

PLANTING NOTES

- PLANT COUNTS SHOWN ARE FOR BIDDING REFERENCE ONLY. CONTRACTOR SHALL SUPPLY ALL PLANTS REQUIRED TO FULFILL DESIGN INTENT AS SHOWN.
- CONTRACTOR SHALL PROTECT AND MAINTAIN ALL PLANT MATERIAL FROM TIME OF DELIVERY TO TIME OF FINAL ACCEPTANCE. OWNER SHALL NOT BE RESPONSIBLE FOR LOSSES DUE TO VANDALISM, THEFT OR SEVERE
- CONTRACTOR SHALL PLACE PLANT MATERIALS SO THEY DO NOT INTERFERE WITH IRRIGATION SYSTEM OR INHIBIT REQUIRED COVERAGE. PLANT LOCATIONS MAY BE ADJUSTED AS LONG AS DESIGN INTENT IS NOT COMPROMISED. CONTRACTOR SHALL SET OUT PLANT MATERIAL AS PER PLAN AND RECEIVE ACCEPTANCE FROM OWNER'S REPRESENTATIVE WITH RESPECT TO PLANT HEALTH AND LOCATION PRIOR TO INSTALLATION. CONTRACTOR SHALL GIVE MINIMUM 2 WORKING DAYS NOTICE FOR OBSERVATION AND SHALL HAVE ALL PLANT MATERIAL IN SPECIFIED LOCATIONS FOR REVIEW AT ONE TIME. CONTRACTOR SHALL REPLACE ANY MATERIAL AS REQUESTED BY OWNER'S REPRERESENTATIVE.
- I. ALL NON-TURF PLANTING AREAS SHALL RECEIVE A 3" LAYER OF BARK MULCH TOP DRESS (UNLESS NOTED OTHERWISE). REFER TO SPECIFICATIONS.
- WHEN WORK HAS TO OCCUR UNDER THE DRIPLINE OF EXISTING TREES NOT SCHEDULED FOR REMOVAL, THE CONTRACTOR SHALL USE ALL POSSIBLE CARE TO AVOID INJURY TO THE TREES AND TREE ROOTS. GRADE IN LINES RADIAL TO THE EXISTING TREES RATHER THAN TANGENTIAL. ALL PARTIAL CUTS OR TEARS THROUGH ROOTS TWO INCHES IN DIAMETER AND LARGER SHALL BE CUT CLEAN. TRENCHES ADJACENT TO TREES SHALL BE FILLED WITHIN 24 HOURS AFTER EXCAVATION, BUT WHERE THIS IS NOT POSSIBLE, THE SIDE OF THE TRENCH ADJACENT TO THE TREE, AND ANY EXPOSED ROOTS SHALL BE KEPT SHADED AND MOIST WITH DAMPENED BURLAP OR CANVAS.
- ALL TURF, MULCH, AND PLANTERS TO RECEIVE SOIL AMENDMENTS AND SOIL PREPARATION PER SPECIFICATIONS UNLESS OTHERWISE NOTED.

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT APP: 02-121752 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹



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				31/4/11
PLANTING LEGEN	D			LEED LANDSCAPE TO LANDSCAPE
BOTANICAL/COMMON NAME	WUCOLS CLASSIFICATION REGION 2 - CENTRAL VALLEY	SPACING/ COMMENTS	DTL REF	REC No. 4069
				Signature EXPIRATION DATE:
ACER RUBRUM RED MAPLE FRUITLESS MALE CULTIVAR)	MEDIUM	PER PLAN		JULY 2025 OF CAL IFORM
PISTACIA CHINESIS CHINESE PISTACHE	LOW	PER PLAN		CONSULTANT
			$\binom{O}{D6.2}$	

PER PLAN

PER PLAN

LOW

MEDIUM

FOUNDATION PLANTING WESTRINGIA FRUTICOSA 'WES05' as shown

ZELKOVA SERRATA 'MUSASHINO'

MUSASHINO JAPANESE ZELKOVA

NO-MOW: NATIVE PRESERVATION MIX BY DELTA BLUEGRASS SOD - REFER TO SPECIFICATIONS.

TIFFWAY 419 HYBRID BERMUDA SOD - REFER TO SPECIFICATIONS

19 | 15 GAL | QUERCUS LOBATA

VALLEY OAK

BIORETENTION AREA - SHRUBS AND GRASSES CALIFORNIA GRAY RUSH CAREX PRAEGRACILIS CLUSTERED FIELD SEDGE 1079 | 1 GAL 1'-6" O.C. MEDIUM

10	`			
WATER EFFICIENT LANDSCAPE CALCULATIONS				
PROJECT	JFK High School, Sacramento, CA			
TOTAL LANDSCAPE AREA (SF)	289,612			
TOTAL IRRIGATED LANDSCAPE AREA	A			
(SF)	52,541			
TOTAL IRRIGATED SPECIAL				
LANDSCAPE AREA (SF)	237,071			
HISTORIC ETO (INCHES/YEAR)	51.90			

MAXIMUM ANNUAL WATER ALLOWANCE (MAWA) MAWA = (ETo)(0.62) [(0.7xLA) + ((0.3)xSLA)]

ESTIMATED ' $\mathsf{ETWU} = (\mathsf{ET}$

TRESS - DRIP

OVERHEAD -

UNDER MAWA = 207,068

	L WATER USE (ETWU) 2) [((PFxHA)/(IE)+SLA	A)]			
HYDROZONE/ IRRIGATION METHOD	PLANT FACTOR (PF)	IRRIGATION EFFICIENCY (IE)	AREA (SQ FT) (HA)	(PFxHA)/IE	JOHN F. KENNEDY
Regular Landscape SHRUBS AND	e Areas				HIGH SCHOOL BASEBALL, SOFTBALL,

GROUNDCOVER & TENNIS COURT 0.75 OVERHEAD -**IMPROVEMENTS** TURF -PROJECT ADDRESS 15,896 OVERHEAD -0.9 0.75 19,075 6715 GLORIA DRIVE SACRAMENTO, CA 95831 TRESS - DRIP 8,542 0.81 34,594

4,414

4,231

DSA BACKCHECK TOTAL 52,541 30,344 Special Landscape Areas NO. REVISIONS TURF -N/A 232840 RECREATIONAL BIOFILTRATION -

237,071 TOTAL ETWU = 976,397 GAL/YEAR

GAL/YEAR

N/A

0.81

CS/MB 01/18/2024 1"=20'-0" 2304200 SHEET NO.

50% SUBMITTAL

100% DSA SUBMITTAL

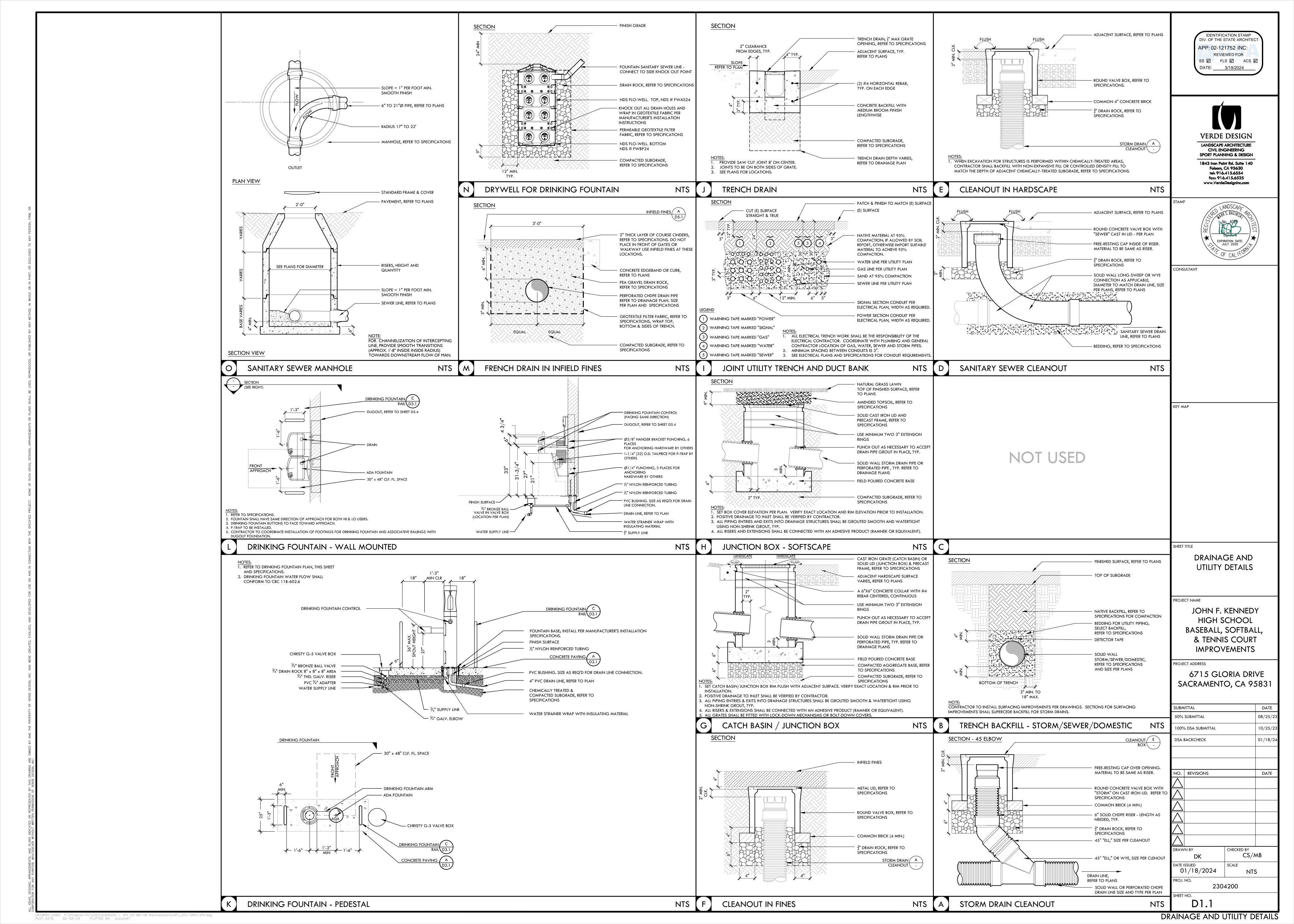
PLANTING PLAN -

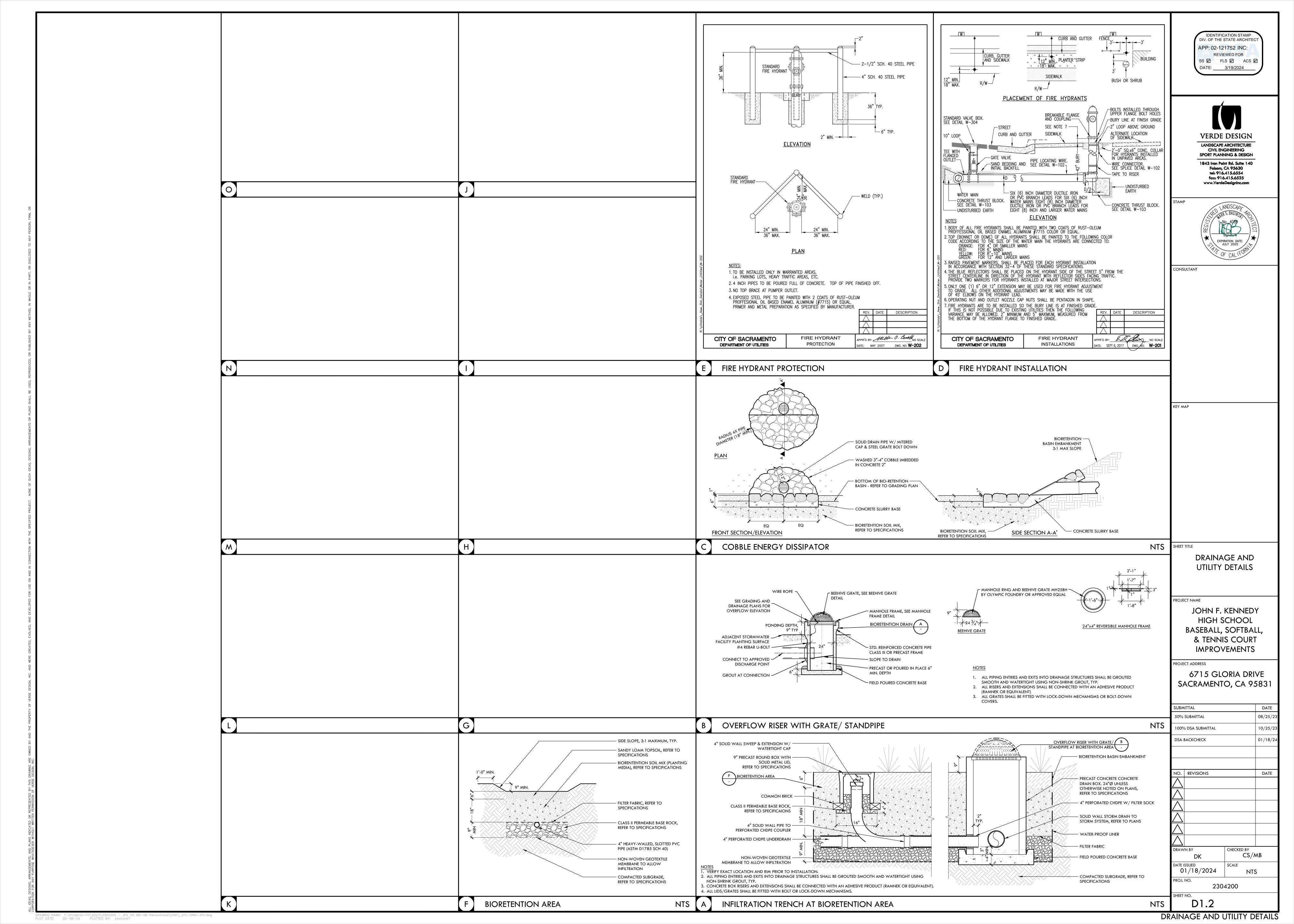
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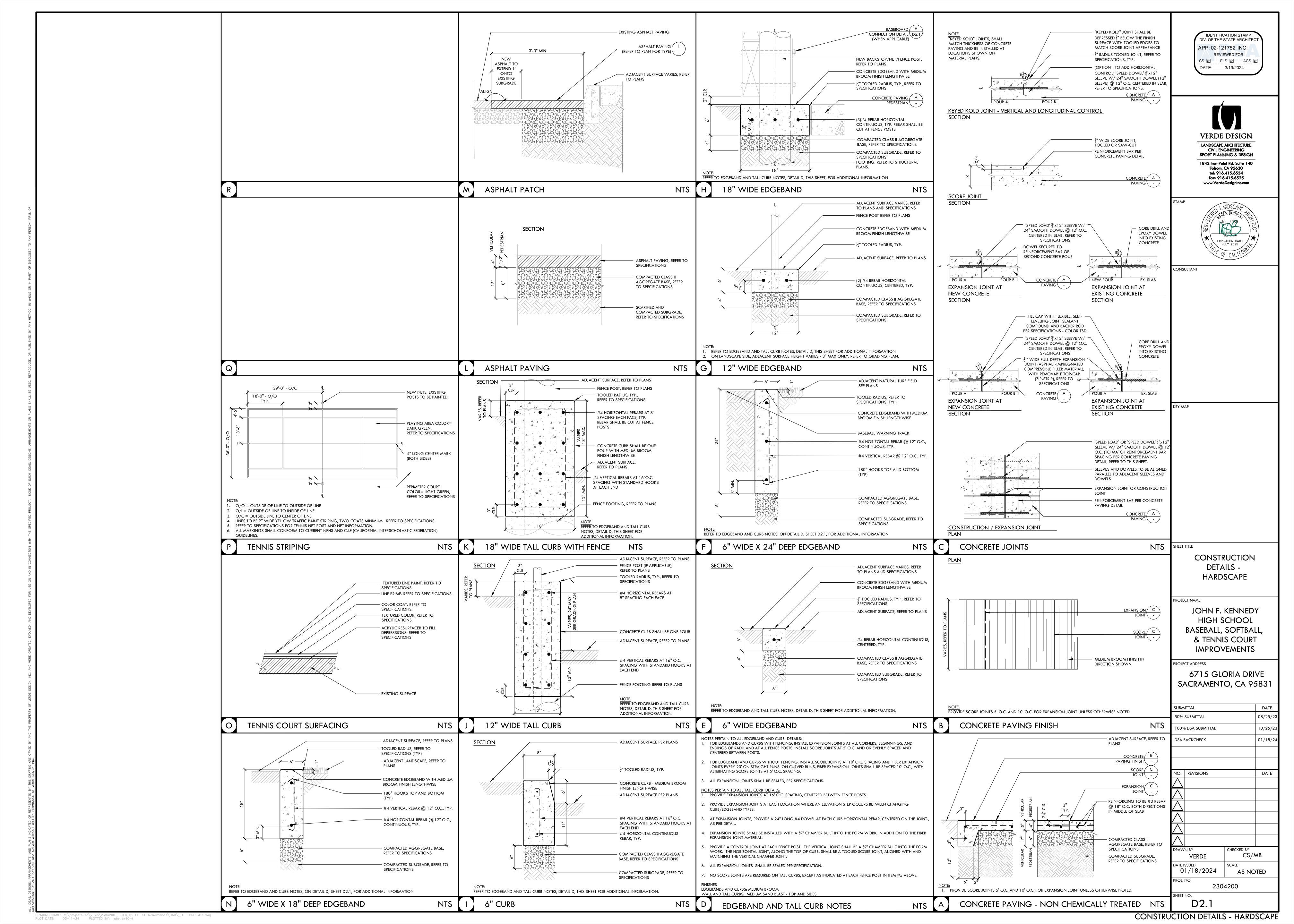
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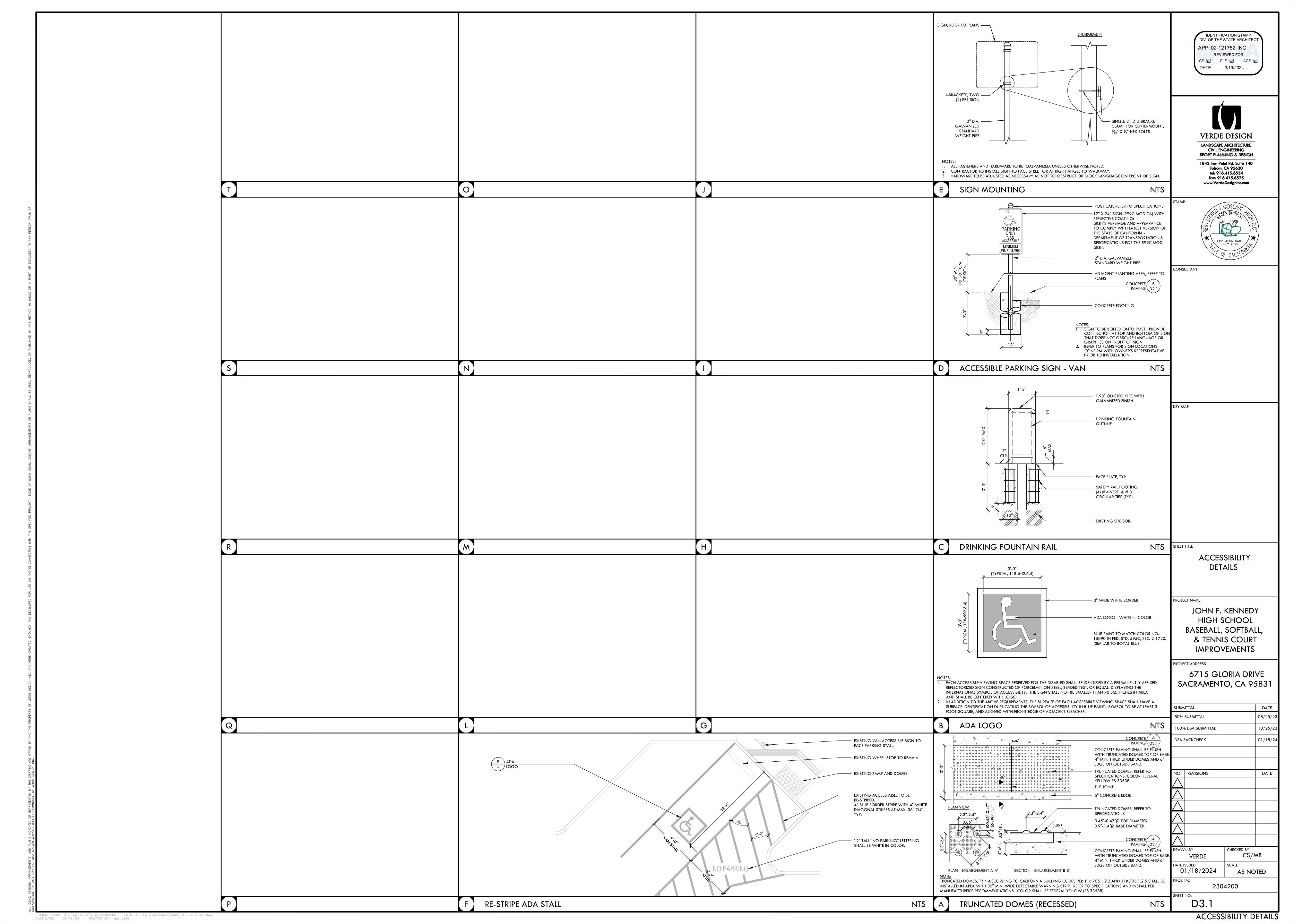
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PLOT DATE: 02-12-24 PLOTTED BY: station40-t

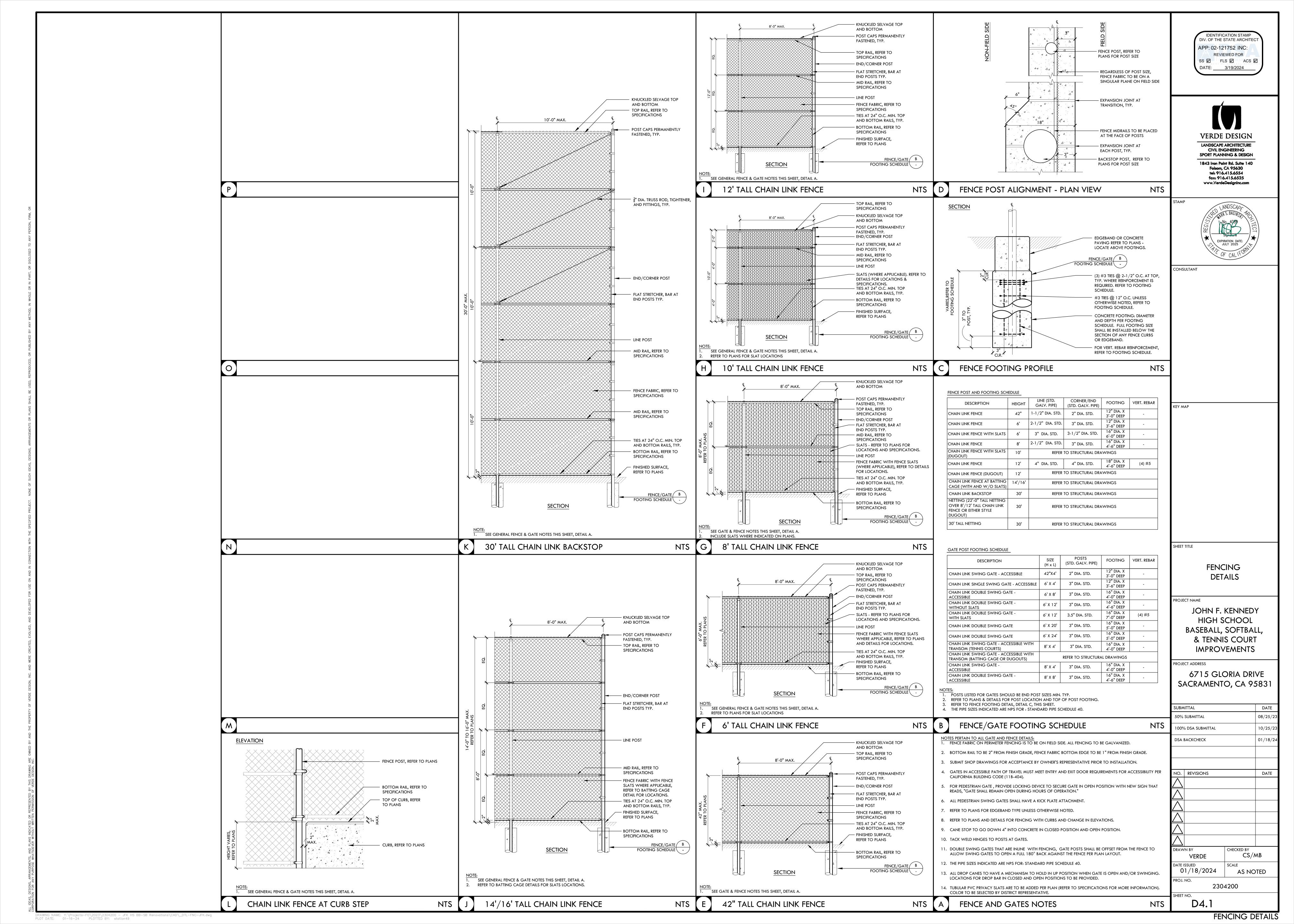
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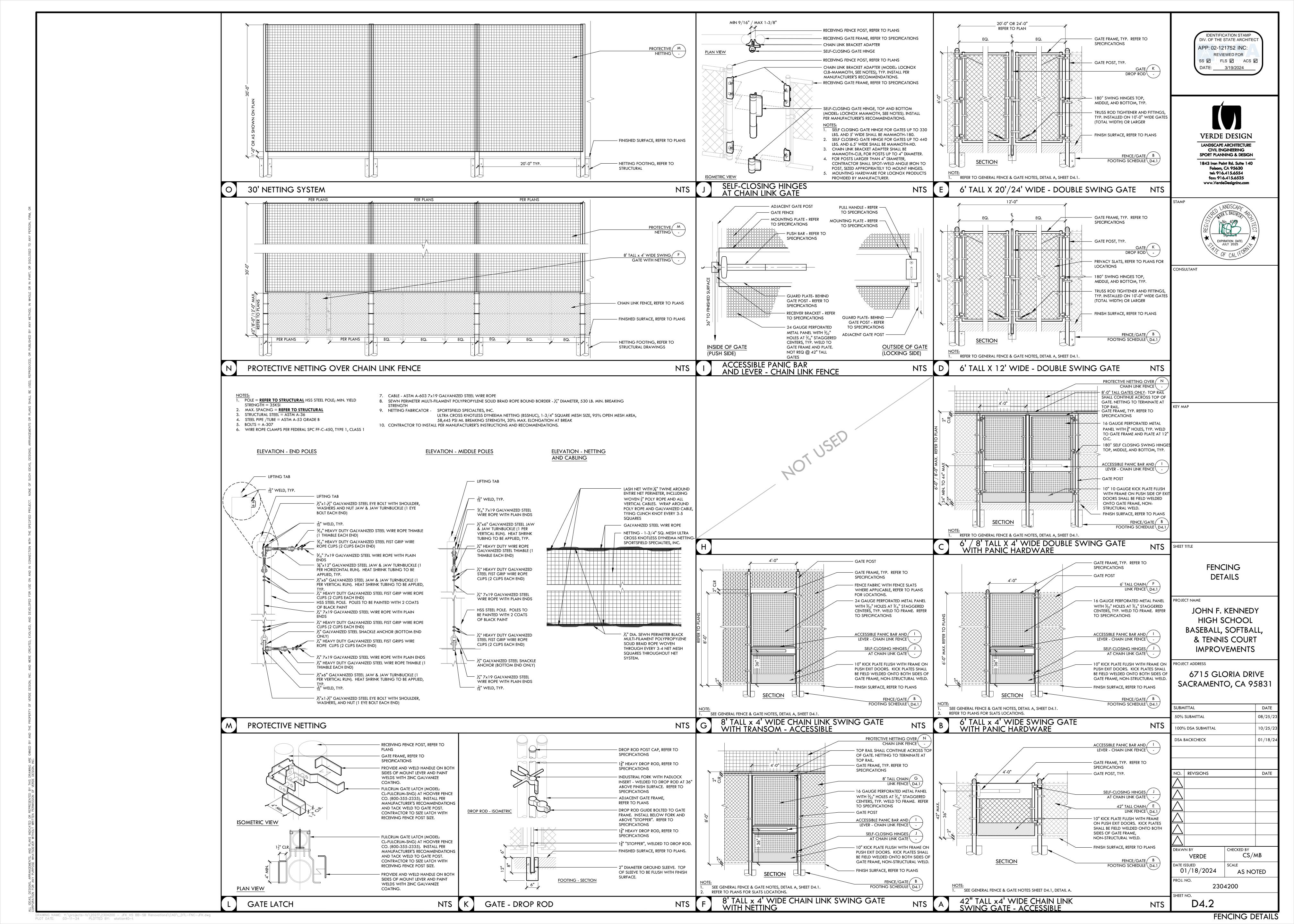


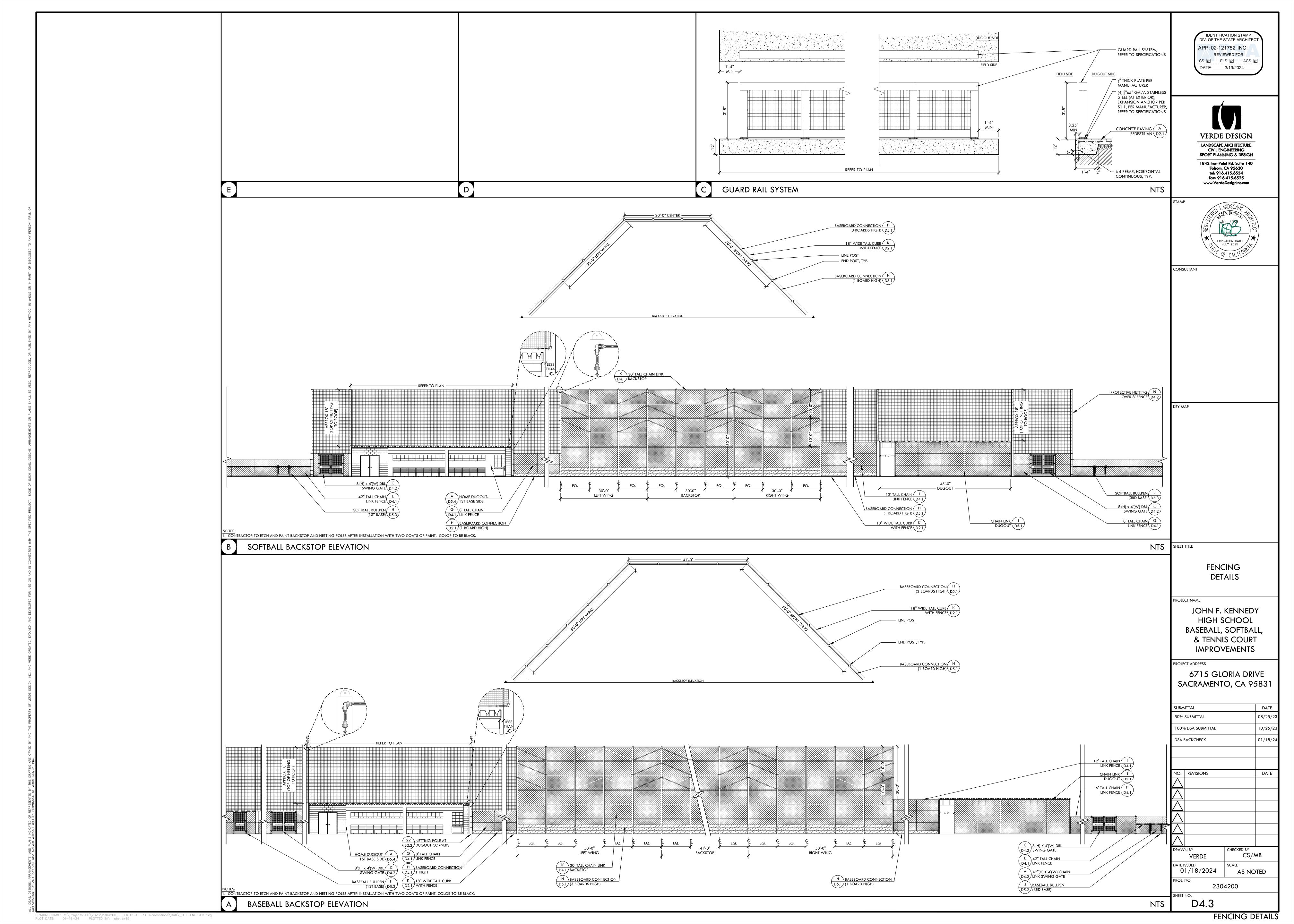


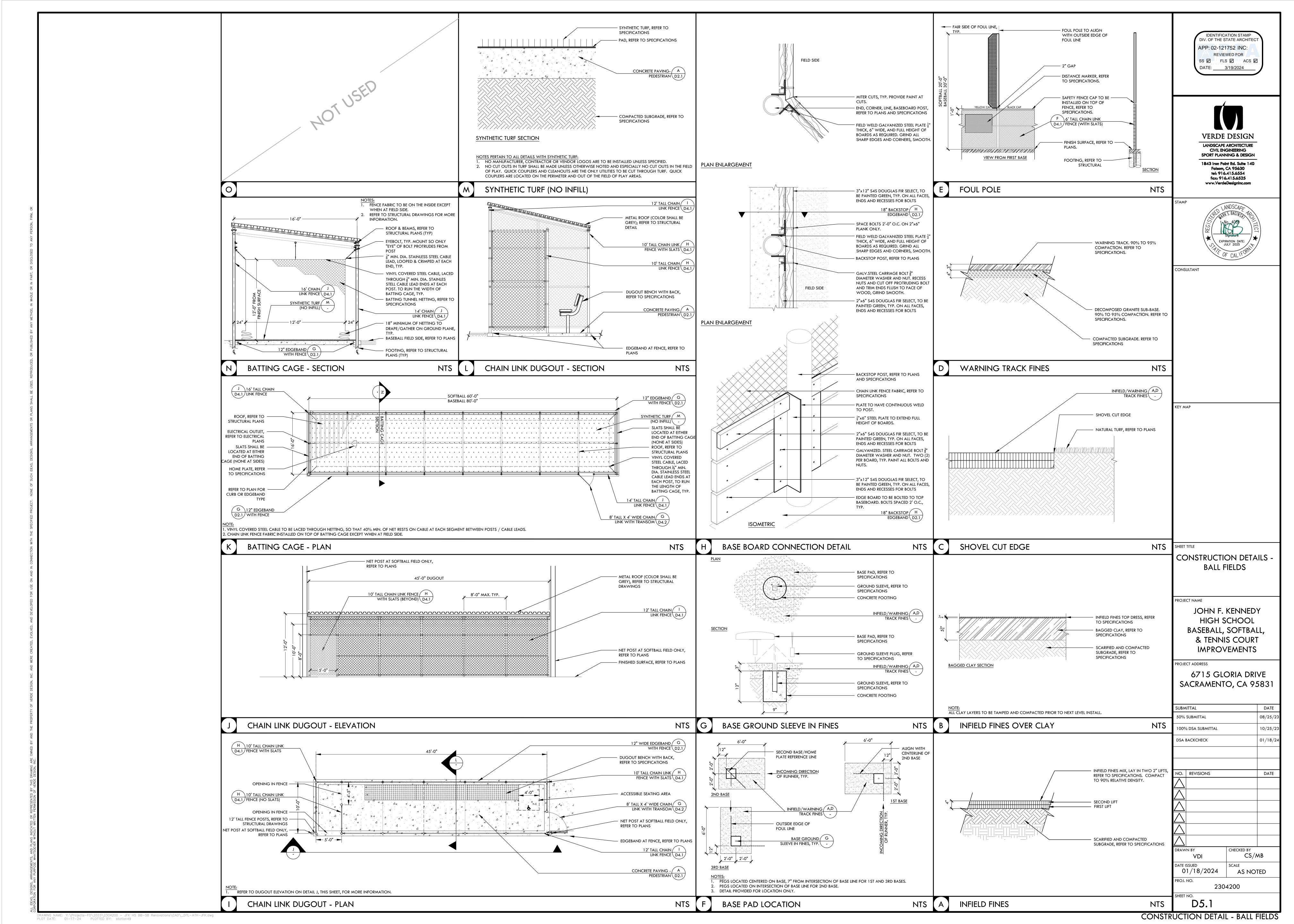


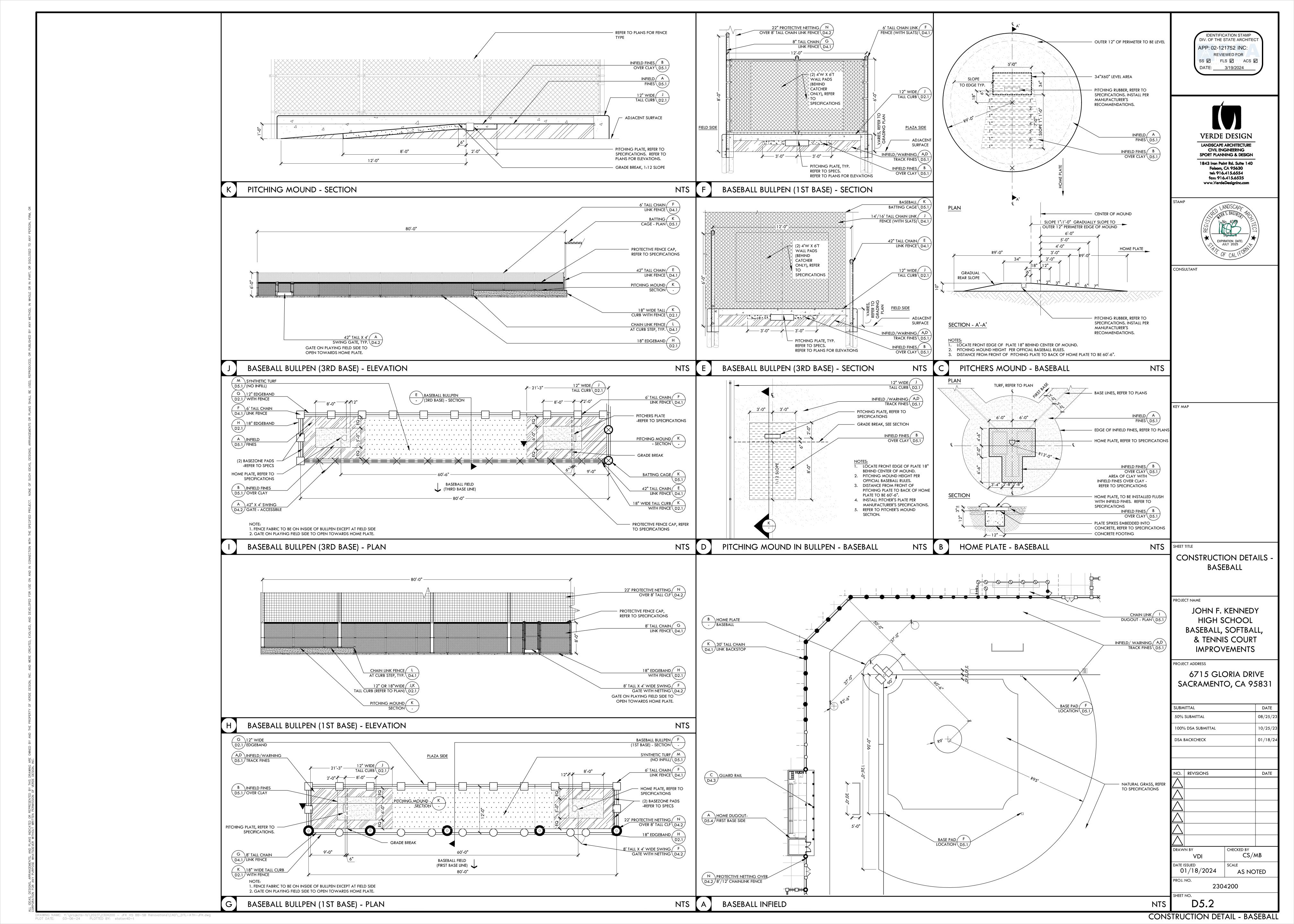


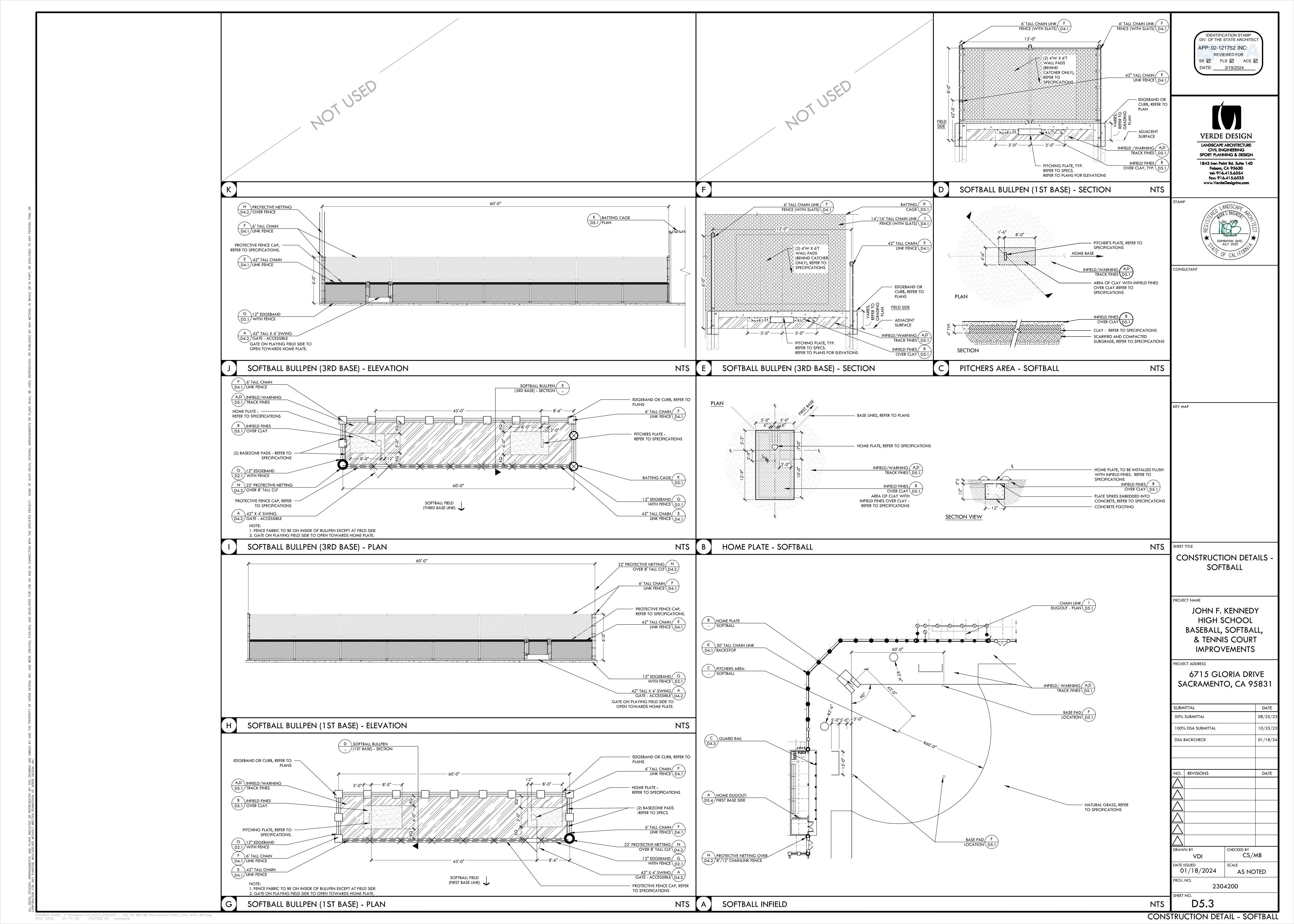


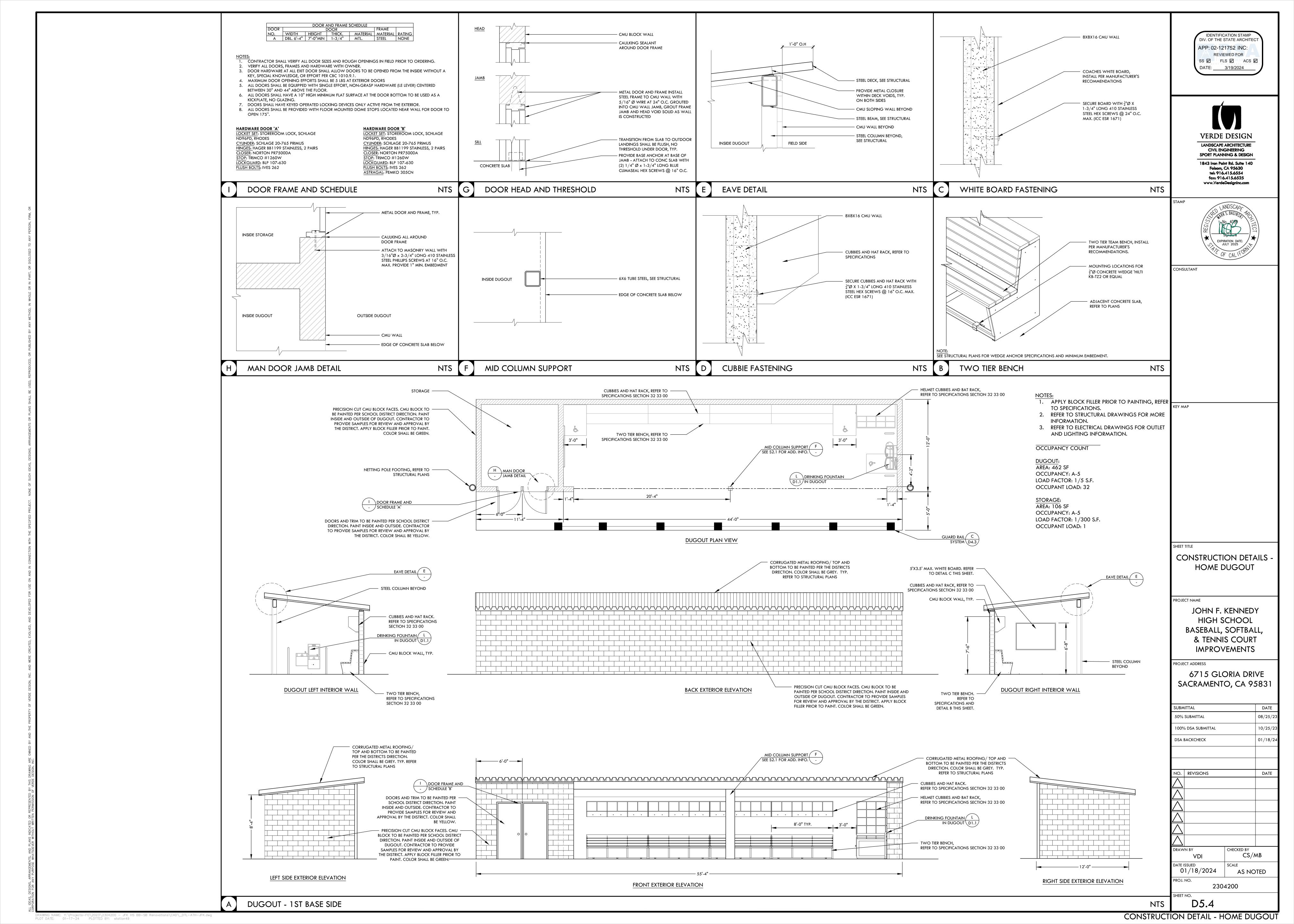


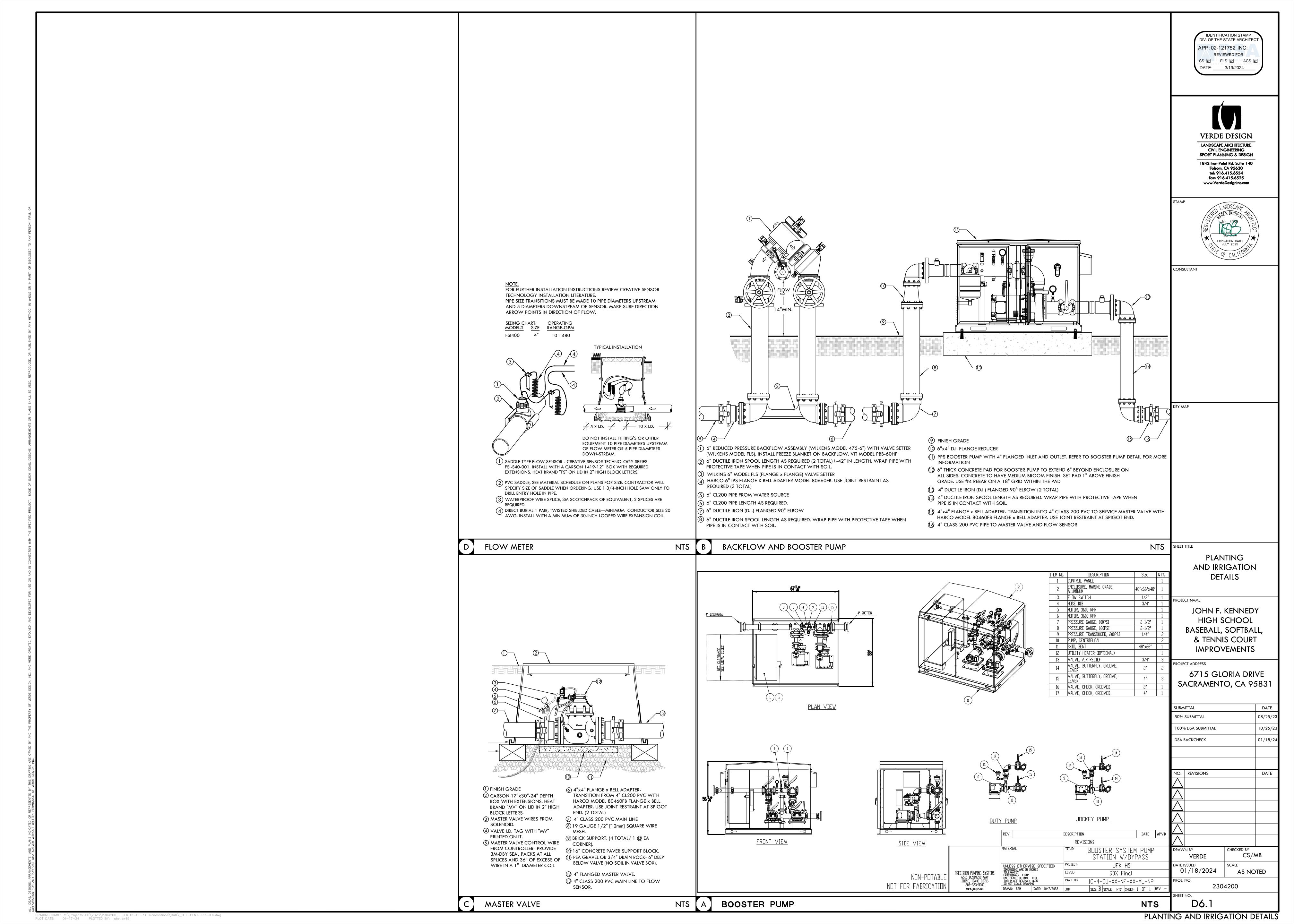


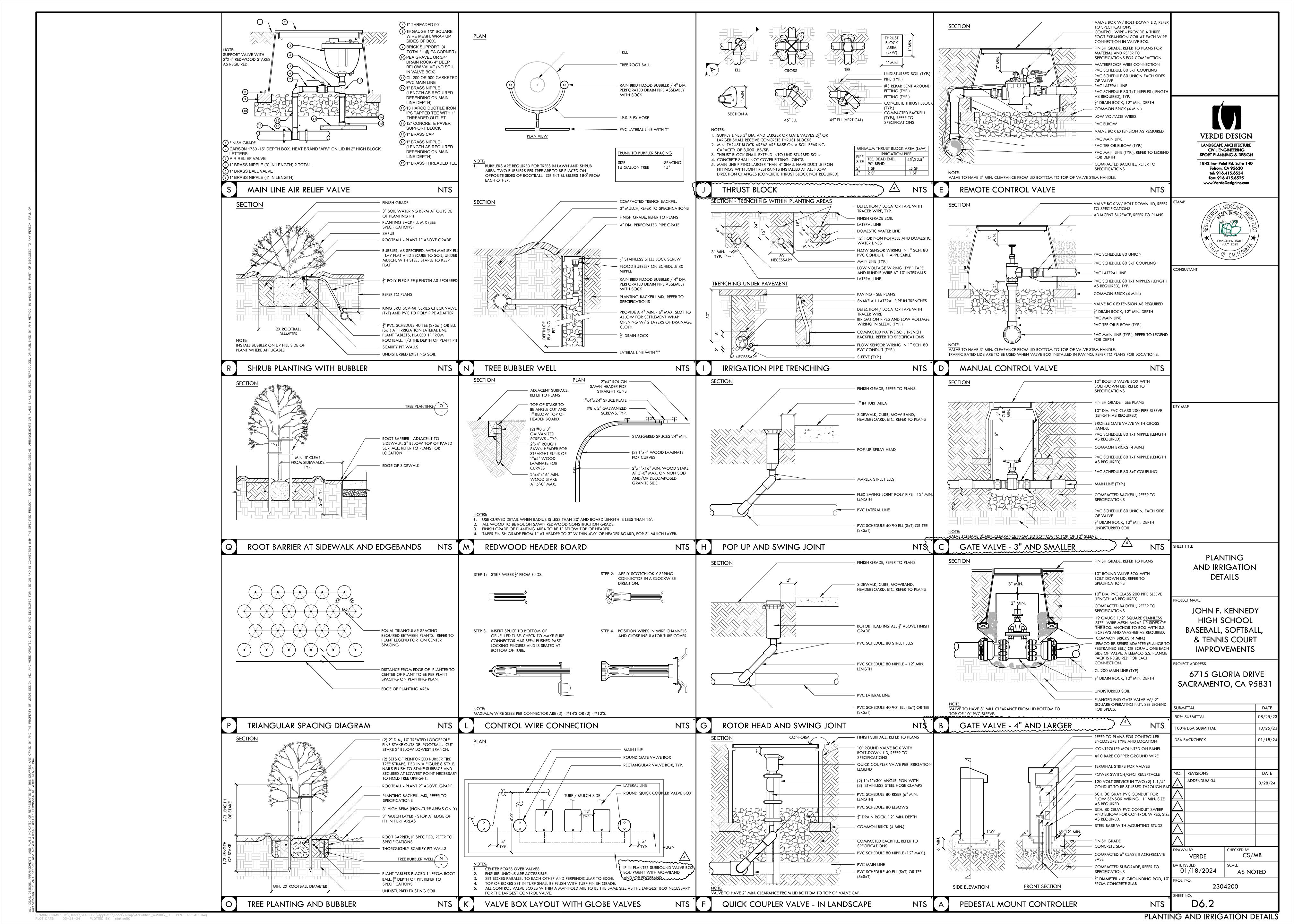












2. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER FOR DIRECTION PRIOR TO PROCEEDING.

3. DETAILS OF CONSTRUCTION ARE TYPICAL, UNLESS NOTED OTHERWISE, AND SHALL APPLY AT ALL LOCATIONS OF SIMILAR CONSTRUCTION. TYPICAL DETAILS ARE NOT CUT AT EVERY APPLICABLE LOCATION ON THE PLANS.

4. DO NOT SCALE DRAWINGS FOR DIMENSIONAL INFORMATION.

5. SHORING, TEMPORARY BRACING AND OTHER METHODS AND MEANS OF CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR, AND IS NOT INCLUDED IN THE SCOPE OF THE STRUCTURAL DRAWINGS.

6. THE FOLLOWING NOTES ARE FOR GENERAL MATERIAL GRADES AND PROCEDURES. SEE SPECIFICATIONS AND REMAINDER OF DRAWINGS FOR COMPLETE REQUIREMENTS. ITEMS NOTED IN PLANS, SECTIONS AND DETAILS TAKE PRECEDENCE OVER GENERAL NOTES.

A) LIVE: ROOF: 20 PSF (REDUCIBLE)

EXPOSURE C, 95 MPH BASIC WIND SPEED DIRECTIONAL PROCEDURE

C) SEISMIC:

BUILDING RISK CATEGORY II EQUIVALENT LATERAL FORCE PROCEDURE (ASCE 7-16 SECTION 12.8) LATITUDE: 38.5018, LONGITUDE: -121.5343 SEISMIC DESIGN CATEGORY (SDC) D SITE CLASS D

 $S_S=0.620$, $S_1=0.266$; $F_0=1.304$, $F_v=2.068$: $S_{MS}=0.809$, $S_{M1}=0.550$; $S_{DS}=0.539$, $S_{D1}=0.367$ IMPORTANCE FACTOR: le=1.00 R=5 FOR SPECIAL REINFORCED (CMU) SHEAR WALLS R=3 FOR SIGNS AND BILLBOARDS (FIELD EQUIPMENT) R=1.5 FOR STEEL POLES

R=1.25 FOR ALL OTHER SELF-SUPPORTING STRUCTURES C_S=0.108 (STRENGTH), 0.077 (ALLOWABLE STRESS) FOR CMU SHEAR WALLS C_S=0.180 (STRENGTH), 0.128 (ALLOWABLE STRESS) FOR SIGNS & BILLBOARDS C_s =0.359 (STRENGTH), 0.257 (ALLOWABLE STRESS) FOR STEEL POLES C_S=0.431 (STRENGTH), 0.308 (ALLOWABLE STRESS) FOR ALL OTHER STRUCTURES C_V =0.108 (STRENGTH), 0.077 (ALLOWABLE STRESS).

D) LOAD COMBINATIONS FOR DESIGN: CONCRETE: PER ASCE 7 SECTION 2.3 FOR STRENGTH DESIGN. FOUNDATIONS: PER CBC SECTION 1605A.2 FOR ALLOWABLE STRESS DESIGN. ALL OTHERS: PER ASCE 7 SECTION 2.4 FOR ALLOWABLE STRESS DESIGN.

STRUCT	URAL ABBREVIATI	ONS	
A.B.	ANCHOR BOLT	I.D.	INSIDE DIAMETER
ADJ APPROX	ADJACENT APPROXIMATE	IN INT	INCH INTERIOR
ARCH	ARCHITECTURAL		
BLDG	BUILDING	LAM LBS	LAMINATE POUNDS
BLK	BLOCK		MDC DED CO IN
BLKG BM	BLOCKING BEAM	KSI	KIPS PER SQ. IN.
B.N. BOT	BOUNDARY NAILING BOTTOM	MAX M.B.	MAXIMUM MACHINE BOLT
BP	BASEPLATE	MECH	MECHANICAL
BRG B.S.	BEARING BOTH SIDES	MFR MIN	MANUFACTURER MINIMUM
		MISC	MISCELLANEOUS
C TO C C.B.	CENTER TO CENTER CARRIAGE BOLT	<n></n>	NEW
CJ	CONTROL JOINT OR	N.S.	NEAR SIDE
C.I.	CONSTRUCTION JOINT CAST IRON	N.I.C. NO.	NOT IN CONTRACT NUMBER
CL CLG	CENTERLINE	NTS	NOT TO SCALE
CMU	CEILING CONCRETE MASONRY UNIT	0.C.	ON CENTER
COL CONC	COLUMN CONCRETE	O.D. OPP	OUTSIDE DIAMETER OPPOSITE
CONT	CONTINUOUS		
C.P. CTRD	COMPLETE PENETRATION CENTERED	PERP PL	PERPENDICULAR STEEL PLATE
CTSK	COUNTERSINK	P.P.	PARTIAL PENETRATION
<d></d>	DEMO	PLYWD PSF	PLYWOOD POUNDS PER SQ. FT.
DBL DM OB #	DOUBLE	PSI	POUNDS PER SQ. IN.
DIA OR Ø DIAG	DIAMETER DIAGONAL	RAD	RADIUS
DO DWG	DITTO DRAWING	REINF REQD	REINFORCING REQUIRED
		REV	REVISION
EA E.F.	EACH EACH FACE	R.O. RWD	ROUGH OPENING REDWOOD
ELEC	ELECTRICAL		
ELEV E.N.	ELEVATION EDGE NAILING	S.A.D S.M.D.	SEE ARCH'L DRAWINGS SEE MECH'L DRAWINGS
EQ	EQUAL FACIL WAY	S.L.D. S.F.	SEE LANDSCAPE DRAWINGS
E.W. EXIST OR <e></e>	EACH WAY EXISTING	S.F. SIM	SQUARE FEET SIMILAR
EXTER	EXTERIOR	SPEC SQ	SPECIFICATION
<f></f>	FUTURE	STD	SQUARE STANDARD
F.D. FHWS	FLOOR DRAIN FLAT HEAD WOOD SCREW	STGRD STIFF	STAGGERED
FIN	FINISH	SYM	STIFFENER SYMMETRICAL
F.O.B. F.O.C.	FACE OF BLOCK FACE OF CONCRETE	T&G	TONGUE & GROOVE
F.O.F.	FACE OF FINISH	THRD	THREADED
F.O.S. F.P.	FACE OF STUD FULL PENETRATION	T.O.C. T.O.F.	TOP OF CONCRETE TOP OF FRAMING
F.S. FT	FAR SIDE FOOT OR FEET	T.O.S. TS	TOP OF STEEL
FTG	FOOTING	TYP	TUBE STEEL TYPICAL
GA	GAGE	U.N.O.	UNLESS NOTED OTHERWISE
GALV G.I.	GALVANIZED GALVANIZED IRON	VERT	
GLB	GLUE-LAMINATED BEAM	VENT	VERTICAL
GYP.BD.	GYPSUM BOARD	W/ W/O	WITH WITHOUT
HDR	HEADER	W/O WT	WEIGHT OR STEEL
HORIZ HR	HORIZONTAL HOUR	WWF	WT SECTION WELDED WIRE FABRIC
H.S. H.S.B.	HIGH STRENGTH	*****	WELDED THILE INDINO
11.3.0.	HIGH STRENGTH BOLT		

HOLLOW STEEL SECTION

GEOTECHNICAL & FOUNDATIONS

1. GEOTECHNICAL CRITERIA USED FOR FOUNDATION DESIGN: A) GEOTECHNICAL REPORT BY UNIVERSAL ENGINEERING SERVICES, WEST SACRAMENTO, CA. REPORT NO. 4630.2300076.0016, DATED 10-17-23. GEOTECHNICAL REPORT SHALL BE CONSIDERED PART OF CONSTRUCTION DOCUMENTS. ALL RECOMMENDATIONS DESCRIBED THEREIN SHALL BE IMPLEMENTED

IN PROJECT'S CONSTRUCTION, INCLUDING GRADING, STRIPPING OF EXISTING

MATERIAL, LOCATION, TYPE AND INSTALLATION OF FILL MATERIAL, AND COMPACTION. B) CONTINUOUS & SPREAD FOOTINGS: MINIMUM WIDTH: 12" (CONTINOUS FOOTINGS) & 24" (SPREAD FOOTINGS) MINIMUM EMBEDMENT BELOW LOWEST ADJACENT FINISHED GRADE: 24"

C) ALLOWABLE SOIL PRESSURES USED FOR FOUNDATION DESIGN: DEAD PLUS LIVE LOAD: 1500 PSF TOTAL LOAD W/ SEISMIC OR WIND: 2000 PSF (1500 + 1/3 INCREASE FOR SHORT TERM LOADS WHERE ALLOWED BY CODE. ALLOWABLE FRICTION COEFFICIENT: 0.250 ALLOWABLE PASSIVE PRESSURE: 150 PCF

PIER/PILE ALLOWABLE LATERAL PRESSURE: 200 PCF PLUS 1/3 INCREASE FOR SHORT TERM LOADS WHERE ALLOWED BY CODE. IGNORE 1 FT. AT TOP. EFFECTIVE PIER WIDTH: 1 DIAMETER. MINIMUM PIER SPACING: 3 DIAMETERS

D) ENGINEERED FILL AND COMPACTION: PER GEOTECHNICAL REPORT RECOMMENDATIONS.

STRUCTURAL CONCRETE

1. ALL CONCRETE WORK SHALL CONFORM TO CHAPTER 19A OF THE 2022 CALIFORNIA BUILDING CODE (CBC) AND 2019 ACL STANDARD 318 AND ASTM C94. SPECIFICATION FOR READY-MIX CONCRETE. CEMENT SHALL BE PORTLAND CEMENT TYPE II AND SHALL COMPLY WITH ASTM C150. CALCIUM CHLORIDE SHALL NOT BE USED. COARSE AND FINE AGGREGATE SHALL COMPLY WITH ASTM C33. CONCRETE MIX DESIGNS SHALL BE SUBMITTED TO AND APPROVED BY TESTING AGENCY PRIOR TO ORDERING CONCRETE.

2. ALL STRUCTURAL CONCRETE MIXES SHALL HAVE MIN. FIVE (5) SACKS CEMENT PER CU. YARD AND MAX. WATER-TO-CEMENT RATIO OF 0.55 MAX. CONCRETE MIX PROPERTIES SHALL BE AS FOLLOWS:

A) SLABS-ON-GRADE & CONCRETE WALLS: 28-DAY COMP. STRENGTH: 3,000 PSI LARGE AGGREGATE SIZE: 1/2" - 1" MAX. SLUMP: 4"

DENSITY: 145 - 150 PCF (NORMAL WEIGHT, HARD ROCK AGGREGATE) EXPOSURE CLASS: C1, S0 (ACI 318 TABLE 19.3.1.1)

B) FOOTINGS & GRADE BEAMS: 28-DAY COMP. STRENGTH: 3,000 PSI LARGE AGGREGATE SIZE: 1" - 1-1/2" MAX. SLUMP: 4"

DENSITY: 145 - 150 PCF (NORMAL WEIGHT, HARD ROCK AGGREGATE) EXPOSURE CLASS: C1, S0 (ACI 318 TABLE 19.3.1.1)

C) C.I.D.H. PIER FOOTINGS: 28-DAY COMP. STRENGTH: 3,000 PSI LARGE AGGREGATE SIZE: 1/2" - 1" MAX. SLUMP: 4"

28-DAY COMP. STRENGTH: 2,500 PSI

DENSITY: 145 - 150 PCF (NORMAL WEIGHT, HARD ROCK AGGREGATE) EXPOSURE CLASS: C1, S0 (ACI 318 TABLE 19.3.1.1) C) NON-STRUCTURAL CONCRETE WALKS ON GRADE:

LARGE AGGREGATE SIZE: 3/8" - 3/4" MAX. SLUMP: 5" DENSITY: 145 - 150 PCF (NORMAL WEIGHT, HARD ROCK AGGREGATE)

FABRIC SHALL CONFORM TO ASTM A1064. 4. GROUT SHALL BE NON-SHRINK GROUT U.N.O. CONFORMING TO ASTM C1107. GROUT SHALL HAVE A 7-DAY COMPRESSIVE STRENGTH 5,000 PSI MIN. GROUT SHALL BE MASTER BUILDERS "MASTERFLOW 928", SIKA SIKAGROUT 212, OR APPROVED EQUAL. FOLLOW

3. STEEL REINFORCING BARS SHALL CONFORM TO ASTM A615, GR. 60 U.N.O. WELDED WIRE

MANUFACTURER'S SURFACE PREPARATION RECOMMENDATIONS. 5. BONDING AGENT SHALL BE MASTER BUILDERS "MASTEREMACO ADH 326", SIKA ARMATEC 110 EPOCEM, OR APPROVED EQUAL, AND SHALL BE APPLIED PER MANUFACTURER'S RECOMMENDATIONS.

6. CURING COMPOUND SHALL BE APPROVED BY ENGINEER, AND APPLIED PER MANUFACTURER'S RECOMMENDATIONS.

7. CONSTRUCTION JOINTS SHALL BE ROUGHENED TO FULL 1/4" AMPLITUDE (ICRI CSP 9) WITH BUSH HAMMER OR OTHER APPROVED METHOD. SURFACES SHALL BE CLEANED OF DUST AND DEBRIS IMMEDIATELY PRIOR TO PLACEMENT OF NEWER CONCRETE.

8. REINFORCING STEEL SHALL BE CONTINUOUS WHERE POSSIBLE. SPLICE WITH CONTACT LAP-SPLICES OR NON-CONTACT SPLICES. STAGGER ALL SPLICES. SPLICE LENGTHS SHALL BE 57 BAR-DIAMETERS MINIMUM. WELDED WIRE FABRIC SHALL BE LAPPED TWO (2) FULL SQUARES, BUT NOT LESS THAN 12".

9. EXTEND HORIZONTAL BARS IN FOUNDATIONS AND WALLS INTO INTERSECTING FOUNDATIONS AND WALLS WITH BEND AND 30 BAR DIAMETER EXTENSION, BUT NOT LESS THAN 24"

10. WELDING OF REINFORCING SHALL NOT BE ALLOWED.

11. SEE STRUCTURAL STEEL NOTES FOR ANCHOR BOLTS CAST IN CONCRETE.

12. ANCHOR BOLT PROJECTION SHALL BE ADEQUATE FOR FULL ENGAGEMENT OF PLATES, WASHERS, NUTS, ETC. AND SHALL BE VERIFIED BY CONTRACTOR PRIOR TO PLACEMENT OF CONCRETE OR GROUT. ANCHOR BOLTS SHALL BE FIRMLY SECURED TO FORMS TO PREVENT THEIR MOVEMENT DURING CONCRETE PLACEMENT. WET-SETTING OF ANCHOR BOLTS IS NOT

13. MAINTAIN THE FOLLOWING MINIMUM CONCRETE COVER FOR REBAR: WHERE CONC. IS PLACED AGAINST EARTH = 3" WHERE CONCRETE IS FORMED AND EXPOSED TO EARTH OR WEATHER = 2" WHERE CONCRETE IS NOT EXPOSED TO EARTH OR WEATHER = 1-1/2" SLABS ON GRADE = 1-1/2"

14. WHERE SIDES OF FOUNDATIONS (FOOTINGS, GRADE BEAMS OR WALLS) ARE CAST AGAINST EARTH WITHOUT FORMS, FOUNDATION SHALL BE WIDENED 1" AT EACH SUCH

15. EXCAVATION FOR FOOTINGS BELOW DEPTHS SHOWN ON DRAWINGS SHALL BE BACKFILLED WITH CONCRETE.

16. NOTIFY ENGINEER, PROJECT INSPECTOR, AND DSA-SS AT LEAST 48 HOURS BEFORE ANY CONCRETE IS TO BE PLACED OR FORMS CLOSED TO ALLOW FOR INSPECTION OF EXCAVATIONS AND REINFORCING PLACEMENT. SEE ALSO SPECIAL INSPECTION REQUIREMENTS.

17. CONTRACTOR SHALL, PRIOR TO EXCAVATION, VERIFY FOOTING CONDITIONS AND FINISH GRADE/PAVING ELEVATIONS AT PERIMETER OF BUILDING. VERIFY THAT FOOTINGS HAVE SPECIFIED MINIMUM DEPTH BELOW ADJACENT GRADE AND THAT FOOTINGS DO NOT "DAYLIGHT OR OTHERWISE INTERFERE WITH INTENDED EXTERIOR CONDITIONS. NOTIFY ENGINEER IF SUCH INTERFERENCE EXISTS PRIOR TO EXCAVATION.

18. IF LOADING OF CONCRETE ELEMENTS PRIOR TO 28-DAY AGE IS ANTICIPATED, CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO SUBMITTAL OF CONCRETE MIX DESIGNS IN ORDER TO ALLOW SPECIFYING PROVISIONS FOR SUCH. PROVISIONS MAY INCLUDE COMPRESSION TEST CYLINDERS BE FIELD-CURED IN CONDITIONS MATCHING SUBJECT CONCRETE ELEMENTS, PLUS USE OF CEMENT TYPES AND/OR ADMIXTURES IN MIX DESIGNS TO PROVIDE THE REQUIRED COMPRESSIVE STRENGTHS AT ANTICIPATED AGES LESS THAN 28 DAYS. LOADING OF CONCRETE ELEMENTS BEFORE CURING FOR 28 DAYS WILL NOT BE APPROVED WITHOUT THESE PROVISIONS BEING SPECIFIED, AND MET BY CONTRACTOR.

CAST-IN-DRILLED-HOLE (CIDH) PIER FOUNDATIONS:

1. REBAR CAGES, EMBEDDED POLES (AS REQUIRED) AND CONCRETE SHALL BE INSTALLED IN DRILLED HOLES AS SOON AFTER EXCAVATION AS POSSIBLE. WHERE SOIL TYPES AND/OR WATER TABLE ELEVATIONS ARE EXPECTED TO RESULT IN CAVING OF DRILLED PIER HOLES,

SLEEVING OF PIER HOLES OR OTHER MEANS OF MITIGATION SHALL BE EMPLOYED. 2. WHERE SLEEVING OF PIER HOLES IS EMPLOYED: PIER HOLES ARE SLEEVED WITH TEMPORARY SLEEVE (TYPICALLY STEEL) THUS: AFTER DRILLING TO DEPTH AND INSERTION OF SLEEVE, ACCUMULATED WATER AND CAVED SPOILS SHALL BE PUMPED OUT OF HOLE, REBAR CAGE AND EMBEDDED POLE (AS REQUIRED) SHALL BE INSTALLED AS SOON AFTER AS POSSIBLE. FOLLOWED BY PUMPING CONCRETE INTO EXCAVATION USING TREMIE WHERE DIRECTED BY GEOTECHNICAL ENGINEER. SLEEVE SHALL BE LIFTED FROM HOLE AS CONCRETE IS PLACED TO ALLOW CONCRETE TO FLOW TO SIDES OF EXCAVATION, DISPLACING ACCUMULATED WATER AS HOLE FILLS WITH CONCRETE, THIS PROCESS SHALL BE CONFIRMED BY GEOTECHNICAL ENGINEER, CONTRACTOR AND PROJECT INSPECTOR PRIOR TO PROCEEDING, AND SHALL BE INSPECTED BY GEOTECHNICAL ENGINEER AND LAB/SPECIAL INSPECTOR DURING ENTIRE PROCESS.

CONCRETE MASONRY

1. ALL CONCRETE UNIT MASONRY WORK SHALL CONFORM TO CHAPTER 21A OF THE 2022 CALIFORNIA BUILDING CODE (CBC) AND 2016 EDITIONS OF TMS 402 AND TMS 602. 2. ALL BLOCK UNITS SHALL BE NORMAL OR MEDIUM WEIGHT UNITS, WITH MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI, CONFORMING TO ASTM C90. MORTAR SHALL BE TYPE

2,000 PSI AT 28 DAYS, CONFORMING TO ASTM C476. 3. DESIGN OF MASONRY IS BASED ON COMPRESSIVE STRENGTH OF MASONRY I'M OF 2,000 PSI. SPECIAL INSPECTION IS REQUIRED. SEE INSPECTION NOTES FOR ADDITIONAL REQUIREMENTS.

4. f'm COMPLIANCE SHALL BE VERIFIED BY THE "UNIT STRENGTH METHOD" PER TMS 602 ARTICLE 1.4B.2 AND MORTAR AND GROUT TESTS PER CBC SECTION 2105A.3 (DSA-SS). TEST UNITS PRIOR TO CONSTRUCTION. MORTAR AND GROUT SHALL BE TESTED DURING CONSTRUCTION FOR EVERY 5,000 SQ. FEET OF WALL AREA. VERIFY MORTAR TYPE.

5. REINFORCING SHALL BE AS SPECIFIED FOR CONCRETE.

6. LAP ALL BARS 72 BAR-DIAMETERS, BUT NOT LESS THAN 24" AT ALL SPLICES. PROVIDE BEND PLUS 48 BAR-DIAMETERS EXTENSION ON HORIZONTAL BARS AT ALL WALL

7. SEE CONCRETE NOTES FOR BOLTS EMBEDDED IN MASONRY. ALL ANCHOR BOLTS THROUGH FACE SHELLS OF MASONRY UNITS SHALL BE GROUTED IN PLACE WITH AT LEAST 1" OF GROUT BETWEEN BOLT AND SHELL, ALL AROUND BOLT.

8. REINFORCING BARS AND TIES SHALL BE HELD AT LEAST ONE BAR DIAMETER OR MINIMUM 1/2" CLEAR FROM MASONRY UNIT FACE SHELLS, EXCEPT BARS MAY BEAR ON CROSS WEBS OF BOND BEAM UNITS. PARALLEL BARS SHALL BE HELD AT LEAST 1" CLEAR BETWEEN, EXCEPT AT CONTACT LAP SPLICES.

9. UNITS SHALL BE LAYED IN RUNNING BOND. USE OF OPEN-END UNITS THROUGHOUT IS ENCOURAGED. USE OF SPEED-BLOCK (NON-GROUTED OPEN-END UNITS) IS NOT ALLOWED. IF OPEN-END UNITS ARE NOT USED, ALL LINTEL HEAD JOINTS SHALL BE FILLED SOLID WITH

10. ALL STARTER (BOTTOM) COURSE UNITS SHALL BE INVERTED DOUBLE OPEN-END BOND-BEAM UNITS. TYPICAL THROUGHOUT. TOPS OF FOOTINGS RECEIVING MASONRY UNITS AND GROUT SHALL BE ROUGHENED TO FULL 1/8" AMPLITUDE (1/4" PEAK-TO-VALLEY), FOR FULL WIDTH OF UNITS.

11. GROUT ALL CELLS SOLID UNLESS NOTED OTHERWISE ON DRAWINGS. NO ITEMS OTHER THAN REBAR, STEEL CONDUIT AND ANCHOR BOLTS SHALL BE EMBEDDED IN CMU. ALL HOLES CREATED FOR EXTRACTION OF TESTING/SAMPLE CORES SHALL BE FILLED SOLID WITH APPROVED NON-SHRINK GROUT AND FINISHED TO MATCH TEXTURE OF ADJACENT FACE SHELL.

12. GROUTING OF MASONRY UNITS UTILIZING THE HIGH-LIFT GROUTING SHALL COMPLY WITH

ALL REQUIREMENTS OF DSA IR 21-2.13, INCLUDING, BUT NOT LIMITED TO, MAXIMUM HEIGHTS

OF POURS AND LIFTS, CLEANOUTS, TESTING AND INSPECTIONS. 13. IF LOADING OF CONCRETE MASONRY ELEMENTS PRIOR TO 28-DAY AGE IS ANTICIPATED, CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO SUBMITTAL OF GROUT AND/OR MORTAR MIX DESIGNS IN ORDER TO ALLOW SPECIFYING PROVISIONS FOR SUCH. PROVISIONS MAY INCLUDE COMPRESSION TEST CYLINDERS TO BE FIELD-CURED IN CONDITIONS MATCHING SUBJECT MASONRY ELEMENTS, PLUS USE OF CEMENT TYPES AND/OR ADMIXTURES IN MIX DESIGNS TO

PROVIDE THE REQUIRED COMPRESSIVE STRENGTHS AT ANTICIPATED AGES LESS THAN 28 DAYS.

LOADING OF MASONRY ELEMENTS BEFORE CURING FOR 28 DAYS WILL NOT BE APPROVED

WITHOUT THESE PROVISIONS BEING SPECIFIED, AND MET BY CONTRACTOR.

STRUCTURAL STEEL

1. ALL STEEL AND MISC. IRON SHALL BE FABRICATED AND ERECTED IN CONFORMANCE WITH AISC 360 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS.

2. STEEL MATERIAL SHALL BE AS FOLLOWS: W SHAPES: ASTM A992

WELDING ELECTRODES: E70XX

PLATES, CHANNELS & ANGLES: ASTM A36 UNLESS NOTED OTHERWISE RECTANGULAR TUBES (TS OR HSS): ASTM A500 GRADE B, Fy=46 KSI PIPES (STD., X-STRG. & XX-STRG.): ASTM A53 GRADE B, Fy=35 KSI ROUND TUBES (HSS): ASTM A500 GRADE B, Fy=42 KSI STEEL POSTS SUPPÓRTING NETTING & METAL CHAIN-LINK FABRIC UP TO 10 FT. HIGH

SHALL BE GALVANIZED PIPES COMPLYING WITH ASTM F1083, REGULAR GRADE 30 KSI YIELD STRENGTH, SCHEDULE 40. HOT-DIP ZINC GALVANIZING SHALL COMPLY WITH ASTM A123, WITH MIN. OF 1.8 OZ./SQ. FT. OUTSIDE AND INSIDE. STEEL POSTS SUPPORTING NETTING & METAL CHAIN-LINK FABRIC <u>OVER</u> 10 FT. HIGH SHALL BE GALVANIZED PIPES PER ASTM A53 (GR. B, Fy=35 KSI) OR ROUND TUBES PER ASTM A500 (GR. B., Fy=42 KSI) HOT-DIP ZINC GALVANIZED

PER ASTM A123, WITH MIN. OF 1.8 OZ./SQ. FT. OUTSIDE AND INSIDE. HEADED STUDS: ASTM A108 TYPE B, Fy=51 KSI MACHINE BOLTS (M.B.): ASTM A307 GRADE A, A563 FOR NUTS, F844 FOR WASHERS ANCHOR BOLTS/RODS (A.B.): ASTM F1554 GRADE 36 THREADED RODS: ASTM A307 OR A36 (MAY BE THREADED FOR ENTIRE LENGTH)

3. UNLESS NOTED OTHERWISE, ANCHOR BOLTS, MACHINE BOLTS AND THREADED ANCHOR RODS THROUGH STEEL AND EMBEDDED IN CONCRETE SHALL CONFORM TO ASTM F1554. ANCHOR BOLTS/RODS SHALL HAVE A STANDARD BOLT HEAD OR TIGHTENED DOUBLE NUTS. THREADED RODS SHALL HAVE TIGHTENED DOUBLE NUTS AT END. ANCHOR BOLT PROJECTION SHALL BE ADEQUATE FOR FULL ENGAGEMENT OF PLATES, WASHERS, NUTS, ETC. AND SHALL BE VERIFIED BY CONTRACTOR PRIOR TO PLACEMENT OF CONCRETE OR GROUT.

4. ALL WELDING ON STRUCTURAL STEEL SHALL CONFORM WITH AWS D1.1 CODE AND SHALL BE PRE-QUALIFIED WELDS CONFORMING TO AWS D1.1. UNLESS SPECIFICALLY INDICATED AS FIELD WELDING, ALL WELDS MAY BE PERFORMED IN SHOP OR FIELD.

. HEADED STUDS SHALL BE WELDED WITH AUTOMATICALLY TIMED STUD WELDING EQUIPMENT. STUDS SHALL NOT BE FILLET- OR BUTT-WELDED UNLESS SPECIFICALLY SHOWN AS SUCH ON

6. ALL COMPLETE AND FULL PENETRATION GROOVE WELDS (DESIGNATED BY "C.P." OR "F.P.") SHALL USE BACK-UP PLATES UNLESS NOTED OTHERWISE. ALL PARTIAL-PENETRATION WELDS (DESIGNATED BY "P.P.") SHALL HAVE LARGEST EFFECTIVE THROAT ALLOWED BY AWS. GROOVE WELDS NOT NOTED WITH "C.P.", "F.P." OR "P.P" SHALL BE COMPLETE PENETRATION

7. WELDING PROCEDURE SPECIFICATIONS SHALL BE SUBMITTED TO THE ARCHITECT AND THE TEST AND INSPECTION AGENCY'S WELDING INSPECTOR FOR REVIEW AND APPROVAL PRIOR TO

8. MINIMUM SPACING OF ALL BOLTS, 7/8" AND SMALLER IN STEEL SHALL BE 3" o.c. AND THE MINIMUM EDGE DISTANCE FROM CENTERLINE OF HOLE TO EDGE OF PLATE OR MEMBER SHALL BE 1-1/2", UNLESS NOTED OTHERWISE ON DRAWINGS. WHERE BOLTS ARE INSTALLED THROUGH FLANGES OF "W" OR SIMILAR SHAPES, THE BOLT GAGE SHALL BE AS RECOMMENDED BY AISC.

9. HOLES FOR BOLTS IN STEEL SHALL BE 1/16" MAXIMUM LARGER IN DIAMETER THAN BOLTS. HOLES FOR ANCHOR BOLTS SHALL NOT BE MORE THAN 5/16" LARGER FOR A.B.'S UP TO 1"ø, AND NOT MORE THAN 1/2" LARGER FOR A.B.'S OVER 1"ø. ALL HOLES SHALL BE DRILLED OR PUNCHED. BURNING OF HOLES IS NOT ALLOWED, WHETHER IN FIELD OR

10. ALL NON-PAINTED STEEL FASTENERS EXPOSED TO WEATHER OR IN UNENCLOSED SPACES SHALL BE HOT-DIPPED GALVANIZED, UNLESS NOTED OTHERWISE. GALVANIZED BOLTS AND NUTS SHALL BE PROVIDED BY SAME MANUFACTURER.

11. ALL STRUCTURAL STEEL SPECIFIED ON DRAWINGS TO BE GALVANIZED SHALL BE HOT-DIPPED ZINC GALVANIZED WITH MIN. 1.8 OZ./SQ. FT. ON ALL SURFACES. GALVANIZING SHALL BE TOUCHED UP AT FIELD-WELDED CONNECTIONS, FIELD-DRILLED HOLES, OR FIELD-CUT EDGES WITH A HIGH-ZINC DUST-CONTENT PAINT.

POST-INSTALLED ANCHORS & DOWELS

***NOTE: POST-INSTALLED ANCHORS PROVIDED IN THE EVENT THAT REBAR OR CAST-IN-PLACE ANCHOR BOLTS ARE MISSED OR INCORRECTLY PLACED, CONTRACTOR SHALL NOTIFY PROJECT INSPECTOR & SEOR ENGINEER FOR DIRECTIONS PRIOR TO PROCEEDING WITH INSTALLATION.

A. GENERAL - APPLICABLE TO ALL ANCHORS: . ANCHORS SHALL BE INSTALLED ONLY WHERE SPECIFIED ON DRAWINGS, PER 'S", CONFORMING TO ASTM C270. GROUT SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF MANUFACTURER'S INSTRUCTIONS, USING MANUFACTURER'S EQUIPMENT, WHERE APPLICABLE. INSTALLER SHALL HAVE ON SITE A COPY OF MANUFACTURER'S INSTALLATION INSTRUCTIONS AND ICC-ES OR IAPMO-UES REPORT.

> ANCHORS SHALL BE INSTALLED ONLY INTO CURED CONCRETE OR MASONRY GROUT THAT HAS ATTAINED THE MIN. DESIGN COMPRESSIVE STRENGTH AT MIN. 28 DAY AGE, EXCEPT AS NOTED BELOW FOR ADHESIVE ANCHORS. IF INSTALLATION OF ANCHORS INTO CONCRETE OR MASONRY ELEMENTS PRIOR TO 28-DAY AGE IS ANTICIPATED, CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO INSTALLATION IN ORDER TO ALLOW SPECIFYING PROVISIONS FOR SUCH. PROVISIONS MAY INCLUDE COMPRESSION TEST CYLINDERS BE FIELD-CURED IN CONDITIONS MATCHING SUBJECT CONCRETE OR MASONRY ELEMENTS. PLUS USE OF CEMENT TYPES AND/OR ADMIXTURES IN MIX DESIGNS TO PROVIDE THE REQUIRED COMPRESSIVE STRENGTHS AT ANTICIPATED AGES LESS THAN 28 DAYS. INSTALLATION OF ANCHORS INTO CONCRETE OR MASONRY GROUT BEFORE CURING FOR 28 DAYS WILL NOT BE APPROVED WITHOUT THESE PROVISIONS BEING SPECIFIED, AND MET BY CONTRACTOR.

5. WHERE POST-INSTALLED ANCHORS ARE USED TO MITIGATE OMITTED OR MISPLACED CAST-IN-PLACE ANCHORS, ADDED SPECIAL INSPECTION AND TESTING COSTS ASSOCIATED WITH THE POST-INSTALLED ANCHORS WILL BE PAID FOR BY THE DISTRICT, HOWEVER, SUCH COSTS WILL BE BACK-CHARGED TO THE CONTRACTOR.

4. PRIOR TO DRILLING HOLES FOR ANY POST-INSTALLED ANCHORS INTO NEW OR EXISTING CONCRETE OR MASONRY, ALL REINFORCING BARS IN AREA OF NEW ANCHORAGE HOLES SHALL BE LOCATED WITH PACHOMETER OR OTHER SUITABLE DEVICE AND CLEARLY MARKED IN THE FIELD. NEW ANCHORS SHALL BE INSTALLED NOT LESS THAN 1" CLEAR FROM REINFORCING. WHERE REINFORCING BARS CANNOT BE LOCATED, CARE SHALL BE TAKEN WHILE DRILLING HOLES SO THAT REINFORCING BARS ARE NOT CUT OR DAMAGED AND HOLES SHALL BE REPAIRED & RELOCATED AS REQUIRED. USE OF DRILLS WITH GROUND FAULT INTERRUPTERS (GFI) IS RECOMMENDED.

5. PROVIDE TESTING AND INSPECTIONS OF ANCHOR INSTALLATIONS PER TESTING AND SPECIAL INSPECTION NOTES, THIS SHEET.

ANCHORS OTHER THAN THOSE SPECIFIED BELOW MAY BE USED ONLY WHEN CURRENT ICC-ES OR IAPMO-UES REPORT FOR SUCH IS SUBMITTED FOR REVIEW AND APPROVAL IN WRITING. ANCHORS SHALL NOT BE INSTALLED UNTIL ANCHORS ARE APPROVED BY STRUCTURAL ENGINEER AND DSA, AND TEST LOADS ARE DETERMINED AND ISSUED.

7. ANCHORS IN CONTACT WITH PRESERVATIVE—TREATED AND FIRE—RETARDANT—TREATED WOOD SHALL BE OF HOT-DIPPED ZINC-COATED GALVANIZED STEEL OR STAINLESS STEEL. ANCHORS EXPOSED TO WEATHER OR REQUIRED TO BE CORROSION RESISTANT SHALL BE OF HOT-DIPPED ZINC-COATED GALVANIZED STEEL OR STAINLESS STEEL.

B. EXPANSION ANCHORS: EXPANSION ANCHORS SHALL BE WEDGE TYPE ANCHORS ONLY AND SHALL HAVE ICC-ES OR IAPMO-UES APPROVAL, INCLUDING APPROVAL FOR RESISTANCE TO SEISMIC AND WIND LOADS, PASSING ICC-ES CRITERIA AC193 (CONCRETE) & ACO1 (MASONRY). USE ONE OF THE FOLLOWING ICC-ES OR IAPMO-UES APPROVED SYSTEMS:

a) HILTI KWIK BOLT TZ2 (ESR-4266), (TYP. ANCHOR SPECIFIED U.N.O.) b) SIMPSON STRONG-BOLT 2 ANCHORS (ESR-3037). c) DEWALT/POWERS POWER-STUD+ SD2, SD4 & SD6 ANCHORS (ESR-2502).

a) HILTI KWIK BOLT TZ2 (ESR-4561), (TYP. ANCHOR SPECIFIED U.N.O.) b) SIMPSON STRONG-BOLT 2 ANCHORS (ER-240), e) DEWALT/POWERS POWER-STUD+ SD1 (ESR-2966) NOTE: OTHER EXPÁNSION ANCHORS MAY BE USED ONLY WHÉN ICC-ES OR IAPMO-UES REPORT FOR SUCH IS SUBMITTED TO AND APPROVED BY ENGINEER AND DSA AND TEST LOADS

2. EXPANSION ANCHORS SHALL HAVE EMBEDMENT NOT LESS THAN EIGHT (8) ANCHOR DIAMETERS, OR AS OTHERWISE SPECIFIED IN DETAILS. TORQUE ANCHORS DURING INSTALLATION TO THE RECOMMENDED INSTALLATION TORQUE VALUES SPECIFIED IN MANUFACTURER'S ICC-ES OR IAPMO-UES REPORT.

C. CHEMICAL ADHESIVE ANCHORS AND DOWELS: ALL THREADED RODS AND REBAR DOWELS INSTALLED IN HARDENED CONCRETE OR MASONRY

ARE DETERMINED AND ISSUED.

GROUT WITH "ADHESIVE" SHALL BE A TWO-PART NOZZLE-MIXED ICC-ES OR IAPMO-UES APPROVED CHEMICAL ADHESIVE SYSTEM, PASSING ICC-ES CRITERIA AC308 (CONCRETE) & AC58 (MASONRY). USE ONE OF THE FOLLOWING ICC-ES OR IAPMO-UES APPROVED SYSTEMS:

a) HILTI "HIT-RE 500-V3" ADHESIVE ANCHOR SYSTEM (ESR-3814), (SPECIFIED U.N.O.) b) SIMPSON "SET-XP" ADHESIVE ANCHOR SYSTEM (ESR-2508), e) DEWALT/POWERS "PURE110+" ADHESIVE ANCHOR SYSTEM (ESR-3298), d) ITW RED HEAD "C6+" ADHESIVE ANCHOR SYSTEM (ESR-4046). MASONRY: a) HILTI "HIT" SYSTEM WITH HY-270 ADHESIVE (ESR-4143),(SPECIFIED U.N.O.)

b) SIMPSON "SET-XP" ADHESIVE ANCHOR SYSTEM (IAPMO ER-0265),) DEWALT/POWERS "AC100+ GOLD" ADHESIVE ANCHOR SYSTEM (ESR-3200). NOTE: OTHER CHEMICAL ADHESIVE ANCHOR SYSTEMS MAY BE USED ONLY WHEN ICC-ES OR IAPMO-UES REPORT FOR SUCH IS SUBMITTED TO AND APPROVED BY ENGINEER AND DSA AND TEST LOADS ARE DETERMINED AND ISSUED.

ANCHORS SHALL BE INSTALLED ONLY INTO CURED CONCRETE OR MASONRY GROUT OF MIN. 21 DAY AGE. IF INSTALLATION OF ANCHORS INTO CONCRETE OR MASONRY ELEMENTS PRIOR TO 21-DAY AGE IS ANTICIPATED, CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO INSTALLATION FOR DIRECTION.

5. INSTALLATION OF CHEMICAL ADHESIVE ANCHORS IN HORIZONTAL OR OVERHEAD APPLICATIONS SHALL BE INSTALLED BY AN ACI/CSRI CERTIFIED ADHESIVE ANCHOR INSTALLER. HOLES SHALL BE DRILLED 1/8" TO 1/4" LARGER IN DIAMETER THAN ROD OR BAR OUTER DIAMETER, AS SPECIFIED IN ICC-ES OR IAPMO-UES REPORT.

BARS/RODS SHALL HAVE EMBEDMENT IN ADHESIVE NOT LESS THAN TEN (10) NOMINAL BAR/ROD DIAMETERS IN CONCRETE AND NINE (9) NOMINAL BAR/ROD DIAMETERS IN MASONRY, OR AS OTHERWISE SPECIFIED IN DETAILS.

6. INSTALLATION TORQUE FOR ALL ANCHORS SHALL BE REDUCED ACCORDING TO MANUFACTURER'S RECOMMENDATION DUE TO THE VICINITY OF ANCHOR TO EDGE OF CONCRETE. 7. THE BOND STRESSES AS SPECIFIED IN ICC-ES OR IAPMO-UES REPORT SHALL BE BASED ON LONG TERM ELEVATED TEMPERATURES OF NOT LESS THAN 110 DEGREES F.

METAL ROOF DECK

1. METAL DECK SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND ICC-ES OR IAPMO REPORT.

METAL DECK SHALL BE AS MANUFACTURED BY VERCO MANUFACTURING CO. (ER-2018), WITH THE FOLLOWING PROPERTIES:

PROFILE: 3" DEEP, N-24, WITH STANDARD INTERLOCKING SIDELAP THICKNESS: 16 GA. PER-FOOT PROPERTIES: I = 1.647 + S = 0.950, -S = 1.005STEEL GRADE: GRADE 50, Fy = 50 KSI, Fu = 65 KSI FINISH: G90 GALVANIZED WITH PRIMER ON BOTH SIDES.

3. ATTACHMENT TO SUPPORTING FRAMING AT HOME DUGOUTS: USE 15/16" PUDDLE WELDS (1/2" FF. DIA.) THUS: TO PERPENDICULAR SUPPORTS: FOUR (4) PW PER 24" SHEET TO PARALLEL SUPPORTS: PW @ 12" o.c. & 3" - 6" FROM ENDS ALONG SIDELAPS: BUTTON PUNCH @ 12" o.c. & 3" - 6" FROM ENDS. (DO NOT USE VSC/PUNCHLOK SYSTEM)

4. PROVIDE STEEL UNDERSIDE CLOSURE BELOW DECKING AT ALL EXTERIOR WALLS AT DUGOUTS, AND WHERE SPECIFIED BY ARCHITECTURAL DRAWINGS, PER DETAIL 31/S2.1. 5. TOUCH-UP: ALL WELDS SHALL BE TOUCHED UP WITH SPRAY-ON ZINC GALVANIZING AS

RECOMMENDED BY MANUFACTURER PRIOR TO RE-APPLICATION OF PRIMER AND PAINT. 6. LAYOUT: DECK SHALL BE LAID OUT SUCH THAT A DOWN-FLUTE IS CENTERED OVER EVERY CMU WALL PARALLEL TO DECK FLUTES. USE ONE-PIECE SHEETS OVER ENTIRE TRANSVERSE DIMENSION OF BUILDINGS. NO SHEET LAPS/SPLICES ARE ALLOWED WITHIN 6" OF CMU PARALLEL TO FLUTES.

TESTING AND SPECIAL INSPECTIONS

A) ALL TESTS AND SPECIAL INSPECTIONS SHALL CONFORM TO APPLICABLE REQUIREMENTS OF 2022 CALIFORNIA BUILDING CODE (CBC) CHAPTER 17A AND APPROVED FORM DSA-103, "LISTING OF STRUCTURAL TESTS AND SPECIAL INSPECTIONS."

B) ALL TESTS OF MATERIALS AND TESTING LABORATORY SHALL BE IN ACCORDANCE WITH 2022 CALIFORNIA ADMINISTRATIVE CODE (CAC) SECTION 4-335. THE OWNER SHALL EMPLOY AND PAY THE INSPECTION/TESTING LABORATORY.

COSTS OF RE-TESTING MAY BE BACK-CHARGED TO THE CONTRACTOR. D) INSPECTOR SHALL BE APPROVED BY DSA. INSPECTIONS SHALL BE IN ACCORDANCE WITH CAC SECTION 4-333(b), AND THE DUTY OF THE INSPECTOR SHALL BE IN ACCORDANCE WITH CAC SECTION 4-342.

E) COPIES OF ALL TEST/INSPECTION REPORTS SHALL BE SUBMITTED TO ARCHITECT, STRUCTURAL ENGINEER. PROJECT INSPECTOR. AND DSA-SSS. 2. FOUNDATIONS (DRILLED PIERS, FOOTINGS, GRADE BEAMS), WALLS AND SLABS-ON-GRADE:

A) NOTIFY ENGINEER AND PROJECT INSPECTOR 48 HOURS BEFORE CONCRETE IS TO BE PLACED OR FORMS CLOSED TO ALLOW FOR INSPECTION OF EXCAVATIONS AND REINFORCING PLACEMENT. B) SPECIAL INSPECTION IS REQUIRED PER CBC SECTION 1705A.3, 1705A.6 & 1705A.8.

C) THE TESTING AGENCY SHALL PERFORM THE FOLLOWING: * REVIEW ALL CONCRETE MIX DESIGNS. ALL DESIGNS SHALL BE SUBMITTED TO AND APPROVED BY TESTING AGENCY PRIOR TO ORDERING

* FOR EACH CONCRETE MIX PLACED, AGENCY SHALL CAST (4) TEST CYLINDERS IN ACCORDANCE WITH ASTM C31 FOR EACH 50 CUBIC YARDS OR 2000 SQUARE FEET, OR FRACTION THEREOF, OF CONCRETE PLACED EACH DAY, AND TRANSPORT CYLINDERS TO LAB. TEST CYLINDERS IN ACCORDANCE WITH ASTM C39. TEST (1) CYLINDER AT 7 DAYS AND (2) CYLINDERS AT 28 DAYS. HOLD LAST TEST CYLINDER FOR

60 DAYS * INSPECT FINAL PLACEMENT OF ALL REINFORCING AND STEEL EMBEDS AS INDICATED ON DETAILS PRIOR TO CONCRETE PLACEMENT. * CONTINUOUS INSPECTION OF CONCRETE PLACEMENT FOR ALL DRILLED PIERS

AND GRADE BEAM FOOTINGS. D) SEE ITEM 8 BELOW FOR INSPECTIONS BY GEOTECHNICAL ENGINEER.

A) SPECIAL INSPECTION IS REQUIRED PER CBC SECTION 1705A.4.

A) <u>GENERAL — APPLICABLE TO ALL ANCHORS AND DOWELS:</u>

50(C.S.) & 40(S.S.)

40(C.S.) & 60(S.S.)

110(C.S.) & 125(S.S.)

B) TESTING LAB SHALL PERFORM THE FOLLOWING:

CONCRETE UNIT MASONRY:

* REVIEW MASONRY GROUT MIX DESIGNS. ALL DESIGNS SHALL BE SUBMITTED TO AND APPROVED BY TESTING AGENCY PRIOR TO ORDERING GROUT. * VERIFY I'M COMPLIANCE PER UNIT STRENGTH METHOD PER CBC 2105A.6. * CAST AND TEST GROUT CYLINDERS AS REQUIRED. * INSPECT UNIT PLACEMENT AND GROUT SPACES. * VERIFY REINFORCING PLACEMENT. 4. POST-INSTALLED ANCHORS IN CONCRETE AND CONCRETE MASONRY:

1) ALL EXPANSION ANCHORS, SCREW ANCHORS AND ADHESIVE ANCHOR SYSTEMS USED SHALL HAVE ICC-ES OR IAPMO-UES APPROVAL. 2) PERIODIC SPECIAL INSPECTION IS REQUIRED FOR ALL ANCHORS. B) <u>EXPANSION ANCHORS IN CONCRETE & MASONRY:</u> 1) PULL-TEST OR TORQUE-TEST 100% OF ANCHORS EXCEPT AS NOTED; PULL-TEST OR TORQUE-TEST 10% OF SILL PLATE ANCHOR BOLTS AND 50% OR ALTERNATE

ANCHORS FOR EQUIPMENT ANCHORAGE AND IN NON-STRUCTURAL APPLICATIONS. 2) PULL-TEST LOAD VALUES SPECIFIED BELOW ARE BASED ON (1-1/4) TIMES THE MAXIMUM DESIGN TENSION STRENGTHS AS PROVIDED IN THE ICC-ES REPORT FOR HILTI KWIK-BOLT TZ2 (ESR-4266) IN CONCRETE, IN ACCORDANCE WITH CBC SECTION 1910A.5.4. AND (2) TIMES THE MAXIMUM ALLOWABLE TENSION LOADS AS PROVIDED IN THE ICC-ES REPORT FOR HILTI KWIK-BOLT TZ2 (ESR-4561) IN MASONRY. 3) PULL-TEST ANCHORS IN TENSION WITH CALIBRATED HYDRAULIC RAM TO VALUES SPECIFIED BELOW.

ANCHOR NOMINAL EMBEDMENT CONC. TENSION MASONRY TENSION <u>DIAMETER (CONC./MASONRY) TEST LOAD (LBS.) TEST LOAD (LBS.)</u> 1180*(790**) 1905 2½" / 2½"* 1955 1000*(770**) 3¾" / 3¾"*(3¾"**) 4050 1280*(970**) 4½" / 4½"*(4½"**) 5525 1880*(1730**) 5½" / 5½"* 7150 2770* CONC. INSTALLATION CMU INSTALATION <u>TORQUE (FT.-LBS.)</u> TORQUE (FT.-LBS.) <u>DIAMETER</u> 30(C.S. & S.S.) 15(C.S. & S.S.)

* - AT ANCHOR INSTALLED IN THE FACE OF GROUT-FILLED MASONRY ** - AT ANCHOR INSTALLED IN THE TOP OF GROUT-FILLED MASONRY 4) ALTERNATIVELY, TORQUE—TEST ANCHORS WITH CALIBRATED TORQUE WRENCH TO VALUES SPECIFIED IN MANUFACTURER'S ICC-ES OR IAPMO-UES REPORT FOR RECOMMENDED INSTALLATION TORQUE WITHIN 1/4 TURN OF THE NUT FOR 3/8" SLEEVE ANCHOR ONLY AND WITHIN 1/2 TURN OF THE NUT FOR ALL OTHER ANCHORS.

25(C.S.) & 15(S.S.)

30(C.S.) & 35(S.S.)

50(C.S. & S.S.)

B) RODS & DOWELS WITH CHEMICAL ADHESIVE IN CONCRETE & MASONRY: 1) PULL—TESTING OF RODS INSTALLED IN CHEMICAL ADHESIVE IS REQUIRED FOR ALL ANCHORS. TESTING OF REBAR USED ONLY AS SHEAR DOWELS ACROSS COLD JOINTS IN SLABS-ON-GRADE, WHERE SLAB IS NOT PART OF THE LATERAL

FORCE-RESISTING SYSTEM, IS NOT REQUIRED. 2) PULL-TEST LOAD VALUES SPECIFIED BELOW ARE BASED ON (1-1/4) TIMES THE MAXIMUM DESIGN TENSION STRENGTHS AS PROVIDED IN THE ICC-ES REPORT FOR HILTI HIT-RE 500-V3 (ESR-3814) IN CONCRETE, IN ACCORDANCE WITH CBC SECTION 1910A.5.4, AND (2) TIMES THE MAXIMUM ALLOWABLE TENSION LOADS AS PROVIDED IN THE ICC-ES REPORT FOR HILTI HIT HY-270

(ESR-4143) IN MASONRY. 3) PULL-TEST ANCHORS IN TENSION WITH CALIBRATED HYDRAULIC RAM TO VALUES SPECIFIED BELOW, BASED ON MIN. EMBEDMENT OF 100 IN CONCRETE & 90 IN MASONRY, U.N.O. ANCHOR/BAR MIN. EMBEDMENT CONC. TEST MASONRY TEST

<u>DIAMETER</u> (CONC./MASONRY) <u>LOAD</u> (LBS.) <u>LOAD</u> (LBS.) %", #3 3¾" / 4¾"* 2910 6", #4 5" / 5"*(5"**) 5165 1300*(1300**) ½", #5 6¼" / N/A*(N/A**) 8245 N/A*(N/A**) ¼",#6 7%" / N/A*(N/A**) 10150 N/A*(N/A**) * - AT ANCHOR INSTALLED IN THE FACE OF GROUT-FILLED MASONRY ** - AT ANCHOR INSTALLED IN THE TOP OF GROUT-FILLED MASONRY

5. WELDING OF STRUCTURAL STEEL. TESTING LAB SHALL: A) VERIFY CERTIFICATION OF WELDERS AT START OF WORK. B) REVIEW WELDING PROCEDURE SPECIFICATIONS SUBMITTED BY FABRICATOR. C) PROVIDE CONTINUOUS INSPECTION OF ALL COMPLETE AND PARTIAL PENETRATION GROOVE WELDS, AND ALL FILLET WELDS 3/8" AND LARGER. D) PROVIDE PERIODIC INSPECTION OF ALL FILLET WELDS 5/16" AND SMALLER. E) TEST WELDS AS DEEMED NECESSARY BY THE INSPECTION AGENCY TO ENSURE

ADDITIONAL INSPECTIONS BY STRUCTURAL ENGINEER: ARCHITECT AND ENGINEER SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO THE FOLLOWING TO ALLOW FOR INSPECTION OF THE RESPECTIVE WORK PRIOR TO FNCLOSING IN FINISHES:

A) AT SUBSTANTIAL COMPLETION OF ANY AREA OF FOUNDATION WORK PRIOR TO CLOSING OF FORMS OR PLACEMENT OF CONCRETE. B) AT SUBSTANTIAL COMPLETION OF ANY AREA OF STRUCTURAL STEEL FRAMING.

ADEQUACY OF WELDS AND CONFORMANCE TO THE DRAWINGS AND SPECIFICATIONS.

7. INSPECTIONS BY GEOTECHNICAL ENGINEER: A) PROVIDE PERIODIC INSPECTION OF SITE PREPARATION & GRADING - STRIPPING OR DISCING OPERATIONS. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY. B) PROVIDE CONTINUOUS INSPECTION OF ENGINEERED FILL OPERATIONS. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT

PROVIDE CONTINUOUS INSPECTION OF EXCAVATIONS FOR DRILLED PIER FOOTINGS.

VERIFY PLACEMENT LOCATIONS, PLUMBNESS, DIAMETERS AND LENGTHS. RECORD

SHOP DRAWING SUBMITTALS

CONCRETE VOLUMES.

AND COMPACTION OF COMPACTED FILL

PROVIDE SHOP DRAWINGS FOR THE FOLLOWING MATERIALS/PRODUCTS: A) CONCRETE MIX DESIGNS (SUBMIT TO TESTING/INSPECTION AGENCY) B) CONCRETE & MASONRY REINFORCING C) CONCRETE SLAB AND WALL CONTROL/CONSTRUCTION JOINT LAYOUT

2. SEE SPECIFICATIONS FOR OTHER SUBMITTALS AND SUBMITTAL PROCEDURE.

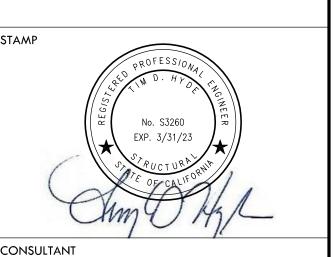
D) CONCRETE MASONRY UNITS E) CONCRETE MASONRY GROUT MIX DESIGN (SUBMIT TO TESTING/INSPECTION AGENCY) F) STRUCTURAL STEEL AND MISC. METALS

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC APP: 02-121752 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹 DATE: ____ 3/19/2024



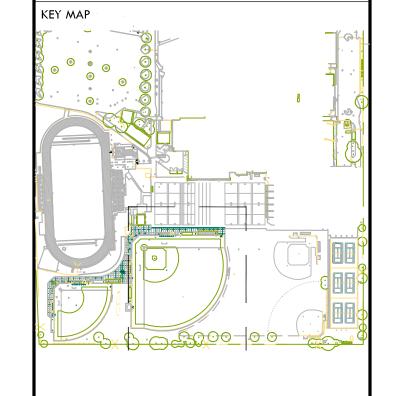
fax: 916.415.6525

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Structural Engineers, Inc. 275 Tennant Avenue, Ste. 204 ph: 408.978.1970 Morgan Hill, CA 95037 AKHSE.com Job M23-02



STRUCTURAL NOTES & MATERIAL GRADES

PROJECT NAME JOHN F. KENNEDY HIGH SCHOOL BASEBALL, SOFTBALL & TENNIS COURT **IMPROVEMENTS**

PROJECT ADDRESS

SUBMITTAL

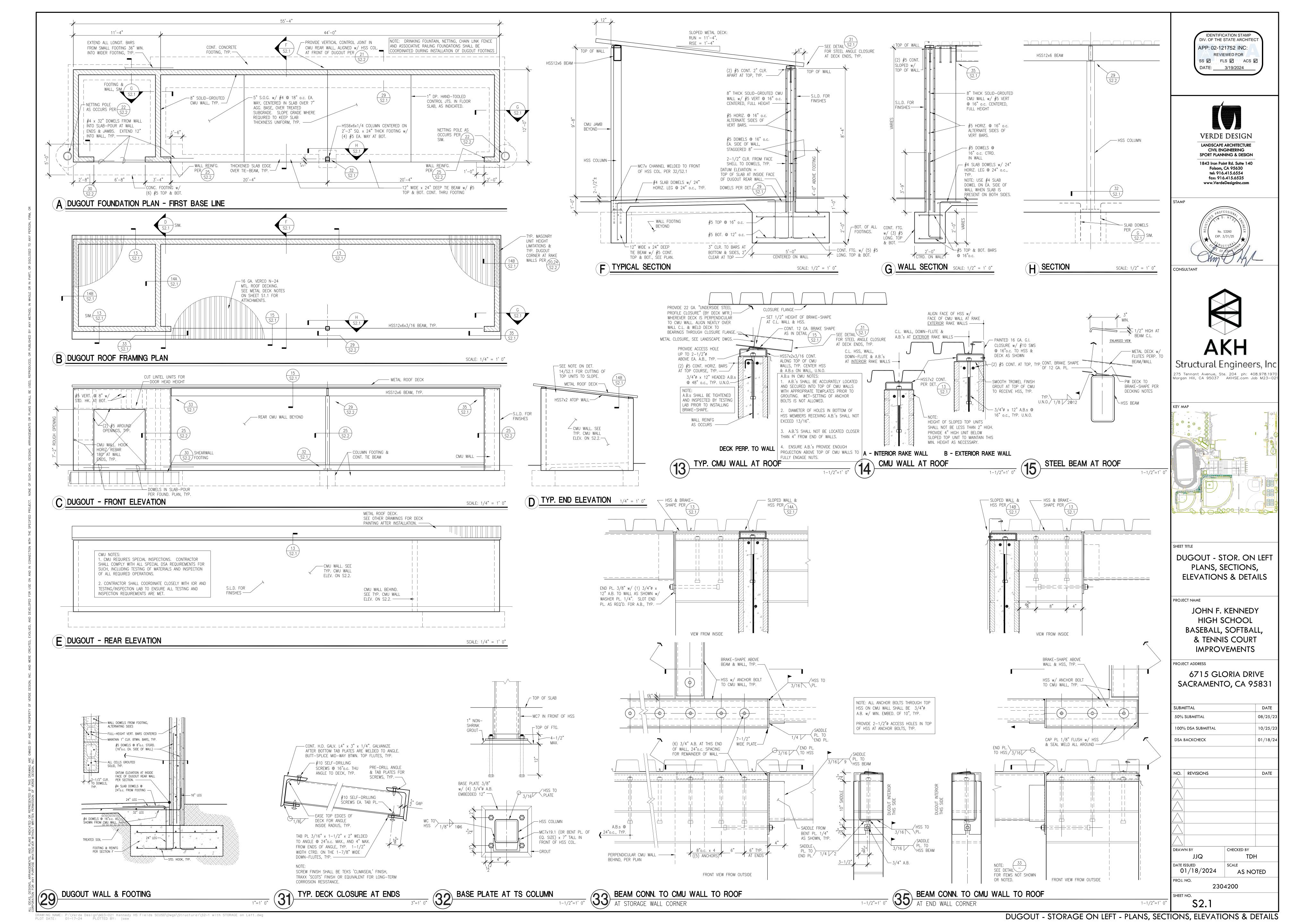
50% SUBMITTAL

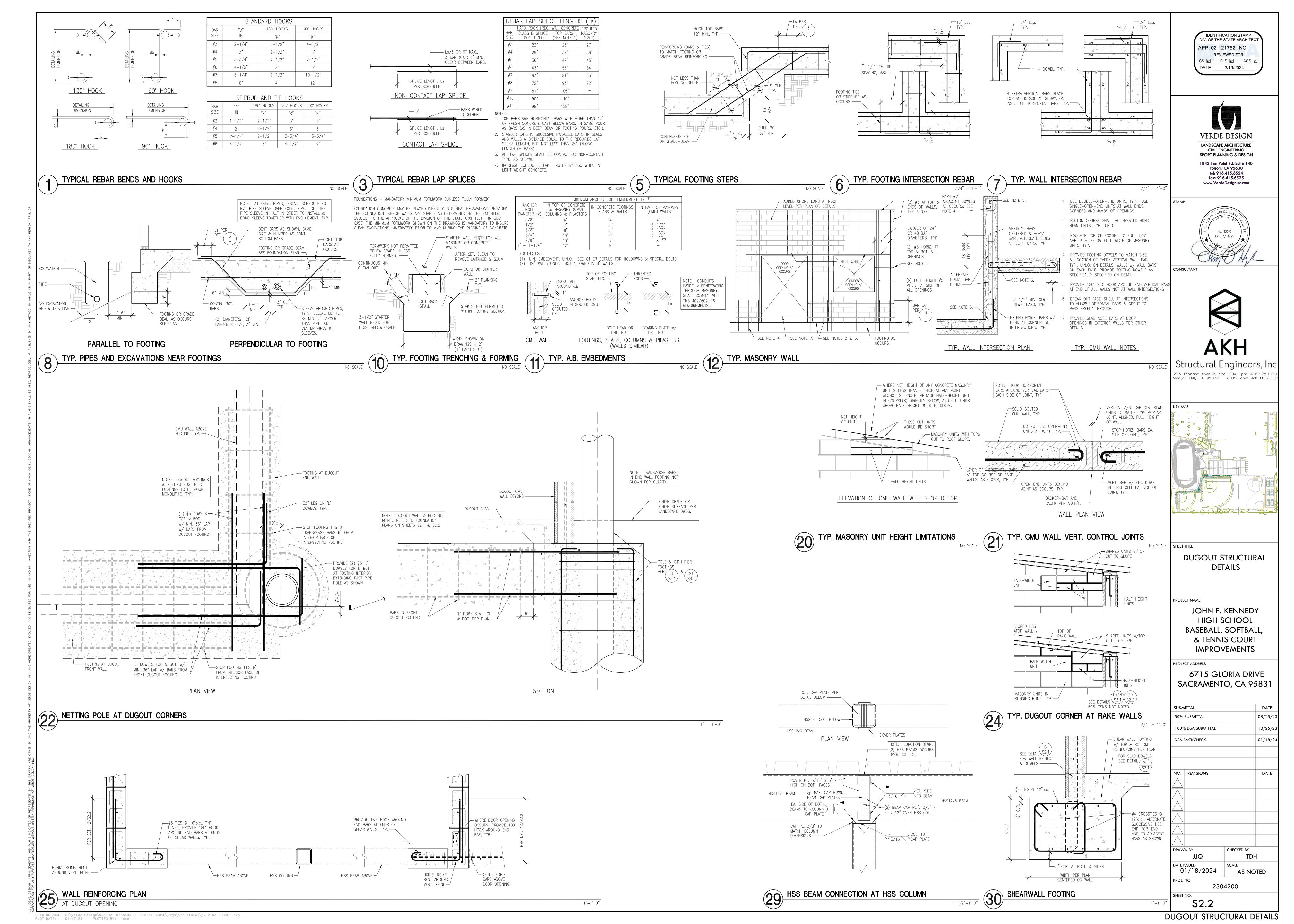
6715 GLORIA DRIVE SACRAMENTO, CA 95831

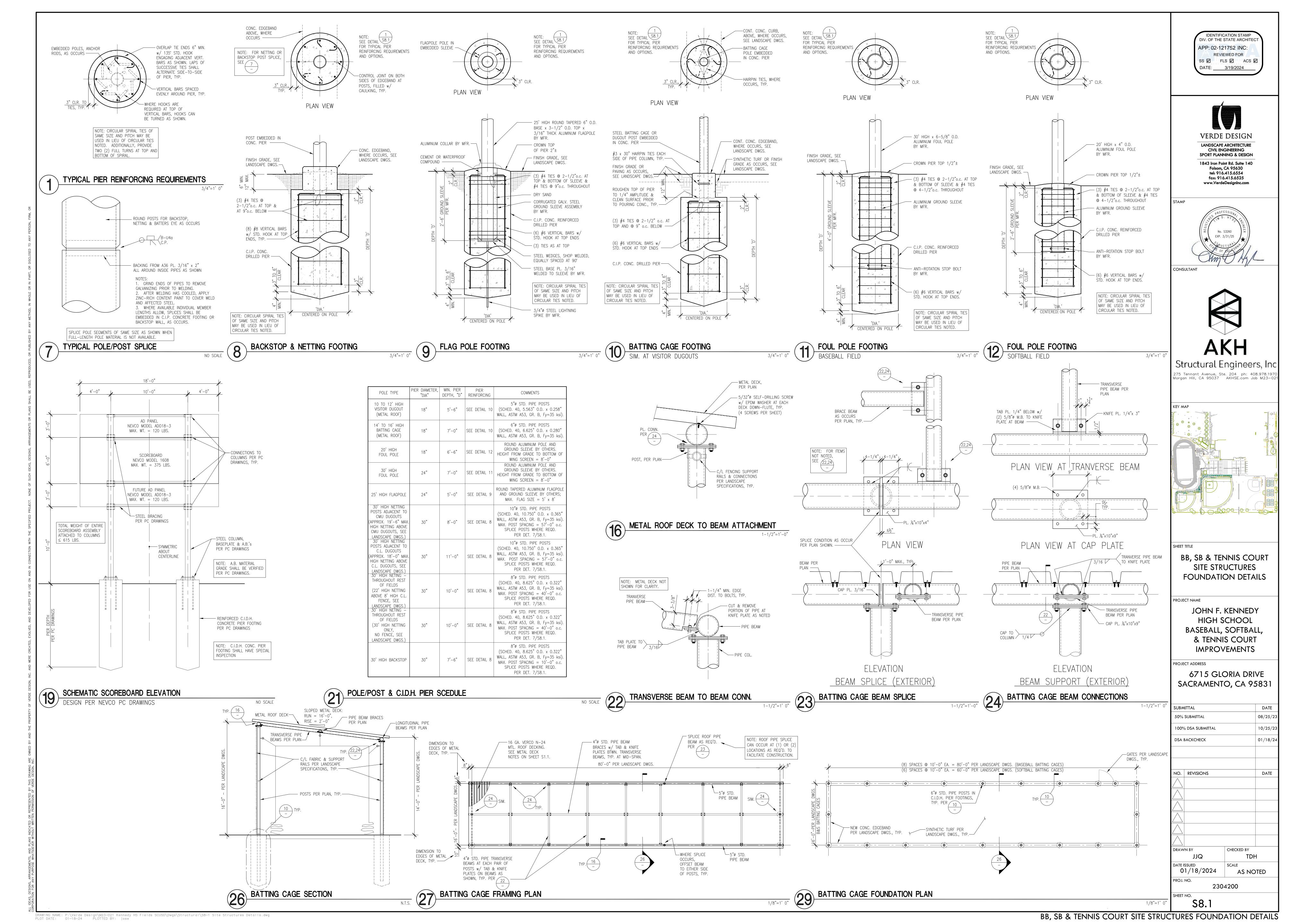
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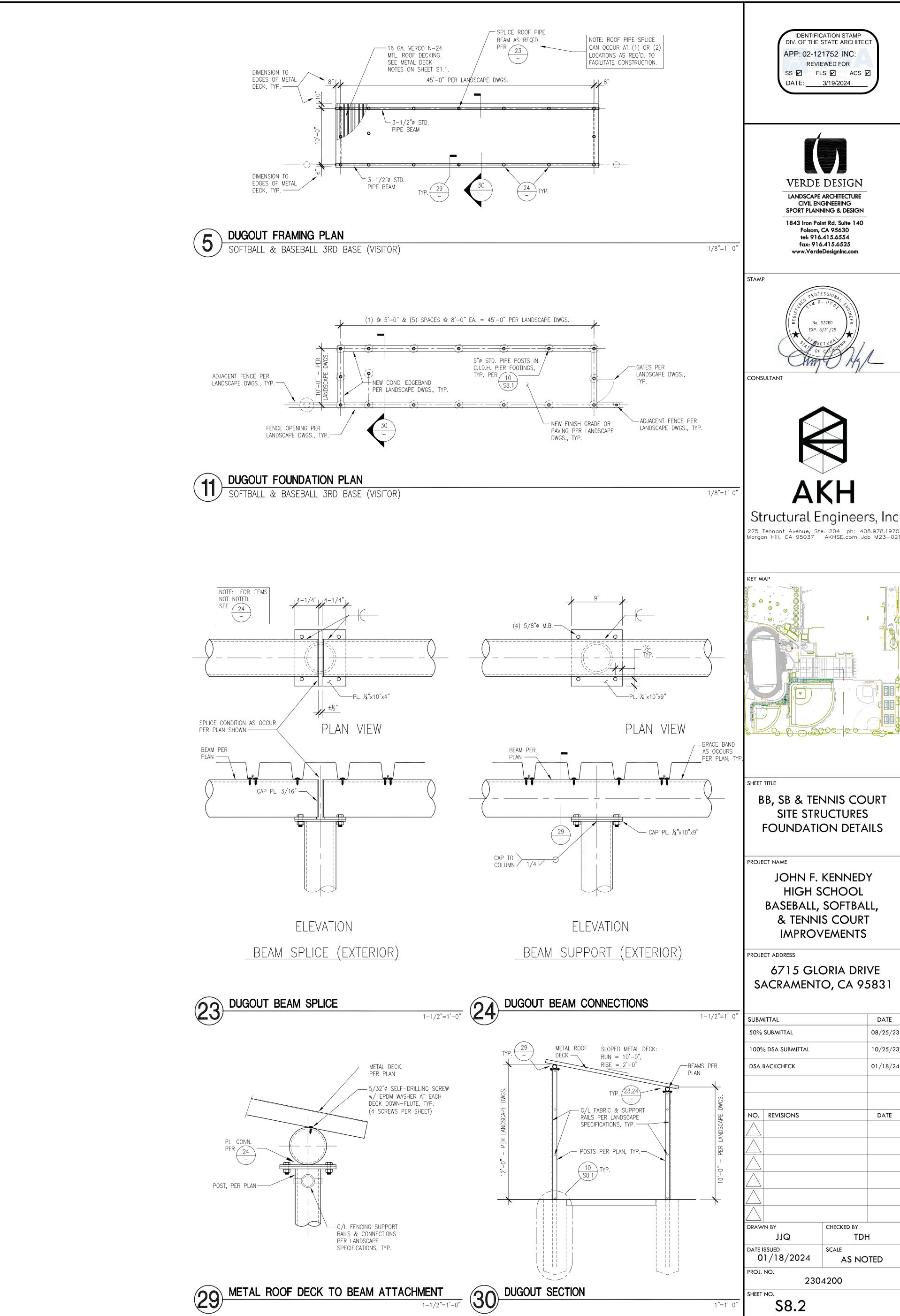
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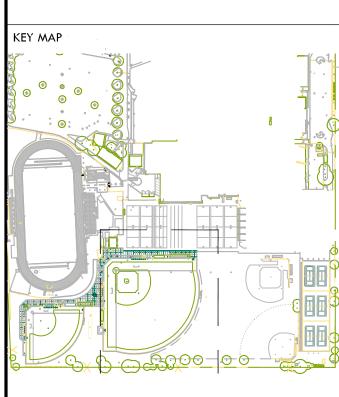








Structural Engineers, Inc



SITE STRUCTURES FOUNDATION DETAILS

JOHN F. KENNEDY BASEBALL, SOFTBALL, & TENNIS COURT

6715 GLORIA DRIVE SACRAMENTO, CA 95831

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BB, SB & TENNIS COURT SITE STRUCTURES FOUNDATION DETAILS

DRAWING NAME: P:\Verde Design\M23—021 Kennedy HS Fields SCUSD\Dwgs\Structural\S8.2 Site Details.dwg PLOT DATE: 03—11—24 PLOTTED BY: jose

2. THE COMPLETE ELECTRICAL INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE N.E.C., AND ALL APPLICABLE STATE AND LOCAL CODES ISSUED BY AUTHORITIES HAVING JURISDICTION.

3. THE CONTRACTOR SHALL BE LICENSED BY THE STATE OF CALIFORNIA C-10 AND SHALL COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS. MATERIALS AND EQUIPMENT SHALL BE U.L. LISTED AND LABELED FOR THE APPLICATION.

4. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, LICENSES AND INSPECTION FEES REQUIRED BY THIS CONTRACT WORK.

5. PRIOR TO SUBMITTING A BID THE CONTRACTOR SHALL VISIT THE SITE, REVIEW THE EXISTING CONDITIONS AND ALLOW FOR LABOR, MATERIAL AND COORDINATION THAT IS NECESSARY TO PROVIDE A COMPLETE INSTALLATION OF EACH SYSTEM. THE CONTRACTOR SHALL OBTAIN AND BE FAMILIAR WITH ALL OTHER TRADES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ELECTRICAL WORK NOTED AND CALLED OUT ON ALL CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION BETWEEN OTHER TRADES ON PROJECT.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF PERSONS AND PROPERTY AND SHALL PROVIDE INSURANCE COVERAGE AS NECESSARY FOR LIABILITY, PERSONAL, PROPERTY DAMAGE, TO FULLY PROTECT THE OWNER, ARCHITECT AND ENGINEER FROM ANY AND ALL CLAIMS RESULTING FROM THIS WORK.

7. THE CONTRACTOR SHALL MAINTAIN RECORD DRAWINGS AT THE PROJECT SITE INDICATING ALL MODIFICATIONS TO ELECTRICAL SYSTEMS. THE CONTRACTOR SHALL AT THE CONCLUSION OF THE PROJECT PROVIDE ACCURATE "AS-BUILT" DRAWINGS. "AS-BUILT" DRAMINGS SHALL SHOW ACTUAL CHANGES TO ORIGINAL ELECTRICAL DRAWING, SHOW LOCATIONS OF PULLBOXES, CONDUIT RUNS AND WIRING CHANGES.

8. ALL MATERIALS PROVIDED TO THE PROJECT SHALL BE UL OR CSA LISTED AND SHALL BE NEW. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AND INSTALL ALL INCIDENTAL MATERIALS REQUIRED FOR A COMPLETE INSTALLATION.

9. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED "CUTTING, PATCHING, EXCAVATION. BACKFILL AND REPAIRS" NECESSARY TO RESTORE DAMAGED SURFACES TO EQUAL OR BETTER THAN ORIGINAL CONDITIONS EXISTING AT START OF WORK. THE CONTRACTOR SHALL CONTACT "UNDERGROUND SERVICES ALERT" FOR LOCATION OF EXISTING UTILITIES PRIOR TO COMMENCEMENT OF UNDERGROUND WORK.

IO. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAINTING ALL EXPOSED CONDUITS AND ELECTRICAL EQUIPMENT. REFER TO ARCHITECTS PAINTING SECTION FOR REQUIREMENTS.

II. ALL ELECTRICAL EQUIPMENT INSTALLED OUTDOORS SHALL BE WEATHERPROOF. EXTERIOR CONDUITS RUN INTO BUILDINGS SHALL BE INSTALLED WITH FLASHING, CAULKED AND SEALED. CONDUITS FOR EXTERIOR ELECTRICAL DEVICES SHALL BE RUN INSIDE BUILDING UNLESS OTHERWISE NOTED ON DRAWINGS. ALL EXTERIOR CONDUITS SHALL BE "RSG" UNLESS OTHERWISE NOTED ON DRAWINGS.

12. ALL CONDUITS UNLESS OTHERWISE NOTED ON DRAWINGS SHALL HAVE AS A MINIMUM: TWO (2) #12'S WITH ONE (1) #12 GROUND. "TICK" MARKS SHOWN ON CIRCUITRY ARE FOR "ROUGH" ESTIMATING ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WIRES AND WIRE SIZES REQUIRED BY LATEST CODE.

13. COORDINATE ALL CONDUIT RUNS, ELECTRICAL EQUIPMENT AND PANELS WITH ALL OTHER WORK TO AVOID CONFLICTS.

14. ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING HAS BEEN SELECTED BASED ON DIMENSIONS TO FIT THE SPACE, THE CONTRACTOR SHALL VERIFY ALL EQUIPMENT DIMENSIONS PRIOR TO ORDERING OF THE EQUIPMENT.

15. CONTRACTOR SHALL REVIEW EQUIPMENT REQUIREMENTS OF OTHER TRADES AND PROVIDE POWER CIRCUITS AND CONNECTIONS TO ELECTRICALLY OPERATED EQUIPMENT.

16. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF UNDERGROUND POWER AND TELEPHONE SERVICES FROM SERVING UTILITIES. FIELD ADJUSTMENTS MAY BE REQUIRED IN INDIVIDUAL SERVICE LOCATIONS.

17. THE CONTRACTOR SHALL CONTACT "UNDERGROUND SERVICES ALERT" FOR LOCATION OF EXISTING UTILITIES PRIOR TO COMMENCEMENT OF UNDERGROUND WORK.

18. NEW DUCT ROUTES ARE APPROXIMATE ONLY AND MAY BE ADJUSTED IN THE FIELD TO CLEAR OTHER UNDERGROUND UTILITIES. PROVIDE AS-BUILT DRAWINGS TO INDICATE ACTUAL LOCATION OF CONDUIT ROUTING.

19. EFFECTIVELY BOND ELECTRICAL CABINETS. ENCLOSURES AND CONDUIT RACEWAYS TO CODE APPROVED GROUND AS PART OF THE CONTINUOUS GROUNDING SYSTEM.

20. FROM ALL NEW PANELS; THE CONTRACTOR SHALL STUB UP INTO ACCESSIBLE CEILING SPACE A MINIMUM OF FOUR (4) 3/4" CONDUITS FOR FUTURE USE.

21. UTILITY SERVICE WORK SHALL BE IN ACCORDANCE WITH THE SERVING UTILITY COMPANY'S RULES, REGULATIONS AND STANDARDS, AND SHALL BE VERIFIED WITH UTILITY COMPANY'S ENGINEERING DRAWINGS AND FIELD SUPERVISOR PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL DETERMINE EXACT LOCATION OF UNDERGROUND POWER, CATV AND TELEPHONE SERVICES FROM SERVING UTILITIES. FIELD ADJUSTMENTS MAY BE REQUIRED IN INDIVIDUAL SERVICE LOCATIONS. THE CONTRACTOR SHALL REMAIN IN CONTACT WITH UTILITY COMPANY ENGINEERING DEPARTMENTS THROUGHOUT PROJECT TO INSURE COORDINATION AND SCHEDULING OF WORK.

22. THE CONTRACTOR SHALL PROVIDE IN EVERY CONDUIT A DRAW STRING FOR USE IN FUTURE CONSTRUCTION. STRING SHALL BE NYLON PULLSTRING ROPE/STRING.

23. POWER FEEDERS MAY NOT BE SHOWN ON THE DRAWINGS, REFER TO THE SINGLE LINE DIAGRAM FOR CONDUIT AND FEEDER INFORMATION. ALL DRAWINGS ARE DIAGRAMMATIC INDICATING LOCATION OR POSITION OF EQUIPMENT. FIELD VERIFY CONDITIONS PRIOR TO INSTALLATION OF ANY WORK.

24. MANUFACTURER'S RECOMMENDATIONS FOR CONDUCTOR SIZING, CIRCUIT BREAKER OR FUSE PROTECTION OF ELECTRICALLY OPERATED EQUIPMENT MAY DIFFER FROM THOSE INDICATED ON DRAWINGS. CONTRACTOR SHALL CONFIRM RATINGS PRIOR TO ORDERING EQUIPMENT. PROVIDE ELECTRICAL PROTECTION TO EQUIPMENT IN ACCORDANCE TO MANUFACTURER'S SPECIFICATIONS AND PER NATIONAL ELECTRICAL CODE REQUIREMENTS.

25. PROVIDE SEISMIC BRACING FOR ALL PENDANT LIGHT FIXTURES, FREESTANDING ELECTRICAL DISTRIBUTION EQUIPMENT, MOTOR CONTROL CENTERS ETC; AND CONDUIT RACKS PER SEISMIC CRITERIA 2022 CBC REQUIREMENTS INCLUDING ENGINEERED LOAD CALCULATIONS COMPLETE WITH SWAY BRACING CRITERIA.

26. DO NOT SUBSTITUTE SPECIFIED MATERIAL OR EQUIPMENT WITHOUT FIRST OBTAINING APPROVAL FROM THE OWNER OR HIS REPRESENTATIVE.

27. ALL SPACES ON PANELS OR SWITCHBOARDS SHALL BE COMPLETE WITH HARDWARES AND BUSSING FOR FUTURE BREAKER OR SWITCH.

28. ALL ELECTRICAL WORK SHALL COMPLY WITH THE 2020 NATIONAL ELECTRICAL CODE AS AMENDED BY THE 2022 CALIFORNIA ELECTRICAL CODE.

29. SPLICE GROUND WIRE INSIDE ALL METAL ELECTRICAL PULL BOXES AND BOND TO METAL COVER WITH #6 CU GND.

SYMBOL LIST:

PLAN, DETAIL OR SECTION DESIGNATION.

201 ROOM NUMBER

SHEET REFERENCE SYMBOL - SEE ASSOCIATED NOTE ON SAME SHEET

3 FEEDER SCHEDULE SYMBOL.

MECHANICAL EQUIPMENT TAG.

INDICATES FIXTURE TYPE

LUMINAIRE SYMBOLS

LUMINAIRE - SEE SCHEDULE LUMINAIRE - SEE SCHEDULE

LUMINAIRE - SEE SCHEDULE LUMINAIRE - SEE SCHEDULE

LUMINAIRE - SEE SCHEDULE

LUMINAIRE WALL MOUNTED-SEE SCHEDULE.

EMERGENCY LUMINAIRE - PROVIDE EMERGENCY BATTERY BALLAST ⊢ EM ⊢ EMERGENCY LUMINAIRE - PROVIDE EMERGENCY BATTERY BALLAST EMERGENCY LUMINAIRE - PROVIDE EMERGENCY BATTERY BALLAST

EMERGENCY LUMINAIRE - PROVIDE EMERGENCY BATTERY BALLAST

EMERGENCY LUMINAIRE - PROVIDE EMERGENCY BATTERY BALLAST

EMERGENCY LUMINAIRE WALL MOUNTED- PROVIDE EMERGENCY BATTERY BALLAST

EXIT LIGHT SINGLE FACE - SEE SCHEDULE.

EXIT LIGHT SINGLE FACE (WITH ARROW)- SEE SCHEDULE.

EXIT LIGHT (DOUBLE FACED WITH ARROW)- SEE SCHEDULE. COMBO EMERGENCY LIGHT/ EXIT LIGHT SINGLE FACE - SEE SCHEDULE.

EMERGENCY BATTERY PACK EXIT LIGHT INSTALL AS DIRECTED.

TYPICAL LUMINAIRE NOMENCLATURE

- INDICATES SMITCHING DESIGNATION

- INDICATES CIRCUIT NUMBER

SWITCH SYMBOLS

SINGLE POLE SMITCH, + 48" AFF MAX. TO TOP OF BOX UON. SINGLE POLE SWITCH, + 48" AFF MAX. TO TOP OF BOX UON.

a = CIRCUIT CONTROLLED. THREE WAY SWITCH + 48" AFF MAX. TO TOP OF BOX UON.

FOUR WAY SWITCH + 48" AFF MAX. TO TOP OF BOX UON.

MOTOR RATED SWITCH

OCCUPANCY SENSOR

OCCUPANCY SENSOR POWER PACK

RECEPTACLE SYMBOLS

CONVENIENCE RECEPTACLE - DUPLEX AT + 18" AFF UON.

GFCI CONVENIENCE RECEPTACLE - DUPLEX.

RECEPTACLE DOUBLE DUPLEX AT + 18" AFF UON.

SINGLE RECEPTACLE - NEMA 5-20R UON, AT + 18" AFF UON.

SINGLE RECEPTACLE - NEMA L21 - 208 VOLT, THREE PHASE, 5 WIRE, AT + 18" AFF UON.

FLOOR BOX WITH CONVENIENCE RECEPTACLE, TELEPHONE AND DATA OUTLET.

FLUSH FLOOR BOX WITH SINGLE CONVENIENCE RECEPTACLE. WIRE RACEWAY, INSTALL AT + 36" AFF UON.

POWER DISTRIBUTION SYMBOLS

PANELBOARD - SURFACE OR FLUSH MOUNTED.

JUNCTION BOX - CEILING OR WALL MOUNTED, SIZE TO CODE, TAPE AND TAG WIRES. PROVIDE FLEX AND/OR RECEPTACLE AS REQUIRED TO CONNECT EQUIPMENT.

DISTRIBUTION PANEL

COMBINATION MAGNETIC STARTER FUSED DISCONNECT SWITCH. RATING AS INDICATED.

UNFUSED DISCONNECT SMITCH - RATING AS INDICATED.

FUSED DISCONNECT SWITCH - SIZE FUSES PER MOTOR MANUFACTURER'S RECOMMENDATIONS. RATING AS INDICATED.

MAGNETIC STARTER - NEMA SIZE INDICATED

TRANSFORMER - SEE SINGLE LINE FOR SIZE.

GROUND ROD.

WIRING & CONDUIT RUN SYMBOLS

CONDUIT - CONCEALED IN WALLS OR CEILING. CONDUIT - EXPOSED. ____

CONDUIT - IN OR BELOW FLOOR: 3/4"MIN.

CONDUIT - HOME RUN TO PANEL, TERMINAL CABINET, ETC. RUNS MARKED WITH CROSSHATCHES INDICATE NUMBER OF #12 AWG WIRES. CROSSHATCH WITH SUBSCRIPT "G" INDICATES GREEN GROUND WIRE. SIZE CONDUIT ACCORDING TO SPECIFICATIONS AND APPLICABLE CODE. CROSSHATCHES WITH "#IO" INDICATES WIRE SIZE OTHER THAN #12'S.

FLEX CONDUIT WITH CONNECTION. CONDUIT - STUB UP.

CAPPED CONDUIT.

TRANSFORMER.

CONDUIT - STUB DOWN. CONDUIT EMERGENCY SYSTEM ——E——

CONDUIT CONTINUATION.

IN-GRADE PULL BOXES

POWER DISTRIBUTION SINGLE LINE SYMBOLS *→ → →* CIRCUIT BREAKER.

"PG&E" METER W/ CURRENT TRANSFORMER

IN-GRADE PULL BOX IDENTIFIED WITH "L" HAS A LID LABELED

IN-GRADE PULL BOX IDENTIFIED WITH "S" HAS A LID LABELED

IN-GRADE PULL BOX IDENTIFIED WITH "P" HAS A LID LABELED

"ELECTRICAL".

MOUNTING NEM NORMALLY CLOSED NOT IN CONTRACT NOT IN ELECTRICAL CONTRACT NUMBER/ NORMALLY OPEN

THOUSAND CIRCULAR MILS

MAIN DISTRIBUTION FRAME

KILOVOLT

KILOWATT

LIGHTING

MECHANICAL

NOT TO SCALE

MANHOLE

MOUNTED

KILOVOLT AMPERES

ON CENTER POLE CIRCUIT BREAKER PUBLIC ADDRESS PULL BOX POWER FACTOR PHASE PANEL PNL EXISTING TO BE RELOCATED REQD REQUIRED

REQT REQUIREMENT(S) RM ROOM RSC RIGID STEEL CONDUIT FIRE ALARM CONTROL PANEL SMITCH SWBD SWITCHBOARD TERMINAL CABINET

ΚM

LTG

MCM

MDF

MH

MECH

MTD

MTG

HORSEPOWER UON INTERCOM INTERMEDIATE DISTRIBUTION FRAME JUNCTION BOX KILOAMPERE INTERRUPTING CAPACITY

ABBREVIATIONS:

AMP FRAME OR AMP FUSE

AUTOMATIC TRANSFER SWITCH

ABOVE FINISHED FLOOR

ARCHITECTURAL

CABLE TELEVISION

CIRCUIT BREAKER

AMP SWITCH

BREAKER

CANDELAS

CENTER LINE

CONDUIT ONLY

CIRCUIT

CEILING

CENTER

DETAIL

DEMOLISH

DIMENSION

DRAWING

EXISTING

EQUIPMENT

FUTURE

FINISH

FLOOR

HEIGH"

GROUND

EMERGENCY

FIRE ALARM

DISTRIBUTION

BUILDING

ABOVE

ARCH

ATS

BKR

CB

CD

CKT

CTR

DET

DISTR

EQPT

FACP

G, GND

FIN

DMG

BLDG

TELEPHONE TYPICAL TEL UNLESS OTHERWISE NOTED **VOLT** WAT WEATHERPROOF XFMR TRANSFORMER

FIXTURE SCHEDULE QUANTITY BALLAST MOUNTING LAMPS WEIGHT DESCRIPTION 40W N/A SINGLE HEAD LED RECTANGULAR LUMINAIRE WITH DIE CAST ALUMINUM ALLOY HOUSING. CAGE FIXTURE TO BE EQUIPPED WITH ADJUSTABLE BRACKET AND HARDWIRE TO MOUNT BELOW BATTING CAGE FIXTURE SHALL BE PROVIDED WITH MINIMUM 3-YEAR WARRANTY. SUBMIT DOCUMENTATION OF PRODUCT E7.2 AT CLOSE OUT. NOTE: FIXTURE USED AS BATTING CAGE LIGHTS. NORTHSTAR LIGHTING - #EX-40W-A2-N-4-90-VI-Y 45M N/A SURFACE MOUNTED LED RECTANGULAR LUMINAIRE WITH DIE CAST ALUMINUM ALLOY HOUSING. STORAGE ROOM FIXTURE TO BE EQUIPPED WITH ADJUSTABLE BRACKET AND HARDWIRE TO MOUNT ON STORAGE ROOM MALL FIXTURE SHALL BE PROVIDED WITH MINIMUM 3-YEAR WARRANTY. SUBMIT DOCUMENTATION OF PRODUCT AT CLOSE OUT. NOTE: FIXTURE USED AS BATTING CAGE LIGHTS. UNV KENALL - MLHAI2-24-R-MB-PP-45L40K-DCCDV

GENERAL ANCHORAGE NOTES:

MEP COMPONENT ANCHORAGE NOTE

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26, AND 30.

I. ALL PERMANENT EQUIPMENT AND COMPONENTS. 2. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (e.g. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE. 3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT

IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENTS AND ASSOCIATED DUCTWORK, PIPING AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

A. COMPONENTS WEIGHING LESS TAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.

B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE 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 SYSTEM SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 2022 CBC, SECTIONS 1617A.1.24, 1617A.1.25 AND

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., HCAI OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEM. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP) ELECTRICAL DISTRIBUTION SYSTEM (E):

MP ☐ MD☐ PP☐ E図 - OPTION I: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

PREAPPROVAL (OPM #) #

DRAWING INDEX ELECTRICAL SYMBOLS, ABBREVIATIONS, NOTES AND SCHEDULES ELECTRICAL DEMO SITE PLAN ELECTRICAL OVERALL SITE PLAN ELECTRICAL ENLARGED BASEBALL AND SOFTBALL SITE PLAN - NEW ELECTRICAL PLAN - DUGOUTS (SOFTBALL) ELECTRICAL PLAN - DUGOUTS (BASEBALL) | ELECTRICAL PLAN - BATTING CAGE (BASEBALL AND SOFTBALL) ELECTRICAL SINGLE LINE DIAGRAM ELECTRICAL DETAILS E7.2 ELECTRICAL DETAILS ELECTRICAL DETAILS E7.3 E7.4 ELECTRICAL DETAILS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE LOCATING ALL EXISTING UNDERGROUND SYSTEMS IN AREA OF NEW TRENCHING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ALL DAMAGED SYSTEMS TO OWNERS SATISFACTION. EXTREME CARE SHALL BE MAINTAINED DURING TRENCHING AS EXISTING SYSTEMS ARE KNOWN TO EXIST IN AREA. MODIFICATIONS TO EXISTING SYSTEMS MAY BE REQUIRED TO ACCOMMODATE NEW SYSTEM CONFIGURATION AND SHALL BE MADE BY THE CONTRACTOR WITHOUT EXTRA EXPENSE TO THE OWNER THE DRAWINGS AND SPECIFICATIONS ARE FOR THE ASSISTANCE AND GUIDANCE OF THE CONTRACTOR. EXACT LOCATIONS, DISTANCES AND ELEVATIONS WILL BE GOVERNED BY ACTUAL CONDITIONS. THE CONTRACTOR SHALL EXAMINE THE CONTRACT DOCUMENTS AND FIELD CONDITIONS TO DETERMINE EXACT ROUTING AND FINAL TERMINATIONS FOR ALL NEW WORK.

APP: 02-121752 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹 DATE: 3/19/2024

IDENTIFICATION STAMP

DIV. OF THE STATE ARCHITEC



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CONSULTANT

JOB #EK23098



KEY MAP

SHEET TITLE

ELECTRICAL SYMBOLS. ABBREVIATIONS. NOTES AND SCHEDULE

PROJECT NAME

SUBMITTAL

50% SUBMITTAL

JOHN F. KENNEDY HIGH SCHOOL BASEBALL, SOFTBALL & TENNIS COURT **IMPROVEMENTS**

PROJECT ADDRESS 6715 GLORIA DRIVE SACRAMENTO, CA 95831

08/20/23

10/25/23 100% SUBMITTAL DSA BACKCHECK 01/18/24 NO. REVISIONS DRAWN BY **CHECKED BY** DATE ISSUED AS NOTED PROJ. NO.

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SHEET NO.