEY COLLEGE  
TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

Sheet Title  
**PLANTING IMAGES**

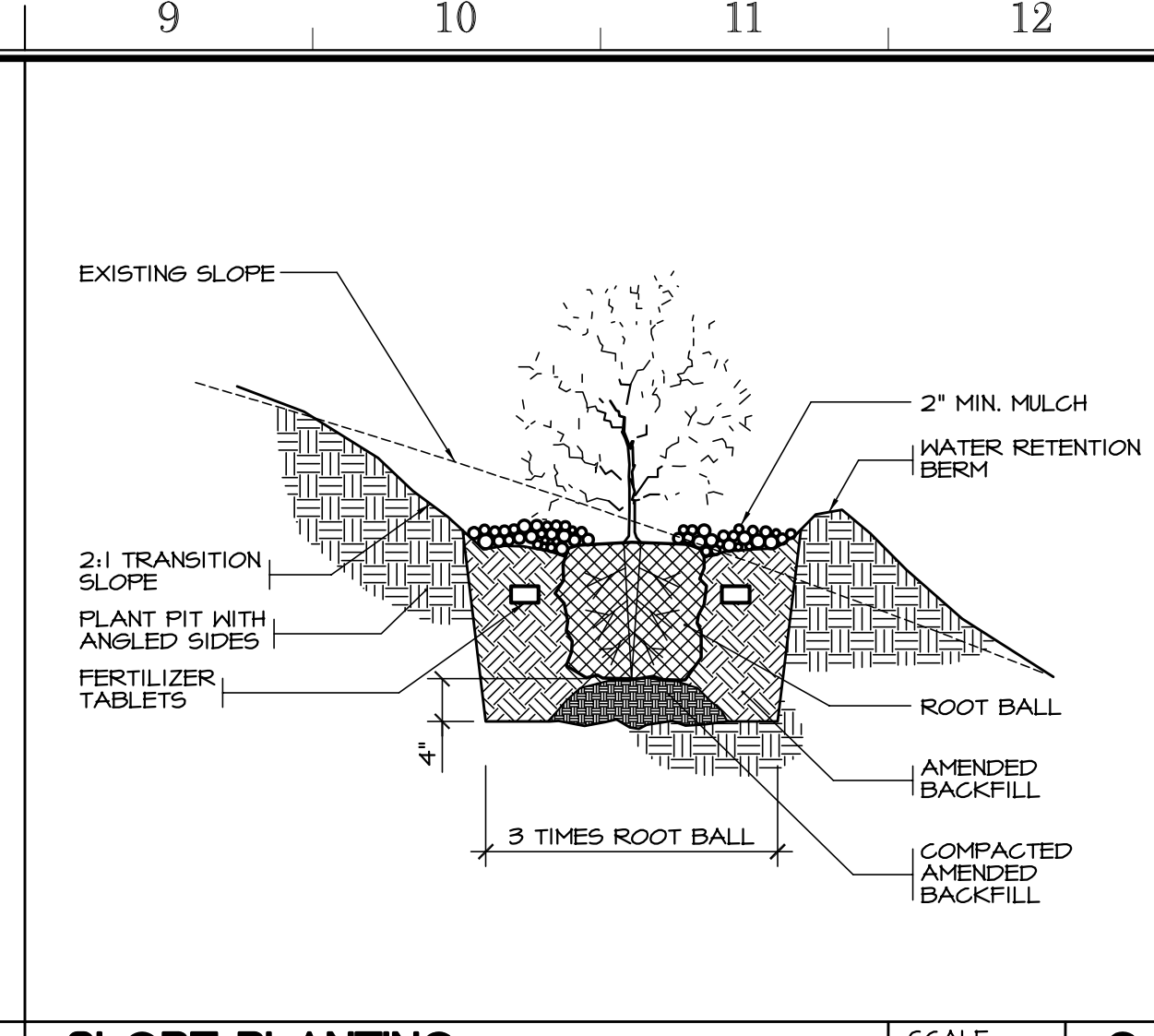
	Document Date 06-29-22	Project Number 22-081V
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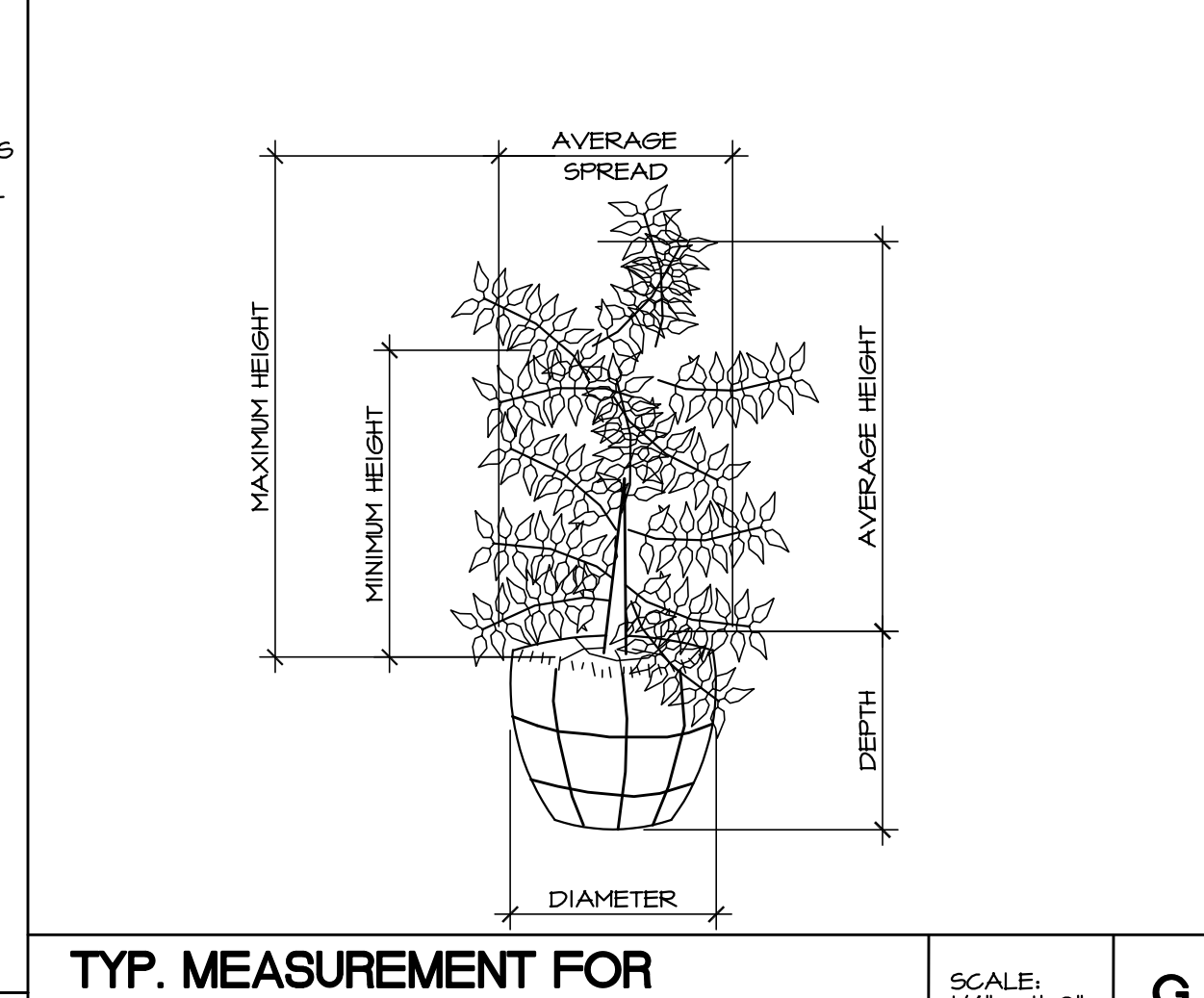
**TREE GUYING AND PLANTING** SCALE: 1/2" = 1'-0" **A**



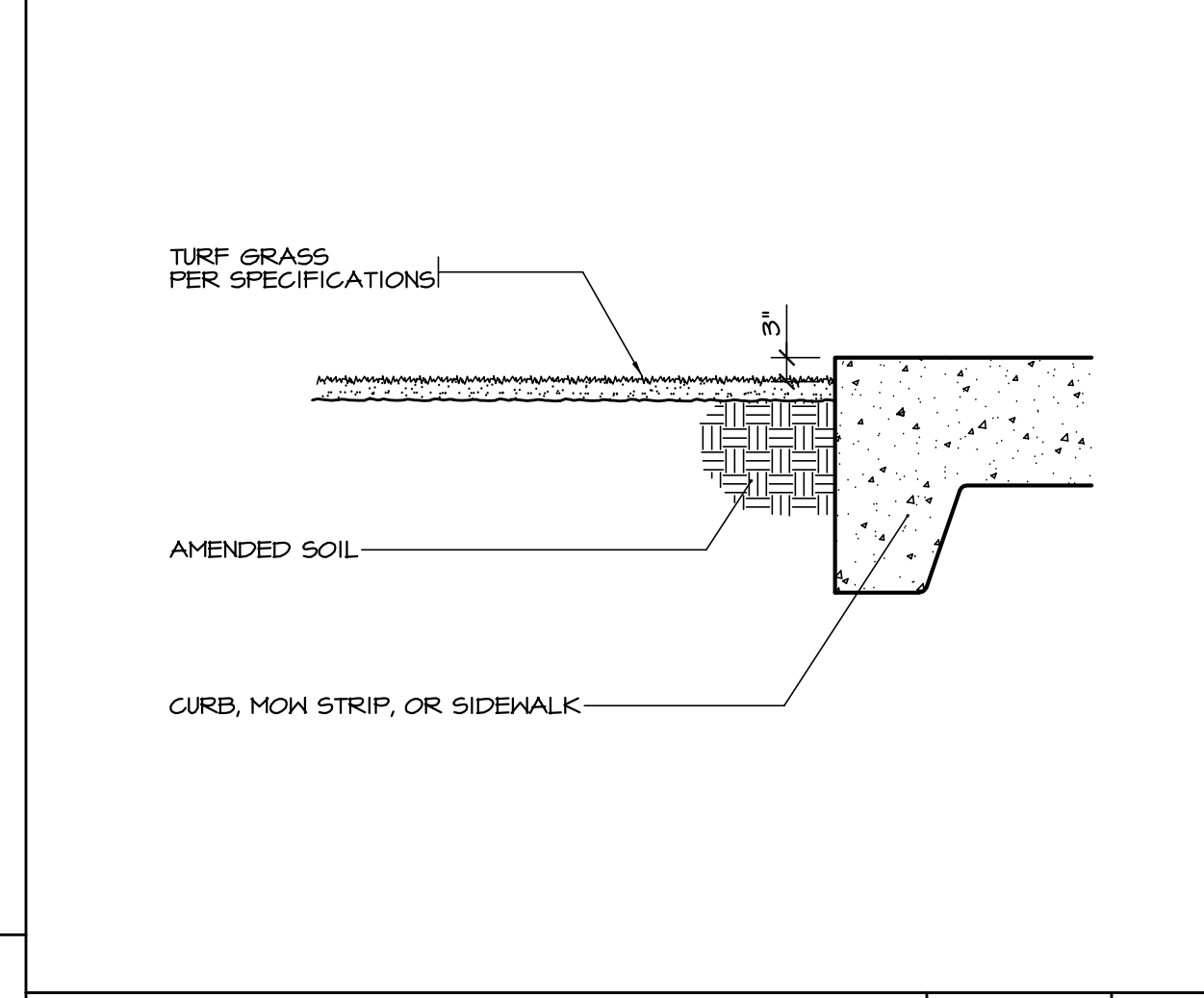
**SHRUB PLANTING** SCALE: 1/2" = 1'-0" **B**



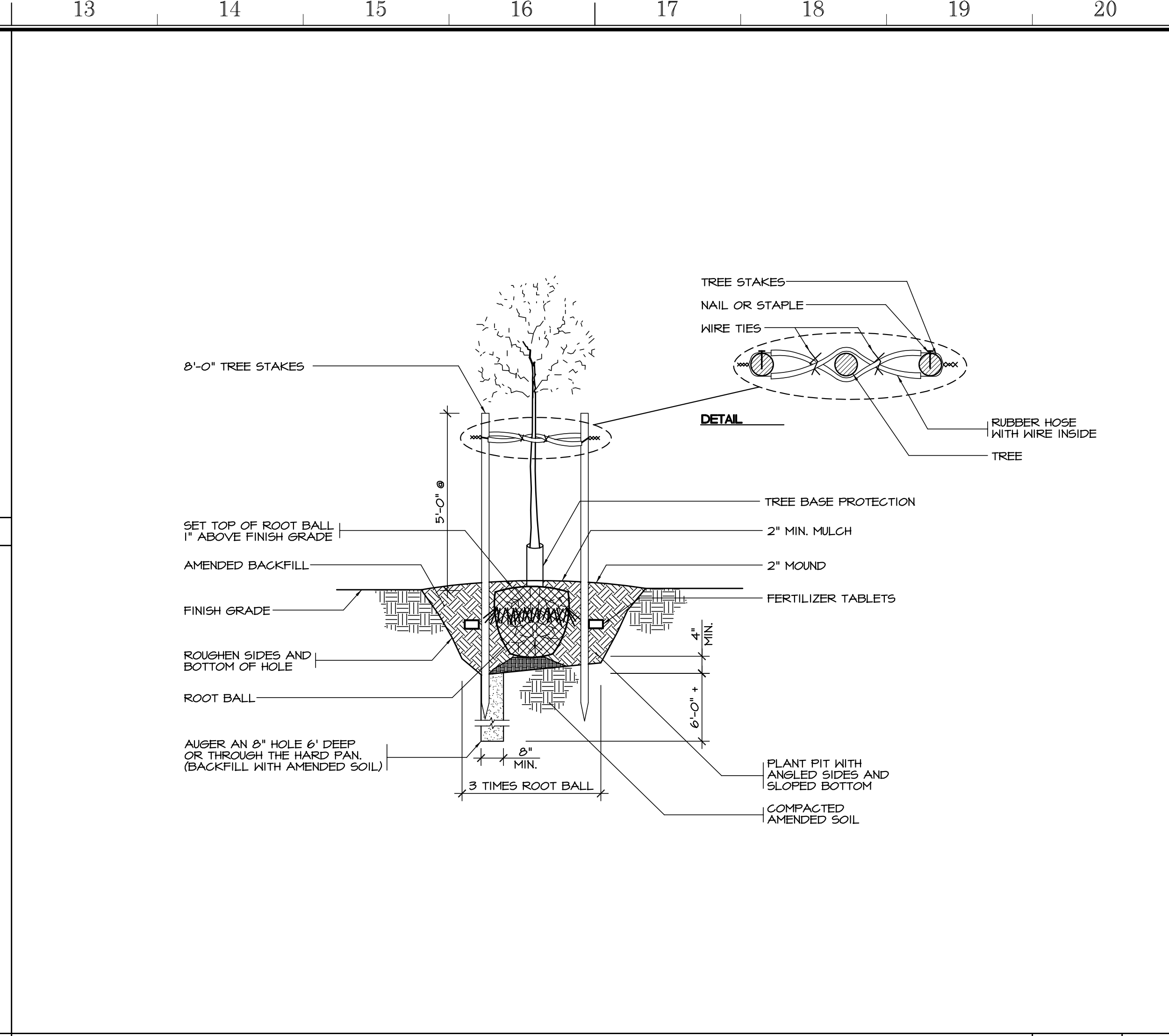
**SLOPE PLANTING** SCALE: 1/2" = 1'-0" **C**



**TYP. MEASUREMENT FOR PROSTRATE TYPE PLANTS** SCALE: 1/4" = 1'-0" **G**

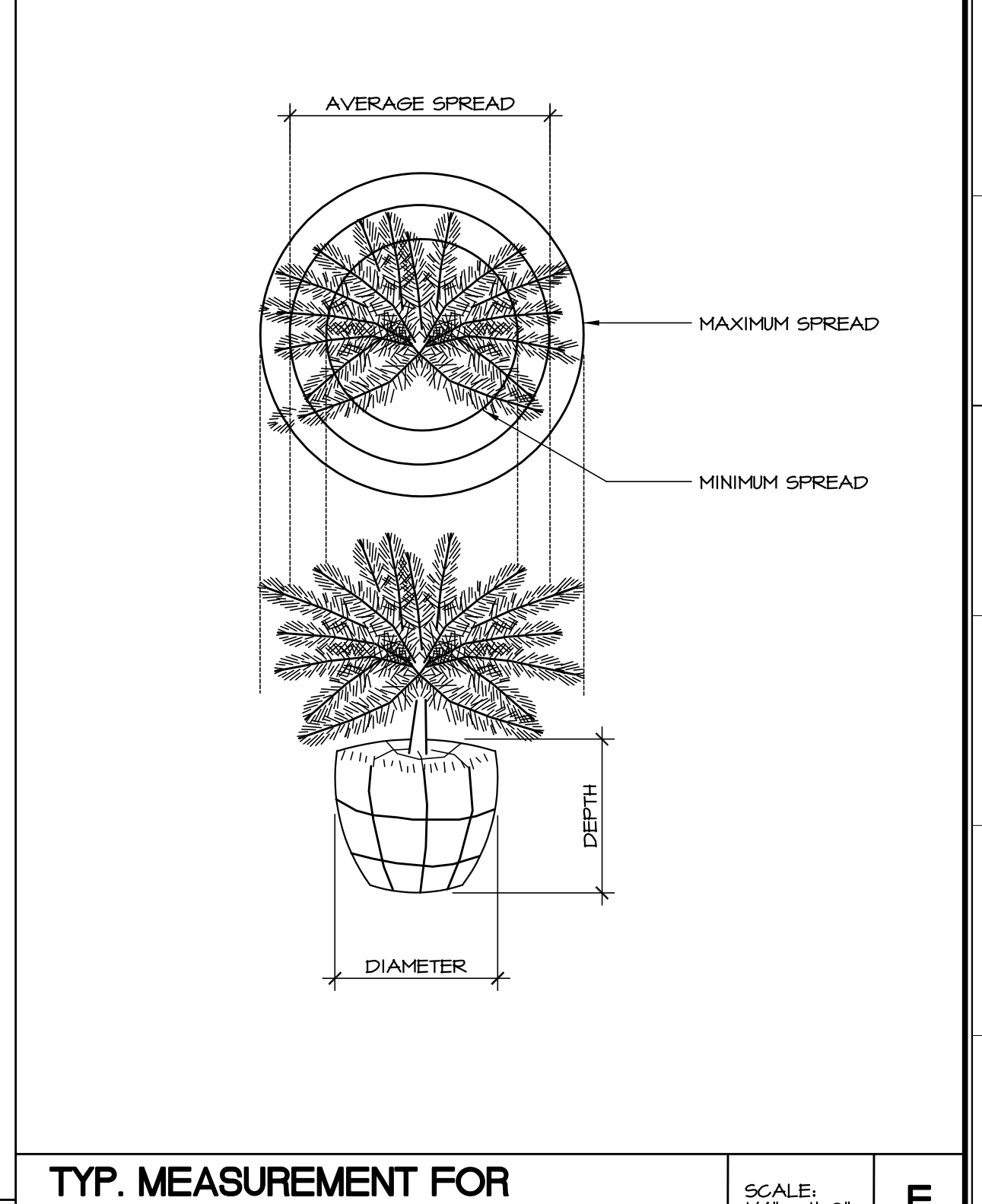


**SOD INSTALLATION** SCALE: 1" = 1'-0" **J**

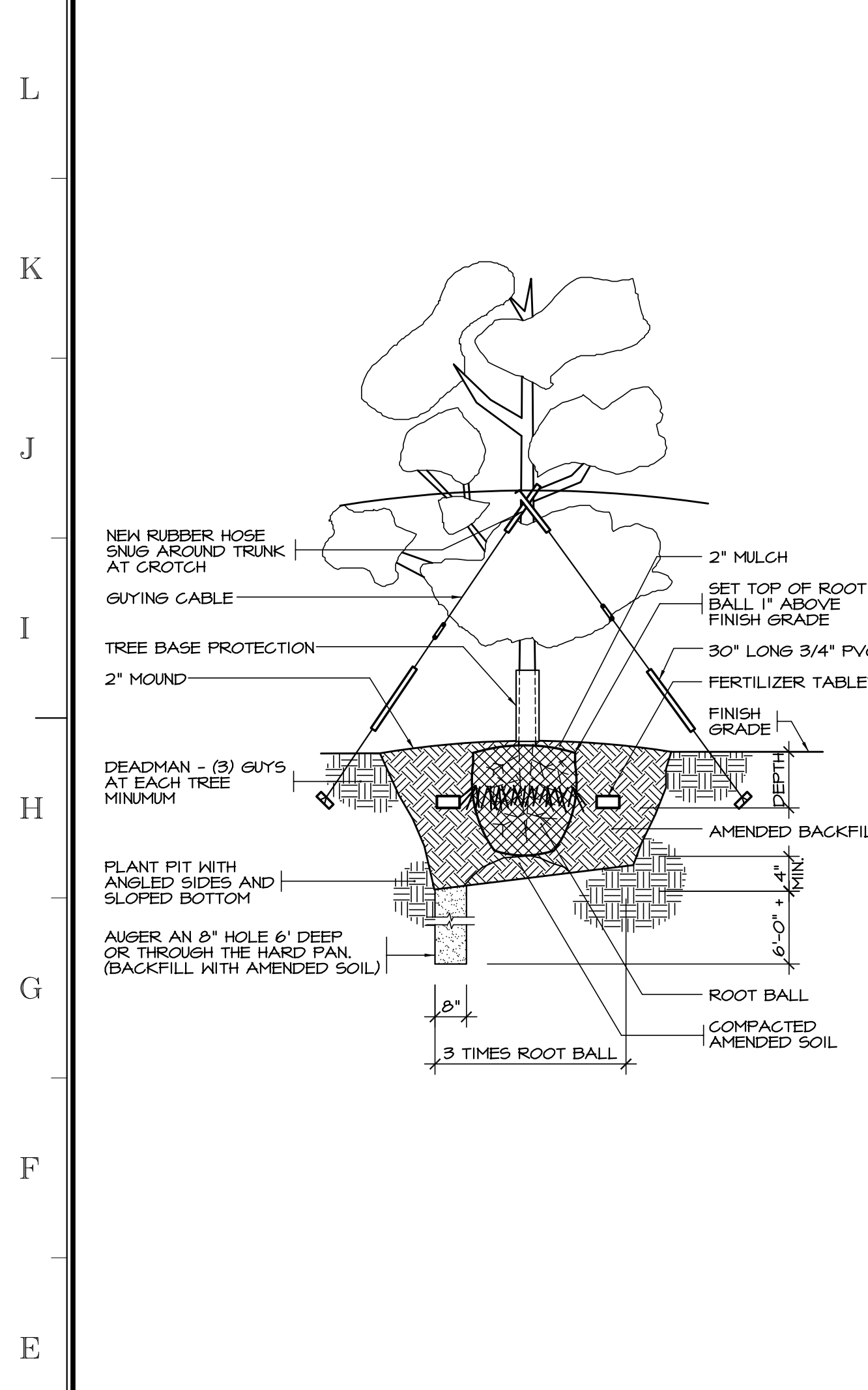


**TREE PLANTING AND STAKING** SCALE: 1/2" = 1'-0" **D**

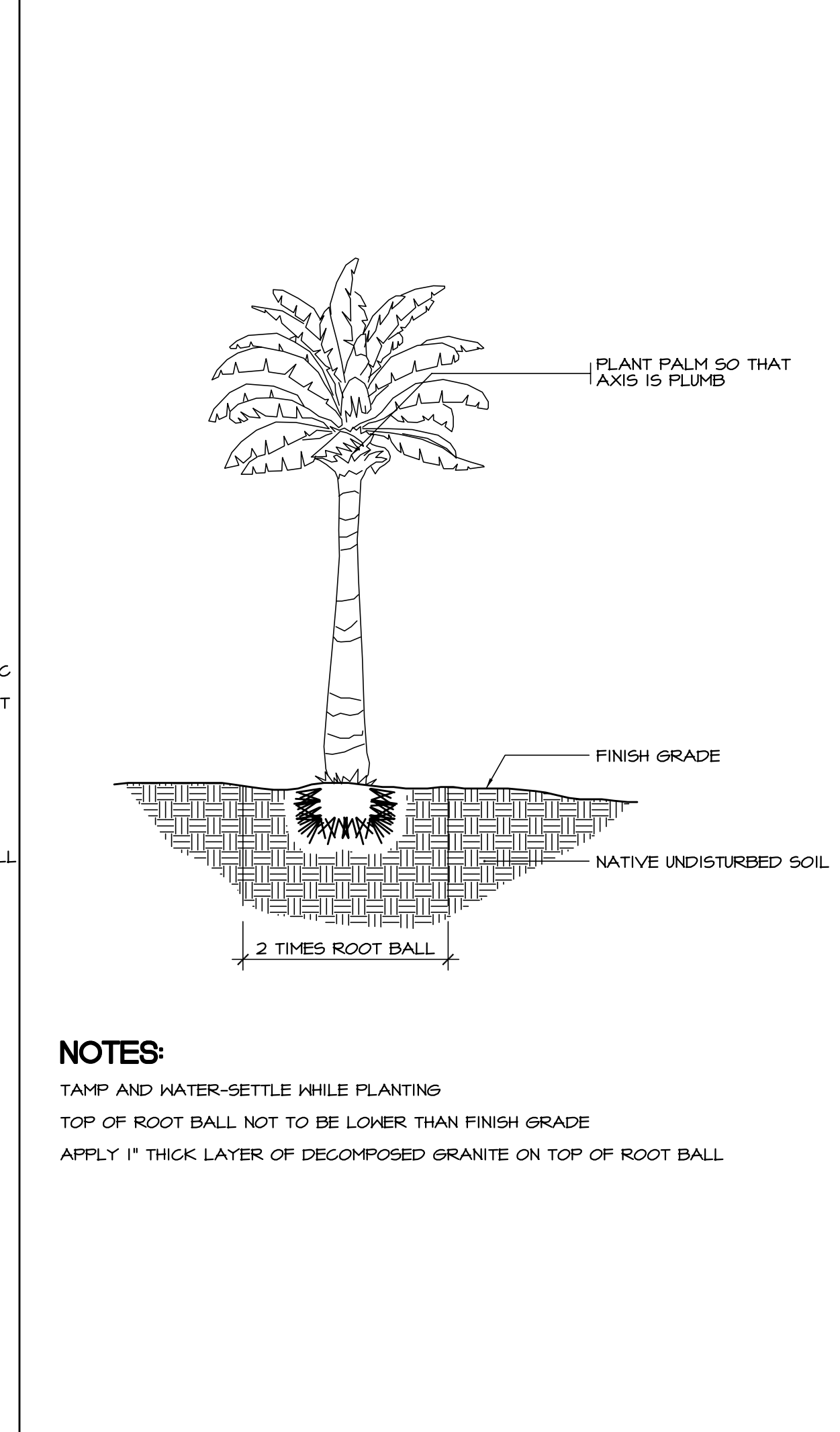
**APPROVALS**



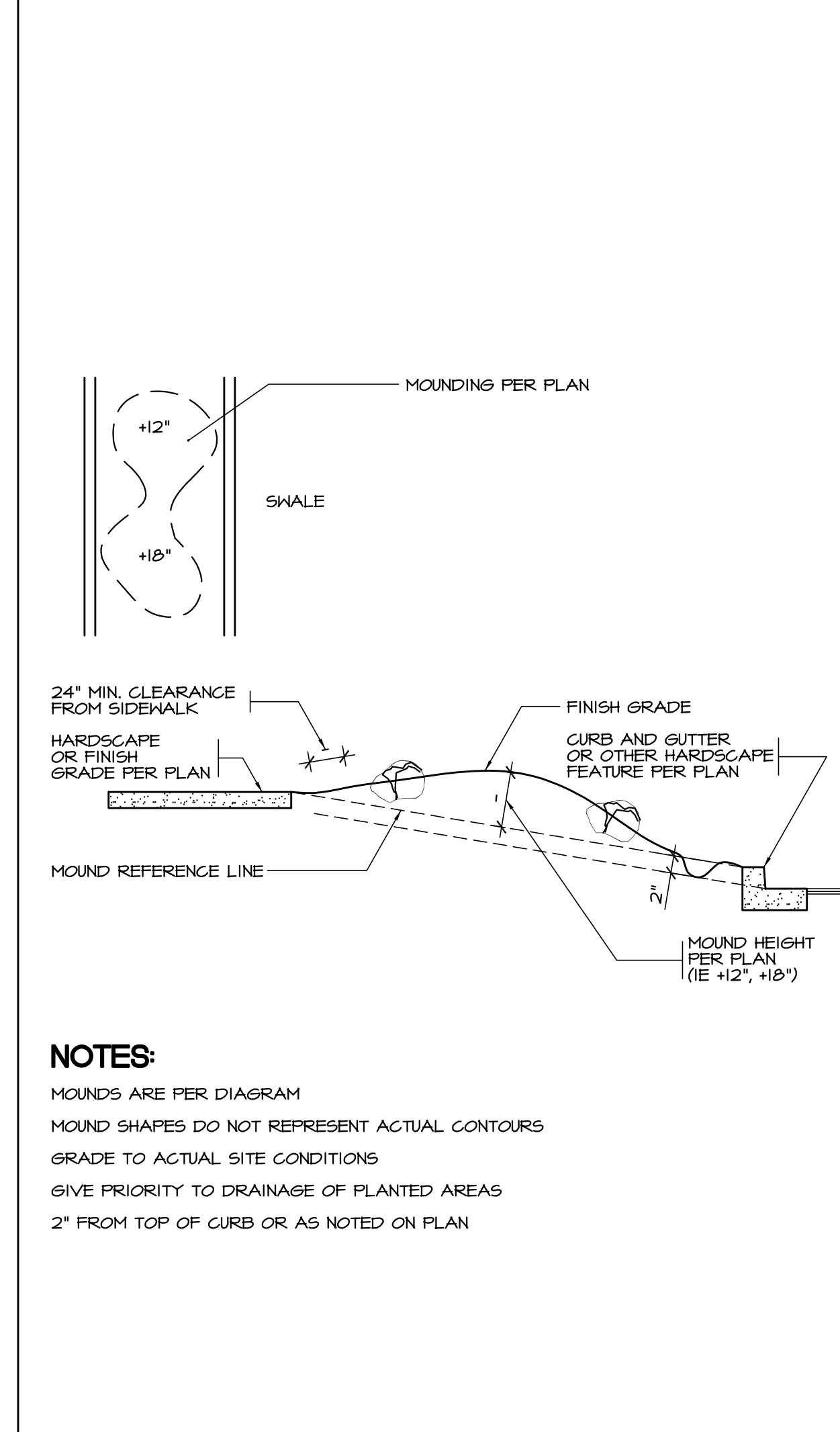
**TYP. MEASUREMENT FOR PROSTRATE TYPE PLANTS** SCALE: 1/4" = 1'-0" **E**



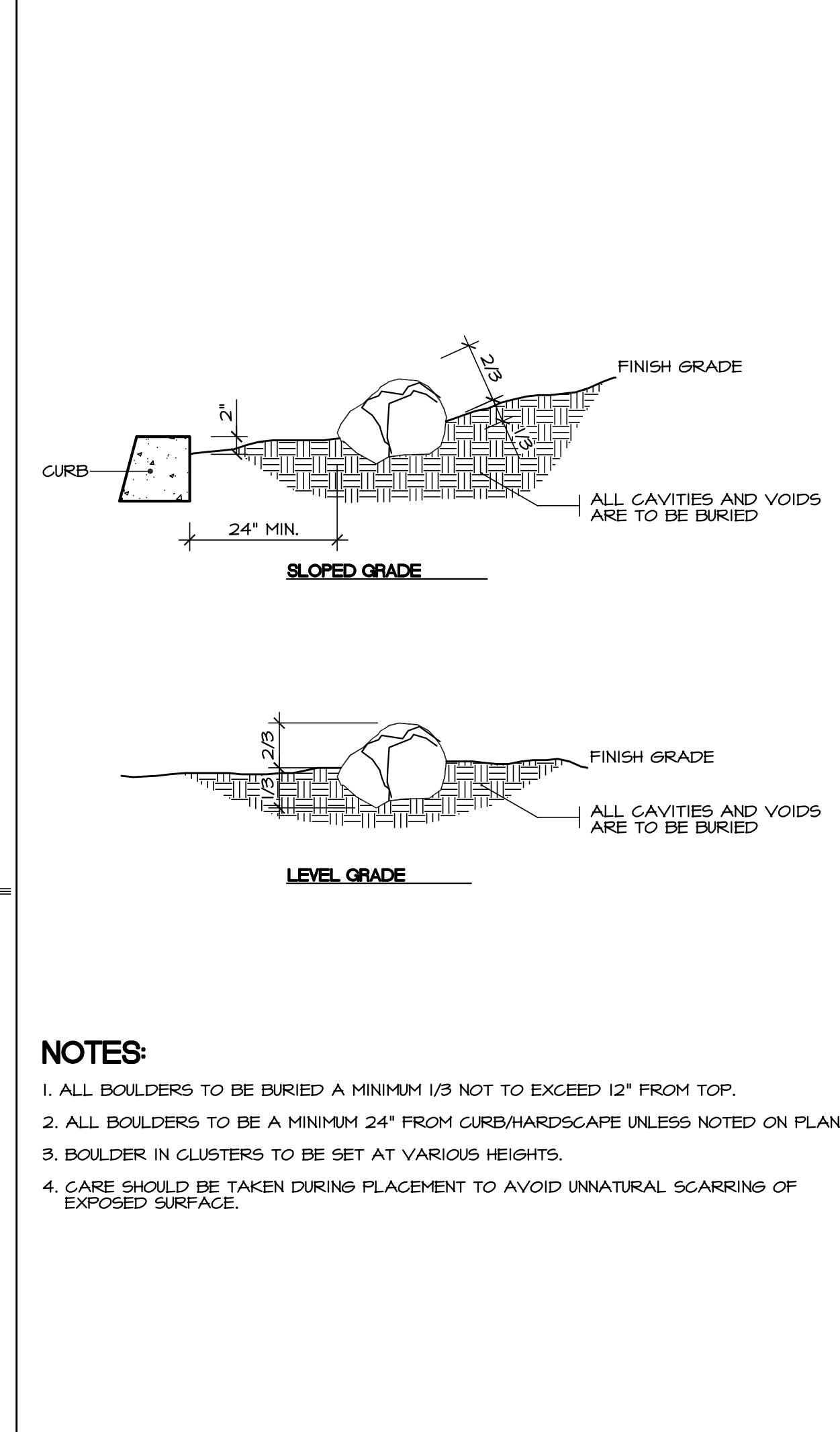
**EVERGREEN / LARGE TREE GUYING** SCALE: 1/2" = 1'-0" **F**



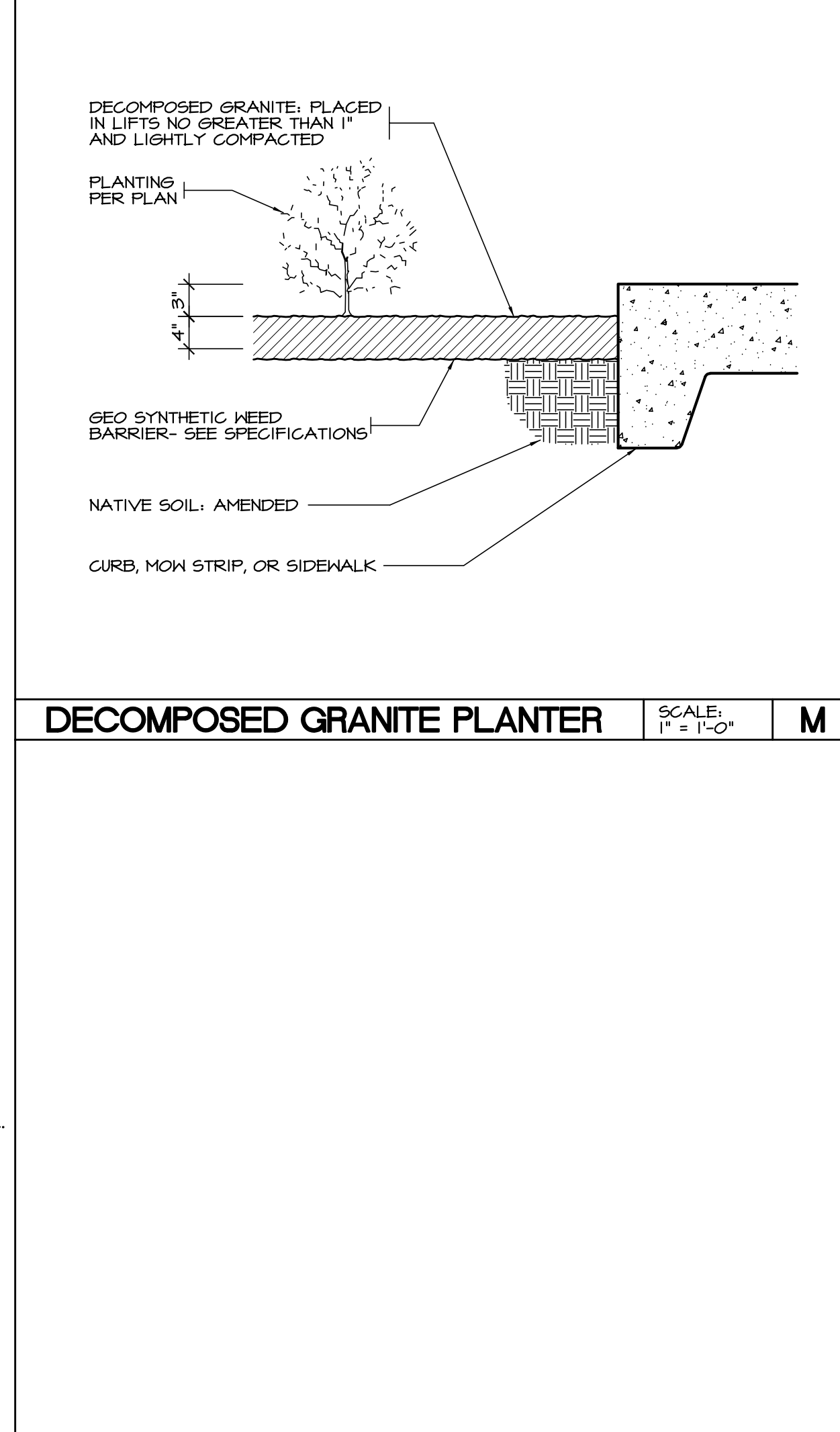
**PALM TREE INSTALLATION** SCALE: N.T.S. **H**



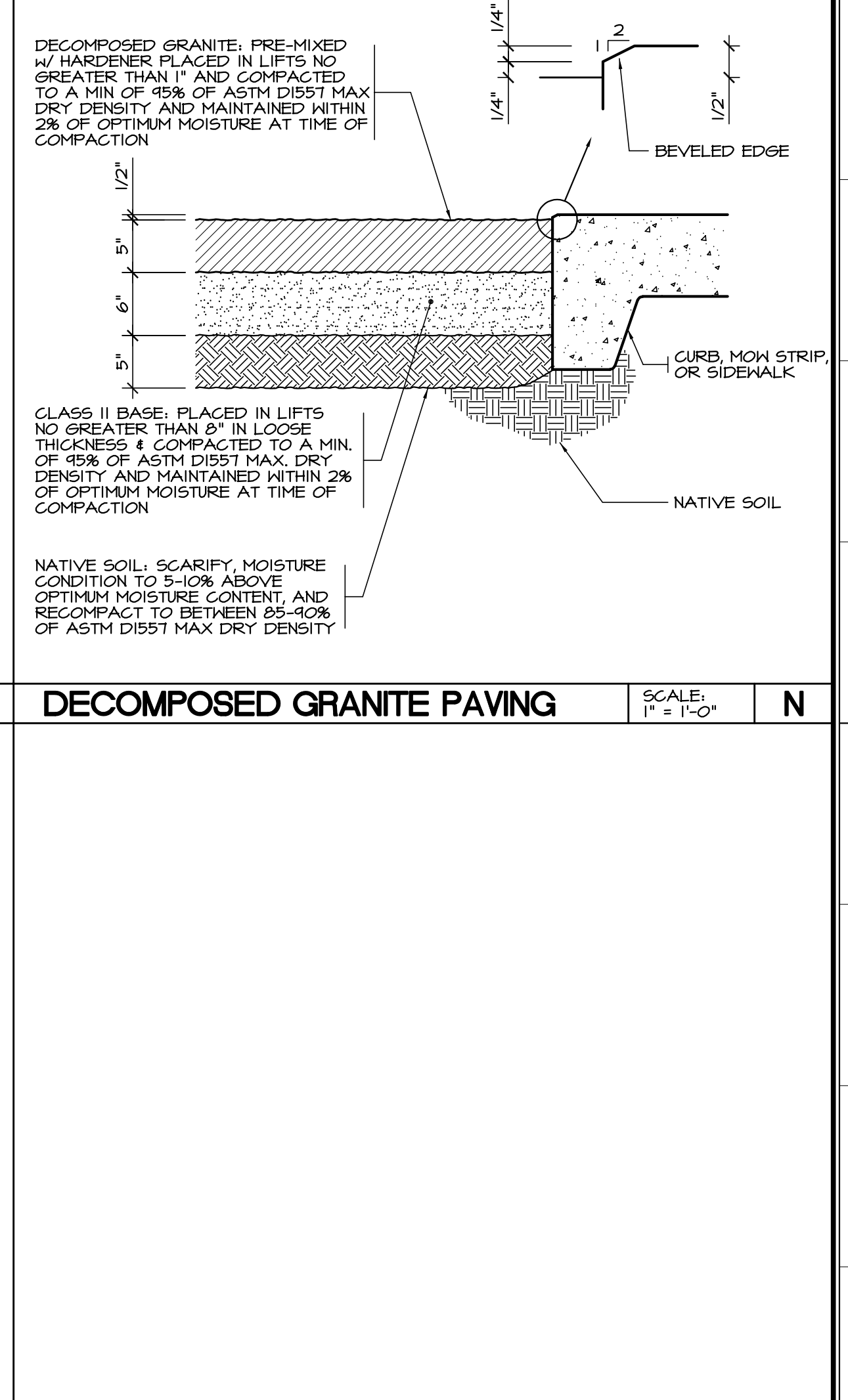
**LANDSCAPE MOUND** SCALE: N.T.S. **K**



**BOULDER INSTALLATION** SCALE: N.T.S. **L**



**DECOMPOSED GRANITE PLANTER** SCALE: 1" = 1'-0" **M**



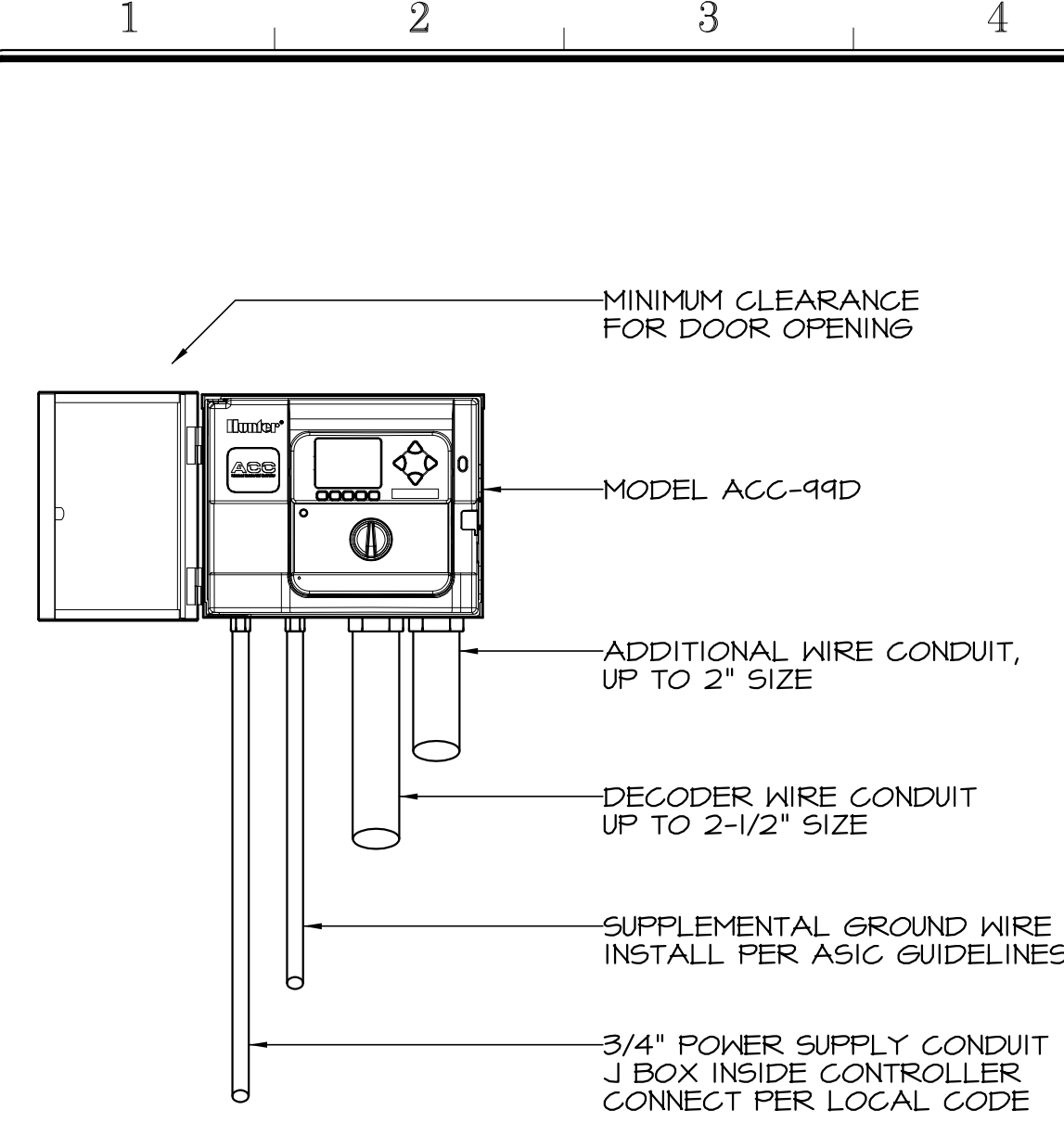
**DECOMPOSED GRANITE PAVING** SCALE: 1" = 1'-0" **N**

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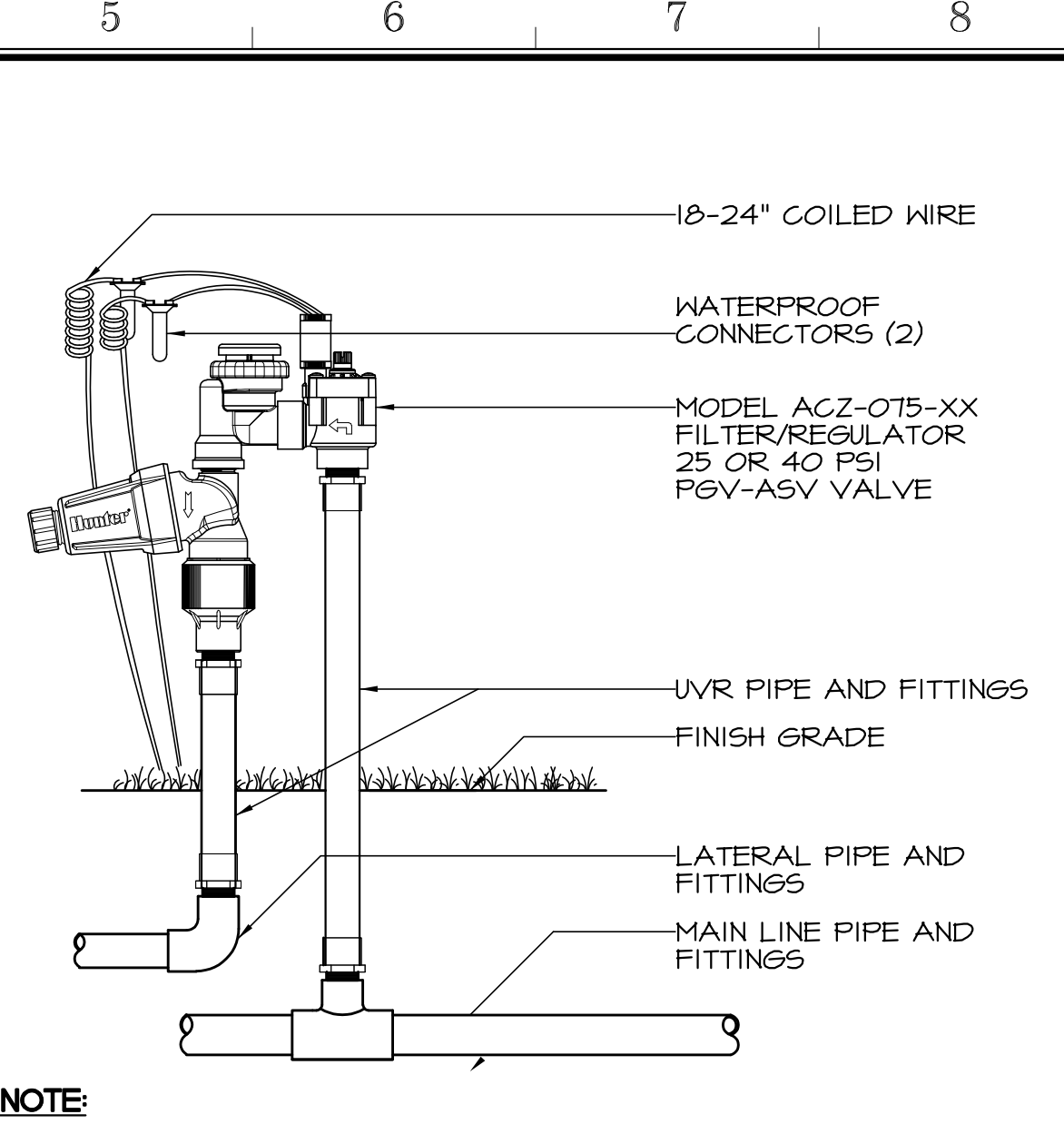
Project Title  
**IMPERIAL VALLEY COLLEGE  
 TENNIS COURT RENOVATION - SHADES AND NEW LIGHTING**

Sheet Title  
**PLANTING DETAILS**

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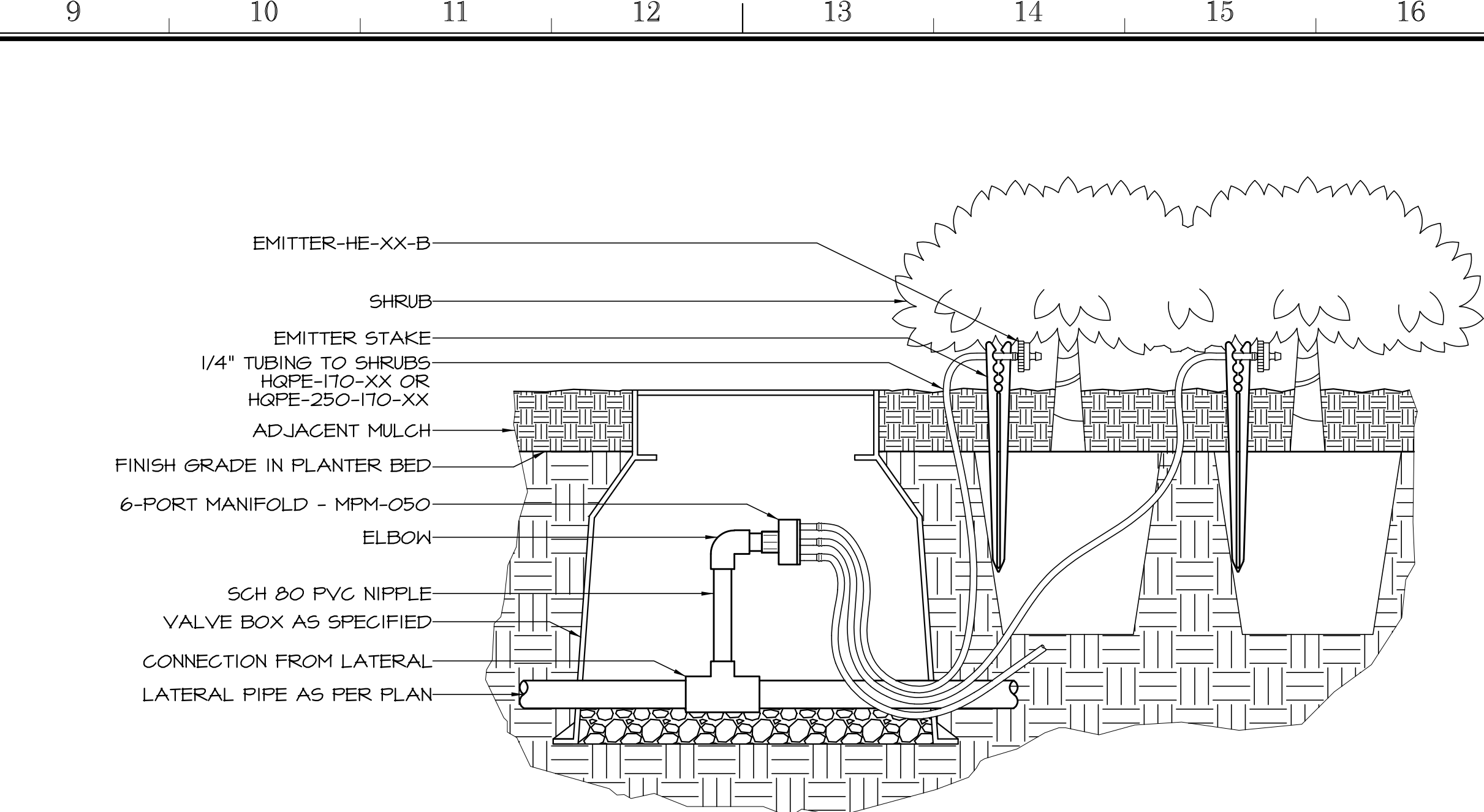


**ACC METAL WALL CONTROLLER** SCALE: N.T.S.

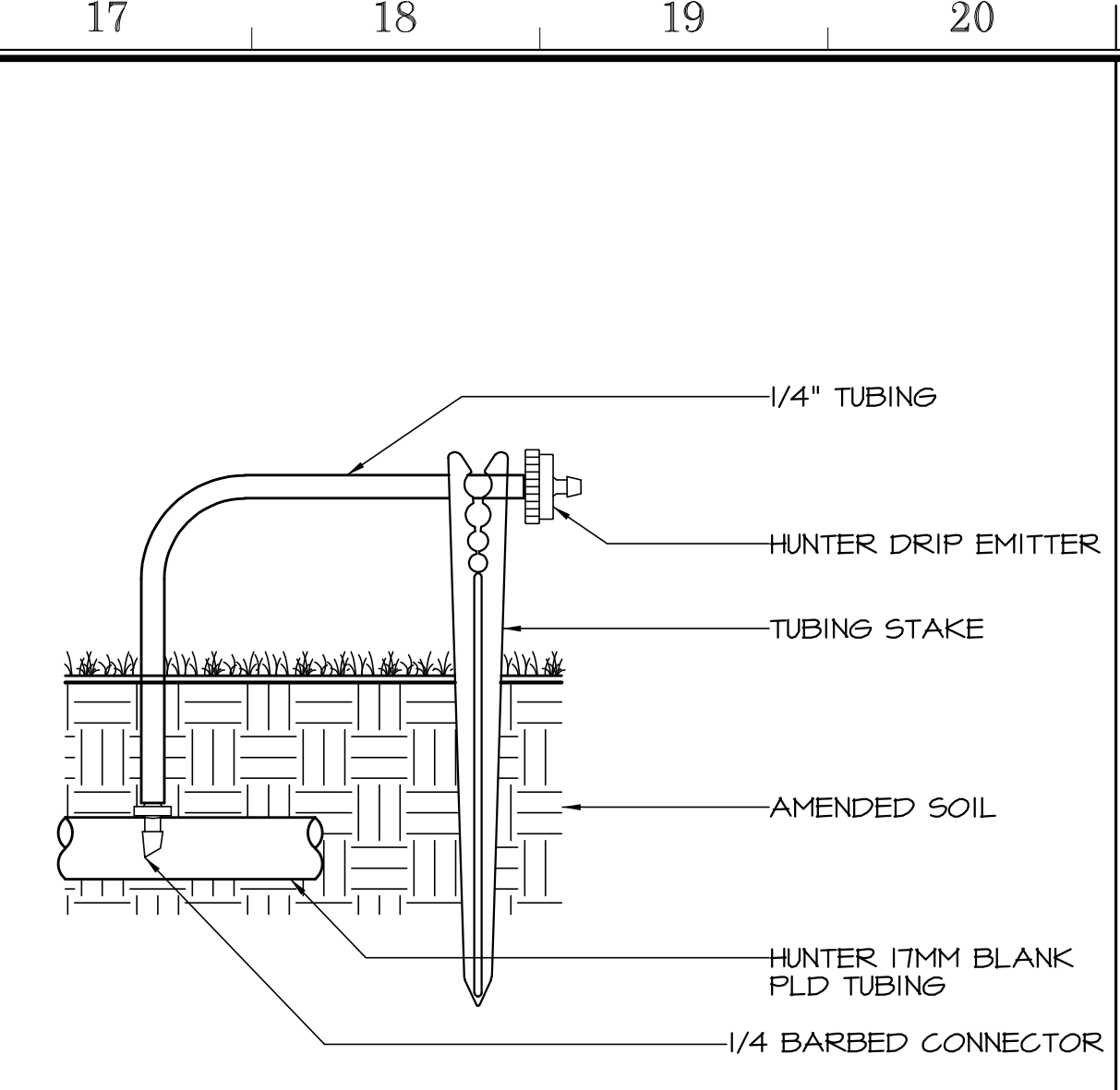


**NOTE:**  
ANTI-SIPHON VALVES SHOULD BE INSTALLED 6-12" ABOVE THE HIGHEST SPRINKLER HEAD WITHIN THE ZONE, OR, ACCORDING TO LOCAL CODE

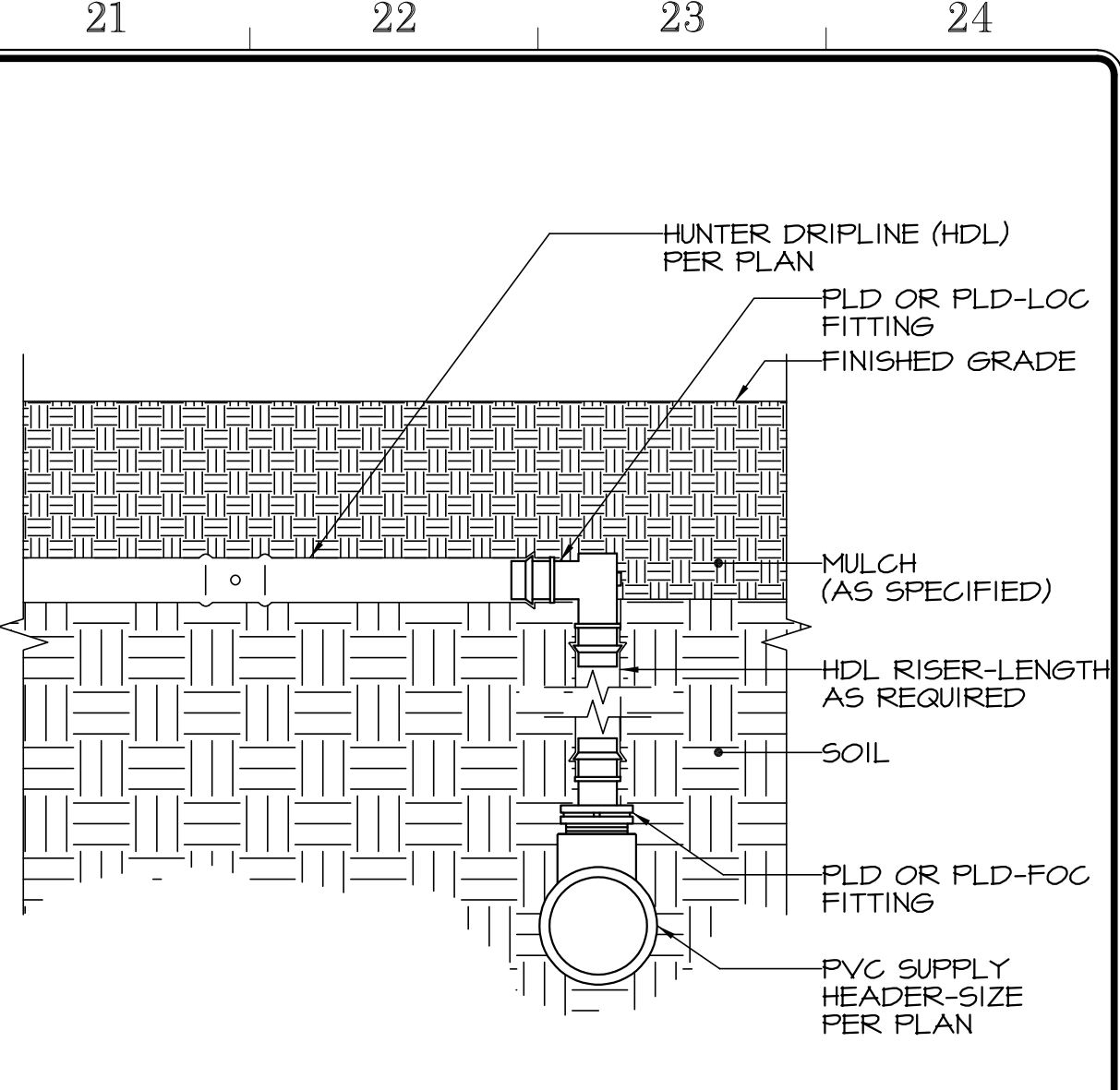
**DRIP ZONE KIT** SCALE: N.T.S.



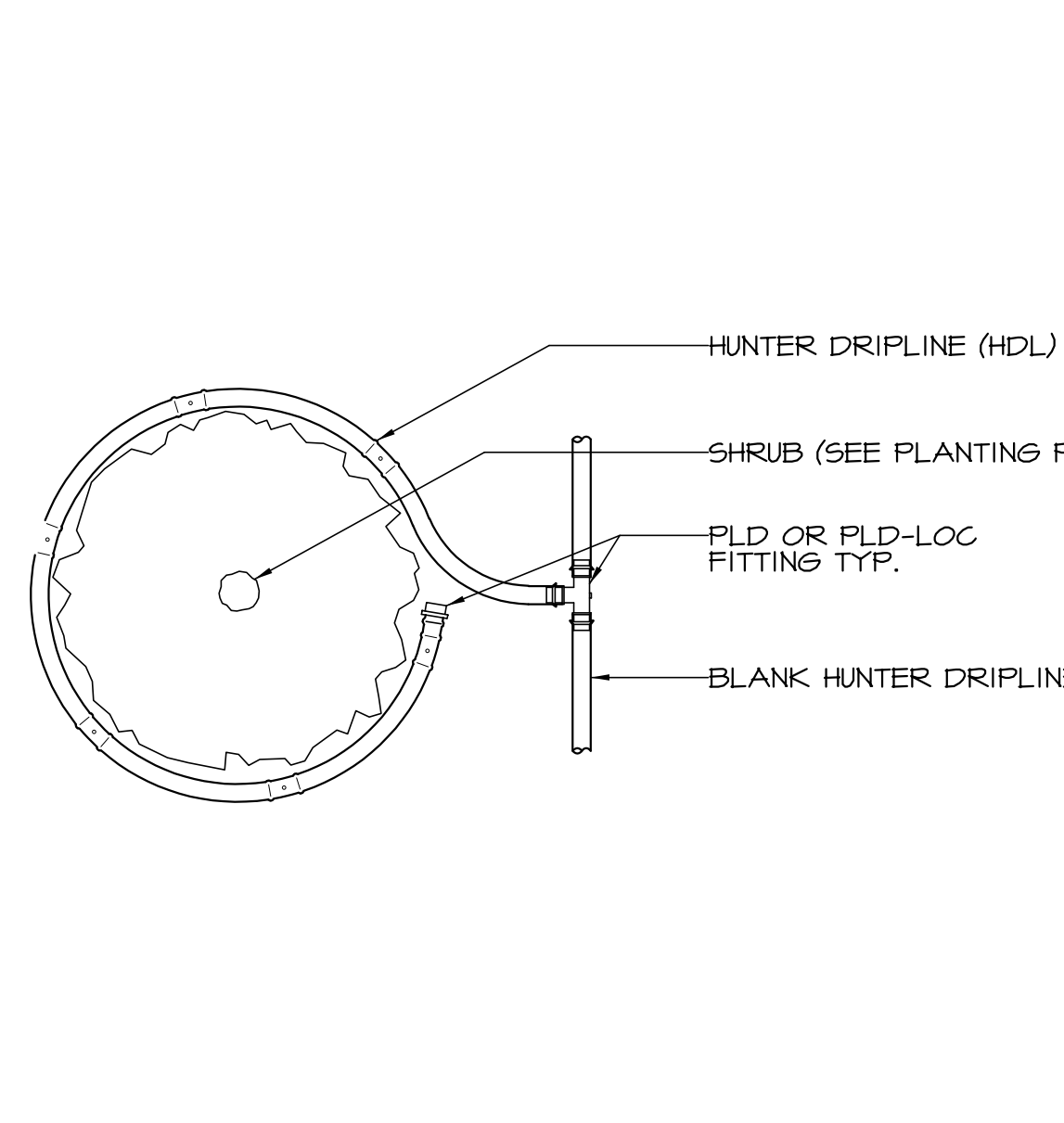
**MULTI- PORT MANIFOLD TO EMITTERS IN VALVE BOX** SCALE: N.T.S.



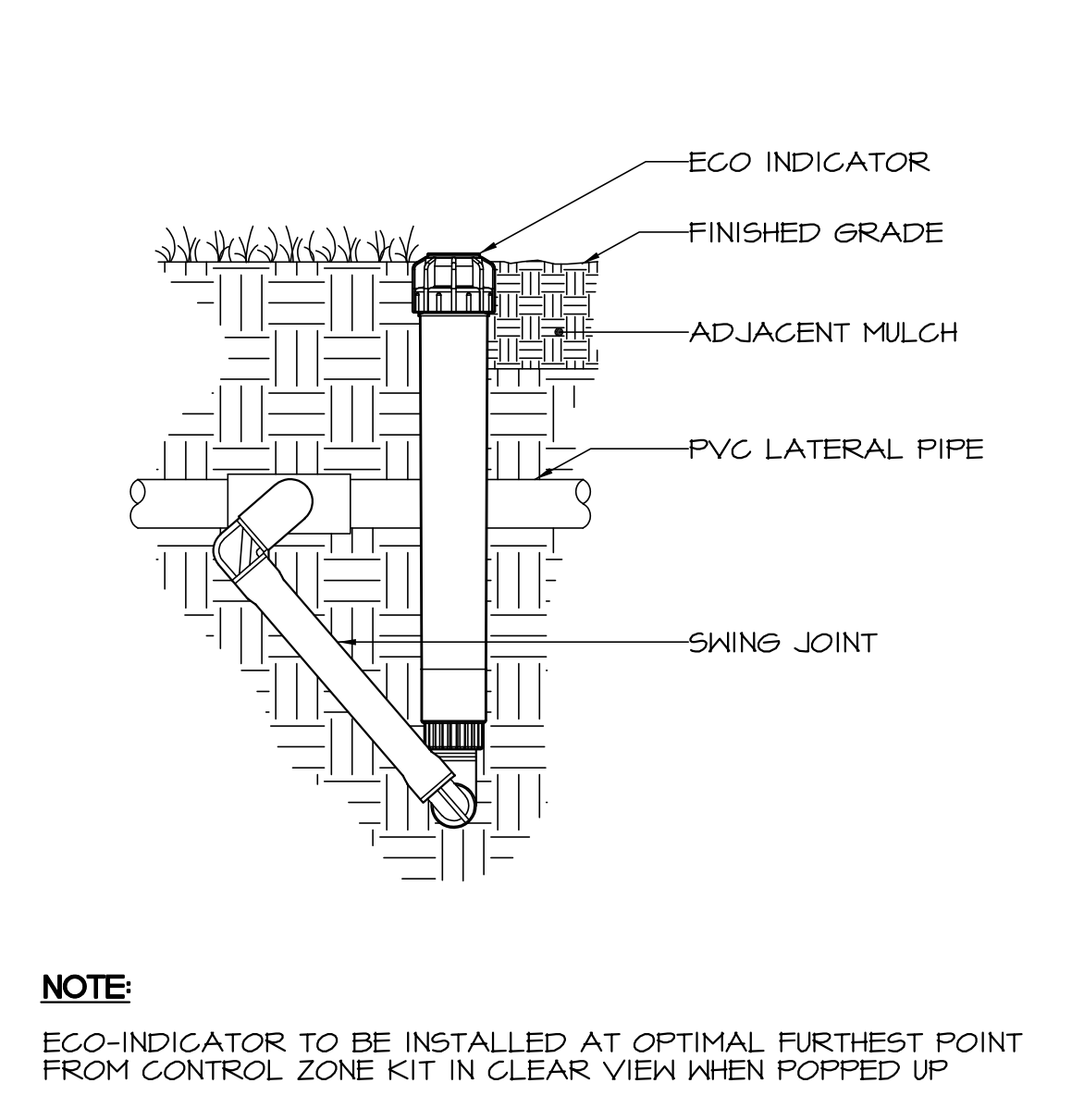
**EMITTER ON STAKE** SCALE: N.T.S.



**CONNECTION W/ DRIPLINE-ELBOW** SCALE: N.T.S.

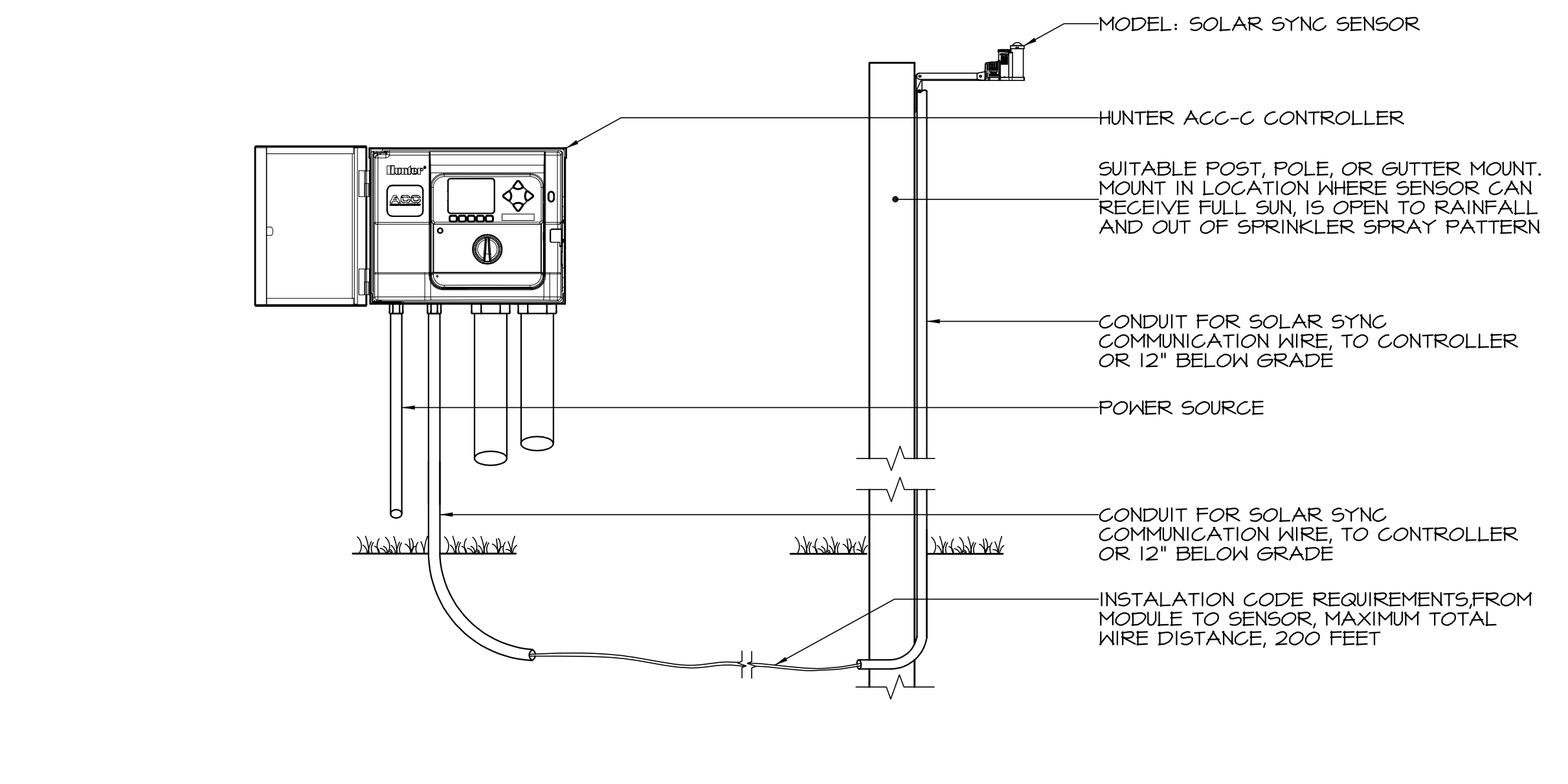


**DRIPLINE-SHRUB RING** SCALE: N.T.S.



**NOTE:**  
ECO-INDICATOR TO BE INSTALLED AT OPTIMAL FURTHEST POINT FROM CONTROL ZONE KIT IN CLEAR VIEW WHEN POPPED UP

**ECO INDICATOR - SWING JOINT** SCALE: N.T.S.



**SOLAR SYNC SYSTEM** SCALE: N.T.S.

**APPROVALS**

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Sheet Title  
**IRRIGATION DETAILS - DRIP**

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