

# **COVINA VALLEY HIGH SCHOOL**

# SWIMMING POOL REPLACEMENT

С

# 463 SOUTH HOLLENBECK AVE, COVINA, CA 91723

# **DSA SUBMITTED SET**

# 12/19/2022

# **DSA APPLICATION # 03-122700 DSA FILE # 19-H8**

	PROJECT TE	AM		DSA REQUIREMENTS			S	HEET LIST	
IENT NAME	COVINA VALLEY UNIFIED SCHOOL DISTRICT	<u>CONTACT:</u> KEITH KOVACH		ND SPECIFICATIONS IS THAT THE WORK OF THE ALTER			.GENERAL.		.STRUCTURAL.
	519 E. BADILLO STREET, COVINA, CA 91723	(626) 277-9681 KKOVACH@C-VUSD.ORG	AS DETERIORATION OR NON-COM CHANGE DOCUMENT (CCD), OR A	PLYING CONSTRUCTION BE DISCOVERED WHICH IS NO SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAI	I COVERED BY THE LING AND SPECIFYING	G0.1	COVER SHEET	*S0.1	GENERAL NOTES
CHITECT	DLR GROUP 1650 SPRUCE STREET, SUITE 300	JESSE MILLER (951) 682-0470	(SECTION 4-317(c), PART I, TITLE 2	SUBMITTED AND APPROVED BY DSA BEFORE PROCEEDI 4, CCR)	NG WITH THE WORK.	G0.3 G1.1 G1.3	GENERAL NOTES, SYMBOLS AND ABBREVIATIONS FIRE ACCESS SITE PLAN FEMA FLOOD MAP	*S0.2 *S0.3 *S0.4	GENERAL NOTES TYPICAL CONCRETE DETAILS TYPICAL CONCRETE & REINF. DETAILS
QUATICS	RIVERSIDE, CA 92507 AQUATIC DESIGN GROUP	JMILLER@DLRGROUP.COM DENNIS BERKSHIRE (760) 444 8202	SHALL BE MADE BY ADDENDUM C	AWINGS AND SPECIFICATIONS OR A CONSTRUCTION CH R A CONSTRUCTION CHANGE DOCUMENT. (CCD) APPRC	VED BY THE DIVISION	01.0	.CODE.	*S0.5 *S0.6	TYPICAL MASONRY DETAILS TYPICAL STEEL DETAILS
	2226 FARADAY AVENUE, CARLSBAD, CA 92008	(760) 444-8303 DBERKSHIRE@AQUATICDESIGNGROUP.COM RON CANEDY	REGULATIONS. NOTWITHSTANDI	QUIRED BY SECTION 4-338, PART I, TITLE 24, CALIFORNI NG OTHER PROVISIONS OF THE PROJECT SPECIFICATIC BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1.	NS, COMPLY WITH ALL	CP0.1	ENLARGED SITE PLAN - EXITING/ CODE ANALYSIS	*S0.7 *S0.8 *S0.9	TYPICAL METAL STUD FRAMING TYPICAL METAL STUD FRAMING TYPICAL METAL DECK DETAILS
VIL	FPL AND ASSOCIATES, INC. 30 CORPORATE PARK, SUITE 401 IRVINE, CA 92606	(949) 252-1688 X 203 RON.CANEDY@FPLASSOCIATES.COM	SECTION 4-338, FOR ALL ADDEND	A AND CONSTRUCTION CHANGE DOCUMENTS.		CP0.1A	EXISTING PARTIAL SITE PLAN - (E) TOILET FACILITIES	*S2.1 	FOUNDATION AND ROOF FRAMING PLAN FOUNDATION DETAILS FOUNDATION DETAILS
ECHANICAL/ .UMBING	<b>DCGA ENGINEERS</b> 4750 ONTARIO MILLS PKWY,	WBLESTHER GAMA (909) 987-0017		ENTS MUST BE SIGNED BY ALL OF THE FOLLOWING: AR CHARGE OF PROJECT; AND STRUCTURAL ENGINEER OF INEER (WHEN APPLICABLE).		*C0.0	SITE IMPROVEMENT PLAN TITLE SHEET	*S4.1	ROOF FRAMING DETAILS
.ECTRICAL	ONTARIO, CA 91764 DCGA ENGINEERS	WBLESTHER.GAMA@DCGAENGINEERS.COM CHEN FANG	SUBSTITUTIONS AFFECTING DSA	REGULATED ITEMS (ACCESSIBILITY, STRUCTURAL ENGI		*C1.0 *C2.0	SITE DEMOLITION PLAN GRADING PLAN		.ELECTRICAL.
	4750 ONTARIO MILLS PKWY,	(909) 987-0017		SIDERED AS A CONSTRUCTION CHANGE DOCUMENT, AI ND INSTALLATION IN ACCORDANCE WITH DSA IR A-6 AN		*C2.1 *C2.2	GRADING PLAN GRADING DETAILS	*E0.1	ELECTRICAL GENERAL NOTES
	ONTARIO, CA 91764	CHEN.FANG@DCGAENGINEERS.COM	PART 1, TITLE 24, CCR.		D OLOTION 4-000(D),	*C2.3	GRADING DETAILS	*E0.2 *E0.3	ELECTRICAL SYMBOLS LIST AND ABBREVIATIONS LIGHTING FIXTURE SCHEDULE AND NOTES
RUCTURAL	RTM ENGINEERING CONSULTANTS	JOSH RANDALL				*C3.0 *C3.1	SITE WET UTILITY PLAN FIRE HYDRANT INSTALLATION PLAN	*E0.4	SINGLE LINE DIAGRAM & BRANCH CIRCUIT VOLTAGE DI
	9931 MUIRLANDS BOULEVARD IRVINE, CA 92618	(949) 462-3200 JOSH.RANDALLI@RTMEC.COM		ECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) HITECT SHALL PROVIDE CONTINUOUS INSPECTION OF T		*C3.2	SITE WET UTILITY DETAILS	*ES1.1	ELECTRICAL SITE PLAN
ADE STRUCTURE	USA SHADE	CHRISTINA BENNETT		IN SECTION 4-342, PART I, TITLE 24, CALIFORNIA CODE		*C3.3	SITE WET UTILITY DETAILS	*ES1.2 *E2.1	ENLARGED ELECTRICAL POOL PLAN ELECTRICAL DEMOLITION, LIGHTING & POWER PLANS
	1085 N. MAIN, STE. C	(714) 241-5542	A DSA ACCEPTED TESTING LABO	RATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNE	R) SHALL CONDUCT ALL		.AQUATICS.	*E2.2 *E3.0	COMMUNICATION, FIRE ALARM & ELECTRICAL ROOF PL COMMUNICATION RISER DIAGRAM
	ORANGE, CA 92867	CHRISTINA.BENNETT@USA-SHADE.COM	THE REQUIRED TESTS AND INSPE	CTIONS FOR THE PROJECT. THE DSA-CERTIFIED PROJE	CT INSPECTOR AND			*E3.1	FIRE ALARM SYMBOLS AND NOTES
	APPLICABLE CODE	S		ALL BE EMPLOYED AND PAID BY THE OWNER (DISTRICT) OR ENGINEER HAVING GENERAL RESPONSIBLE CHARG		*DP.1	SWIMMING POOL DECK PLAN	*E3.2 *E3.3	FIRE ALARM WIRING DIAGRAM DETAILS FIRE ALARM WIRING DIAGRAM DETAILS
		-		ORD; AND DIVISION OF THE STATE ARCHITECT (DSA).		*SP.1 *SP.2	SWIMMING POOL LAYOUT PLAN SWIMMING POOL PIPING PLAN	*E3.4	FIRE ALARM RISER DIAGRAM
ARTIAL LIST OF APP				· · · · · · · · · · · · · · · · · · ·		*SP.3	SWIMMING POOL UNDERWATER LIGHT / TIMING SYSTEM PLAN	*E4.1 *E4.2	ELECTRICAL DETAILS ELECTRICAL DETAILS
	trative Code (CAC), Part 1, Title 24 CCR* Code (CBC), Part 2, Title 24 CCR			OVEMENTS, ROAD AND ACCESS REQUIREMENTS AND E COMPLY WITH ALL LOCAL ORDINANCES.	NVIRONMENTAL	*SP.4 *SP.5	SWIMMING POOL SECTIONS DETAILS	*E4.3	ELECTRICAL DETAILS
	ling Code, Vol. 1 & 2, and 2019 California amendmen	ts)		COMPET WITH ALL LOOKE ONDINANCES.		*SP.6	DETAILS	*E5.1 *E6.1	PANEL SCHEDULES TITLE 24
21California Electrical	Code (CEC), Part 3, Title 24 CCR			F THE CALIFORNIA BUILDING STANDARDS CODE, TITLE	, ,	*SP.7 *SP.8	DETAILS DETAILS	*E6.2	TITLE 24
	l Code and 2019 California Amendments) cal Code (CMC), Part 4, Title 24 CCR			CONTRACTOR SHALL KEEP A COPY OF TITLE 24, CCR, ISTRUCTION. ALL WORK SHALL CONFORM TO 2019 EDIT		*SP.9	DETAILS	*E6.3	TITLE 24
021 IAPMO Uniform N	lechanical Code and 2019 California amendments)		CALIFORNIA CODE OF REGULATIO		ION TITLE 24,	*SP.10 *SP.11	DETAILS DETAILS		.MECHANICAL.
	g Code (CPC), Part 5, Title 24 CCR lumbing Code and 2019 California amendments)		CUTTING, BORING, SAWCUTTING	OR DRILLING THROUGH THE NEW OR EXISTING STRUCT	URAL ELEMENTS TO BE	*MR.1 *MR.2	MECHANICAL ROOM LAYOUT PLAN MECHANICAL ROOM SECTIONS		
22 California Energy (	Code (CEC), Part 6, Title 24 CCR			N THE DRAWINGS OR ACCEPTED BY THE ARCHITECT AN	ND STRUCTURAL	*MR.3	DETAILS	*M0.1	MECHANICAL GENERAL NOTES, SYMBOLS AND ABBRE
	e (CFC), Part 9, Title 24 CCR Code and 2019 California Amendments)		ENGINEER WITH THE APPROVAL	OF DSA REPRESENTATIVE		*MR.4 *MR.5	DETAILS DETAILS	*M0.2 *M0.3	MECHANICAL SCHEDULES AND DETAILS TITLE 24
22 California Existing	Building Code (CEBC), Part 10, Title 24 CCR		SWIMMING POOL SHALL COMPLY	WITH ALL LOCAL HEALTH DEPARTMENT REQUIREMENTS	6	*MR.6	DETAILS	*M0.4	TITLE 24
	ing Building Code and 2019 California Amendments) uilding Standards Code (CALGreen), Part 11, Title 24		DRINKING WATER WELL SHALL CO	OMPLY WITH ALL LOCAL HEALTH DEPARTMENT REQUIRE	EMENTS	*MR.7 *MR.8	DETAILS DETAILS	*M2.1	MECHANICAL DEMOLITION, REMODEL & MECHANICAL F
	ced Standards Code, Part 12, Title 24 CCR ety, State Fire Marshal Regulations		STATE	MENT OF GENERAL CONFORMANCE					.PLUMBING.
10 ADA Standards for	Accesible Design						.ARCHITECTURAL - SITE.	*P0.1	PLUMBING GENERAL NOTES, SYMBOLS AND ABBREVIA
ARTIAL LIST OF APP	LICABLE STANDARDS		FOR ARCHITECTS/ENGINEERS WI	IO UTILIZE PLANS, INCLUDING BUT NOT LIMITED TO SHO	P DRAWINGS,	101.0		*P0.2	PLUMBING SCHEDULES AND DETAILS
PA 14 - Standard for	the Installation of Standpipe and Hose Systems (CA a	amended)2019 Edition	PREPARED BY OTHER LICENSED	DESIGN PROFESSIONALS AND/OR CONSULTANTS.		AS1.0 AS1.1	EXISTING SITE PLAN OVERALL SITE PLAN	*PS1.1 *P2.1	PLUMBING SITE PLAN PLUMBING DEMOLITION, REMODEL & PLUMBING ROOF
PA 17 - Standard for	Dry Chemical Extinguishing Systems r Wet Chemical Extinguishing Systems		FOR THE FOLLOWING DRAWINGS	OR SHEETS:		AS1.2 AS1.3	DEMO ENLARGED SITE PLAN ENLARGED REMODEL SITE PLAN		
PA 20 - Standard for	the Installation of Stationary Pumps for Fire Protectio	n2022 Edition	ALL DRAWINGS PER "SHEET INDE	X" ON SHEET G0.1 MARKED WITH AN ASTERISK "*"					.SHADE STRUCTURE USING DSA PC#4-119455
	Water Tanks for Private Fire Protection the Installation of Private Fire Service Mains and	2023 Edition		R DESIGN PROFESSIONALS OR CONSULTANTS WHO ARE			ARCHITECTURAL - BUILDING	*P.C.T-1.0	P.C. TITLE SHEET
Their Appurtenances			BEEN EXAMINED BY ME FOR:	E SUCH DRAWINGS IN THIS STATE. THESE DRAWINGS	JR SHEETS HAVE			*P.C.T-3.0	DSA 103 SAMPLE FORMS
	Alarm and Signaling Code (CA amended)					A2.1	FLOOR PLAN, REFLECTED CEILING PLAN & ROOF PLAN	*P.C.T-3.1 *10.1-000	DSA 103 SAMPLE FORMS PRODUCT INFORMATION
	Fire Doors and Other Opening Protectives on Clean Agent Fire Extinguishing Systems (CA amer		_	TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE	24, CCR, AND THE	A2.2 A2.3	ENLARGED FLOOR PLAN AND INTERIOR ELEVATIONS ENLARGED FLOOR PLAN AND INTERIOR ELEVATIONS	*10.2-2000	REACTIONS
	ng Devices for Fire Alarm and Signaling Systems,		PROJECT SPECIFICATIONS PR 2. COORDINATION WITH MY PLAN	EPARED BY ME, AND S AND SPECIFICATIONS AND IS ACCEPTABLE FOR INCO	RPORATION INTO THE	A2.4	ENLARGED FLOOR PLAN AND INTERIOR ELEVATIONS		
Including Accessories			CONSTRUCTION OF THIS PROJ			A2.5 A2.6	ENLARGED CANOPY PLAN & DETAILS ENLARGED CANOPY PLAN & DETAILS		
	eat Detectors for Fire Protective Signaling Systems Signaling Devices for the Hearing Impaired	2023 Edition 		ONFORMANCE SHALL NOT BE CONSTRUED AS RELIEVIN		A4.1	EXTERIOR ELEVATIONS AND SITE DETAILS		_ SHEET COUNT: 102
	Bleachers, Folding and Telescopic Seating, and Grand		DUTIES, AND RESPONSIBILITIES U	NDER SECTION 17302 AND 81138 OF THE EDUCATION C	,	A4.2 A5.1	SITE DETAILS BUILDING SECTIONS AND WALL SECTIONS		
r a complete list of ap	plicable NFPA standards refer to 2022 CBC (SFM) C	napter 35 and California Fire Code Chapter 80.		4 , PART 1. (TITLE 24, PART 1, SECTION 4-317(B)).		A6.1 A6.2	BUILDING DETAILS BUILDING DETAILS		
e California Building (	Code Chapter 35 for State of California amendments t	o the NFPA Standards.	GENERAL CONFORMANCE WITH T	IEETS INDICATED IN THIS STATEMENT OF GENERAL CO HE PROJECTS DESIGN, AND HAVE BEEN COORDINATED		A8.0 A11.1	PARTITION TYPES, EXTERIOR WALL ASSEMBLIES AND ROOF TYPES FINISH, DOOR, AND WINDOW SCHEDULES AND DETAILS		
0.4			PLANS AND SPECIFICATIONS.		F	A11.2	SIGNAGE DETAILS		
			June Marke		12/19/2022		.INTERIORS.		
			SIGNATURE		DATE	A12.1	FINISH PLAN		
			JESSE MILLER	C-32306	10-31-2023				



& PLUMBING ROOF PLANS

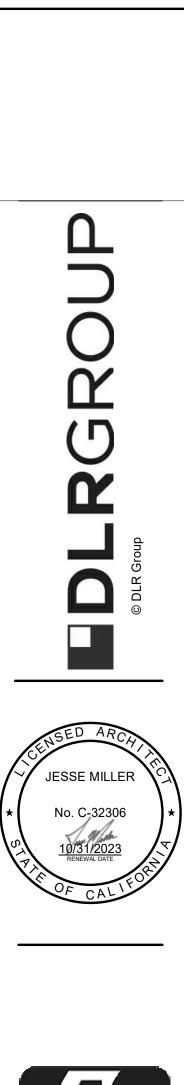
OLS AND ABBREVIATIONS

EL & MECHANICAL ROOF PLANS

**IBOLS AND ABBREVIATIONS** AILS

NOTES IRCUIT VOLTAGE DROP CALCULATION & POWER PLANS ECTRICAL ROOF PLANS





# A

## GE ٧S

GENER	AL ABBREVIATIONS
#	NUMBER
&	AND
@	AT
ADA	AMERICANS WITH DISABILITY ACT
ADDN	ADDITION OR ADDITIONAL
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHJ	AUTHORITY HAVING JURISDICTION
ALT	ALTERNATE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
BLDG	BUILDING
BSMT	BASEMENT
CL	CENTER LINE
CLG	CEILING
CM	CENTIMETER
CONC	CONCRETE
CONN(S)	CONNECTION(S)
CONST	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACT(OR)
CTR	CENTER
D	DEPTH
DEG	DEGREE
DEMO	DEMOLISH OR DEMOLITION
DIA	DIAMETER
DIM	DIMENSION
DIV	SPECIFICATION DIVISION
DN	DOWN
DTL	DETAIL
DWG(S)	DRAWING(S)
E	EAST
EA	EACH
EC	ELECTRICAL CONTRACTOR
EL	ELEVATION
ELEC	ELECTRICAL
ENG	ENGINEER
EQ	EQUAL
EQUIP	EQUIPMENT
EQUIV	EQUIVALENT
EXST	EXISTING
EXT	EXTERIOR
FIN	FINISHED
FL	FLOOR
FT	FEET
FUT	FUTURE
GC	GENERAL CONTRACTOR
GOVT	GOVERNMENT
H	HEIGHT
HORIZ	HORIZONTAL
HT	HEIGHT
i.e.	THAT IS
IBC	INTERNATIONAL BUILDING CODE
IN	INCH
INT	INTERIOR
LB(S)	POUND(S)
M	METER
M MAX MC MECH MEZZ MFR MIN MIN MISC MM	METER MAXIMUM MECHANICAL CONTRACTOR MECHANICAL MEZZANINE MANUFACTURER MINIMUM MISCELLANEOUS MILLIMETER
N	NORTH
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
oc	ON CENTER
opp	OPPOSITE
ovhd	OVERHEAD
PAR	PARALLEL
PENT	PENTHOUSE
PLYWD	PLYWOOD
QTY	QUANTITY
REQ(D)	REQUIRE(D)
REV	REVISION(S)
RM	ROOM
RND	ROUND
S	SOUTH
SCHED	SCHEDULE
SECT	SECTION
SHT	SHEET
SIM	SIMILAR
SPEC	SPECIFICATION(S)
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SYM	SYMETRICAL
TEMP	TEMPORARY
TYP	TYPICAL
UNEX	UNEXCAVATED
UNFIN	UNFINISHED
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFY IN FIELD
W	WEST
W/	WITH
W/O	WITHOUT

## GENERAL SYMBOLS DETAIL NUMBER EARTH $2 \times$ CROSS REFERENCE ??? - SHEET NUMBER GRAVEL SAND (X 🚽 A4.XX ) BUILDING ELEVATION XX

A4.XX	BOILDING ELEVATION		0,410
XX		× ►	CONCRETE
A12.X XX	INTERIOR ELEVATION		PRECAST CONCRETE
XX			STEEL
•	SIMILAR OR TYPICAL REFERENCE		STONE
? SIM	WALL SECTION		CONCRETE MASONRY UNIT
7777	WALL SECTION		BRICK VENEER
?	DETAIL REFERENCE		GYM FLOOR
111			WOOD (CONTINUOUS BLOCKING)
? ?			WOOD (NON-CONTINUOUS BLOCKING)
2111 2111	BUILDING SECTION		WOOD (TRIM/FINISH)
x	SHEET NOTE		GLASS
2	REFERENCE KEYNOTE	· · · _ · _ ·	SHINGLES
			PLYWOOD (LARGE SCALE)
(?)	COLUMN GRID LINE		GYPSUM WALL BOARD
RO <u>OM NA</u> ME	ROOM NUMBER/NAME		BLANKET INSULATION
???			RIGID INSULATION
x <u>xx-x</u> x	REVISION NUMBER		SPRAY FOAM INSULATION
	LEVEL ELEVATION		MINERAL WOOL INSULATION
XXX'-XX" V			PROTECTION BOARD
TYP FF EL=	FINISH FLOOR ELEVATION		CARPET (LARGE SCALE)
100'-0"			ACOUSTIC TILE (LARGE SCALE)
100'-0"	SPOT ELEVATION		TILE (LARGE SCALE)

В

# SITE SYMBOLS

	PROPERTY LINE		AREA INLET
	LOT LINE		CURB INLET
	EASMENT LINE	Ŭ	MANHOLE
	BUILDING LINE, EXISTING	•	HEAD WALL
	BUILDING LINE, NEW W/DOOR OPENING AND STRUCTURAL STOOP	(	FLARED END
	PRIMARY CONTOUR, EXISTING	Ĺ	CLEAN OUT
1	PRIMARY CONTOUR, NEW	►	CAP
)	SECONDARY CONTOUR, EXISTING	со	THRUST BLOCK
	SECONDARY CONTOUR, NEW	•	VALVE
		]	POST INDICATOR VALVE
		$\triangleright$	REDUCER
		r -	FIRE HYDRANT
			POWER POLE
	CURB, THICKENED EDGE	PIV	LIGHT POLE
PE \	CURB, EXISTING	_	TELEPHONE MANHOLE
	CURB, NEW		TELEPHONE BOX
$\sim$	PAVING CONTRACTION JOINT	<b>FH</b>	SPRINKLER HEAD, 360°
	PAVING KEYED CONSTRUCTION JOINT	1	SPRINKLER HEAD, 270°
	PAVING TIED CONSTRUCTION JOINT	ø	SPRINKLER HEAD, 180°
	PAVING EXPANSION JOINT	□●	SPRINKLER HEAD, 90°
	FENCE, SECURITY	_	QUICK COUPLING
	FENCE, BARBED WIRE		TREE, EXISTING DECIDUOL
	FENCE, CHAIN LINK	$\boxtimes$	TREE, EXISTING CONIFER
	FENCE, WOOD	_	
	SEED LIMIT	•	SHADE TREE
	SOD LIMIT	•	ORNAMENTAL TREE
	FOUNDATION DRAIN, NON-PERFORATED		
	FOUNDATION DRAIN, PERFORATED	•	DECIDUOUS TREE
	SUBDRAIN, PERFORATED	O	SHRUB
<u>XX XX</u>	SANITARY SEWER	QC	CLIPPED SHRUB
<u>x x</u>	FORCE MAIN	$\otimes$	
	WATER	Ø <sup>X*</sup>	
-00	FIRE	X'	
	GAS	$\bigcirc$	
	HIGH PRESSURE STEAM	Jen wy	
	MEDIUM PRESSURE STEAM		
	LOW PRESSURE STEAM	Zun	
	UNDERGROUND ELEC/TELEPHONE	" " "	
	OVERHEAD POWER	"Ren were a	
	LAWN SPRINKLER HOT LINE		
D	LAWN SPRINKLER LATERAL	-////	
		$\langle \gamma \rangle$	
ŝ		\` ~~~	
1		[]	
N			
_ F			
G			
HPS			

# ARCHITECTURAL SYMBOLS

\_\_\_\_\_ MPS \_\_\_\_\_

\_\_\_\_\_ LPS \_\_\_\_\_

\_\_\_\_\_ UGE/UGT \_\_\_\_\_

\_\_\_\_\_OHP \_\_\_\_

\_\_\_\_\_ НОТ \_\_\_\_\_

\_\_\_\_\_ LAT \_\_\_\_\_

XX XX/ A11.X XX (XX/ A11.X) XX XX	CASEWORK ELEVATION
	DOOR NUMBER
A124	INTERIOR WINDOW NUMBER
?	EXTERIOR WINDOW / CURTAIN WALL NUMBER
(XX. X. XX)	WALL TYPE
APC-1 CEILING TYPE 9' - 0" CEILING HEIGHT	CEILING TYPE

# ARCHITECTURAL ABBREVIATIONS

GMP

GR

GR

GRS GWB

GYP

HC

HD

HDF

HDR

HDWD

HDWR

HM

HSS

HVAC

INSUL

KC.I

KIT

LKR

LOC

LONG

LSC

LTG

LV

LVT

MAG

MAS

MATI

MB

MBD

MBH

MH

MR/S

MTD

MTG

MUL

NC

NFPA

NOM

O to O

OA OFCI

OFF

OFOI

OH

OPG(S)

OSHA

OTB

OVFL

PAN B

PB

PCD

PCT

PER

PERP

PLAM

PLBG

PREFAB

PROJ

PS

PTD

PTD/R

PTN

PVC

PWL

QTR RND

QT

RAD

RCP

REFL

REM

RESIL

RFM

RH

RI&C

SC SCD

SCH

SCR

SCT

SHOWER CURTAIN HOOK

SHOWER CURTAIN ROD

STRUCTURAL CLAY TILE

RF

PR

MC MEMB

MAINT MAN

HR HR

С

A/E AB ABS ACC ACR ACT AD ADJ ADJT ADJT ADJT ADMIN AEC AL ALUM AP APC ASPH AUTO AVG AWP	ARCHITECT/ENGINEER AIR BARRIER ASBESTOS ADA ACCESSIBLE ACRYLIC ACOUSTIC CEILING TILE ACCESS DOOR ADJUSTABLE ADJACENT ADMINISTRATION AUTOMATED EXTERNAL DEFIBRILLATORS ALUMINUM ALUMINUM ACCESS PANEL ACOUSTIC PANEL CEILING ASPHALT AUTOMATIC AVERAGE ACOUSTIC WALL PANEL
B.O. BCS BD BLK BLKG BLKHD BM(S) BOT BRDG BRG BRKT BT BTWN	BOTTOM OF BABY CHANGING STATION BOARD BLOCK BLOCKING BULKHEAD BEAM(S) BOTTOM BRIDGING BEARING BRACKET BATHTUB BETWEEN
CAB CBD CER CF CFCI CFMF CG CI CIG CIP CJ CJA CLO CLR CMU COL COM COMB COMB COMB COMPR COMF CONFIG CONFIG CONFIG CONFIG CONFIG CONFIG CONFIG CONFIG CONFIC C	CABINET CHALKBOARD CERAMIC CUBIC FEET CONTRACTOR FURNISHED CONTRACTOR IN COLD-FORMED METAL FRAMING CLEAR FLOAT GLASS CAST IRON CLEAR INSULATING GLASS CAST IN PLACE CONTROL JOINT CONTROL JOINT ABOVE CLOSET CLEAR CONCRETE MASONRY UNIT COLUMN COMMON COMBINATION COMBINATION COMBINATION COMPRESSIBLE CONFERENCE CONFIGURATION CORRIDOR COVER PLATE CARPET CHAIR RAIL COUNTERSINK CONSTRUCTION JOINT CASEWORK CERAMIC TILE CLEAR TEMPERED FLOAT GLASS CLEAR TEMPERED INSULATING GLASS COPPER COMBINATION UNIT CONDOM VENDOR CUBIC YARD CYLINDER
DB DBL DC DEPR DEPT DF DG DIAG DPFG DR DSN DW DWL(S) DWR	DECIBEL DOUBLE DUST COLLECTOR DEPRESS(ION)(ED) DEPARTMENT DETENTION DRINKING FOUNTAIN DOOR GRILLE DIAGONAL DAMPROOFING DOOR DOWNSPOUT NOZZLE DISHWASHER DOWEL(S) DRAWER
EB EE EEW EEWS EFF EJ ELAS ELEV EMER ENCL ENTR ERF EUI EW EWC EXP EXP	EXPANSION BOLT EACH END EMERGENCY EYE WASH EMERGENCY EYE WASH SHOWER EFFICIENCY EXPANSION JOINT ELASTOMERIC ELEVATOR EMERGENCY ENCLOSURE ENTRANCE EPOXY RESIN FLOORING ENERGY USE INTENSITY EACH WAY ELECTRIC WATER COOLER EXPANSION EXPOSED
F F.O. FAB FD FD FDN FE FEC FF FH FHC FIG FIX FLASH FLASH FLEX FLG FLM FLUOR FO	FABRIC FACE OF FABRICATE(D) FACE BRICK FLOOR DRAIN FOUNDATION FIRE EXTINGUISHER FIRE EXTINGUISHER CABINET FIRE EXTINGUISHER CABINET FINISH FLOOR FIRE HYDRANT FIRE HOSE CABINET FIGURE FLASHING FLASHING FLEXIBLE FLOORING FULL LENGTH MIRROR FLUORESCENT FINISH OPENING

FOC

FOF

FOS

FOW

FRF

FRT

FSS

FTG

FVC

FWC

GA

GAL

GB

GD

GEN

GFA

GALV

FOM

ALUMINUM ACCESS PANEL
ACOUSTIC PANEL CEILING ASPHALT
AUTOMATIC AVERAGE
ACOUSTIC WALL PANEL
BOTTOM OF BABY CHANGING STATION
BOARD BLOCK
BLOCKING BULKHEAD
BEAM(S) BOTTOM
BRIDGING BEARING
BRACKET BATHTUB
BETWEEN
CABINET CHALKBOARD
CERAMIC CUBIC FEET
CONTRACTOR FURNISHED CONTRACTOR INSTALLED COLD-FORMED METAL FRAMING
CLEAR FLOAT GLASS CAST IRON
CLEAR INSULATING GLASS CAST IN PLACE
CONTROL JOINT CONTROL JOINT ABOVE
CLOSET CLEAR
CONCRETE MASONRY UNIT COLUMN
COMMON COMBINATION
COMMUNICATIONS COMPRESSIBLE
CONFERENCE CONFIGURATION
CORRIDOR COVER PLATE
CARPET CHAIR RAIL
COUNTERSINK CONSTRUCTION JOINT
CASEWORK CERAMIC TILE
CLEAR TEMPERED FLOAT GLASS CLEAR TEMPERED INSULATING GLASS
CONDOM VENDOR CUBIC YARD CYLINDER
DECIBEL
DOUBLE DUST COLLECTOR
DEPRESS(ION)(ED) DEPARTMENT
DETENTION DRINKING FOUNTAIN
DOOR GRILLE DIAGONAL
DAMPROOFING DOOR
DOWNSPOUT NOZZLE DISHWASHER
DOWEL(S) DRAWER
EXPANSION BOLT
EACH END EMERGENCY EYE WASH
EMERGENCY EYE WASH SHOWER EFFICIENCY
EXPANSION JOINT ELASTOMERIC
ELEVATOR EMERGENCY
ENCLOSURE ENTRANCE EPOXY RESIN FLOORING
ENERGY USE INTENSITY EACH WAY
ELECTRIC WATER COOLER EXPANSION
EXPOSED
FABRIC FACE OF
FACE OF FABRICATE(D) FACE BRICK
FLOOR DRAIN FOUNDATION
FIRE EXTINGUISHER FIRE EXTINGUISHER CABINET
FINISH FLOOR FIRE HYDRANT
FIRE HOSE CABINET FIGURE
FIXTURE FLASHING
FLEXIBLE FLOORING
FULL LENGTH MIRROR FLUORESCENT
FINISH OPENING FACE OF CONCRETE
FACE OF FINISH FACE OF MASONRY
FACE OF STUD FACE OF WALL
FIREPROOFING FIRE RESISTANT
FIBERGLASS REINFORCED PANEL FIRE RESISTANCE TREATED
FLOOR SINK FOLDING SHOWER SEAT
FOOTING FIRE VALVE CABINET
FABRIC WALL COVERING
GROUT GAUGE
CALLON
GALLON GALVANIZED
GALVANIZED GRAB BAR GARBAGE DISPOSAL
GALVANIZED GRAB BAR

GLASS GUARANTEED MAXIMUM PRICE GUARD RAIL		SEC` SF SG		SECRETARY SQUARE FEET SPANDREL GLASS
GRADE GALVANIZED RIGID STEEL		SGL SH		SINGLE SHOWER
SYPSUM WALL BOARD SYPSUM		SHM SLN1		SECURITY HOLLOW METAL SEALANT
IOLLOW CORE		SM SND		SHEET METAL SANITARY NAPKIN DISPOSAL
IAND DRYER IIGH DENSITY FIBERBOARD		SNV SPL		SANITARY NAPKIN VENDOR SOUND PRESSURE LEVEL
IEADER IARDWOOD		SQ SS		SQUARE SOLID SURFACE
IARDWARE IOLLOW METAL		SSA SSS		STORM SHELTER AREA STAINLESS STEEL SHELF
iour Iandrail		SST ST		STAINLESS STEEL STONE
IARDWARE SET IOLLOW STRUCTURAL SHAPE		ST STAC	3'D	STAIR STAGGERED
EATING VENTILATING AND AIR CONDITIONING		STC STGI		SOUND TRANSMISSION CLASS STRINGER
N ACCORDANCE WITH NSIDE DIAMETER		SUBI	FL	SUBFLOOR SURFACE
NSIDE FACE		SUSI		SUSPENDED
NSULATED INFILL PANEL GLASS SOLATION JOINT		SVF		SHEET VINYL FLOORING
N JOIST SPACE NCLUDE(ING)		T T&G		TREAD TONGUE AND GROOVE
NSULATION		T.O. TAN		TOP OF TANGENT
ANITOR OIST BEARING ELEVATION		TB TBD		TOWEL BAR TACK BOARD
UNCTION OINT FILLER BOARD		TCP TERI	र	TOILET COMPARTMENT PARTIT TERRAZZO
OIST OINT		TFG TG		TINTED FLOAT GLASS TEMPERED GLASS
EYED CONSTRUCTION JOINT		TH THK		THRESHOLD THICK(NESS)
NOCKDOWN (ITCHEN HOOD		TI TIG		TENANT IMPROVEMENT
ITCHEN		TMR		TILT MIRROR UNIT TOILET
NGLE		TOP		TOP OF PAVING
ABORATORY AMINATED AVATORY		TRAN TT TTD	iU	TRANSVERSE TERRAZZO TILE TOULET TISSUE DISPENSER
AVATORY UMBER		TTD TTG		TOILET TISSUE DISPENSER TINTED TEMPERED FLOAT GLA
OADING INEAR FOOT		TTIG TW		TINTED TEMPERED INSULATING
ENGTH (LONG) AMINATED GLASS		UL		UNDERWRITERS LABORATORI
INEAR INOLEUM		UR US		URINAL UTILITY SHELF
OCKER OCATION		UTIL		UTILITY
ONGITUDINAL IFE SAFETY CODE		VB VB		VAPOR BARRIER VINYL BASE
IGHTING OUVER		VCB VF		VENTED COVE BASE VINYL FLOOR
UXURY VINYL TILE		VOC VOL		VOLITILE ORGANIC COMPOUNE VOLUME
IAGNETIC IAINTENANCE		VP VT		VENEER PLASTER VINYL TILE
IANUAL		VWC		VINTE TILE VINYL WALL COVERING
IASONRY IATERIAL		W		WIDE
IOP BASIN IARKER BOARD		WB WC		WALL BASE WATER CLOSET
IOP/BROOM HOLDER IEDICINE CABINET		WC WCL		WALL COVERING WATER CLOSET/LAVATORY CC
IEMBRANE IANHOLE		WD WDF		WOOD WOOD FLOORING
/IRROR WITH SHELF //OUNTED		WDV WG	V	WINDOW POLISHED WIRE GLASS
IOUNTING IULLION		WI WOM	1	WROUGHT IRON WALK OFF MAT
IOISE CRITERIA		WR WRB	-	WASTE RECEPTACLE WEATHER RESISTANT BARRIEF
IATIONAL FIRE PROTECTION ASSOCIATION		WW WWF		WARM WHITE WELDED WIRE FABRIC
		YD		YARD
DVERALL DWNER FURNISHED CONTRACTOR INSTALLED				
DFFICE DWNER FURNISHED OWNER INSTALLED				
DPPOSITE HAND DPENING(S)				
PERATIONAL SAFETY AND HEALTH ADMINISTRATION	N			
OPEN TO BELOW OVERFLOW				
PAINT				
PARTICLE BOARD	5/5/23, 11:4/	5 AM		California Green Building Standards Cod
PRECAST CONCRETE		APPENDIX A5—NO	NRESIDENTI	AL VOLUNTARY MEASURES
PORCELAIN CERAMIC TILE PANIC DEVICE				
PERFORATED PERPENDICULAR		CHAPTER 5 DIVISIONS		SECTION TITLE
PATTERN GLASS PORTABLE INSTRUMENT CONNECTION		(continued) DIVISION 5.4 Material Conservation	Mandatory Mandatory	Commissioning plan [N] Functional performance testing [N]
		Conservation and Resource Efficiency	Mandatory Mandatory	Documentation and training [N] Systems manual [N]
PATTERN INSULATING GLASS	1		Mandatory Mandatory	Systems operation training [N] Commissioning report [N]
PLATE PROPERTY LINE			Mandatory	Testing and adjusting for new buildings < 10,000 sf or new systems that serve additions or alterations [A]
PLATE PROPERTY LINE PLASTIC LAMINATE PLASTIC LAMINATE			Mandatory	System testing plan for renewable energy, landscape
PLATE PROPERTY LINE PLASTIC LAMINATE PLASTIC LAMINATE PLUMBING PAIR			Mandatory Mandatory Mandatory	System testing plan for renewable energy, landscape irrigation and water reuse [A] Procedures for testing and adjusting
PLATE PROPERTY LINE PLASTIC LAMINATE PLASTIC LAMINATE PLUMBING PAIR PREFABRICATED PROJECT(OR) (ION)			Mandatory Mandatory Mandatory Mandatory Mandatory	System testing plan for renewable energy, landscape irrigation and water reuse [A] Procedures for testing and adjusting Procedures for HVAC balancing Reporting for testing and adjusting
PLATE PROPERTY LINE PLASTIC LAMINATE PLASTIC LAMINATE PLUMBING PAIR PREFABRICATED			Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory	System testing plan for renewable energy, landscape irrigation and water reuse [A] Procedures for testing and adjusting Procedures for HVAC balancing
PLATE PROPERTY LINE PLASTIC LAMINATE PLASTIC LAMINATE PLUMBING PAIR PREFABRICATED PROJECT(OR) (ION) PROJECTION SCREEN		DIVISION 5.5 Environmental Quality (continued)	Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory	System testing plan for renewable energy, landscape irrigation and water reuse [A] Procedures for testing and adjusting Procedures for HVAC balancing Reporting for testing and adjusting Operation and maintenance (O&M) manual Inspection and reports Fireplaces Woodstoves
PLATE PROPERTY LINE PLASTIC LAMINATE PLASTIC LAMINATE PLUMBING PAIR PREFABRICATED PROJECT(OR) (ION) PROJECTION SCREEN POINT POINT OF TANGENCY		Environmental Quality	Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory	System testing plan for renewable energy, landscape irrigation and water reuse [A] Procedures for testing and adjusting Procedures for HVAC balancing Reporting for testing and adjusting Operation and maintenance (O&M) manual Inspection and reports Fireplaces
PLATE PROPERTY LINE PLASTIC LAMINATE PLASTIC LAMINATE PLUMBING PAIR PREFABRICATED PROJECT(OR) (ION) PROJECT(OR) (ION) PROJECTION SCREEN POINT POINT OF TANGENCY PAPER TOWEL DISPENSER COMBINATION TOWEL DISPENSER/RECEPTACLE		Environmental Quality	Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory	System testing plan for renewable energy, landscape irrigation and water reuse [A] Procedures for testing and adjusting Procedures for HVAC balancing Reporting for testing and adjusting Operation and maintenance (O&M) manual Inspection and reports Fireplaces Woodstoves Temporary ventilation Covering of ducts openings and protection of mechan
PLATE PROPERTY LINE PLASTIC LAMINATE PLASTIC LAMINATE PLUMBING PAIR PREFABRICATED PROJECT(OR) (ION) PROJECTION SCREEN POINT POINT OF TANGENCY PAPER TOWEL DISPENSER COMBINATION TOWEL DISPENSER/RECEPTACLE PARTITION POLYVINYL CHLORIDE COUND POWER LEVEL		Environmental Quality	Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory	System testing plan for renewable energy, landscape irrigation and water reuse [A] Procedures for testing and adjusting Procedures for HVAC balancing Reporting for testing and adjusting Operation and maintenance (O&M) manual Inspection and reports Fireplaces Woodstoves Temporary ventilation Covering of ducts openings and protection of mechan ical equipment during construction Adhesives, sealants and caulks
PLATE PROPERTY LINE PLASTIC LAMINATE PLASTIC LAMINATE PLUMBING PAIR PREFABRICATED PROJECT(OR) (ION) PROJECTION SCREEN POINT POINT OF TANGENCY PAPER TOWEL DISPENSER COMBINATION TOWEL DISPENSER/RECEPTACLE PARTITION POLYVINYL CHLORIDE SOUND POWER LEVEL PLASTIC LAMINATE PLASTIC LAMINATE		Environmental Quality	Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory	System testing plan for renewable energy, landscape irrigation and water reuse [A] Procedures for testing and adjusting Procedures for HVAC balancing Reporting for testing and adjusting Operation and maintenance (O&M) manual Inspection and reports Fireplaces Woodsteves Temporary ventilation Covering of ducts openings and protection of mechan ical equipment during construction Adhesives, sealants and caulks Paints and contings Aerosol paints and coatings
AATE ROPERTY LINE PLASTIC LAMINATE PLASTIC LAMINATE PLASTIC LAMINATE PLUMBING PAIR REFABRICATED ROJECT(OR) (ION) ROJECTION SCREEN POINT POINT OF TANGENCY PAPER TOWEL DISPENSER COMBINATION TOWEL DISPENSER/RECEPTACLE PARTITION POLYVINYL CHLORIDE SOUND POWER LEVEL PULSER RISER		Environmental Quality	Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory	System testing plan for renewable energy, landscape irrigation and water reuse [A] Procedures for testing and adjusting Procedures for HVAC balancing Reporting for testing and adjusting Operation and maintenance (O&M) manual Inspection and reports Fireplaces Woodstoves Temporary ventilation Covering of ducts openings and protection of mechan ical equipment during construction Adhesives, sealants and caulks Paints and contings Aerosol paints and contings Aerosol paints and contings: verification Carpet systems
PLATE PROPERTY LINE PROPERTY LINE PLASTIC LAMINATE PLASTIC LAMINATE PLUMBING PAIR PREFABRICATED PROJECT(OR) (ION) PROJECT(OR) (ION) PROJECTION SCREEN POINT POINT OF TANGENCY PAPER TOWEL DISPENSER COMBINATION TOWEL DISPENSER/RECEPTACLE PARTITION POLYVINYL CHLORIDE SOUND POWER LEVEL PULATER ROUND RISER RADIUS RUBBER BASE		Environmental Quality	Mandatory Mandatory	System testing plan for renewable energy, landscape irrigation and water reuse [A]           Procedures for testing and adjusting           Procedures for HVAC balancing           Reporting for testing and adjusting           Operation and maintenance (O&M) manual           Inspection and reports           Fireplaces           Woodstoves           Temporary ventilation           Covering of ducts openings and protection of mechan ical equipment during construction           Adhesives, sealants and caulks           Paints and contings           Aerosol paints and contings           Aerosol paints and contings:           Carpet systems           Carpet adhesives per Table 5.504.4.1
PLATE PROPERTY LINE PLASTIC LAMINATE PLASTIC LAMINATE PLUMBING PAIR PREFABRICATED PROJECT(OR) (ION) PROJECTION SCREEN POINT POINT OF TANGENCY PAPER TOWEL DISPENSER COMBINATION TOWEL DISPENSER/RECEPTACLE PARTITION POLYVINYL CHLORIDE SOUND POWER LEVEL PURCENTION POLYVINYL CHLORIDE SOUND POWER LEVEL PURCENTER ROUND RISER RADIUS RUBBER BASE REMOTE CONTROL REFLECTED CEILING PLAN		Environmental Quality	Mandatory Mandatory	System testing plan for renewable energy, landscape irrigation and water reuse [A]           Procedures for testing and adjusting           Procedures for HVAC balancing           Reporting for testing and adjusting           Operation and maintenance (O&M) manual           Inspection and reports           Fireplaces           Woodstoves           Temporary ventilation           Covering of ducts openings and protection of mechan ical equipment during construction           Adhesives, sealants and caulks           Paints and contings           Aerosol paints and contings           Carpet systems           Carpet adhesives per Table 5.504.4.1           Composite wood products           Composite wood products: documentation
PLATE PROPERTY LINE PROPERTY LINE PLASTIC LAMINATE PLASTIC LAMINATE PLUMBING PAIR PREFABRICATED PROJECT(OR) (ION) PROJECTION SCREEN POINT POINT OF TANGENCY PAPER TOWEL DISPENSER POINT OF TANGENCY PAPER TOWEL DISPENSER COMBINATION TOWEL DISPENSER/RECEPTACLE PARTITION POLYVINYL CHLORIDE SOUND POWER LEVEL PULSE PARTER ROUND RISER RADIUS RUBBER BASE REMOTE CONTROL REFLECTED CEILING PLAN ROOF DRAIN REFERENCE		Environmental Quality	Mandatory Mandatory	System testing plan for renewable energy, landscape irrigation and water reuse [A]           Procedures for testing and adjusting           Procedures for testing and adjusting           Operation and maintenance (O&M) manual           Inspection and reports           Fireplaces           Woodstoves           Temporary ventilation           Covering of ducts openings and protection of mechanical equipment during construction           Adhesives, sealants and caulks           Paints and contings           Aerosol paints and contings           Carpet systems           Carpet adhesives per Table 5.504.4.1           Composite wood products:           Composite wood products:           Resilient flooring systems           Resilient flooring: verification of compliance
PLATE PROPERTY LINE PLASTIC LAMINATE PLASTIC LAMINATE PLUMBING PAIR PREFABRICATED PROJECT(OR) (ION) PROJECTION SCREEN POINT POINT OF TANGENCY PAPER TOWEL DISPENSER POMBINATION TOWEL DISPENSER/RECEPTACLE PARTITION POLYVINYL CHLORIDE SOUND POWER LEVEL PARTER ROUND RISER RADIUS RUBBER BASE REMOTE CONTROL REFLECTED CEILING PLAN ROOF DRAIN		Environmental Quality	Mandatory Mandatory	System testing plan for renewable energy, landscape irrigation and water reuse [A]         Procedures for testing and adjusting         Procedures for HVAC balancing         Reporting for testing and adjusting         Operation and maintenance (O&M) manual         Inspection and reports         Fireplaces         Woodsteves         Temporary ventilation         Covering of ducts openings and protection of mechanical equipment during construction         Adhesives, scalants and caulks         Paints and contings         Aerosol paints and contings: verification         Carpet cashion         Carpet adhesives per Table 5.504.4.1         Composite wood products:         Composite wood products: documentation         Resilient flooring: verification of compliance         Thermal insulation         Verification of compliance         Acoustical ceilings and wall panels         Verification of compliance
PLATE PROPERTY LINE PLASTIC LAMINATE PLASTIC LAMINATE PLUMBING PAIR PREFABRICATED PROJECT(OR) (ION) PROJECTION SCREEN POINT POINT OF TANGENCY PAPER TOWEL DISPENSER COMBINATION TOWEL DISPENSER/RECEPTACLE PARTITION POLYVINYL CHLORIDE SOUND POWER LEVEL PULSE PARTER ROUND RISER RADIUS RUBBER BASE REMOTE CONTROL REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED		Environmental Quality	Mandatory Mandatory	System testing plan for renewable energy, landscape irrigation and water reuse [A]           Procedures for testing and adjusting           Procedures for testing and adjusting           Operation and maintenance (O&M) manual           Inspection and maintenance (O&M) manual           Inspection and reports           Fireplaces           Woodstoves           Temporary ventilation           Covering of ducts openings and protection of mechan ical equipment during construction           Adhesives, sealants and caulks           Paints and contings           Aerosol paints and contings           Carpet systems           Carpet adhesives per Table 5.504.4.1           Composite wood products:           Composite wood products:           Resilient flooring: verification of compliance           Thermal insulation           Verification of compliance           Accountical ceilings and wall panels
PLATE PROPERTY LINE PLASTIC LAMINATE PLASTIC LAMINATE PLASTIC LAMINATE PLUMBING PAIR PREFABRICATED PROJECT(OR) (ION) PROJECTION SCREEN POINT OF TANGENCY PAPER TOWEL DISPENSER POINT OF TANGENCY PAPER TOWEL DISPENSER POINT OF TANGENCY PAPER TOWEL DISPENSER/RECEPTACLE PARTITION POLYVINYL CHLORIDE SOUND POWER LEVEL PUARRY TILE PUARRY TILE PUARRY TILE PUARTER ROUND RISER RADIUS RUBBER BASE REMOTE CONTROL REFERENCE REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REMOVABLE RESILIENT		Environmental Quality	Mandatory Mandatory	System testing plan for renewable energy, landscape irrigation and water reuse [A]         Procedures for testing and adjusting         Procedures for HVAC balancing         Reporting for testing and adjusting         Operation and maintenance (O&M) manual         Inspection and reports         Fireplaces         Woodsteves         Temporary ventilation         Covering of ducts openings and protection of mechanical equipment during construction         Adhesives, scalants and caulks         Paints and contings         Aerosol paints and contings: verification         Carpet cashion         Carpet adhesives per Table 5.504.4.1         Composite wood products:         Composite wood products: documentation         Resilient flooring: verification of compliance         Thermal insulation         Verification of compliance         Acoustical ceilings and wall panels         Verification of compliance
PLATE PROPERTY LINE PLASTIC LAMINATE PLASTIC		Environmental Quality (continued)	Mandatory Mandatory	System testing plan for renewable energy, landscape irrigation and water reuse [A]           Procedures for testing and adjusting           Procedures for testing and adjusting           Operation and maintenance (O&M) manual           Inspection and reports           Fireplaces           Woodstoves           Temporary ventilation           Covering of ducts openings and protection of mecha ical equipment during construction           Adhesives, scalants and caulks           Paints and coatings           Aerosol paints and coatings           Carpet cashion           Carpet ashion           Carpet ashion           Carpet ashion           Resilient flooring: verification           Resilient flooring: verification of compliance           Thermal insulation           Verification of compliance           Acoustical ceilings and wall panels           Verification of compliance

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	5/5/23, 11:43 <i>/</i>	M			California Green Building Standards Code, Tit	le 24, Part 11	(CAL	Green),	2022	
SOAP DISPENSER	A	PENDIX A5	ONRESIDE	NTIAL VO	UNTARY MEASURES					
SOAP DISPENSER SECRETARY										
SQUARE FEET SPANDREL GLASS					A5.602 CALGreen VERIFICATION GUIDELINES MANDATORY MEASURES CHECKLIST					
SPANDREL GLASS SINGLE		Application: This checklist shall be used for nonresidential projects that meet one of the following: new construction, building								
SHOWER	ad	ditions of 1,0	00 square fe	et or grea	ter, or building alterations with a permit valuatio Tier 2 requirement:					
SECURITY HOLLOW METAL SEALANT					nd/or included) does not apply to the project—mainly used for ad	ditions and a	lterati	ons)		
SHEET METAL	0	= Other (prov ] = New cons	ide explana	ition)		annons and a		ousy		GENERAL NOTES
SANITARY NAPKIN DISPOSAL SANITARY NAPKIN VENDOR	[A	] = Additions	and/or Alte	erations p	irsuant to Section 301.3					GENERAL NOTES
SOUND PRESSURE LEVEL	Г								PLAN SHEET,	A. GENERAL NOTES APPLY TO ALL SHEETS.
SQUARE		CHAPTER 5 DIVISIONS			SECTION TITLE	SECTION	۷	N/A O	SPEC OR ATTACH REFERENCE	B. DIMENSIONS ARE ACTUAL AND ARE TO FACE OF STUD OF CMU WALLS, FACE OF FRAMES, OR CENTERLINE O
SOLID SURFACE STORM SHELTER AREA		DIVISION 5.1 Planning and Design	Mandatory	Storm y than 1 a	rater pollution prevention for projects that disturb less ere of land	5.106.1 through 5.106.2	х		C0.0	OTHERWISE. C. THE OWNER SHALL FURNISH AND INSTALL THE FOLLO
STAINLESS STEEL SHELF		Design	Mandatory	y Short-te	rm bicycle parking (with exception)	5.106.4.1.1		N/A		D. INCLUDE ALL OWNER-FURNISHED AND INSTALLED ITEI CONTRACTOR-INSTALLED ITEMS IN THE CONSTRUCTIO WITH THE OWNER TO ACCOMMODATE THESE ITEMS.
STAINLESS STEEL			Mandatory	y Long-to	rm bicycle parking	5.106.4.1.2 through 5.106.4.1.5		N/A		E. COORDINATE ALL MECHANICAL CHASE SIZES WITH TH F. ARCHITECTURAL FINISH FLOOR ELEVATION 0'-0" EQUA
STONE STAIR					vehicle (EV) charging [N] w/ exceptions able spaces [N]	5.106.5.3 5.106.5.3.1		N/A N/A		ELEVATION OF FINISH FLOOR 496.74 FEET. G. SEE SHEET XX.X FOR LOCATION OF WALLS OF FIRE-RI
STAGGERED			Mandatory	y Electric	vehicle charging stations (EVCS) sutomatic load management systems (ALMS)	5.106.5.3.2		N/A N/A		ALL WALLS OF FIRE-RESISTANCE-RATED CONSTRUCT FLOOR OR ROOF DECK ABOVE. H. ALL PENETRATIONS THROUGH WALLS SHALL BE SEAL
SOUND TRANSMISSION CLASS STRINGER			Mandatory	y Access	ble EVCS	5.106.5.3.4		N/A		MATERIAL AS REQUIRED TO ACHIEVE THE RESPECTIVI STOPPAGE. SEE SPECIFICATION SECTION 078413.
SUBFLOOR	>				r EVCS signs	5.106.3.1,		N/A		I. COORDINATE WITH MECHANICAL AND ELECTRICAL CO OF EQUIPMENT PADS SHOWN ON PLANS.
SURFACE			Mandatory	y Table 5	106.5.3.1 w/ footnotes	5.106.3.2 and 5.106.3.3		N/A		J. FIRE-RESISTANCE-RATED ENCLOSURES AROUND ALL CONTINUOUS FROM FLOOR TO UNDERSIDE OF FLOOR LEVEL.
SUSPENDED SHEET VINYL FLOORING			Mandatory	Electric [N]	vehicle (EV) charging: medium-duty and heavy-duty	5.106.5.4		N/A		K. CONSTRUCTION DOCUMENTS ARE COMPLEMENTARY. LOCATION OF WORK. SEE SPECIFICATIONS FOR QUAL
SHEET VINTE FLOORING			Mandatory	y houses,	vehicle charging readiness requirements for ware- grocery stores and retail stores with planned off-	5.106.5.4.1		N/A		L. WORK: ALL ASPECTS OF THE WORK AND ITEMS NOT S NECESSARY TO MAKE A COMPLETE WORKING INSTAL
TREAD			Mandatory		uding spaces [N]	5.106.5.4 and				INDICATED IN THE CONTRACTOR'S BID. M. GENERAL SHEET NOTES ONLY APPLY TO PARTICULAR
TONGUE AND GROOVE TOP OF			manadory			5.106.5.4.1 5.106.8		N/A		N. NO ASBESTOS OR POE CONTAINING MATERIALS SHALL O. DO NOT SCALE DRAWINGS. DIMENSIONS NOTED PREV DISCREPANCY.
TANGENT			Mandatory	table)	ellution reduction [N] (with exceptions, notes and	through 5.106.8.2	х		E0.3	P. HORIZONTAL AND VERTICAL DIMENSIONS ARE MINIMU GIVEN TO FINISH SURFACES. GC TO VERIFY ALL CLEA
TOWEL BAR			Mandatory	Grading not alte	g and paving (exception for additions and alterations ring the drainage path)	5.106.10	х		C0.0, C2.0	OF DISCREPANCY.
TACK BOARD TOILET COMPARTMENT PARTITION	1	Energy Efficiency	Mandatory	y Meet th	e minimum energy efficiency standard	5.201.1	х		M0.3, M0.4	
TERRAZZO	I	DIVISION 5.3 Water	Mandatory		e meters (new buildings or additions > 50,000 sf that e more than 100 gal/day)	5.303.1.1	х		P0.2, PS1.1	
TINTED FLOAT GLASS		Efficiency and Conservation	Mandatory	Separat	e meters (for tenants in new buildings or additions sume more than 1,000 gal/day)	5.303.1.2		N/A		
TEMPERED GLASS THRESHOLD		(continued)	Mandatory	y Water o	losets shall not exceed 1.28 gallons per flush (gpf)	5.303.3.1	Х		P0.2 / Spin 224000	
THICK(NESS)					(continued)					
	AF	PENDIX A5-28			2022 CALIF	ORNIA GREEN	BUIL	DING ST/	ANDARDS CODE	
TINTED INSULATING GLASS TILT MIRROR UNIT										
TOILET										
TOP OF PAVING TRANSVERSE	5/5/23, 11:44	AM			California Green Building Standards Code, Ti	le 24, Part 11	(CAL	Green),	2022	
TERRAZZO TILE										
					APPENDIX	A5-NONRES	IDEN	IAL VOL	UNTARY MEAS	JRES
TINTED TEMPERED FLOAT GLASS TINTED TEMPERED INSULATING GLASS										
TACK WALL		CHAP	TER 5		SECTION TITLE	CODE		Y NA	0 PLAN SHE SPEC 0 ATTAC	R
UNDERWRITERS LABORATORIES		(conti	nued) N	Mandatory	Wall-mounted urinals shall not exceed 0.125 gpf	5.303.3.2.		x	P0.2 / Spe	CE
URINAL		DIVISI Wa Efficien	ON 5.3 ter N	Mandatory		5.303.3.2.2	_	(	224000 P0.2 / Spe 224000	e de la constante de
UTILITY SHELF		Conser		Mandatory	Single showerhead shall have maximum flow rate of 1.8 gpm (gallons per minute) at 80 psi	5.303.3.3.	1	(	P0.2 / Spe 224000	
UTILITY				Mandatory	Multiple showerheads serving one shower shall have a combined flow rate of 1.8 gpm at 80 psi	5.303.3.3.		N/A	P0.2 / Spe	
VAPOR BARRIER			-	Mandatory Mandatory	Nonresidential lavatory faucets Kitchen faucets	5.303.3.4.1	-	N/A	224000	
VINYL BASE			-	Mandatory	Wash fountains	5.303.3.4.3	3 )	(	P0.2 / Spe 224000	
VENTED COVE BASE VINYL FLOOR			-	Mandatory Mandatory	Metering faucets Metering faucets for wash fountains	5.303.3.4.4	-	N/A	P0.2 / Spec 224000	
VOLITILE ORGANIC COMPOUND			-	,	Pre-rinse spray valve	5.303.3.4.	-	N/A N/A		
			-		Food waste disposers	5.303.4.1		N/A		GENERAL ARCHITEC
VENEER PLASTER VINYL TILE			-	Mandatory	Areas of additions or alterations Standards for plumbing fixtures and fittings	5.303.5 5.303.6	×	N/A	P0.2 / Spec	
VINYL WALL COVERING				Mandatory	Outdoor potable water use in landscape areas (with not	es) 5.304.1		N/A	224000	1. ALL INTERIOR CMU WALLS SHALL BE 8 INCHES NOMIN OTHERWISE.
WIDE		DIVISI Mate Conser	erial	Mandatory Mandatory	Weather protection Moisture control: sprinklers	5.407.1	×	N/A	Division 07 Specs	2. PARTITION TYPES ARE DESIGNATED ON FLOOR PLANS SEE SHEET A8.0 FOR TYPES.
WALL BASE		and Re Effici	source M	Mandatory		5.407.2.2.	I X	110	A11.1 / Spi 081113	OK ROOF DECK ADOVE ONLESS NOTED OTHERWISE,
WATER CLOSET		(conti	nued)	Mandatory	Moisture control: flashing	5.407.2.2.2	2 >		A11.1 / Sp 076200	4. PROVISIONS ARE MADE AT ALL FULL HEIGHT NON-BEA MOVEMENT OF THE BUILDING STRUCTURE WITHOUT WALL. FILL IRREGULARITIES BETWEEN TOP OF WALL
WALL COVERING WATER CLOSET/LAVATORY COMBINATION				Mandatory	Construction waste management—comply with eithe Sections 5.408.1.1, 5.408.1.2, 5.408.1.3 or more strin gent local ordinance	5.408.1.2, 5.408.1.3	Х		Spec 0174	INSULATION OR FIRE STOPPING MATERIALS AS REQUI RESPECTIVE WALLS. SEE DETAIL ON SHEET 5B/A6.2
WOOD			-	Mandatory Mandatory	Construction waste management: documentation Universal waste [A]	5.408.1.4	1	K N/A	Spec 0174	19         5.         SEE STRUCTURAL DRAWINGS FOR BRACING OF NON-           6.         FURNISH AND INSTALL FIRE-TREATED WOOD BLOCKING
WOOD FLOORING				Mandatory	Excavated soil and land clearing debris (100% reuse recycle)		+	N/A		STUD PARTITIONS FOR THE PROPER ANCHORAGE OF ACCESSORIES, CASEWORK, MILLWORK, WALL-MOUN BOARDS, DOOR STOPS, AUDIO VISUAL BRACKETS, AN
WINDOW POLISHED WIRE GLASS				Mandatory		5.410.1		N/A		7. GYPSUM BOARD SURFACES SHALL BE ISOLATED WITH DRAWINGS AND AS DESCRIBED IN THE SPECIFICATION
WROUGHT IRON			-	Mandatory		5.410.1.1		N/A		8. MASONRY CONTROL JOINTS (CJ) AND CONTROL JOINT SHOWN ON THE FLOOR PLAN AND BUILDING ELEVATION
			-	Mandatory Mandatory		5.410.1.2		N/A N/A		VENTS OR RISERS OCCUR IN SINGLE WYTHE MASONF WALLS BEARING ON THE CONCRETE FLOOR SLAB ABU CONCRETE FOOTINGS OR AS INDICATED ON DRAWING
WASTE RECEPTACLE WEATHER RESISTANT BARRIER			N	Mandatory	Owner's or owner representative's Project Require- ments (OPR) [N]	5.410.2.1	×		Division 01 Specs	9. "MBD" AND "TBD" INDICATE DATE OF AND TAC PRECEDES THE DESIGNATION (EXAMPLE 16' MBD). AL
WARM WHITE			N	Mandatory	Basis of Design (BOD) [N]	5.410.2.2	>		G0.1	ELEVATIONS OR SPECIFICATIONS FOR MOUNTING HEI 10. EXTEND FURRING CHANNELS AND GYPSUM BOARD UF
WELDED WIRE FABRIC					(continued)					CMU WALLS. 11. SCRIBE GYPSUM WALL BOARD OF WALLS AND PARTIT ABOVE. SEAL TIGHTLY AROUND ALL PENETRATIONS.
VAPD										ADUVE. SEAL IIGHTLY AKUUND ALL PENETRATIONS.

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

5/5/23, 11:45 AM

https://secure.madcad.com/library/CA-Green-Building-Code-Title-24-Part-11-2022-1stptg/view/#

NONRESIDENTIAL VOLUNTARY MEASURES PLAN SHEET, SPEC OR ATTACH REFERENCE CODE Y N/A O SECTION TITLE 5.410.2.3 N/A Mandatory Commissioning plan [N] Specs 014000 Mandatory Functional performance testing [N] 5.410.2.4 14529 Charles 017823, Mandatory Documentation and training [N] Mandatory Systems manual [N] 017900 Specs 017823. Mandatory Systems operation training [N] 5.410.2.5.2 017900 5.410.2.6 Mandatory Commissioning report [N] Specs 017823, 017900 
 Mandatory
 Testing and adjusting for new buildings < 10,000 sf or new systems that serve additions or alterations [A]
 5.410.4
 Mandatory System testing plan for renewable energy, landscape irrigation and water reuse [A] 5.410.4.2 N/A 5.410.4.3 Specs 017823. Mandatory Procedures for testing and adjusting 5.410.4.3.1 Spec 230593 Mandatory Procedures for HVAC balancing Spec 230593 Mandatory Reporting for testing and adjusting 5.410.4.4 X Specs 017823, Mandatory Operation and maintenance (O&M) manual 5.410.4.5 cs 017823. Mandatory Inspection and reports 5.410.4.5.1 017900 5.503.1 Mandatory Fireplaces 5.503.1. Mandatory Woodstoves 5.504.1 N/A Mandatory Temporary ventilation 4.1 N/A Mandatory Covering of ducts openings and protection of mechan-ical equipment during construction 5.504.3 N/A 5.504.4.1 X Spec 079200 Mandatory Adhesives, sealants and caulks Specs 099113. 5.504.4.3 Mandatory Paints and coatings 099123 5.504.4.3.1 Mandatory Aerosol paints and coatings 5.504.4.3.2 Mandatory Aerosol paints and coatings: verification 5.504.4.4 N/A 5.504.4.4.1 N/A Mandatory Carpet systems Mandatory Carpet cushion 5.504.4.2 N/A Mandatory Carpet adhesives per Table 5.504.4.1 2 N/A 5.504.4.5 Mandatory Composite wood products N/A Mandatory Composite wood products: documentation 5.504.4.5.3 Spec 096723 Mandatory Resilient flooring systems 5.504.4.6 X Spec 096723 Mandatory Resilient flooring: verification of compliance 5.504.4.6.1 Spec 072100 5.504.4.7 X Mandatory Thermal insulation Spec 072100 5.504.4.7.1 v Mandatory Verification of compliance

5.504.4.8 N/A

5.504.4.8.1 N/A

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

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California Green Building Standards Code, Title 24, Part 11 (CALGreen), 2022

APPENDIX A5-NONRESIDENTIAL VOLUNTARY MEASURES CODE SECTION Y NIA O ATTACH REFERENCE CHAPTER 5 DIVISIONS SECTION TITLE 5.504.5.3 x (continued) DIVISION 5.5 Mandatory Filters (with exceptions) Environmental Quality Mandatory Filters: labeling Spec 233300 5.504.5.3.1 Mandatory Environmental tobacco smoke (ETS) control 5.504.7 M0.3, M0.4 Mandatory Indoor moisture control 5.505.1 5.506.1 Mandatory Outside air delivery 5.506.2 
 Mandatory
 Caroon moxice (CO<sub>2</sub>) menitoring
 5.506.2
 N/A

 Mandatory
 Acoustical control (with exception)
 5.507.4
 N/A

 Mandatory
 Exterior noise transmission, prescriptive method
 5.507.4.1
 N/A

 Mandatory
 Noise exposure where noise contours are not readily available
 5.507.4.1.1
 X
 M0.3, M0.4
 Mandatory Carbon dioxide (CO2) monitoring M0.3, M0.4 Mandatory Performance method method 5.507.4.2 x ⊬× | - | ------Mandatory Site features 5.507.4.2.1 Mandatory Documentation of compliance 5 507 4 2 2 G0.1 Mandatory Interior sound transmission (with note) 5.507.4.3 Mandatory Ozone depletion and greenhouse gas reductions 5.508.1 5.508.1.1 Mandatory Chlorofluorocarbons (CFCs) N/A 5.508.1.2 Mandatory Halons Mandatory Supermarket refrigerant leak reduction for retail food stores 8,000 square feet or more Sections 5.508.2 through 5.508.2.6.3 N/A END OF MANDATORY PROVISIONS Documentation Author's / Responsible Designer's Declaration Statement

Date: 5/5/2023
License: C-32306
Phone: 951.682.0470

APPENDIX A5-29

California Green Building Standards Code, Title 24, Part 11 (CALGreen), 2022

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Spec 233300

# 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

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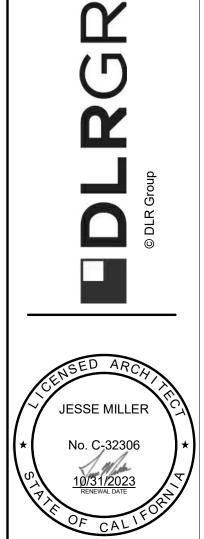
APPENDIX A5-31

# NOTES

ALL SHEETS. ND ARE TO FACE OF STUDS, FACE OF CONCRETE WALLS, FACE VAMES, OR CENTERLINE OF COLUMNS, UNLESS NOTED ISH AND INSTALL THE FOLLOWING ITEMS: 5-ROW BLEACHERS RNISHED AND INSTALLED ITEMS AND OWNER-FURNISHED AND ITEMS IN THE CONSTRUCTION SCHEDULE, AND SHALL COORDINATE COMMODATE THESE ITEMS. NICAL CHASE SIZES WITH THE MECHANICAL CONTRACTOR. LOOR ELEVATION 0'-0" EQUALS ACTUAL SITE REFERENCE DOR 496.74 FEET. CATION OF WALLS OF FIRE-RESISTANCE-RATED CONSTRUCTION. STANCE-RATED CONSTRUCTION SHALL EXTEND TO UNDERSIDE OF BOVE 30VE. JUGH WALLS SHALL BE SEALED WITH PENETRATION FIRE STOPPING TO ACHIEVE THE RESPECTIVE FIRE-RESISTANCE RATING AND SMOKE CATION SECTION 078413. IANICAL AND ELECTRICAL CONTRACTORS THE SIZE AND LOCATION DWN ON PLANS. ENCLOSURES AROUND ALL STEEL COLUMNS SHALL BE DR TO UNDERSIDE OF FLOOR OR ROOF DECK ABOVE FOR EACH

NTS ARE COMPLEMENTARY. SEE DRAWING FOR QUANTITIES AND SPECIFICATIONS FOR QUALITIES AND CONDITIONS OF WORK. THE WORK AND ITEMS NOT SPECIFICALLY MENTIONED, BUT OMPLETE WORKING INSTALLATION, SHALL BE INCLUDED AND ACTOR'S BID. LY APPLY TO PARTICULAR DRAWING OR SERIES OF DRAWINGS. ININIG MATERIALS SHALL BE USED ON THIS PROJECT. DIMENSIONS NOTED PREVAIL. NOTIFY ARCHITECT IN CASE OF

DIMENSIONS ARE MINIMUM DIMENSIONS. CLEARANCES ARE . GC TO VERIFY ALL CLEARANCES. NOTIFY ARCHITECT IN CASE



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RCHITECTURAL NOTES

SHALL BE 8 INCHES NOMINAL THICKNESS, UNLESS NOTED GNATED ON FLOOR PLANS

S. INTERIOR STUD WALLS SHALL EXTEND TO UNDERSIDE OF FLOOR LESS NOTED OTHERWISE, PER PARTITION TYPE. ALL FULL HEIGHT NON-BEARING WALLS FOR 1-INCH VERTICAL NG STRUCTURE WITHOUT TRANSFER OF COMPRESSIVE LOADS TO DEFINITE TO DEFINITE AND TO DEFINITE TO DEFINITAL. S BETWEEN TOP OF WALL AND DECK ABOVE WITH MINERAL WOOL ING MATERIALS AS REQUIRED TO MEET FIRE RATING OF

2'ING MATERIALS AS REQUIRED TO MEET FINE INFINO OF DETAIL ON SHEET 5B/A6.2 IGS FOR BRACING OF NON-LOAD BEARING MASONRY WALLS. E-TREATED WOOD BLOCKING OR METAL BACKING PLATE IN METAL E PROPER ANCHORAGE OF ALL WALL ATTACHED ITEMS; I.E. TOILET K, MILLWORK, WALL-MOUNTED FIXTURES, MARKER BOARDS, TACK INICIAN INICIANA INIC ED IN THE SPECIFICATIONS. IBED IN THE SPECIFICATIONS. S (CJ) AND CONTROL JOINTS ABOVE (CJA) SHALL BE LOCATED AS NA AND BUILDING ELEVATIONS, AND WHERE LARGE PLUMBING IN SINGLE WYTHE MASONRY WALLS, AND WHERE MASONRY ONCRETE FLOOR SLAB ABUT MASONRY WALLS BEARING ON DUBLICATE ON DENVIRON INDICATED ON DRAWINGS.

RKER BOARDS AND TACK BOARDS ON PLANS. THE LENGTH ION (EXAMPLE 16' MBD). ALL BOARDS ARE 4'-0" TALL. SEE WALL ATIONS FOR MOUNTING HEIGHT. ELS AND GYPSUM BOARD UP 4 INCHES ABOVE FINISHED CEILING ON

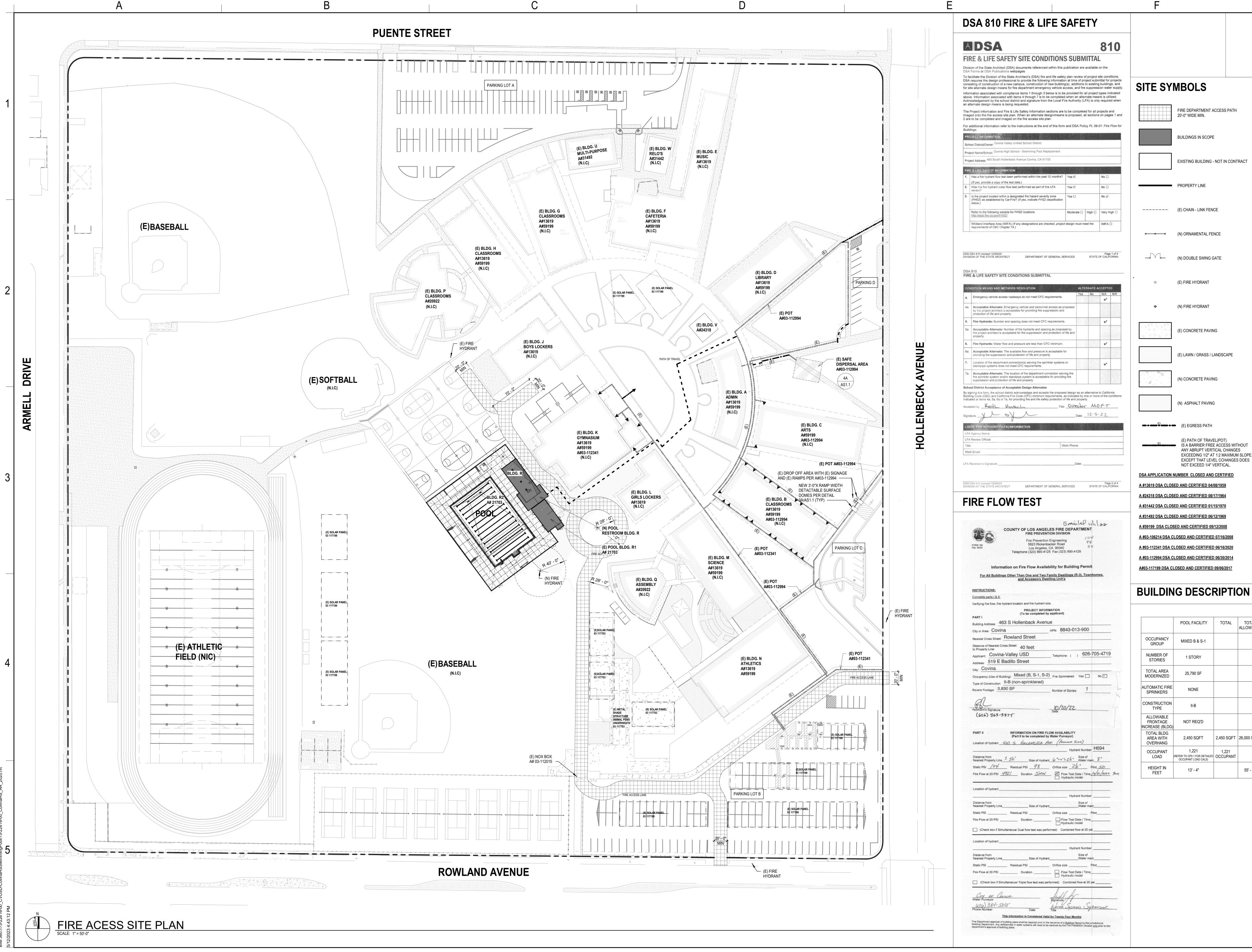
ARD OF WALLS AND PARTITIONS TO IRREGULARITIES OF DECK



75-22616-00 DSA A# 03-122700 DSA FILE # 19-H8

GENERAL NOTES, SYMBOLS AND ABBREVIATIONS

G0.3

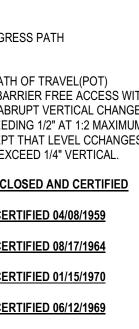




75-22616-00 DSA A# 03-122700 DSA FILE # 19-H8 FIRE ACCESS

SITE PLAN

S Т POOL FACILITY TOTAL TOTAL Ш ALLOWAB VAL " **4** è **NIN** O Ŭ Ô 2,450 SQFT 26,000 SQ DSA SUBMITTAL SET\_V2 1,221 55' - 0" 04/28/2023 REVISIONS



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117°54'19"W 34°5'6"N



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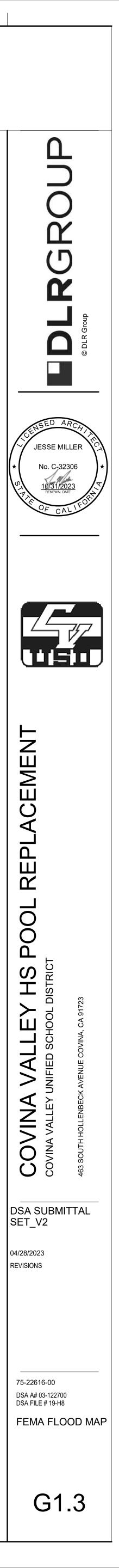
2,000 Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

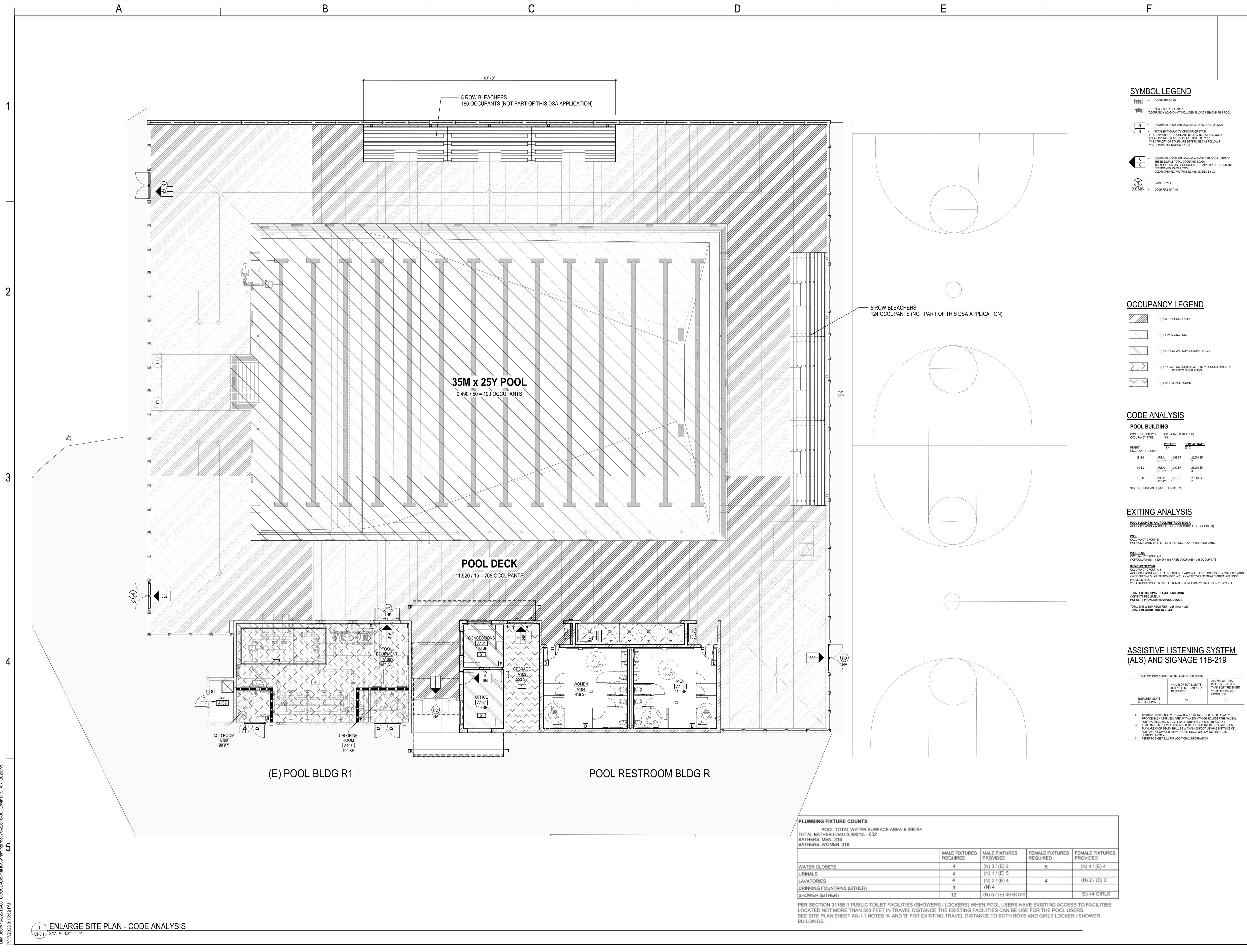
Legend	
SEE FIS REPORT FOR DETAILED LEG	END AND INDEX MAP FOR FIRM PANEL LAYOUT
SPECIAL FLOOD HAZARD AREAS	Without Base Flood Elevation (BFE) Zone A, V, A99 With BFE or Depth Zone AE, AO, AH, VE, AR Regulatory Floodway
	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i>
OTHER AREAS OF	Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i> Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>
FLOOD HAZARD	Area with Flood Risk due to Levee Zone D
NO SCREEN	Area of Minimal Flood Hazard <i>Zone X</i> Effective LOMRs
OTHER AREAS	Area of Undetermined Flood Hazard Zone D
GENERAL – – – – STRUCTURES	Channel, Culvert, or Storm Sewer Levee, Dike, or Floodwall
B 20.2 17.5 8 	Cross Sections with 1% Annual Chance Water Surface Elevation Coastal Transect Base Flood Elevation Line (BFE) Limit of Study Jurisdiction Boundary Coastal Transect Baseline Profile Baseline Hydrographic Feature
	Digital Data Available N No Digital Data Available
MAP PANELS	Unmapped
points	n displayed on the map is an approximate selected by the user and does not represent thoritative property location.
· ·	FEMA's standards for the use of

digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/26/2022 at 5:56 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

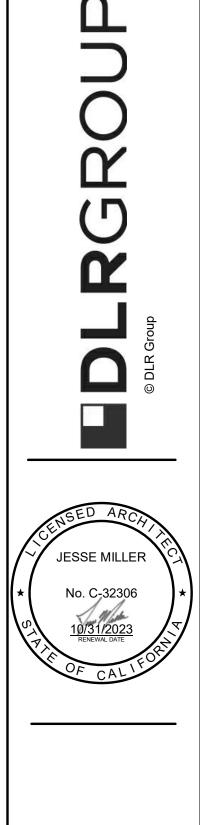














# CODE ALLOWED 26,000 SF 26,000 SF

VERS PER SEATS	
OF TOTAL SEATS LESS THAN 2 QTY RS	25% SE/ TH/ WI <sup>-</sup> CO

25% MIN OF TOTAL SEATS BUT NO LESS THAN 2 QTY RECEIVERS WITH HEARING AID COMPATIBLE 4

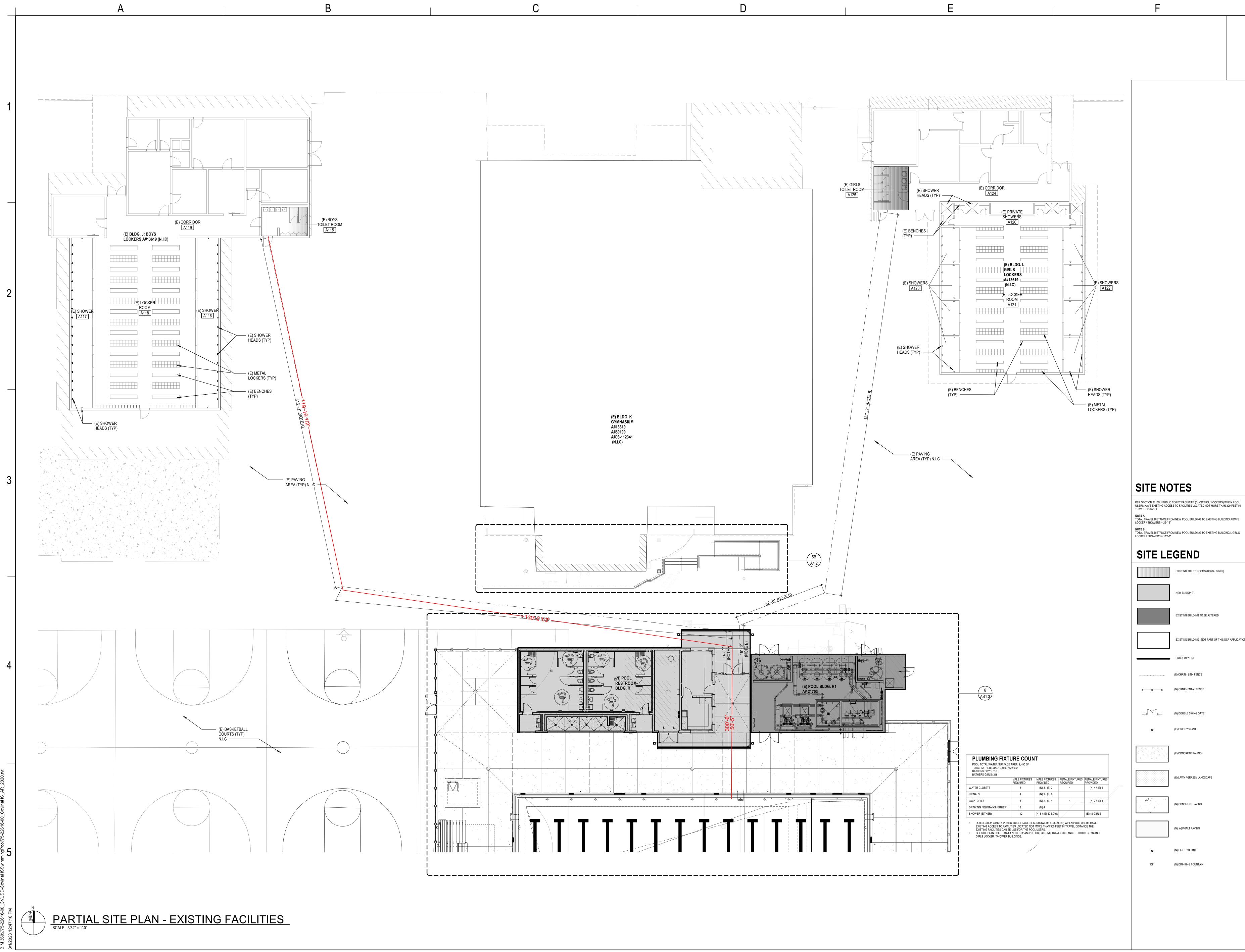
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04/28/2023 REVISIONS

75-22616-00 DSA A# 03-122700 DSA FILE # 19-H8

ENLARGED SITE PLAN - EXITING/ CODE ANALYSIS

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04/28/2023

75-22616-00

DSA A# 03-122700

DSA FILE # 19-H8

EXISTING

FACILITIES

PARTIAL SITE PLAN - (E) TOILET

CP0.1A

REVISIONS

DSA SUBMITTAL

 $\Box$ 

(N) FIRE HYDRANT

(N) DRINKING FOUNTAIN

(N) ASPHALT PAVING

CONCRETE PAVIN

(E) LAWN / GRASS / LANDSCAPE

(E) FIRE HYDRANT

(E) CONCRETE PAVING

PROPERTY LINE

EXISTING BUILDING - NOT PART OF THIS DSA APPLICATION (N.I.C)

EXISTING BUILDING TO BE ALTERED

NEW BUILDING

EXISTING TOILET ROOMS (BOYS / GIRLS)

	Α Ι		В
	NERAL NOTES FOR GRADING		
C F	ALL WORK SHALL CONFORM WITH THE "GREENBOOK" STANDARD SPECIFI CONSTRUCTION (SSPWC), 2021 EDITION AND THE LATEST REVISIONS THERETO, TH HANDBOOK (W.A.T.C.H. MANUAL), A.D.A, TITLE 24 REQUIREMENTS, AND 2019 C.B.C. U	E WORK AREA TRAFFIC CONTROL	
2. A	THE CONTRACT SPECIFICATIONS. A COPY OF THE DIVISION OF STATE ARCHITECT APPROVED GRADING PLANS MU	ST BE IN THE POSSESSION OF A	
3. A	RESPONSIBLE PERSON AND AVAILABLE AT THE JOB SITE AT ALL TIMES. AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION, THE CO		
C 11	REGIONAL NOTIFICATION CENTER (UNDERGROUND SERVICE ALERT OF SOUTHERN OBTAIN AN INQUIRY IDENTIFICATION NUMBER AND TO REQUEST THE UTILITY OW NDICATE THE LOCATION OF THEIR SUBSURFACE FACILITIES. THE CONTRACTOR S	VNERS TO MARK OR OTHERWISE SHALL DETERMINE THE LOCATION	
F	AND DEPTH OF ALL UTILITIES, INCLUDING ALL SERVICE CONNECTIONS, WHICH RESPECTIVE OWNERS AND WHICH MAY AFFECT OR BE AFFECTED BY ITS OPERAT FAKE ALL NECESSARY MEASURES TO PROTECT ALL UTILITIES AND ALL STRUCTURE	TIONS. THE CONTRACTOR SHALL	
	ALL PERMITS NECESSARY PRIOR TO BEGINNING CONSTRUCTION SHALL BE OBTAINE		1. A
T C	THE PROJECT, THE CONTRACTOR SHALL KEEP THE WORK SITE CLEAN AND FREE F CONTRACTOR SHALL ALSO ABATE DUST NUISANCE BY CLEANING, SWEEPING AN JSING DUST FENCES OR OTHER METHODS AS DIRECTED BY THE CONSTRUCTION	ROM RUBBISH AND DEBRIS. THE D SPRINKLING WITH WATER AND	RESIDU TRANSF PROPEI
6. T	THROUGHOUT THE CONSTRUCTION OPERATION AND SHALL INCORPORATE IN BASE	OCCUR DURING CONSTRUCTION	2. SI SITE US
7. A	PRACTICES AND SUBMIT THIS RECORD TO THE SCHOOL DISTRICT & DSA CERTIFIED A	SIDEWALKS, CURBS OR STREET	3. S TRANS
E	FURNISHINGS, OR TO PRIVATE PROPERTY SHALL BE REPAIRED AT THE SOLE EXPEN ENGINEER'S SATISFACTION. THE CONTRACTOR SHALL REMOVE AND REPLACE ANY BROKEN OR DAMAGED		PROPE 4. A OF EA
A	ASPHALT PAVING AND TURF (PATCH, REPAIR OR OVERLAY) CAUSED BY THEIR V DIRECTION OF THE OWNER.		5. F CONS
C	ALL UNDERGROUND SEWER, STORM DRAIN, AND WATER PIPELINES, ELECTRIC PO CONDUITS AND CABLE AND GAS PIPELINES SHALL BE INSTALLED PRIOR TO CONS SIDEWALKS AND PAVEMENT.		OTHEF 6. A MADE
P	WHERE JOINING THE EXISTING PAVEMENT, SAWCUT TO SOUND PAVEMENT AND OV PROPER GRADE AND 2% MAX. CROSS-SLOPE OR 5% MAX. RUNNING SLOPE AS N PAVEMENT SHALL BE REPLACED AS REQUIRED BY THE ENGINEER.		HOUSE CONST
11. A E	AT LEAST TWO (2) WORKING DAYS BEFORE COMMENCING EXCAVATION, THE CO EXPOSE THE EXISTING UTILITIES AT ALL CROSSINGS AND AT THE POINT OF TIE-IN; T		7. A DEBRI IN TRA
12. S	VERIFY THE ELEVATION OF THE EXISTING FACILITIES. SURVEY MONUMENTS SHALL BE PRESERVED AND REFERENCED BEFORE CONSTI CONSTRUCTION PURSUANT TO SECTION 2-9 OF THE S.S.P.W.C. (GREENBOOK).	RUCTION AND RE-PLACED AFTER	8. C ANTICI DISCH
13. A L	ALL UNSUITABLE MATERIAL SHALL BE REMOVED, AS DIRECTED BY THE SOILS E JNSUITABLE MATERIAL SHALL BE REMOVED, AS DIRECTED BY THE SOILS ENGINEE	R, FROM ALL AREAS TO RECEIVE	FOR P THEY I STANE
C 14. A	COMPACTED FILL OR DRAINAGE STRUCTURES. TO RECEIVE COMPACTED FILL OR DF	RAINAGE STRUCTURES. E REMOVED FROM ALL AREAS TO	NUISA UNDEF 9. F
15. A	RECEIVE COMPACTED FILL AND HAULED TO DUMP-SITE APPROVED BY THE ENGINEE	BY THE SOILS ENGINEER AFTER	3. F CHEMI PESTIC FIBER
S	REMOVAL OF UNSUITABLE MATERIAL AND EXCAVATION OF KEYWAYS AND BENCHE SUBSURFACE DRAINAGE SYSTEMS OR ANY FILLS. ALL SOILS OR ROCK MATERIALS DEEMED UNSUITABLE FOR PLACEMENT IN COMP		HYDRA WASH FLOAT
F	FROM THE SITE. ANY IMPORTED MATERIAL SHALL BE APPROVED BY THE SOI COMPACTED FILL. BLOCKY MATERIAL SHALL BE BROKEN INTO SUITABLE PARTICLI FILL IN CONFORMANCE WITH THE CITY STANDARDS.	LS ENGINEER PRIOR TO USE IN	OR CH FLUSH MATEF ON-SIT
D	ALL TREE ROOTS, ABANDONED IRRIGATION LINES, UTILITY SERVICES AND SIM DURING EXCAVATION SHALL BE REMOVED FROM THE SITE AND VOIDS CREATED FILLED AND COMPACTED AS DIRECTED BY THE SOILS ENGINEER.		ULTIM REQUI
Ģ	ALL EXCAVATED BACK SLOPES AND KEYS FOR BUTTRESS FILLS MUST BE E GEOLOGIST AND SOILS ENGINEER TO INSURE ALL POTENTIAL PLANES OF FAILUI	RE HAVE BEEN EXPOSED IN THE	10. E CONTA NON-C DISCHA
19. T	EXCAVATION AND WILL BE ADEQUATELY SUPPORTED BY THE PROPOSED BUTTRESS THE SOILS ENGINEER SHALL SUBMIT RECOMMENDATIONS FOR CORRECTIVE WO WHERE UNSTABLE MATERIAL IS EXPOSED AT THE TOP OF CUTS.		REGION 11. C
20. T	THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING STORM DAMAGE PREV CONTROL DEVICES AND/OR TO PERFORM CERTAIN GRADING TO PREVENT SOIL OR		THE FA TO BE I
C F	NTO PUBLIC STREETS OR ADJACENT PROPERTIES. IN THE EVENT OF SUCH AN COMMENCE IMMEDIATELY. SHOULD CITY FORCES OR THE CITY CONTRACTOR PEF ROM THIS DEVELOPMENT, THE CONTRACTOR SHALL PAY THE COST INCURRED	RFORM ANY CLEANUP RESULTING	12. 1 TO PRE HAZAR
21. E	JPON RECEIPT OF BILLING. EITHER WATER OR DUST PALLIATIVE, OR BOTH, MUST BE APPLIED FOR THE A EXCESSIVE DUST RESULTING FROM THE LOADING OR TRANSPORTATION OF EARTH		13. T THE WO
C	OR PRIVATE AND PUBLIC ROADWAYS.		14. T THAT D IS PRO
23. A	ALL EQUIPMENT USED TO HAUL EXCAVATION OR FILL MATERIAL FROM OR T DESIGNATED ROUTE OR ROUTES IN GOING TO AND FROM THE SITE. THE CONTRAC	TO THE SITE SHALL FOLLOW A	15. E AT ALL AVAILA
T N F	DESIGNATION OF A ROUTE PROVIDING ACCESS TO A SPECIFIED PLACE OTHER THA THE SATISFACTION OF THE CITY BUILDING OFFICIAL THAT SUCH SPECIFIED PLACE MATERIAL MAY BE REASONABLY DEPOSITED OR FILL MATERIAL MAY BE OBTAINED PERMIT IS REQUIRED WHEN IT IS NECESSARY TO FLAG TRAFFIC OR INSTALL ANY CITY RIGHT-OF-WAY.	IS A PLACE WHERE EXCAVATION D. A SEPARATE ENCROACHMENT	RAPID
C F	ANY EARTH ROCK, GRAVEL, SAND, STONE OR OTHER EXCAVATED MATERIAL DEPOS OR WASH UPON ANY PUBLIC PLACE OR PRIVATE PROPERTY SHALL BE REMOVED PRIVATE PROPERTY BY THE END OF THE WORKDAY BY THE CONTRACTOR RESPONS	D FROM SUCH PUBLIC PLACE OR SIBLE FOR THE DEPOSITION. IF AN	
25. E	ADVERSE CONDITION IS CAUSED BY DEPOSIT, THE CONDITION SHALL BE CORRECTE		
26. A	AT ALL TIMES. ALL TRUCKS HAULING DIRT, SAND, OIL, OR OTHER LOOSE MATERIALS ARE TO BE CO LEAST TWO FEET OF FREEBOARD IN ACCORDANCE WITH THE REQUIREMENTS OF C\		
	ADJUST UTILITY BOXES TO BE FLUSH WITH ULTIMATE FINISH SURFACE IN PAVING SC		
L	CONTRACTOR SHALL HIRE A LICENSED SURVEYOR TO STAKE ALL CATCH BASIN LINES, BUILDING PADS, FINISH FLOORS, SWALES AND GRADE BREAKS. TWO STAK CATCH BASINS.		
S S L	N ORDER TO MITIGATE THE IMPACTS ON CULTURAL RESOURCES OR LANDSO SUGGESTIVE OF PREHISTORIC OR HISTORIC ORIGIN IS ENCOUNTERED, WORK IN TH STOPPED, AND THE OWNER SHALL BE NOTIFIED. GRADING, CONSTRUCTION OR LA JNTIL THE FIND IS EVALUATED AND IT IS DETERMINED WHETHER THE MATERIAL IS A AND ADDITIONAL MITIGATION IS REQUIRED.	E VICINITY OF THE FIND SHALL BE ANDSCAPING SHALL NOT RESUME	
30. N	NO PERSON SHALL, WHEN HAULING ANY EARTH, SAND, GRAVEL, ROCK, STONE OR ( DEBRIS OVER ANY PUBLIC STREET, ALLEY OR OTHER PUBLIC PLACE, ALLOW SUC	CH MATERIAL TO BLOW OR SPILL	
C	OVER UPON SUCH STREET, ALLEY OR PUBLIC PLACE OR ADJACENT PRIVATE PROC CREEKS OR STREAMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE C CONSTRUCTION OR SOILS MATERIALS DEPOSITED ON THE PUBLIC RIGHT-OF-WAY PRIVATE PROPERTY.	LEANUP AND REMOVAL OF ANY	
			EART
S	THE CONTRACTOR'S ATTENTION IS DIRECTED TO SECTION 7-10, PUBLIC CONV STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK), IN SCOPE OF WORK:		BEEN
A	A. PROVIDE ALL LABOR, SUPERVISION, MATERIALS, EQUIPMENT & FACILITIES NECE DELIVER, STORE AND INSTALL ALL WORK NOTED ON THE DRAWINGS.	ESSARY TO FURNISH, FABRICATE,	ON T THE I
B C C S	B. THE CONTRACTOR SHALL FURNISH & INSTALL ALL WORK NECESSARY TO MAKE OR NOT SUCH DETAILS ARE MENTIONED IN THESE SPECIFICATIONS OR SHOWN OBVIOUSLY NECESSARY TO MAKE A COMPLETE SYSTEM, EXCEPTING ONLY SPECIFICALLY MENTIONED HEREIN OR PLAINLY MARKED ON THE ACCOMPANYING JNDER ANOTHER SECTION OF THE SPECIFICATION.	ON THE PLANS, BUT WHICH ARE ′ THOSE PORTIONS THAT ARE	CONS GRAD 1 ACR
3. IT	T SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY AVAILABLE SPACES FO		GRAD
C	COORDINATION: THE DRAWINGS ARE DIAGRAMMATIC & INTENDED TO SHOW COORDINATE HIS WORK WITH OTHER TRADES TO PROVIDE BEST ARRANGEMENT OF	ALL DUCT, PIPES, CONDUIT, ETC.	REQU
Т	WORKMANSHIP: THE WORK SHALL BE ACCOMPLISHED BY THE USE OF COMPETEN IRADE. THE ENGINEER AND ARCHITECT SHALL HAVE THE RIGHT TO INTERPRET WITH THE CONTRACT DOCUMENTS.		RECO
	MATERIALS: ALL MATERIALS, APPLIANCES & EQUIPMENT SHALL BE NEW & THE BI FREE FROM ALL DEFECTS AND OF THE MAKE, BRAND, AND QUANTITY SPECIFIED.	EST OF THEIR RESPECTIVE KIND.	INVES <u>2022</u> E WHEF
Ν	CLEAN-UP: UPON COMPLETION OF THE WORK UNDER THIS SECTION THE CONTRACT MATERIALS. EQUIPMENT & DEBRIS INCIDENTAL TO THIS WORK & LEAVE THE PREMIS SATISFACTION OF THE ARCHITECT / OWNER.		PLAN THE N
-			NOTE

# SITE IMPROVEMENT PLANS FOR **COVINA VALLEY HIGH SCHOOL POOL REPLACEMENT**

# M WATER POLLUTION CONTROL NOTES:

RIATE BMP'S FOR CONSTRUCTION-RELATED MATERIALS, WASTE, SPILLS OR L BE IMPLEMENTED AND RETAINED ON SITE TO MINIMIZE OM THE SITE TO STREETS, DRAINAGE FACILITIES, OR ADJOINING WIND OR RUNOFF.

FROM AREAS DISTURBED BY CONSTRUCTION SHALL BE RETAINED ON RUCTURAL CONTROLS TO THE MAXIMUM EXTENT PRACTICABLE.

LES OF SOIL SHALL BE PROPERLY CONTAINED TO MINIMIZE SEDIMENT ROM THE SITE TO STREETS, DRAINAGE FACILITIES OR ADJACENT IA RUNOFF, VEHICLE TACKING, OR WIND.

VABLE EROSION PROTECTIVE DEVICES SHALL BE IN PLACE AT THE END KING DAY WHEN THE 5-DAY RAIN PROBABILITY FORECAST EXCEEDS 50%.

ROM EQUIPMENT AND VEHICLE WASHING SHALL BE CONTAINED AT IN SITES UNLESS TREATED TO REDUCE OR REMOVE SEDIMENT AND ANTS.

TRUCTION CONTRACTOR AND SUBCONTRACTOR PERSONNEL ARE TO BE OF THE REQUIRED BEST MANAGEMENT PRACTICES AND GOOD G MEASURES FOR THE PROJECT SITE AND ANY ASSOCIATED N STAGING AREAS.

ND OF EACH DAY OF CONSTRUCTION ACTIVITY ALL CONSTRUCTION ASTE MATERIALS SHALL BE COLLECTED AND PROPERLY DISPOSED RECYCLE BINS.

ICTION SITES SHALL BE MAINTAINED IN SUCH A CONDITION THAT AN TORM DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE. OF MATERIAL OTHER THAN STORMWATER ONLY WHEN NECESSARY IANCE AND COMPLETION OF CONSTRUCTION PRACTICES AND WHERE CAUSE OR CONTRIBUTE TO A VIOLATION OF ANY WATER QUALITY USE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR CONTAIN A HAZARDOUS SUBSTANCE IN A QUANTITY REPORTABLE AL REGULATIONS 40 CFR PARTS 117 AND 302.

AL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SOLID OR LIQUID LLS; WASTES FROM PAINTS, STAINS, SEALANTS, GLUES, LIMES, ERBICIDES, WOOD PRESERVATIVES AND SOLVENTS; ASBESTOS FLAKES OR STUCCO FRAGMENTS; FUELS, OILS, LUBRICANTS, AND ADIATOR OR BATTERY FLUIDS; FERTILIZERS, VEHICLE/EQUIPMENT AND CONCRETE WASH WATER; CONCRETE, DETERGENT OR STES; WASTES FROM ANY ENGINE/EQUIPMENT STEAM CLEANING DEGREASING AND SUPERCHLORINATED POTABLE WATER LINE RING CONSTRUCTION, PERMITTEE SHALL DISPOSE OF SUCH A WASHOUT BIN OR SPECIFIED AND CONTROLLED TEMPORARY AREA CALLY SEPARATED FROM POTENTIAL STORMWATER RUNOFF, WITH POSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL

RING OF CONTAMINATED GROUNDWATER, OR DISCHARGING SOILS VIA SURFACE EROSION IS PROHIBITED. DEWATERING OF ATED GROUNDWATER REQUIRES A NATIONAL POLLUTANT MINATION SYSTEM PERMIT FROM THE RESPECTIVE STATE ER QUALITY CONTROL BOARD.

AREAS ON THE PERMITTED AREA PERIMETER MUST DRAIN AWAY FROM OPES AT THE CONCLUSION OF EACH WORKING DAY. DRAINAGE IS D TOWARD DESILTING FACILITIES.

FRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS IBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATER CREATES A NDITION.

FRACTOR SHALL INSPECT THE EROSION CONTROL WORK AND INSURE THAT ACCORDANCE WITH THE APPROVED PLANS.

RAL CONTRACTOR SHALL NOTIFY ALL SUBCONTRACTORS & MATERIAL SUPPLIERS: OF CHEMICALS INTO THE STORM DRAIN SYSTEM OR THE WATERSHED

INT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE URING THE RAINY SEASON. NECESSARY MATERIALS SHALL BE BITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE UCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.

OWING BMPs AS OUTLINED IN, BUT NOT LIMITED TO, THE STORMWATER BEST MANAGEMENT PRACTICE DK, CONSTRUCTION, CALIFORNIA STORMWATER QUALITY ASSOCIATION, LATEST EDITION, MAY APPLY ONSTRUCTION (ADDITIONAL MEASURES MAY BE REQUIRED IF DEEMED APPROPRIATE BY INSPECTOR)

DRMWATER MANAGEMENT & L MANAGEMENT BMPs

- TER CONSERVATION PRACTICES VATERING OPERATIONS ING AND GRINDING OPERATIONS
- ICIT CONNECTION/DISCHARGE TABLE WATER/IRRIGATION
- HICLE AND EQUIPMENT CLEANING EHICLE AND EQUIPMENT MAINTENANCE
- NCRETE CURING DNCRETE FINISHING
- ATERIAL AND EQUIPMENT USE TERIAL DELIVERY AND STORAGE
- TERIAL USE OCKPILE MANAGEMENT
- PILL PREVENTION AND CONTROL
- DLID WASTE MANAGEMENT AZARDOUS WASTE MANAGEMENT
- ONTAMINATED SOIL MANAGEMENT DNCRETE WASTE MANAGEMENT
- IQUID WASTE MANAGEMENT

- EROSION & SEDIMENTAL CONTROL BMPs EC-1 - SCHEDULING EC-2 - PRESERVATION OF EXISTING VEGETATION
- EC-7 GEOTEXTILES & MATS EC-9 - EARTH DIKES AND DRAINAGE SWALES
- EC-11 SLOPE DRAINS
- SE-1 SILT FENCE SE-2 - SEDIMENT BASIN
- SE-3 SEDIMENT TRAP SE-4 - CHECK DAM
- SE-5 FIBER ROLLS SE-6 - GRAVEL BAG BERM
- SE-7 STREET SWEEPING AND VACUUMING SE-8 - SANDBAG BARRIER
- SE-9 STRAW BALE BARRIER
- SE-10 STORM DRAIN INLET PROTECTION WE-1 - WIND EROSION CONTROL
- TC-1 STABILIZED CONSTRUCTION ENTRANCE/EXIT TC-2 - STABILIZED CONSTRUCTION ROADWAY

TC-3 - ENTRANCE/OUTLET TIRE WASH

- ANITARY/SEPTIC WASTE MANAGEMENT
- **RK NOTICE TO CONTRACTOR: NO EARTHWORK ANALYSIS HAS** PLETED WITH RESPECT TO VOLUMES OF SOILS TO BE EXCAVATED. R IMPORTED IN ORDER TO PROVIDE THE FINISHED GRADES SHOWN

ANS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING WORK QUANTITIES NECESSARY TO COMPLETE THE PROJECT.

**ION STORM WATER NOTE:** ORK ASSOCIATED WITH THIS PROJECT WILL DISTURB LESS THAN OIL AND THUS SHALL NOT BE SUBJECT TO COMPLY WITH THE RMWATER CONSTRUCTION GENERAL PERMIT 2009-0009-DWQ.

ANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS NTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS PLY WITH ALL LOCAL ORDINANCES.

DATIONS AND CONCLUSIONS OF GEOTECHNICAL ION PROJECT No. 2460A27, DATED NOVEMBER 28, GL, INC. SHALL BE THOROUGHLY COMPLIED WITH. **IFLICTING INFORMATION BETWEEN THIS GRADING R THE PROJECT EARTHWORK SPECIFICATIONS &** NED REPORT OCCUR, NOTIFY THE ARCHITECT.

NTRACTOR: BEFORE DEMOLTION OR TRENCHING E CONTRACTOR SHALL COMPLETE AN UNDERGROUND PING SURVEY OF THE ENTIRE LIMITS OF WORK TO WERE EXISTING UTILITIES ARE AND WHERE POSSIBLE JND CONFLICTS MAY OCCUR.

# UNDERGROUND FIRE SERVICE GENERAL NOTES

- 1. PRIOR TO INSTALLATION, ALL PLANS AND SPECIFICATIONS SHALL BE APPROVED BY D.S.A. 2. PRIOR TO INSTALLATION, ALL REQUIRED PERMITS SHALL BE OBTAINED BY THE CONTRACTOR FROM THE AGENCY HAVING JURISDICTION.
- 3. D.S.A. INSPECTIONS ARE REQUIRED: 1) PRIOR TO POURING THRUST BLOCKS, 2) FOR HYDROSTATIC TESTING, AND 3) FOR FLUSH. SCHEDULE ALL INSPECTIONS 48 HOURS IN ADVANCE.
- 4. VERTICAL TRENCH SHORING SHALL CONFORM WITH THE ORDERS OF THE STATE OF CALIFORNIA, DIVISION OF INDUSTRIAL (DIS) SAFETY AND O.S.H.A. STANDARDS.
- 5. INSTALLATION, INSPECTION, AND TESTING SHALL CONFORM TO 2016 NFPA 24. ALL PIPES SHALL BE APPROVED FOR USE IN FIRE SERVICE SYSTEMS (CLASS 235 MINIMUM) 7. ALL FERROUS PIPE AND FITTINGS SHALL BE PROTECTED WITH A LOOSE 8-MIL POLYETHYLENE TUBE. THE ENDS OF THE TUBE AND ANY SPLICES MADE FOR "T"S OR OTHER PIPING COMPONENTS SHALL BE SEALED WITH 2" TAPE, APPROVED FOR UNDERGROUND USE. GALVANIZING DOES NOT MEET THE REQUIREMENTS OF THIS SECTION. ALL BOLTED JOINTS SHALL BE CLEANED AND THOROUGHLY COATED WITH ASPHALT OR OTHER CORROSION RETARDING MATERIAL AFTER ASSEMBLY AND PRIOR TO POLY-TUBE INSTALLATION.
- 8. A 6" BED OF CLEAN FILL SAND SHALL BE PROVIDED BELOW AND 12" ABOVE THE WATER PIPE. ALL BOLTS USED FOR UNDERGROUND CONNECTIONS SHALL BE STAINLESS STEEL
- 10. A MINIMUM OF 30" OF COVER, FROM FINISH GRADE TO THE TOP OF PIPE, SHALL BE PROVIDED. WHEN SURFACE LOADS ARE EXPECTED, A MINIMUM OF 36" COVER SHALL BE PROVIDED.
- 11. THRUST BLOCKS, OR OTHER APPROVED METHODS OF THRUST RESTRAINT, SHALL BE PROVIDED WHEREVER PIPE CHANGES DIRECTION. PROVIDE DETAILS AND CALCULATIONS FOR SIZING THRUST BLOCKS BASED ON ACTUAL SOIL CONDITIONS.
- 12. THE TRENCH SHALL BE EXCAVATED FOR THRUST BLOCKS AND INSPECTED PRIOR TO POUR. ALL CORROSION PROTECTION SHALL BE IN PLACE. 13. A HYDROSTATIC TEST (200 PSI FOR TWO HOURS OR 50 PSI OVER MAXIMUM STATIC PRESSURE, WHICHEVER IS GREATER) SHALL BE WITNESSED BY AN D.S.A. INSPECTOR. THE TRENCH SHALL BE BACK-FILLED
- BETWEEN THE JOINTS TO PREVENT MOVEMENT OF THE PIPE. 14. THE SYSTEM SHALL BE THOROUGHLY FLUSHED, UNTIL THE WATER IS CLEAR, BEFORE CONNECTION IS MADE TO OVERHEAD PIPING. FLOW SHALL BE THROUGH A MINIMUM OF A 4" HOSE OF PIPE UNLESS
- OTHERWISE APPROVED BY THE D.S.A. INSPECTOR. D.S.A. INSPECTOR SHALL WITNESS THE FLUSH. 15. PRIVATE HYDRANTS, SPRINKLER CONTROL VALVES, DETECTOR CHECK ASSEMBLIES, POST INDICATING VALVES AND FIRE DEPARTMENT CONNECTIONS SHALL BE PAINTED OSHA RED.
- 16. CONTRACTOR SHALL PROVIDE TO D.S.A. INSPECTOR A COMPLETED "CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR UNDERGROUND PIPING," AT TIME OF FINAL INSPECTION IN ACCORDANCE WITH CHAPTER 10 OF NFPA 24, 2016 EDITION. 17. ALL VALVE BOXES SHALL BE SET TO FINISH GRADE BY THE CONTRACTOR AS PART OF THIS PROJECT.
- ALL GATE VALVE BOX COVERS SHALL BE PAINTED RED. 18. THE FIRE DEPARTMENT CONNECTION SHOULD BE LOCATED NOT LESS THAN 18 INCHES AND NOT MORE
- THAN 4 FEET ABOVE THE LEVEL OF THE ADJACENT GRADE OR ACCESS LEVEL. 19. BACKFILL SHALL BE WET TAMPERED IN LAYERS AND WETTED UNDER AND AROUND PIPES TO PREVENT SETTLEMENT OR LATERAL MOVEMENT. BACKFILL SHALL CONSIST OF CLEAN FILL SAND TO A MINIMUM OF 6
- INCHES BELOW AND TO A MINIMUM OF 12 INCHES ABOVE THE PIPE. 20. ALL CONTROL VALVES SHALL BE LOCKED IN THE OPEN POSITION. VALVES SHALL BE MONITORED IF THEY SERVE 6 OR MORE SPRINKLER HEADS.
- 21. NO MECHANICAL EXCAVATION WITHIN TWO FEET (LATERALLY) OF A WATER MAIN WILL BE ALLOWED.
- 22. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL REQUIRED VERTICAL BENDS NECESSARY TO MAINTAIN 6" MINIMUM VERTICAL CLEARANCE FROM EXISTING UTILITIES.
- 23. A 14 GAUGE COPPER LOCATION WIRE SHALL BE INSTALLED ON TOP OF ALL PVC PIPE

# UNDERGROUND UTILITY LINETYPE LEGEND

W G E COMM	— W — SEW	W SEW E COMM	(E)ELECTRICA (E)COMMUNIC
 SEW W FW	SEW W FW	SEW W FW	(E)UNKNOWN NEW SANITAR NEW DOMEST NEW FIRE WA NEW STORM D

**BASIS OF BEARINGS:** 

THE BASIS OF BEARINGS FOR THIS PROJECT IS NORTH 88° 34' 48" WEST ALONG THE CENTERLINE OF ROWLAND AVENUE. REFERENCED TO THE NAD83 CALIFORNIA COORDINATE SYSTEM, ZONE 5 GRID, EPOCH 2007.0

**BENCHMARK:** 

COUNTY OF LOS ANGELES BENCHMARK 4G1683 "RDBM TAG IN E CB 3.3FT S/O BCR @ SE CORNER BADILLO ST & ARMEL DR" ELEVATION = 507.111' (NAVD 88) QUAD YEAR 2005

	ABB	REVIATIONS	
ABND AC AP BLDG BC BW CL CF CLF CONC DCV DESC D/W	ABANDONED ASPHALT PAVEMENT ANGLE POINT BUILDING BEGINNING OF CURVE BACK OF WALK CENTERLINE CURB FACE HEIGHT CHAIN LINK FENCE CONCRETE DETECTOR CHECK VALVE DESCRIBED DRIVEWAY	MH NG N.I.C. P.C.C. PL PIV PP RCE RR S SDMH SL SMH	MANHOLE NATURAL GROUND NOT IN CONTRACT PORTLAND CEMENT CONRETE PROPERTY LINE POST INDICATOR VALVE POWER POLE REGISTERED CIVIL ENGINEER RAILROAD SLOPE STORM DRAIN MANHOLE STREET LIGHT SEWER MANHOLE
DI EP EC EX FDC FH	DROP INLET EDGE OF PAVEMENT END OF CURVE EXISTING FIRE DEPARTMENT CONNECTION FIRE HYDRANT	S.P.P.W.C. S.S.P.W.C. SW	STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION). STANDARD SPECIFICATIONS FOR PUBLI WORKS CONSTRUCTION (GREEN BOOK) 2021 EDITION SIDEWALK
FL FS GA GB GP GV HB	FLOWLINE FINISH SURFACE GUY ANCHOR GRADE BREAK GUARD POST GAS VALVE HOSE BIBB	TC TELE TG TCO TS TW TYP.	TOP OF CURB TELEPHONE TOP OF GRATE TOP OF CLEANOUT TRAFFIC SIGN TOP OF WALL TYPICAL
HP ICV INV IP L LIP LP LT&T	HIGH POINT IRRIGATION CONTROL VALVE INVERT IRON PIPE LENGTH LIP OF GUTTER LIGHT POLE LEAD TACK AND TAG	UDG UTIL WM WV W VLT VIF VLT	UNDERGROUND CONDUIT UTILITY WATER METER WATER VALVE WATER VAULT VERIFY IN FIELD VAULT

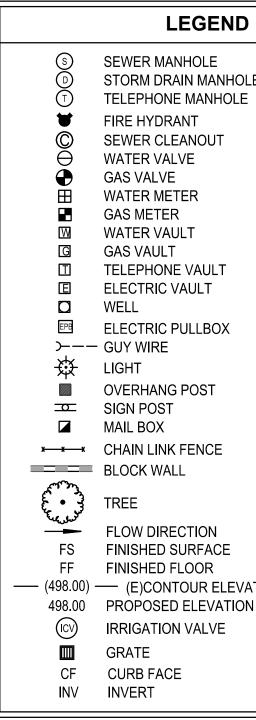
	SHEET INDEX
SHEET	DESIGNATION
C0.0	SITE IMPROVEMENT PLAN TITLE SHEET
C1.0	SITE DEMOLITION PLAN
C2.0	GRADING PLAN
C2.1	GRADING PLAN
C2.2	GRADING DETAILS
C2.3	GRADING DETAILS
C3.0	SITE WET UTILITY PLAN
C3.1	FIRE WATER INSTALLATION PLAN
C3.2	SITE WET UTILITY DETAILS
C3.3	SITE WET UTILITY DETAILS

# RAIN

C WATER SEWER AL/POWER

CATIONS **UTILITY** RY SEWER TIC WATER ATER DRAIN

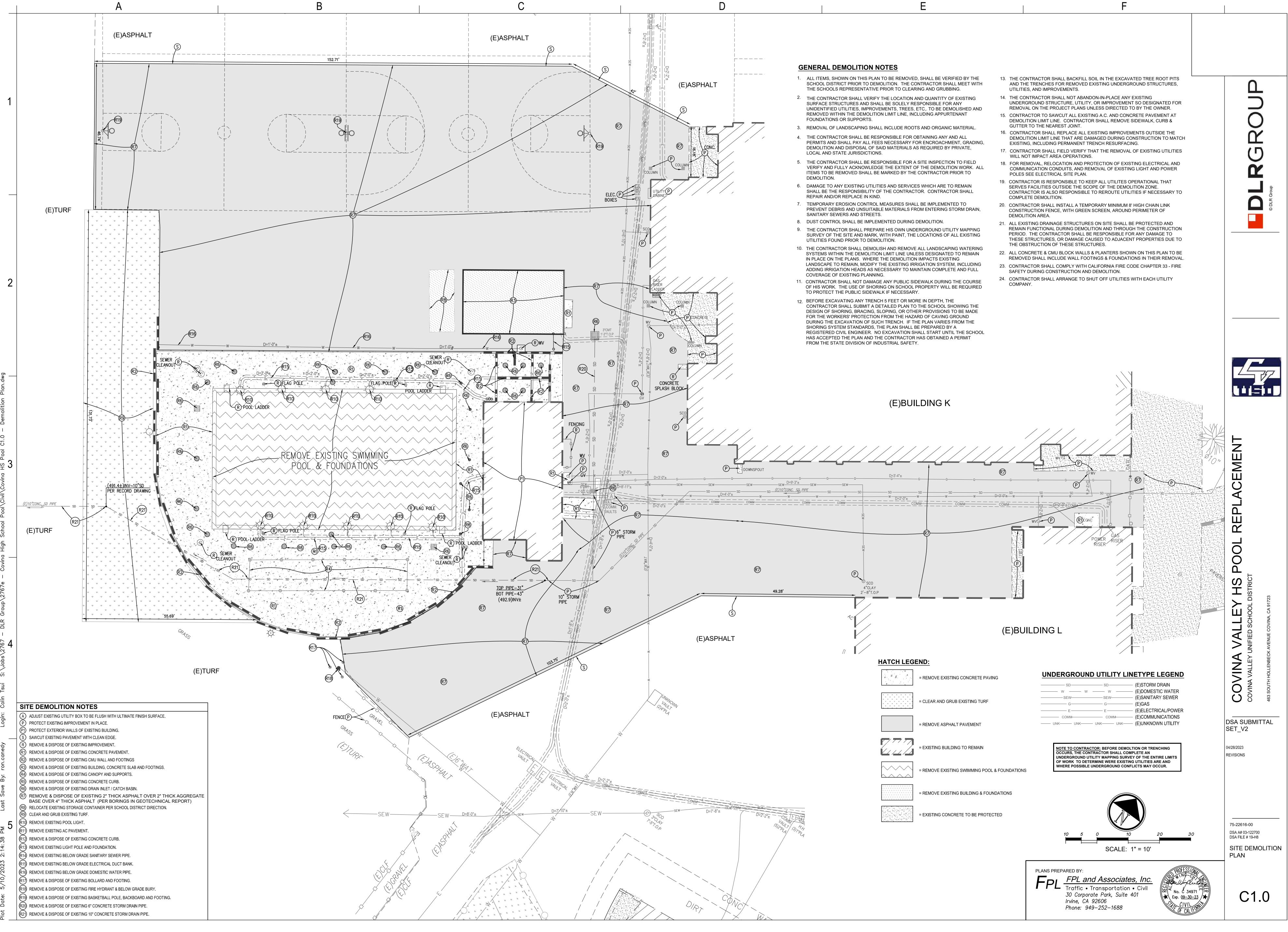
# HORIZONTAL CONTROL

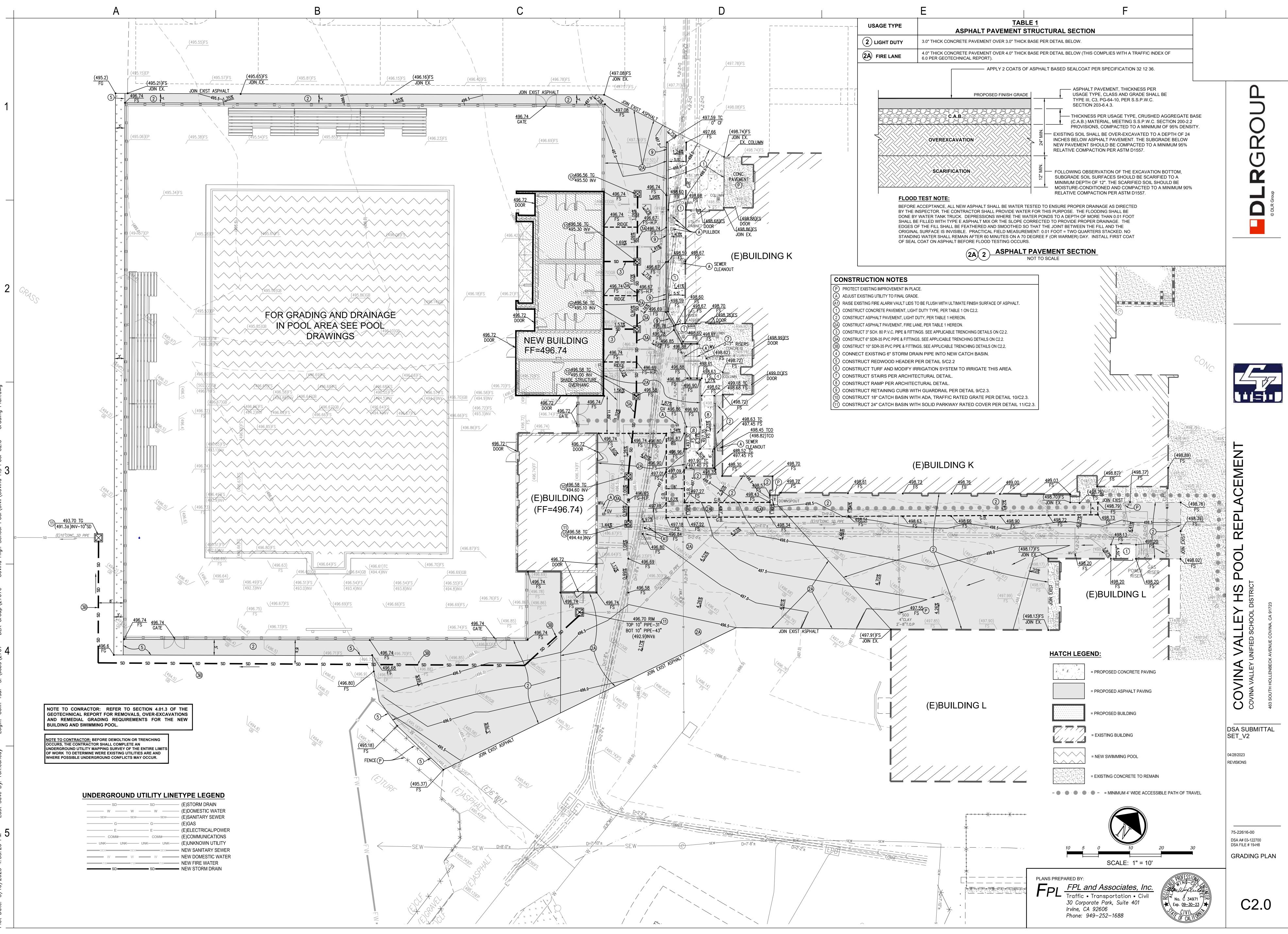




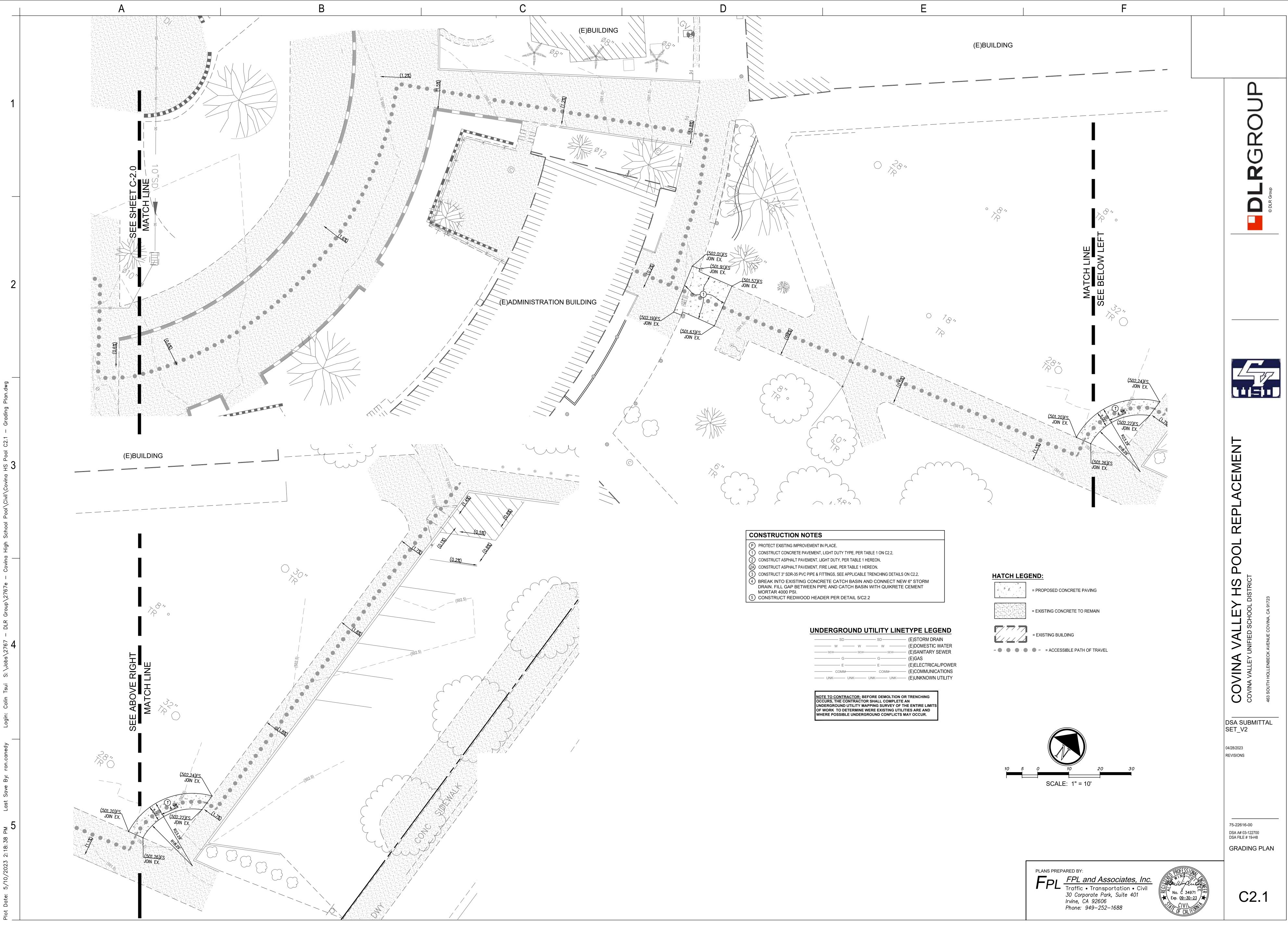
HORIZONTAL CONTROL         CAD GEOMETRIC ELECTRONIC FILE SHALL BE MADE AVAILABLE TO THE CONTRACTORYS SURVEYOR TO LAVOUT THE CONSTRUCTION STAKING OF TO SURVEYOR OR CONTRACTORYS SURVEYOR TO SIGNA WANVER FORM BEFORE RELEASE ELECTRONIC DRAWINGS.         EXISTING UNDERGROUND STRUCTURES         DISTON GOT THE EXISTING UNDERGROUND UTILITIES, AS SHOWN ON THESE I OSTANED FORM SOURCES OF VARYING RELIABILITY, NO REPRESENTATION IS MADE OR COMPLETENESS OF SAID UTILITY INFORMATION. THE CONTRACTOR IS CAUTIONE EXCAVATION WILL REVEAT THE LOCATIONS OF SUCH UNDERGROUND DETILITIES, TS CONTRACTORS RESPONSIBILITY TO NOTIFY THE OWNERS OF THE UTILITIES OR STREET RESONATION OR IMPROVEMENTS. THE CONTRACTOR SHALL VERIFY LOCATIONS OF SUCH UNDERGROUND AND ANY OTR ECOORD OR NOT SHOWN IN THE PLANS WHICH ARE IDENTIFIED DURING CONSTRUCT         OSTORY THE SHOWN TO BE PROTECT THE UTILITY INFORMATION. THE CONTRACTOR SHALL VERIFY LOCATIONS OF SUCH UNDERGROUND AND ANY OTR ECOORD OR NOT SHOWN IN THE PLANS WHICH ARE IDENTIFIED DURING CONSTRUCT         OSTORY THE CONTRACTOR SHALL TAKE PRECAUTIONARY PROTECT THE UTILITY INFORMATION. THE CONTRACTOR SHALL VERIFY CONTRACTOR SHALL VERIFY LOCATIONS OF SUCH MAINHOLE         INTERVIEW       INTERVIEW         OKENTRACTOR SHALL VERIFY CONTRACTOR SHALL VERIFY CONT	N HE PROJECT. THE E OF ANY CAD PLANS, WERE AS TO THE ACCURACY ED THAT ONLY ACTUAL HALL BE THE UCTURES CONCERNED ILITIES PRIOR TO ANY MEASURES TO IER LINES NOT OF TON. DSA SET_ 04/28/20 REVISIO	COVINA VALLEY UNIFIED SCHOOL DISTRICT 463 SOUTH HOLLENBECK AVENUE COVINA, CA 91723
PLANS PREPARED BY: <b>FPL</b> <u>FPL and Associates, Inc.</u> Traffic • Transportation • Civil 30 Corporate Park, Suite 401 Irvine, CA 92606 Phone: 949–252–1688	PLA PROFESSION NING-CH PLA	e ROVEMENT IN TITLE SHEET



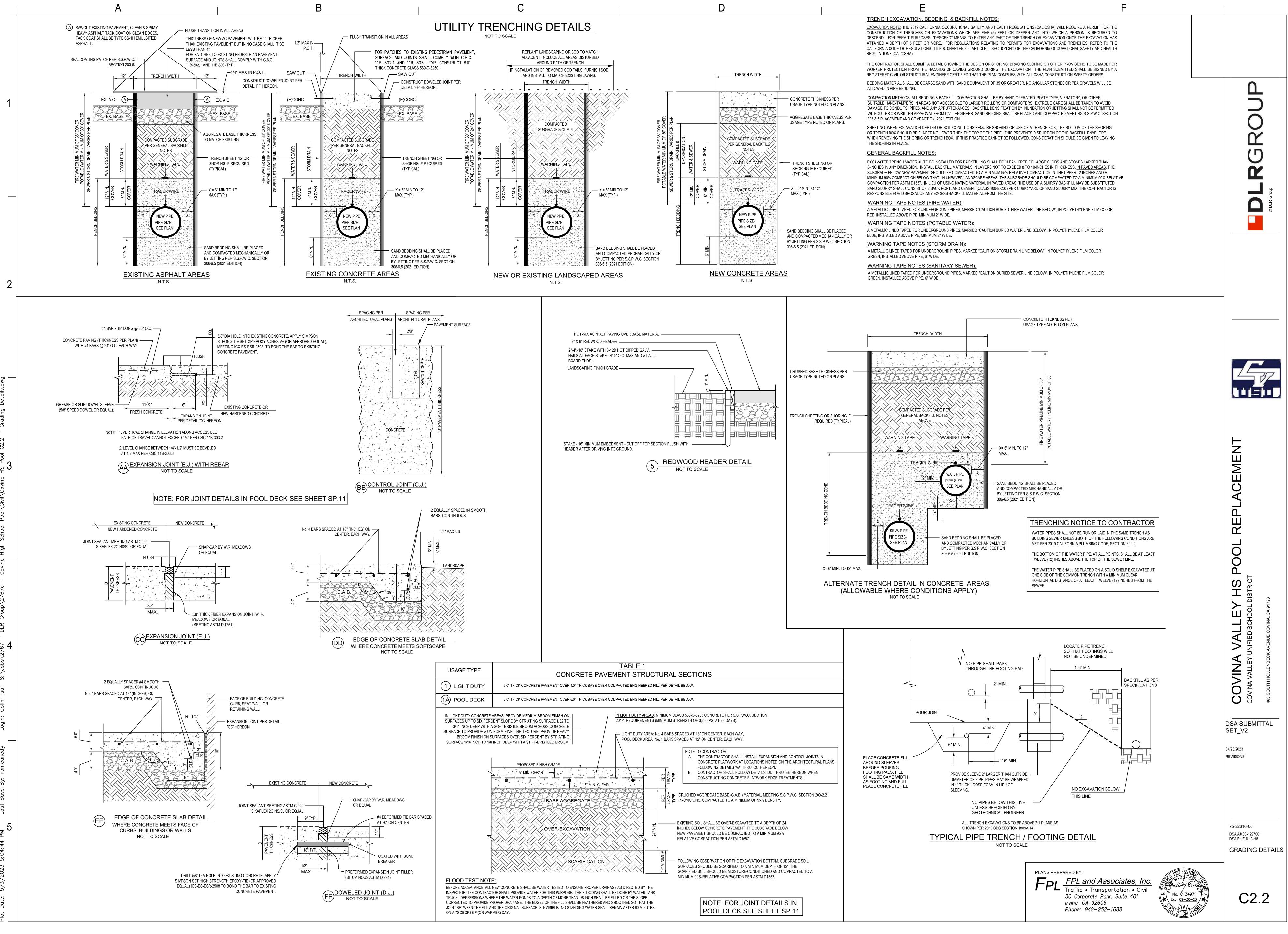


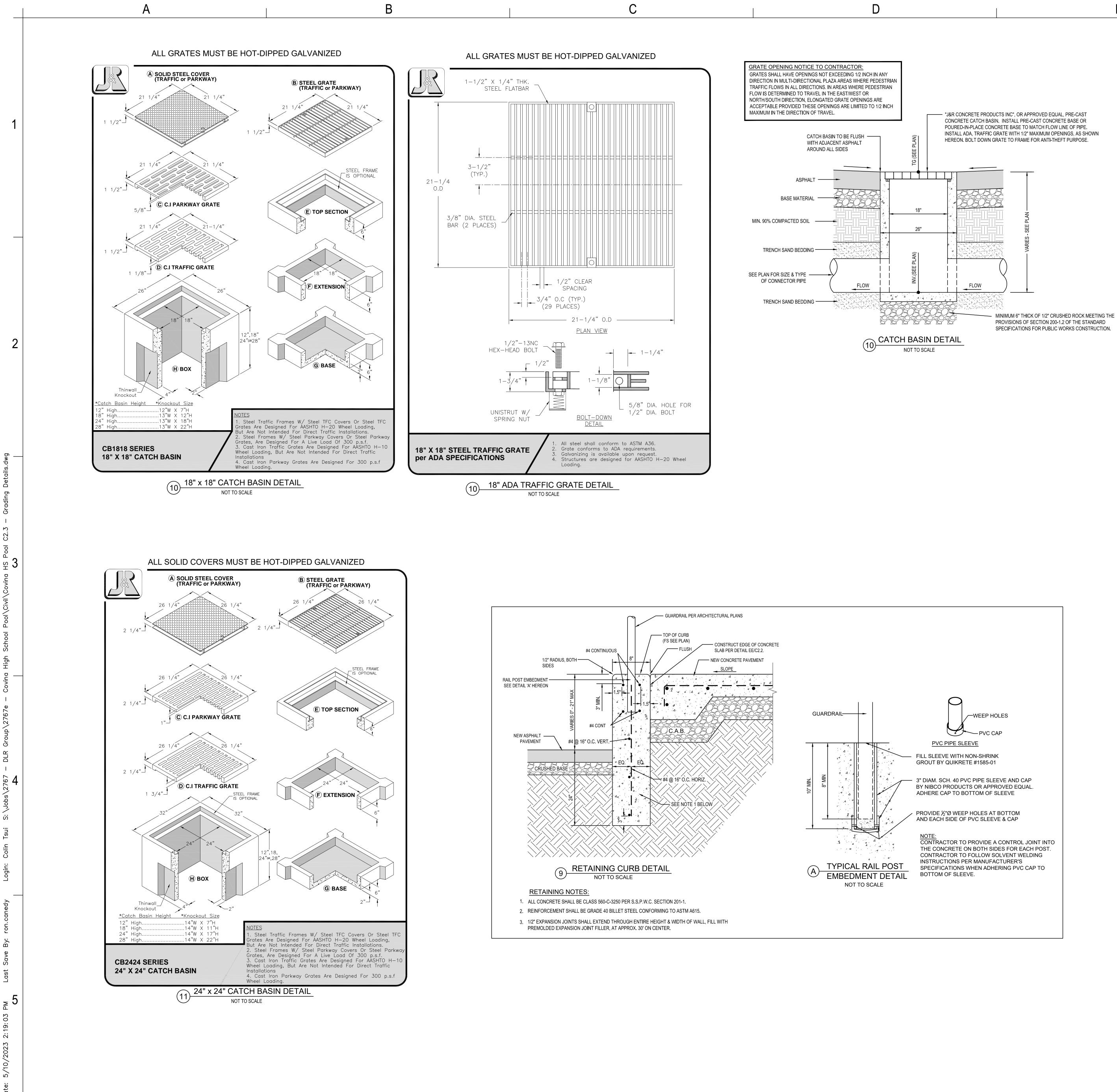


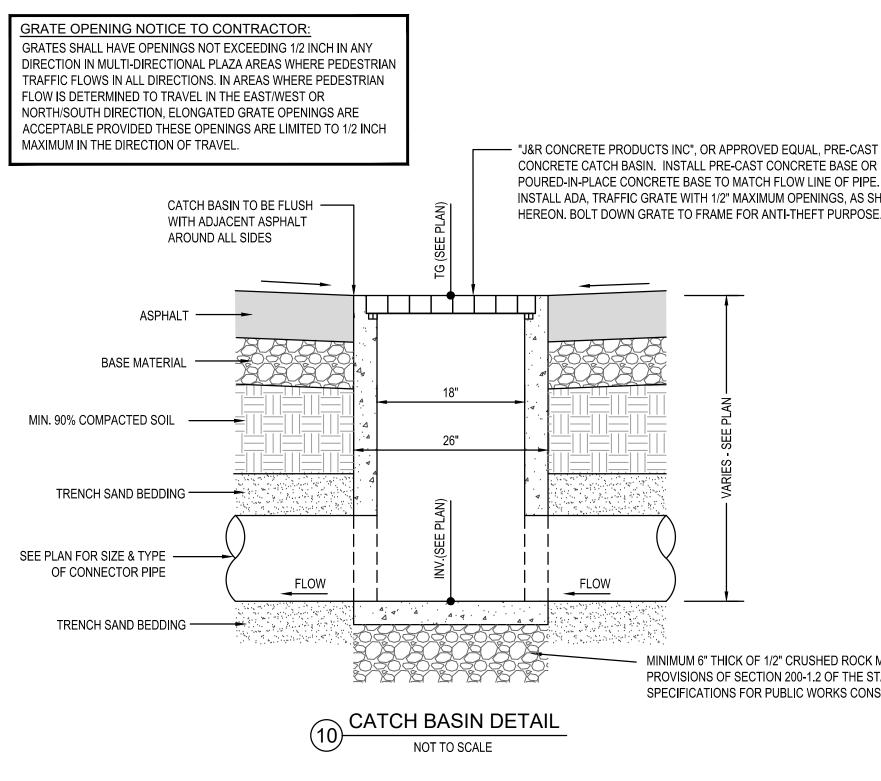
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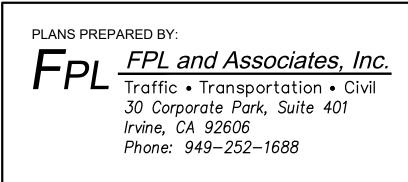
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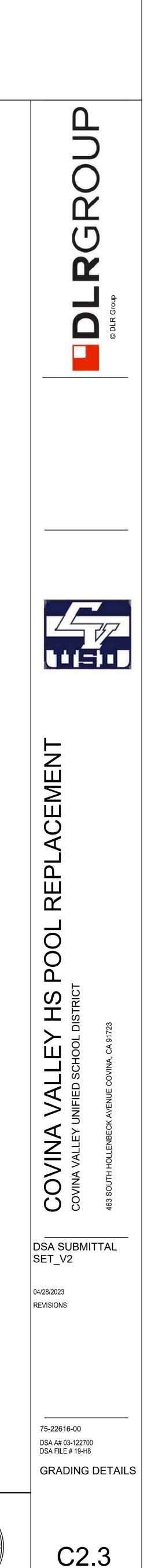




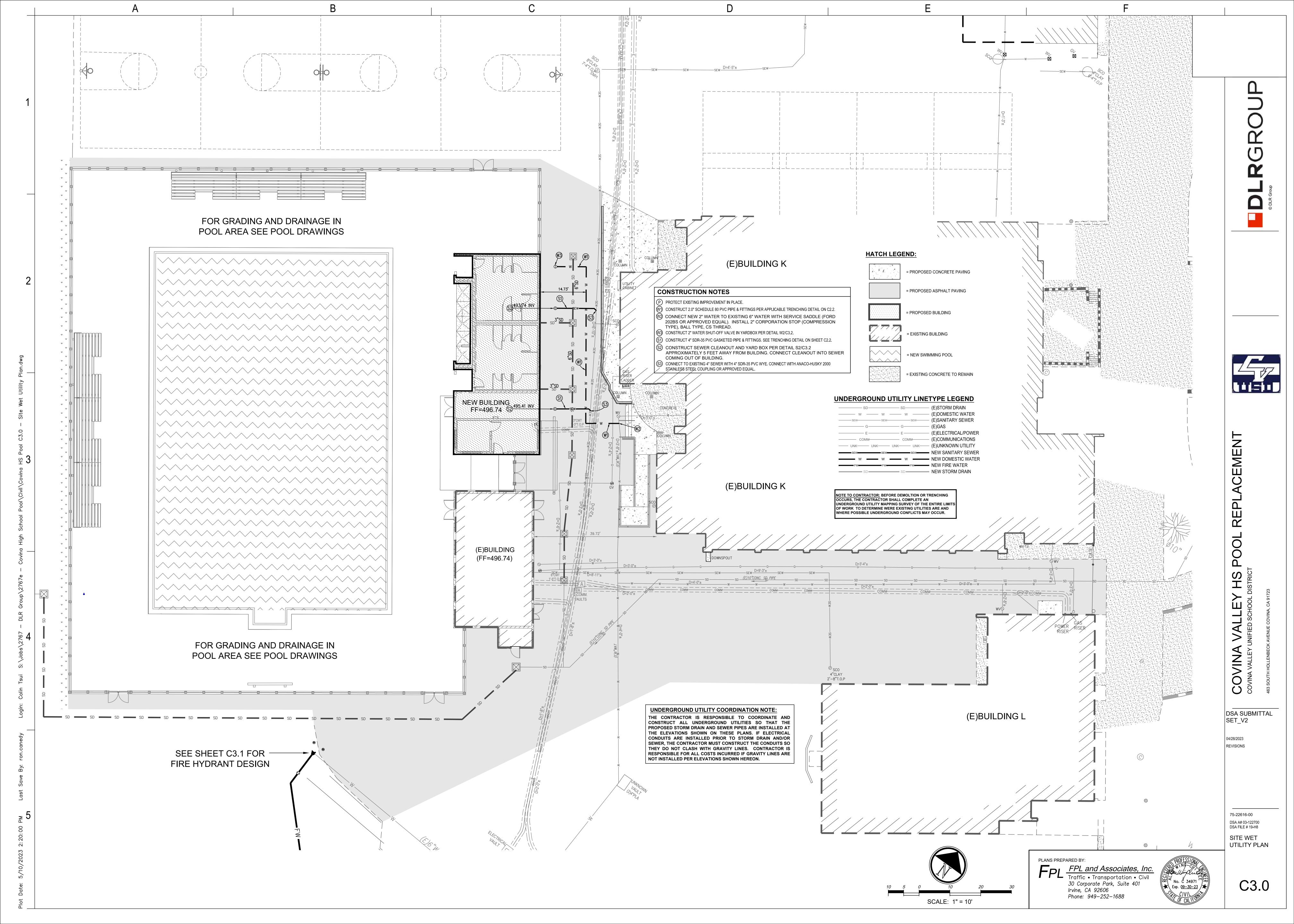


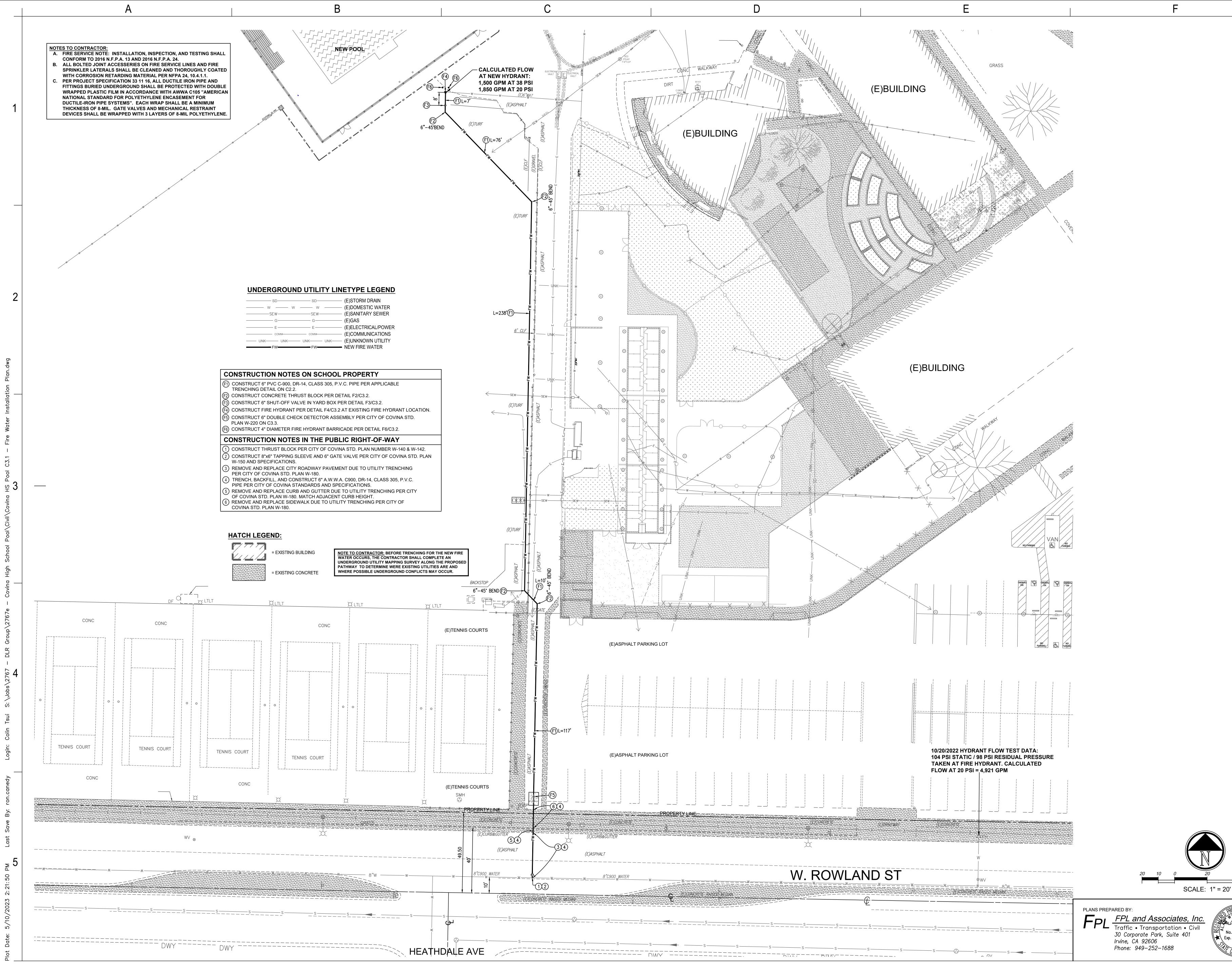
PROVISIONS OF SECTION 200-1.2 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.

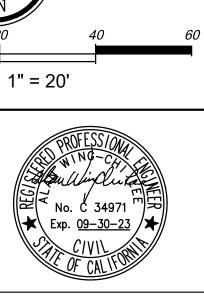












DSA A# 03-122700 DSA FILE # 19-H8 FIRE HYDRANT INSTALLATION PLAN

75-22616-00

04/28/2023 REVISIONS

DSA SUBMITTAL SET\_V2

COVINA VALLEY HS POO COVINA VALLEY UNIFIED SCHOOL DISTRICT 463 SOUTH HOLLENBECK AVENUE COVINA, CA 91723



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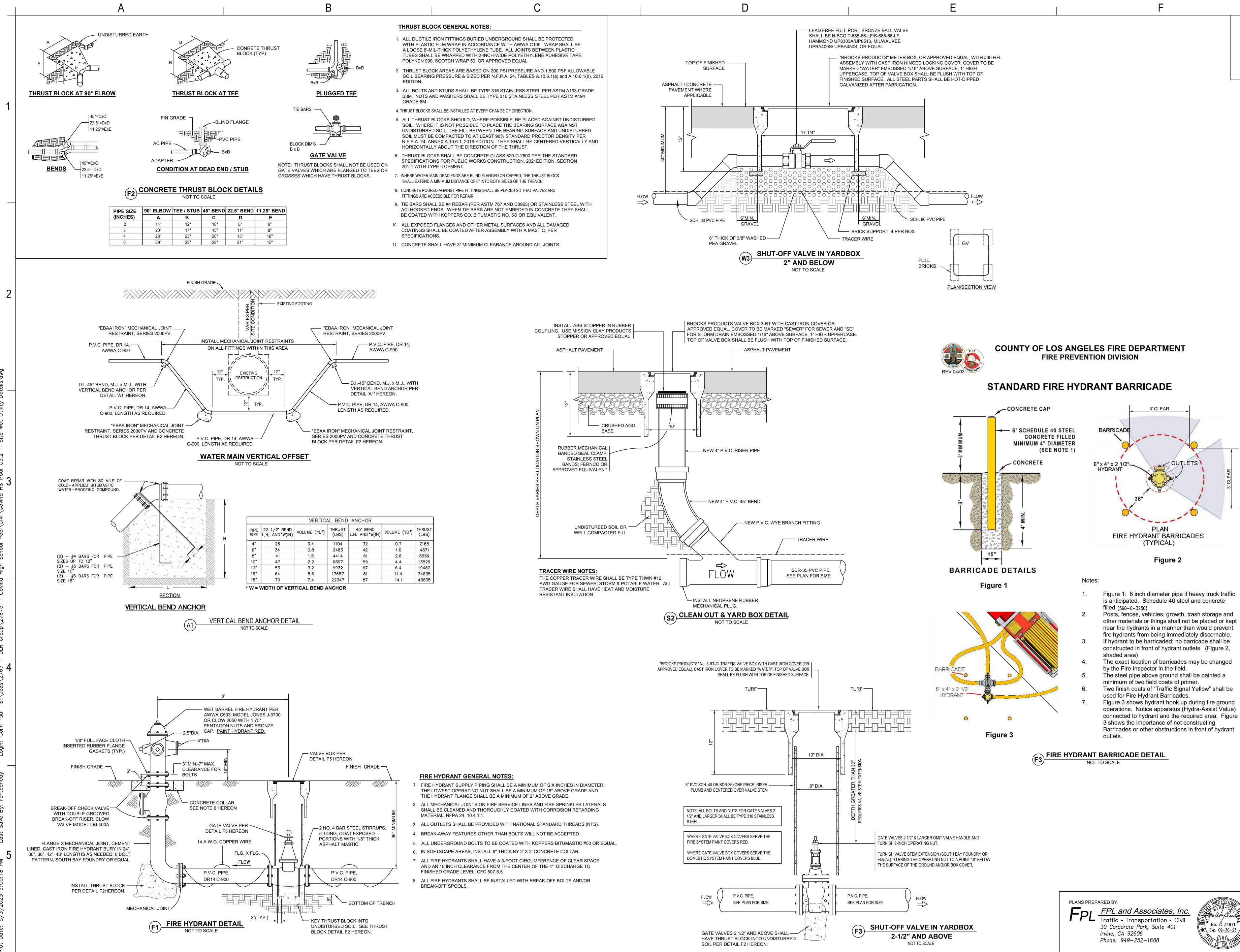
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VOLUME (YD 3)	THRUST (LBS)
0.7	2165
1.6	4871
2.8	8659
4.4	13529
6.4	19482
11.4	34635
14.1	43835



C3.2

UTILITY DETAILS

75-22616-00 DSA A# 03-122700

DSA FILE # 19-H8

SITE WET

REVISIONS

04/28/2023

SET V2

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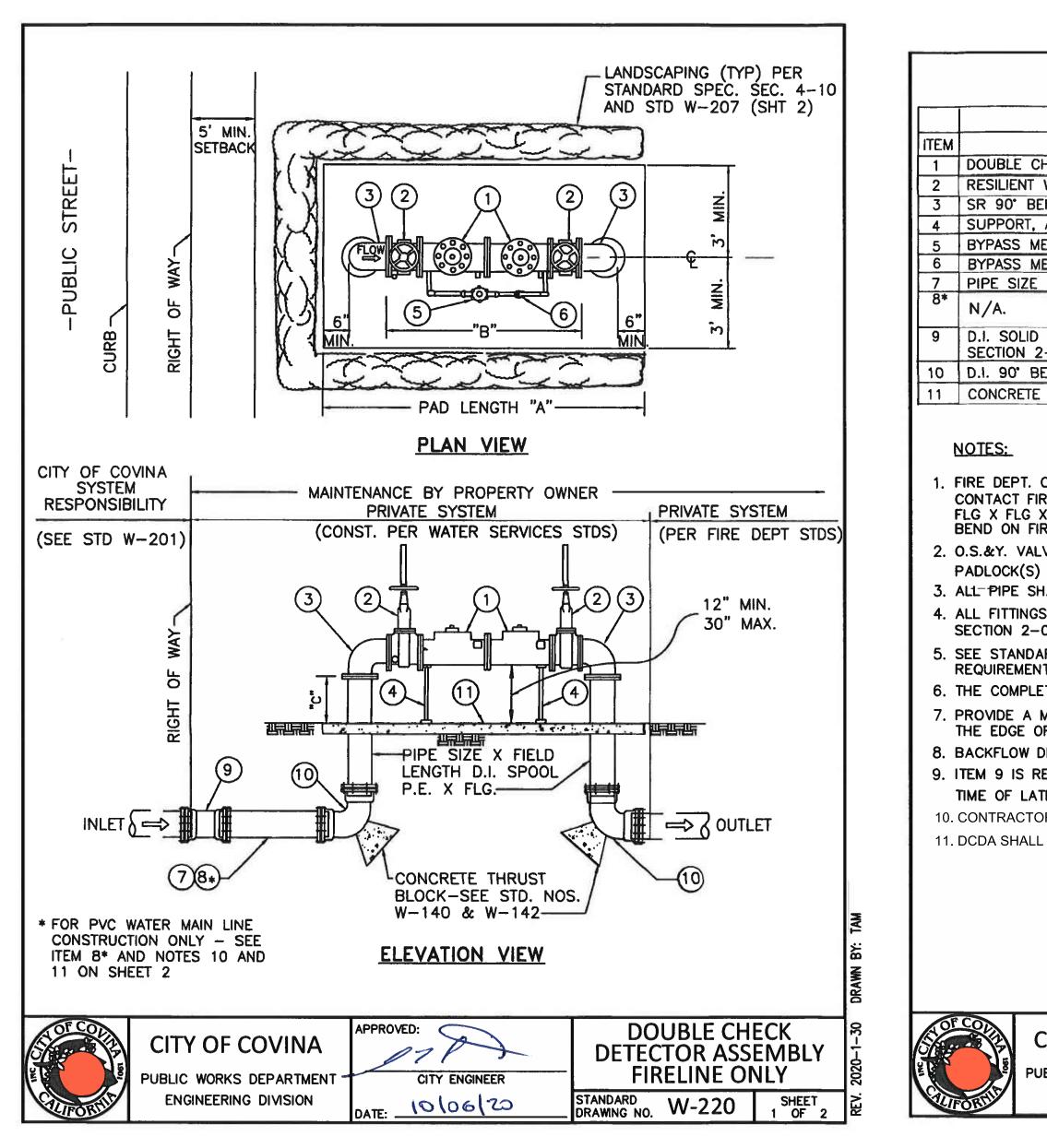
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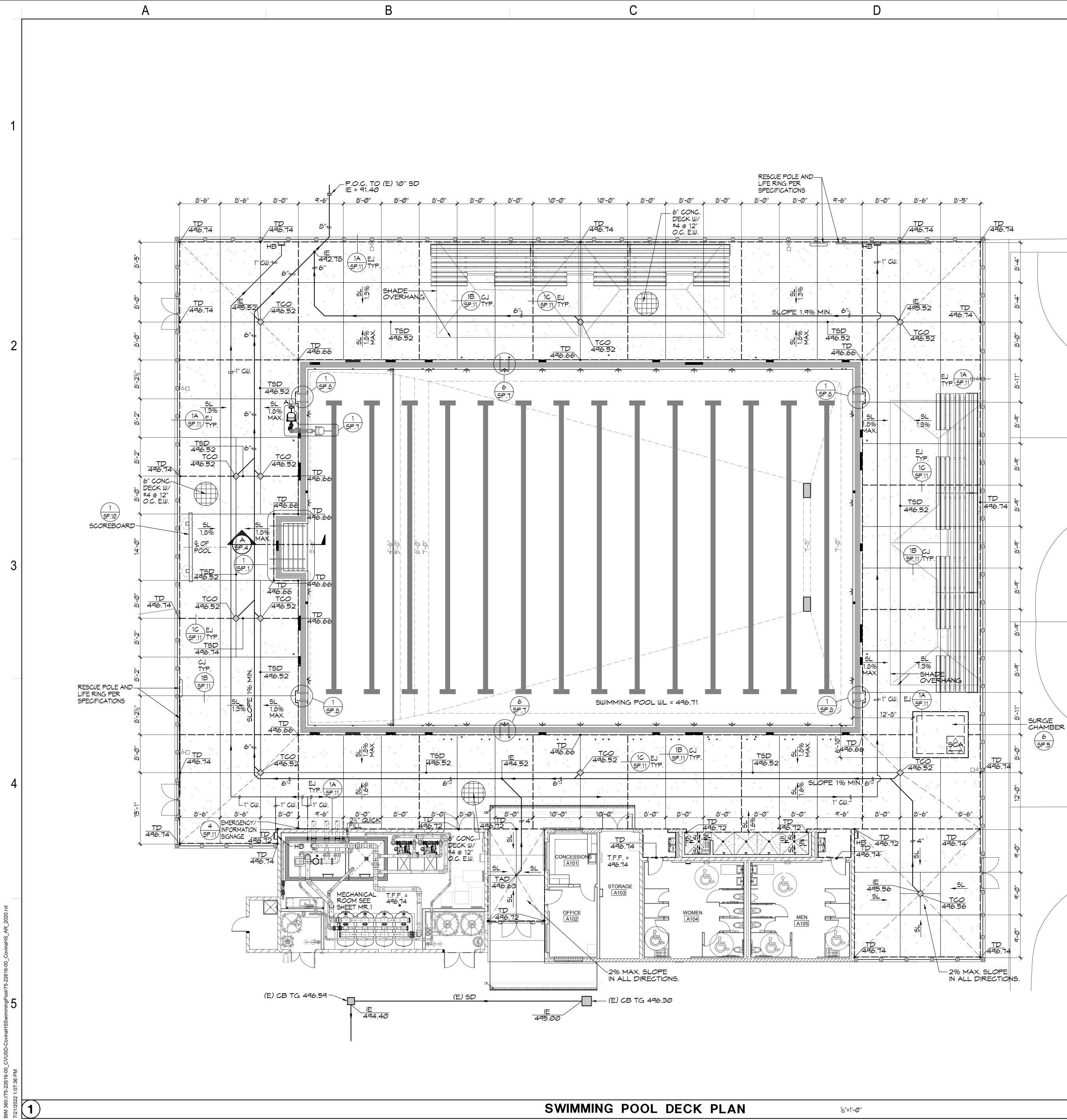
SECTION 2-08 & 2-12 OF THESE SPECIFICATIONS. SEE STANDARD DRAWING W-207 (SHEET 2) FOR ABOVE GROUND ASSEMBLY INSTALLATIO REQUIREMENTS.	E. IVAL, I A				
M         DESCRIPTION           DOUBLE CHECK DETECTOR ASSEMBLY SEE SPECIFICATIONS SECTION 5-01.           RESILIENT WEDGE VALVE, 0.S.&Y., SEE SPECIFICATIONS SECTION 2-05.           SR 90' BEND, FLG X FLG, D.I., CEMENT MORTAR LINED.           SUPPORT, ADJUSTABLE PIPE, FLAT SUPPORT (SEE STD. NO. W-270).           BYPASS METER SEE SPECIFICATIONS SECTION 4-06.           BYPASS METER DOUBLE CHECK VALVE.           PIPE SIZE X FIELD LENGTH D.I. SPOOL, P.E. X P.E. (CLASS 52).           N/A.           D.I. SOLID SLEEVE M.J. X M.J., (SEE NOTE 9); MJ'S SHALL BE RESTRAINED AS PER SECTION 2-12.01.           D.I. 90' BEND, M.J. X M.J. (2 TYP.); M.J.'S SHALL BE RESTRAINED PER SECT. 2-12.           CONCRETE PAD 4" THICK, SIZE AS INDICATED HEREIN; CLASS 520-C-2500 CONCRET           NOTES:           FIRE DEPT. CONNECTIONS CANNOT BE PLACED ON THE ASSEMBLY WITHOUT PRIOR APPRO           CONCRETE PAD 4" THICK, SIZE AS INDICATED HEREIN; CLASS 520-C-2500 CONCRET           NOTES:           FIRE DEPT. CONNECTIONS CANNOT BE PLACED ON THE ASSEMBLY WITHOUT PRIOR APPRO           CONTACT FIRE DEPT. STATION 154 AT (626) 974-8331. WHERE APPROVED BY FIRE DEP           FLG X FLG, D.L., CEMENT MORTAR LINED TEE MAY BE SUBSTITUTED FOR THE TOP           BEND ON FIRELINES.           O.S.&Y. VALVES SHALL BE LOCKED IN OPEN POSITION WITH CHAIN AND OWNER'S PADLOC           PADLOCK(S) SHALL BE DUCTLLE IRON.           ALL "PIPE SHALL BE DUCTLLE IRON. <th>E. IVAL, [ A</th>	E. IVAL, [ A				
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IME OF LATERAL INSTALLATION.					
D. CONTRACTOR TO PROVIDE A SIGN ON THE D.C.D.A. DESIGNATING WHAT IT SERVES AS NOTED BELOW.					
L DCDA SHALL BE MONITORED BY CAMPUS FIRE ALARM SYSTEM, SEE SHEET ES1.1.					
D.C.D.A. SIGNAGE NOTES					
1. THE SIGN SHALL BE METAL, PAINTED WHITE WITH ENGRAVED RED LETTERS 1" HIGH.					
SOUTH OF POOL".	2. THE SIGN SHALL INDICATE WHAT IT SERVES, "FIRE HYDRANT SOUTH OF POOL"				
3. SIGN SHALL BE PERMANENTLY BANDED TO THE VALVE WITH U-BOLTS.					
APPROVED: DOUBLE					
CITY OF COVINA / MORE DETECTOR A	HECK				
PUBLIC WORKS DEPARTMENT					
	SSEMBLY				
TORTILE ENGINEERING DIVISION DATE: 10106120 STANDARD DRAWING NO. W-220	SSEMBLY ONLY				

STANDARD W-220 SHEET

PLANS PREPARED BY: FPL FPL FRED BT. FPL and Associates, Inc. Traffic • Transportation • Civil 30 Corporate Park, Suite 401 Irvine, CA 92606 Phone: 949–252–1688







# SWIMMING POOL DECK PLAN

1⁄8"=1'-Ø"



# SWIMMING POOL DATA

SURFACE AREA	=	8,686 SQ. FT.
PERIMETER	=	390 FT.
DEPTHS	=	3'-6" TO 7'-3"
VOLUME	=	423,547 GAL.
6 HR TURNOVER	=	1,177 GPM

# LEGEND

 - EJ — —	=	EXPANSION JOINT
 -CJ	=	CONTROL JOINT
 TSD===	=	TOP OF SLOT DRAIN
TCO	=	TOP OF CLEAN-OUT
TAD	=	TOP OF AREA DRAIN
HB	=	HOSE BIBB
AL	=	
SCA	=	SURGE CHAMBER ACCESS COVER (7)
CW	=	COLD WATER
SL	=	SLOPE DIRECTION
WL	=	WATERLEVEL
TFF	=	TOP OF FINISHED FLOOR
TD	=	TOP OF DECK
I.E.	=	INVERT ELEVATION
P.O.C.	=	POINT OF CONNECTION
SD	=	STORM DRAIN
СВ	=	CATCH BASIN

# NOTES:

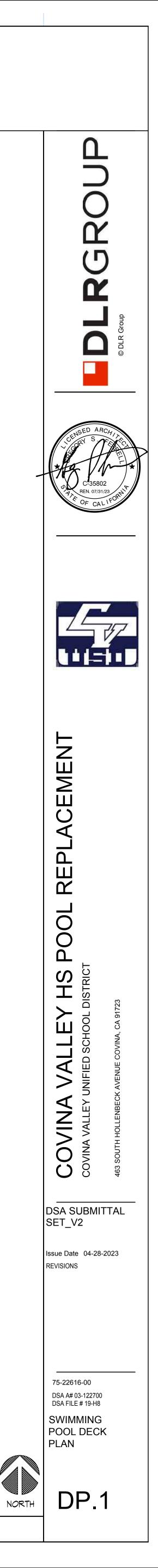
- 1. COORDINATE SIGNAGE PLACEMENT PER  $\begin{pmatrix} 4 \\ SP.11 \end{pmatrix}$  AND COLOR SCHEME WITH OWNER PRIOR TO INSTALLATION.
- 2. DECKS SHALL HAVE 1% MIN. SLOPE AND 1.8% MAX. SLOPE TO DRAINS.
- 3. ALL POOL DECKING SHALL BE NON-SLIP AND NON-ABRASIVE MEDIUM BROOM FINISH WITH NATURAL GRAY CONCRETE UNLESS OTHERWISE NOTED.
- 4. REFER TO ARCHITECTURAL PLANS FOR LOCATIONS AND QUANTITY OF REQUIRED EXITS, DRINKING FOUNTAINS, AND SANITARY FIXTURES.
- THE POOL CANNOT BE WITHOUT AN APPROVED POOL ENCLOSURE AT ANY TIME, INCLUDING DURING CONSTRUCTION AND INSTALLATION OF THE NEW POOL ENCLOSURE.

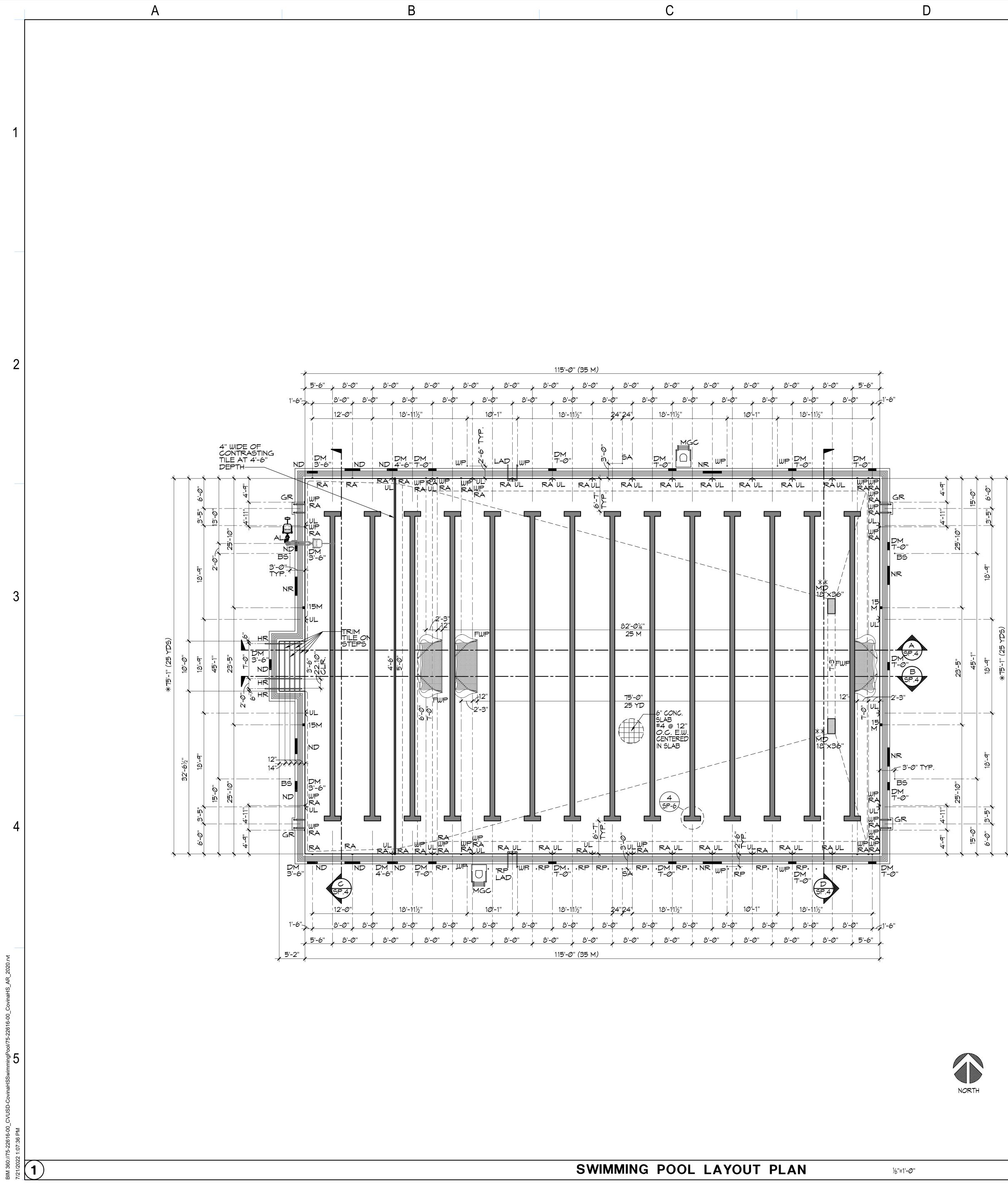
## COUNTY OF LOS ANGELES - DEPARTMENT OF PUBLIC HEALTH ENVIRONMENTAL HEALTH – RECREATIONAL WATERS PROGRAM THE PROPOSED CONSTRUCTION/EQUIPMENT INSTALLATION IS TYPE OF POOL: Swimming pool SR# 0320681 APPROVED: \_\_\_\_\_\_BY: \_\_\_\_\_Bharat Dungrani Digitally signed by Bharat Dungrani Digitally signed by Bhara PLAN CHECK INSPECTOR DATE

THIS APPROVAL DOES NOT AUTHORIZE THE VIOLATION OF ANY LAW, ORDINANCE, OR REGULATION. (SEE PLAN APPROVAL SHEET, ATTACHED)

# LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH RECREATIONAL WATERS PLAN CHECK 5050 COMMERCE DRIVE BALDWIN PARK, CA 91706 626-430-5360 MAIN LINE









# SWIMMING POOL DATA

SURFACE AREA	=	8,686 SQ. FT.
PERIMETER	=	390 FT.
DEPTHS	=	3'-6" TO 7'-3"
VOLUME	=	423,547 GAL.
6 HR TURNOVER	=	1,177 GPM

# LEGEND

MD	=	MAIN DRAIN 2 SP.8
GR	=	GRABRAIL (1 SP.8)
DM	=	DEPTH MARKER
NR	=	'NO RUNNING'
ND	=	'NO DIVING' (6,7)
RA	=	ROPE ANCHOR
RP	=	RACING PLATFORM (9)
BS	=	BACKSTROKE STANCHION
WP	=	WATER POLO GOALS (STATIONARY)
UL	=	UNDERWATER LIGHT
MGC	=	MOVEABLE GUARD CHAIR (5P.7)
AL	=	ACCESSIBLE LIFT
FWP	=	FLOATING WATER POLO GOALS
HR	=	HANDRAIL 8 SP.6
LAD	=	LADDER 6 (5P.7)
SA	=	STANCHION ANCHOR
15M	=	15 METER MARKER

# **CERTIFICATION REQUIREMENTS**

- \* THE CONTRACTOR SHALL RETAIN AN INDEPENDENT LICENSED SURVEYOR TO PROVIDE PROOF OF COMPLIANCE FOR REQUIRED POOL LENGTHS AS FOLLOWS: (RECOMMEND PATRELL ENG. GROUP (626) 335-4362)
- SHORT COURSE-25YDS: (ALLOWS FOR TOUCH PADS AT ONE END) 75'-0 5/16" MIN.: 75'-1 3/16" MAX.
- TOLERANCE AGAINST LENGT,H SHALL EXTEND IN A VERTICAL PLANE 0.3M (12") ABOVE AND 0.8M. (2'-7½") BELOW THE SURFACE OF THE WATER AT ALL POINTS OF BOTH END WALLS TYP. OF ALL COURSES.
- THE INDEPENDENT LICENSED SURVEYOR SHALL FILL OUT, NOTARIZE AND FILE OFFICIAL CERTIFICATION FORM(S) WITH USA SWIMMING.
- \*\*CONTRACTOR SHALL RETAIN A LICENSED ENGINEER TO CERTIFY THE FIELD BUILT MAIN DRAIN SYSTEMS AS V.G.B. COMPLIANT.

# POOL DESIGN CRITERIA

POOL DESIGN CODES CALIFORNIA BUILDING CODE 2019 ASCE 7-16

# POOL DESIGN CRITERIA

PER GEOTECHNICAL ENGINEERING INVESTIGATION BY: MTGL, INC. DATED NOVEMBER 28, 2022, MTGL PROJECT NO. 2460A27

DRAINED CONDITIONS (F	PER SOIL REPORT)
ACTIVE PRESSURE: AT-REST PRESSURE:	40 pcf 60 pcf
APPROX. SOIL UNIT WT .:	120 pcf
BEARING PRESSURE:	2,000 psf
PASSIVE PRESSURE:	350 pcf (USE 150 pcf FOR SCOREBOARD COLUMNS)
COEFF. OF FRICTION:	0.35
SEISMIC PRESSURE:	23 pcf (FOR WALLS>6'-0")

SURCHARGE AT DECK

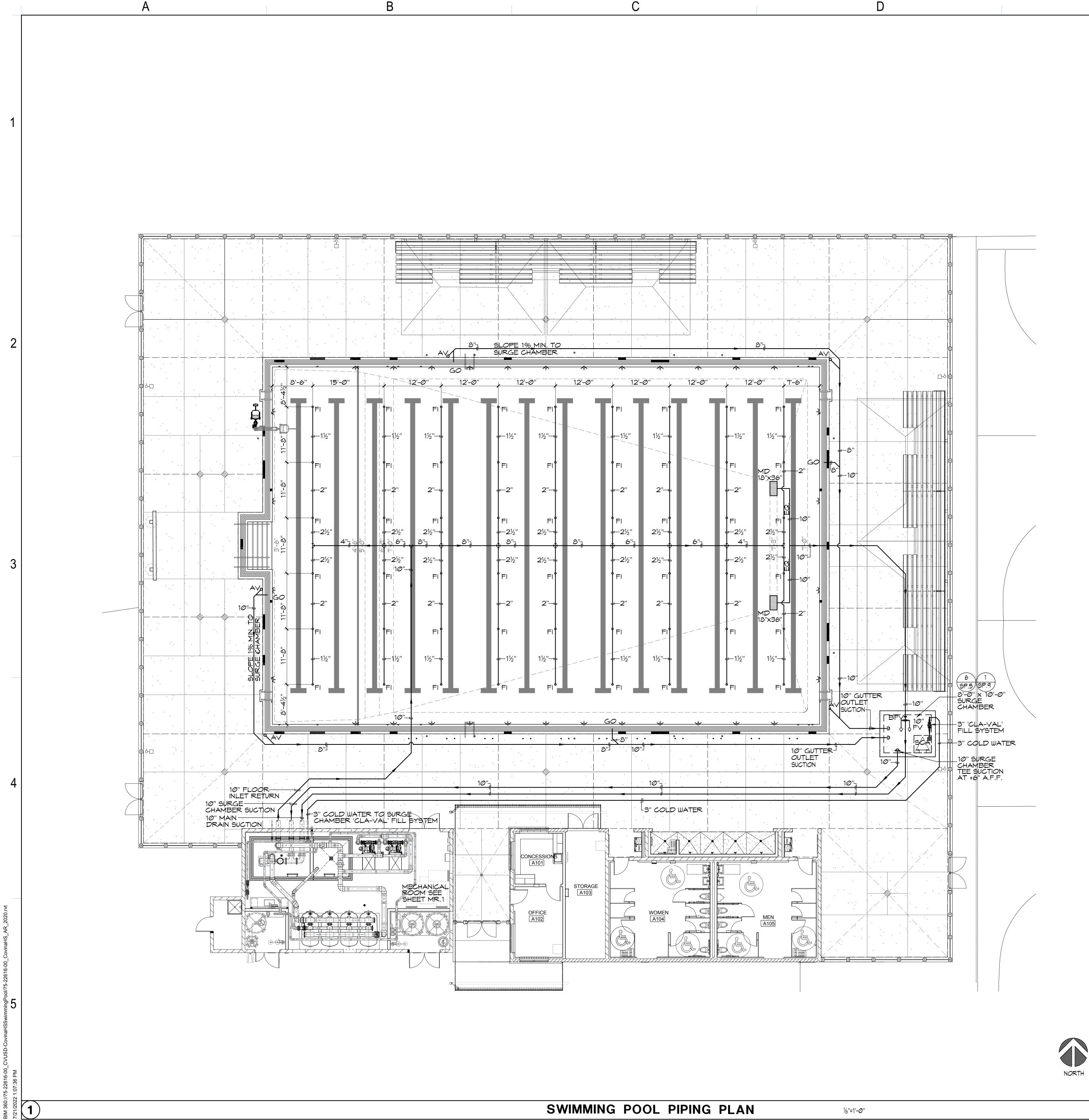
- 1) ASSUME 50% OF VERTICALLY APPLIED SURCHARGE TO ACT AS HORIZONTAL UNIFORM LOAD ON POOL WALL.
- 2) DL = WEIGHT OF 8" MAX. CONCRETE DECK SLAB ABOVE.
- 3) LL DESIGN CASE = POOL EMPTY DURING CONSTRUCTION OR FOR SHORT TERM MAINTENANCE. NO 100 psf LL FOR FULL CROWD OPERATING CONDITION WHEN EMPTY. CONCRETE DESIGN
- f'c = 4,000 psi MIN. fy = 60 ksi

NOTE:

1. HYDROSTATIC PRESSURE RELIEF VALVES ARE PROVIDED IN POOL FLOOR SLABS TO ESTABLISH A "DRAINED CONDITION" (WHEN THE POOL IS EMPTY) IN THE PRESENCE OF A GROUND WATER TABLE, A PERCHED GROUND WATER CONDITION, OR POOR SITE DRAINAGE.









# SWIMMING POOL DATA

Ε

SURFACE AREA	=	8,686 SQ. FT.
PERIMETER	=	390 FT.
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6 HR TURNOVER	=	1,177 GPM

# SWIMMING POOL SURGE DATA

REQUIRED SURGE CAPACITY	=	8,686 GAL.
SURGE IN PERIMETER GUTTER	=	4,382 GAL.
SURGE IN GUTTER PIPING	=	1,086 GAL.
8' x 10'-0" SURGE IN SURGE CHAME	BER=	3,295 GAL.
TOTAL SUPPLIED SURGE	=	8,763 GAL.
· 8763 CAL > 8686 CAL OK		

∴8,763 GAL. > 8,686 <u>GAL</u>. OK

# LEGEND

MD	=	MAIN DRAIN
FI	=	FLOOR INLET
GO	=	GUTTER OUTLET
AV	=	AIR VENT
SCA	=	SURGE CHAMBER ACCESS
BFV	=	BUTTERFLY VALVE
FV	=	FLOAT VALVE
A.F.F.	=	ABOVE FINISH FLOOR

## NOTES: 3

(SP.9)

. PIPING ROUTES ARE SCHEMATIC IN NATURE AND SHOWN ON PLANS FOR CLARITY. CONTRACTOR SHALL ROUTE PIPING ACCORDINGLY TO MEET NOTED INVERT ELEVATIONS. REFER TO REFERENCED DETAIL FOR PIPE SPACING REQUIREMENTS.

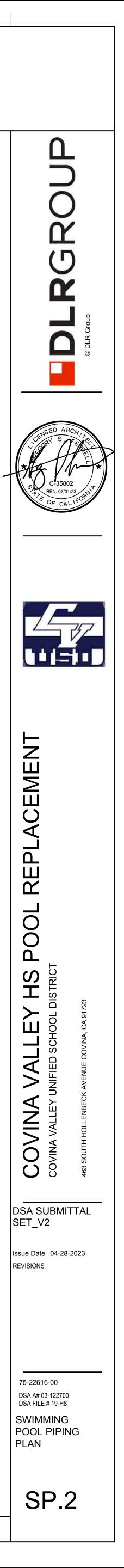
- 2. ALL BELOW GRADE POOL PIPING SHALL BE SCHEDULE 40 PVC AND ALL ABOVE GRADE POOL PIPING SHALL BE SCHEDULE 80 PVC. 3 COORDINATE ALL PIPING WITH SITE AND BUILDING UTILITIES INCLUDING
- PIPING, CONDUITS / STRUCTURES AND THE LIKE. COORDINATE ROUTING OF PIPING THROUGH STRUCTURAL SLAB. ALL PIPING SHALL HAVE UNIFORM SLOPE IN ONE DIRECTION. 4. SURGE CHAMBER TEE SUCTION SHALL BE SET AT +6" A.F.F. MAINTAIN
- MAXIMUM SEPARATION BETWEEN SUCTION AND INFLUENT PIPING WITHIN THE SURGE CHAMBER.
- 5. EACH MAIN DRAIN SHALL BE EQUIPPED WITH HYDROSTATIC RELIEF VALVE PER RECOMMENDATIONS OF GEOTECHNICAL REPORT

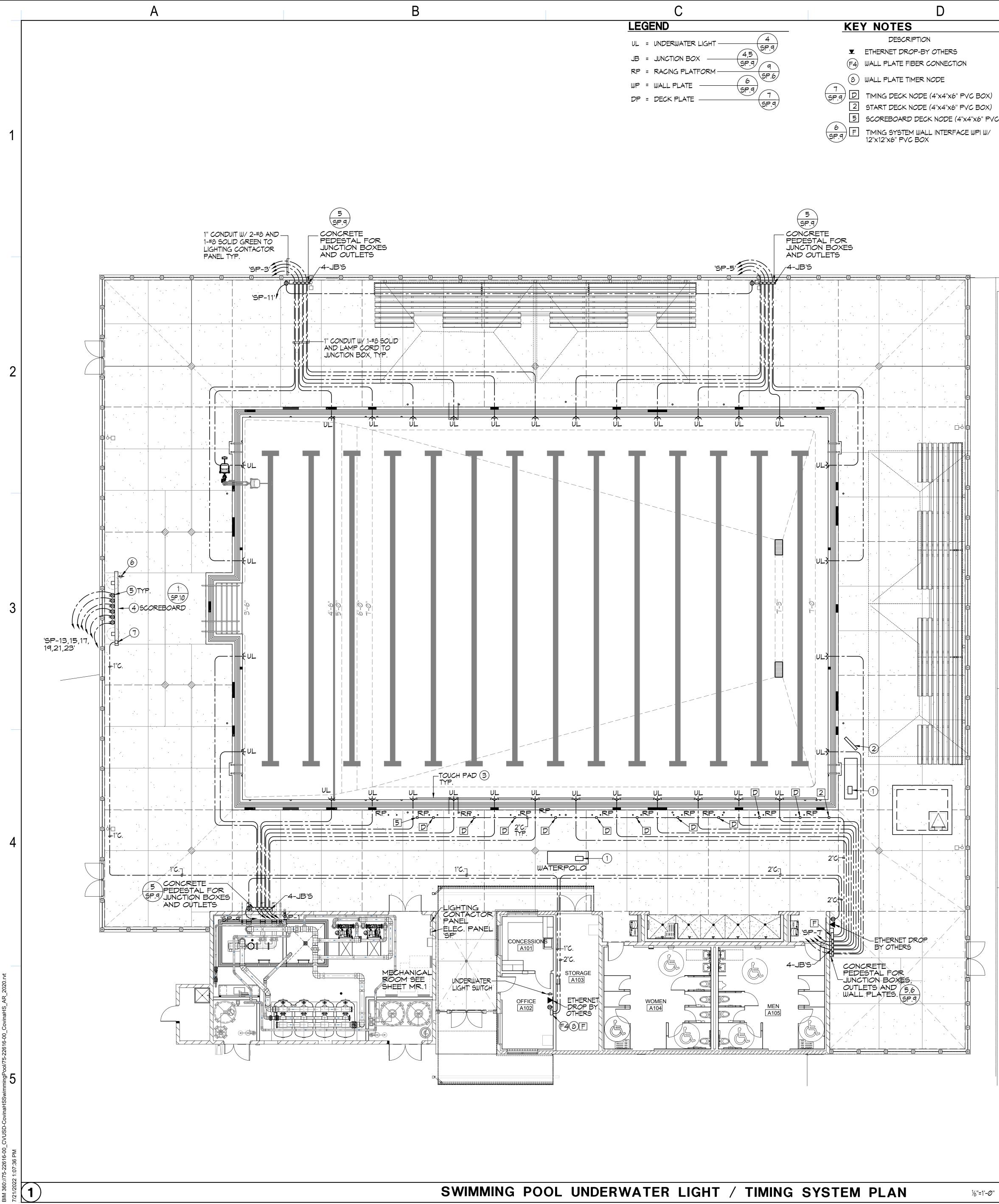
## COUNTY OF LOS ANGELES - DEPARTMENT OF PUBLIC HEALTH ENVIRONMENTAL HEALTH – RECREATIONAL WATERS PROGRAM THE PROPOSED CONSTRUCTION/EQUIPMENT INSTALLATION IS TYPE OF POOL: Swimming pool SR#0320681 APPROVED: 08/11/2023 BY: Bharat Dungrani Dungran PLAN CHECK INSPECTOR DATE THIS APPROVAL DOES NOT AUTHORIZE THE VIOLATION OF ANY LAW, ORDINANCE, OR REGULATION.

(SEE PLAN APPROVAL SHEET, ATTACHED)

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH RECREATIONAL WATERS PLAN CHECK 5050 COMMERCE DRIVE BALDWIN PARK, CA 91706 626-430-5360 MAIN LINE



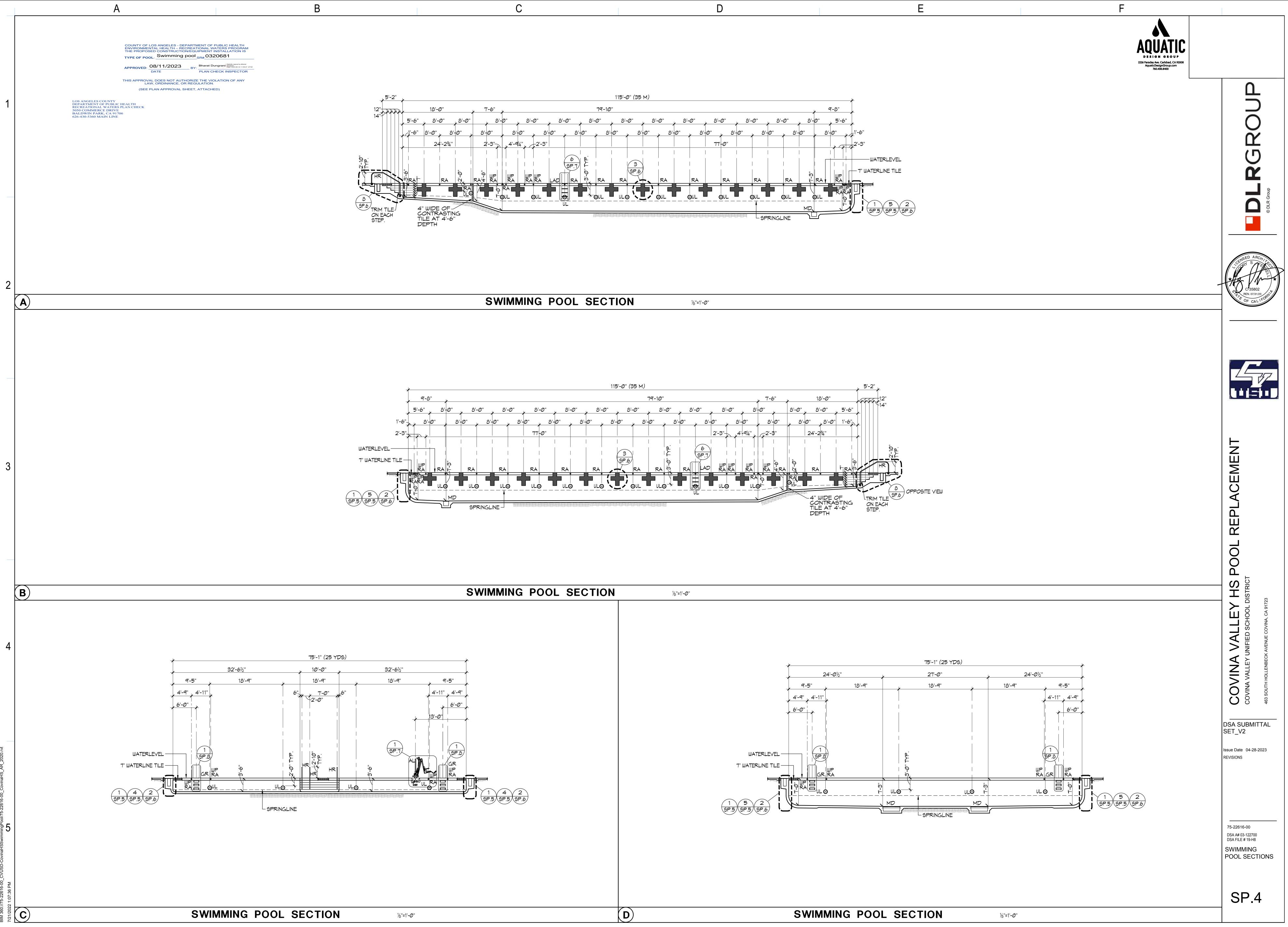




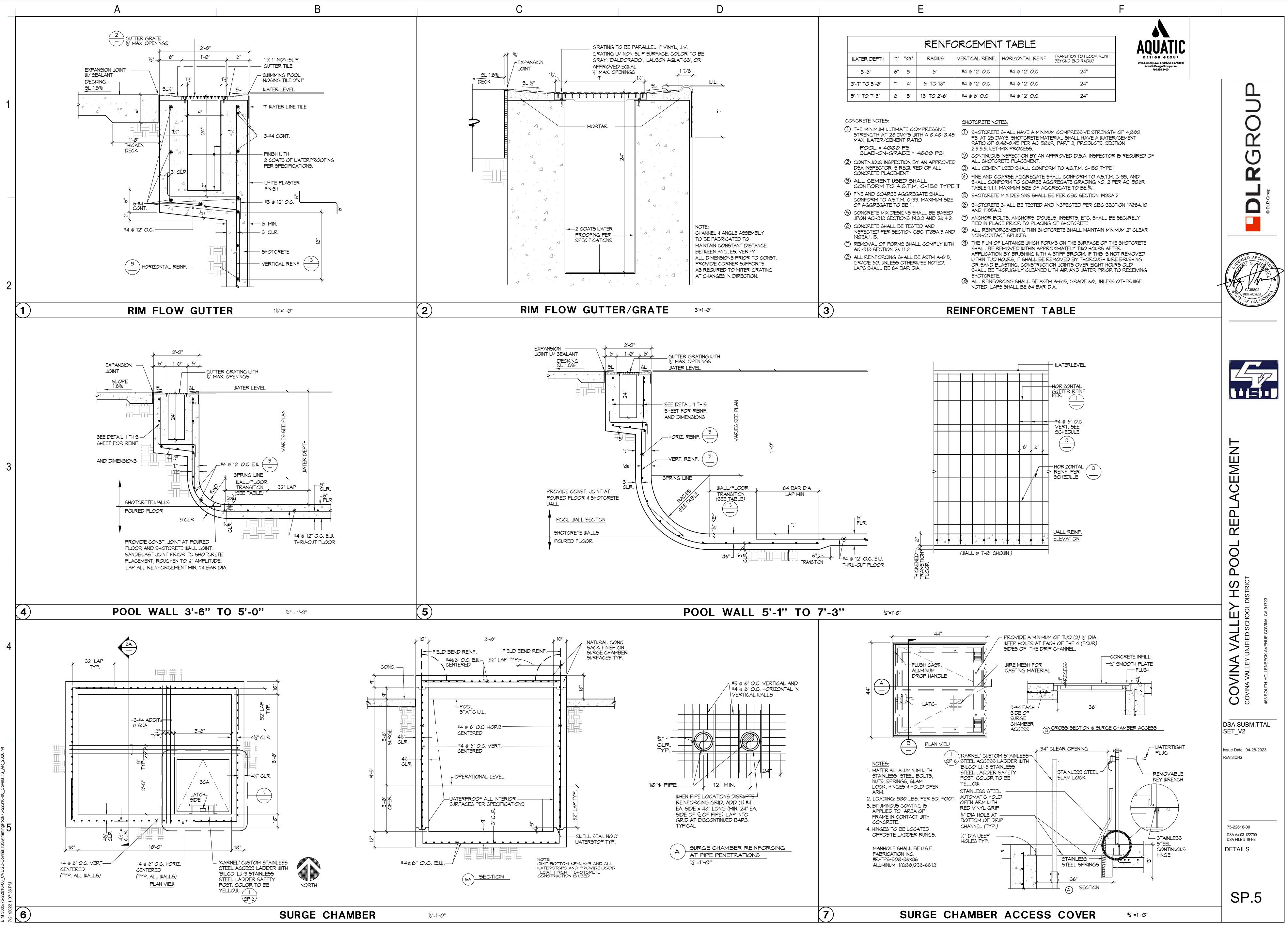
	E F
	TIMING SYSTEM NOTES/EQUIPMENT
QUANTITY UNIT 2 COUNT	NOTE: THE CONTRACTOR SHALL SUPPLY AND INSTALL DECK PLATE BOXES, WALL PLATE BOXES, WALL PLATE JUNCTION BOXES, CONDUIT, WIRING, SCOREBOARD AND ALL TIMING EQUIPMENT AS SHOWN FOR THE 'COLORADO' TIME SYSTEM OR EQUAL.
1 COUNT 1 COUNT	TIMING SYSTEM QTY MODEL DESCRIPTION
() 10 COUNT	1 1 GEN7-TMR INTUITIVE SOFTWARE INTERFACE WITH MODERN WINDOWS USER INTERFACE AND TOUCHSCREEN FRIENDLY. FLEXIBLE USER INTERFACE OPTIONS WITH ETHERNET
1  COUNT	CONNECTIVITY TO THE TIMER. ADVANCED DIAGNOSTICS, INTELLIGENT BUS SYSTEM, ROBUST SAFEGUARDS. TIMER WILL CONTINUE TO RUN AND FINISH RACE WITHOUT USER INTERFACE. WET-PLUGGABLE TITANIUM CONNECTIONS. INTEGRATED 2.4 GHZ
VCBOX) 1 COUNT / 2 COUNT	WIRELESS TO SCOREBOARDS, FACILITY NETWORK CONNECTIVITY. 1 R-600-302 GEN7 LAPTOP
	START SYSTEM QTY MODEL DESCRIPTION
	2 1 55 CHAMPION SERIES START SYSTEM WITH WIRED MICROPHONE, VOLUME CONTROL ON EACH MICROPHONE INPUT, EXTERNAL CONNECTIONS FOR ADDITIONAL STROBE LIGHTS,
	LED BATTERY INDICATION LIGHT, AC/DC POWER CAPABILITIES AND AN EXTERNAL 360° STROBE. TRIPOD OR TABLE TOP OPTIONS. 1 START-FPM-2 FLAG POLE MOUNTING KIT FOR STARTER
	10 SP-6/45 6 WATT INDIVIDUAL BLOCK SPEAKER
	TOUCHPADS <u>ATY</u> MODEL <u>DESCRIPTION</u>
	(3)10 TP-90G AQUAGRIP GUTTERHUNG TOUCHPADS (90" x 22") US PATENT 5,702,799 1 CAD-TP96 TOUCHPAD CADDY FOR GUTTERHUNG TOUCHPADS. HOLDS UP TO TEN TOUCHPADS.
	SOME ASSEMBLY REQUIRED. 10 4000-0040 SPECIAL SIZE TOUCHPAD BRACKETS
	GENT TOUCHPAD SYSTEM QTY MODEL DESCRIPTION
	1 TP-GEN7-10 TEN-LANE TOUCHPAD SYSTEM FOR THE GEN 7 TIMING SYSTEM (SERIAL) INCLUDES AN TEN-LANE CABLE HARNESS, ONE PUSHBUTTON PER LANE+ ONE SPARE, VACUUM PUMP AND TOUCHPAD METER.
	<u>GEN7 CABLE</u> QTY MODEL DESCRIPTION
	1 R-015-707-8 SCOREBOARD CABLE, 8 METER 1 R-015-715-8 TIMER CABLE, 8 METER
	1 R-015-706-8 STARTER CABLE, 8 METER 1 R-015-715-15 TIMER CABLE, 15 METER
	<u>GEN7 IN DECK</u> QTY MODEL DESCRIPTION
	D       10       TDPI-D       TITANIUM DOMED DECK PLATE-INTELLIGENT         TITANIUM DECK PLATES REQUIRE A 4" SQUARE OR 4.125" DIAMETER CIRCULAR
	OPENING AT A MINIMUM. WRITTEN VERIFICATION AND SIGN OFF REQUIRED FROM CUSTOMER. NOTE: INCLUDES 5 YEAR WARRANTY.
	2 1 TDPI-52 START DECK NODE
	5     1     TDPI-SC5     SCOREBOARD DECK NODE       F     2     R-1004-0549     GENT WALL PLATE (12X12)
	1 TDPI-K1 KIT-SCOREBOARD BUS HEAD& TAIL NODE INSTALLATION
	1       TDPI-K1       KIT-TIMING BUS HEAD & TAIL NODE INSTALLATION         1       WPI-F4       WP-YDS FIBER & LEGACY CONNECT
	GENT CABLE QTY MODEL DESCRIPTION 12001 D. 215 TOT TIMING RUS CARLEST CONDUCTOR
	1200' R-015-737 TIMING BUS CABLE- 7 CONDUCTOR 1200' R-015-726 SCOREBOARD BUS CABLE- 4 CONDUCTOR
	PACE CLOCK <u>ATY</u> MODEL <u>DESCRIPTION</u>
	1 PC-PRO-R PACE CLOCK - PRO/WATER POLO SHOT CLOCK 1 DC-1500 SPECIFICATIONS: 1 PC - PRO- • 4 DIGIT PACE CLOCK
	1 PC-PRO AND 1 DC 10" RED DIGITS - VIEWABLE UP TO 400 FEET 1500 DECK • HIGH INTENSITY LED - INDOOR/OUTDOOR
	CLOCKS PER • "SPLASH-PROOF" PROTECTIVE LENS OWNER
	APPROVAL. • INTERNAL HORN • FEET AND HANDLE
	FUNCTIONS:
	<ul> <li>SIMPLE PACE CLOCK</li> <li>CUMULATIVE SPLIT DISPLAY</li> <li>LAP SPLIT DISPLAY</li> </ul>
	<ul> <li>LAP COUNTER</li> <li>LAP SPLIT DISPLAY WITH TURN SPEED</li> </ul>
	<ul> <li>RELAY EXCHANGES DISPLAY</li> <li>START REACTION DISPLAY</li> </ul>
	<ul> <li>HAND TURN SPEED</li> <li>BREAK OUT SPEED DISPLAY</li> </ul>
	<ul> <li>BREAK OUT SPEED DISPLAY WITH START REACTION</li> <li>TIME DISPLAY FOR REPETITIVE SETS</li> </ul>
	<ul><li>SINGLE LANE TIMER</li><li>MID-RACE TIMING DISPLAY</li></ul>
	<ul><li>WATERPOLO SHOT CLOCK</li><li>WATERPOLO GAME CLOCK</li></ul>
	NOTE: MOST FUNCTIONS REQUIRE ADDITIONAL INPUT DEVICES, i.e. TOUCHPAD, RELAY JUDGING PLATFORM, START SYSTEM, PUSHBUTTON
	CONTROLLER QTY MODEL DESCRIPTION
	1     WTTC-2     WIRELESS TABLE TOP CONTROLLER       1     CASE-WTTC     CASE FOR THE WIRELESS TABLE TOP CONTROLLER
	1 WHC-1 WIRELESS HANDHELD CONTROLLER
	ADAPTER <u>QTY</u> MODEL <u>DESCRIPTION</u> 1 WA-3 WIRELESS ADAPTER, 2.4 GHz
	RELAY JUDGING PLATFORM
	<u>QTY</u> <u>MODEL</u> <u>DESCRIPTION</u> 10 RJPL-24x32 CTS RELAY JUDGING PLATFORM 24"x32" W/ BUILT-IN LED LIGHT FOR START
	1 CAD-RJPL-2 CADDY- 24" WIDTH RELAY JUDGING PLATFORMS (HOLDS 10)
	FULL COLOR VIDEO DISPLAY       QTY     MODEL       DESCRIPTION
	(4)1 SCOREBOARD (U)US PROVIDE LED MATRIX DISPLAY SCOREBOARD USTED INCLUDING ALL POWER REQUIREMENTS, 1 BONDING AND STRUCTURAL SUPPORTS.
	SP.10 THE SCOREBOARD SHALL HAVE FULL COLOR AND VIDEO CAPABILITIES.
	12mm 208 x 352 FULL COLOR OUTDOOR ACTIVE AREA: 8.18(H) x 13.84(W) WILL SHOW 18 LINES OF 4.2" CHARACTERS
	VIEWABLE FROM 169', 44 PER LINE WILL SHOW 16 LINES OF 5.19" CHARACTERS
	VIEWABLE FROM 207', 35 PER LINE WILL SHOW 13 LINES OF 6.1" CHARACTERS VIEWABLE FROM 244', 29 PER LINE
	COMPLETE SUBMITTAL REQUIRED. COLORADO TIME SYSTEM' OR EQUAL.
	(5) PROVIDE SIX (6) DEDICATED 20 AMP CIRCUIT TO BE TERMINATED INTO SCOREBOARD LOAD CENTER
NORTH	<ul> <li>MASTER ON/OFF SCOREBOARD SWITCH WITH</li> <li>PILOT LIGHT W/ LOCKABLE ENCLOSURE.</li> <li>SCOREBOARD DATA CONNECTION BOX</li> </ul>
	(7) SCOREBOARD DATA CONNECTION BOX CONNECT TO TIMING/WALL BOX LOCATION W/ 1'' PVC CONDUIT.
	1 ID PANEL NON-ILLUMINATED FACILITY IDENTIFICATION PANEL WITH ARTWORK.
0"	





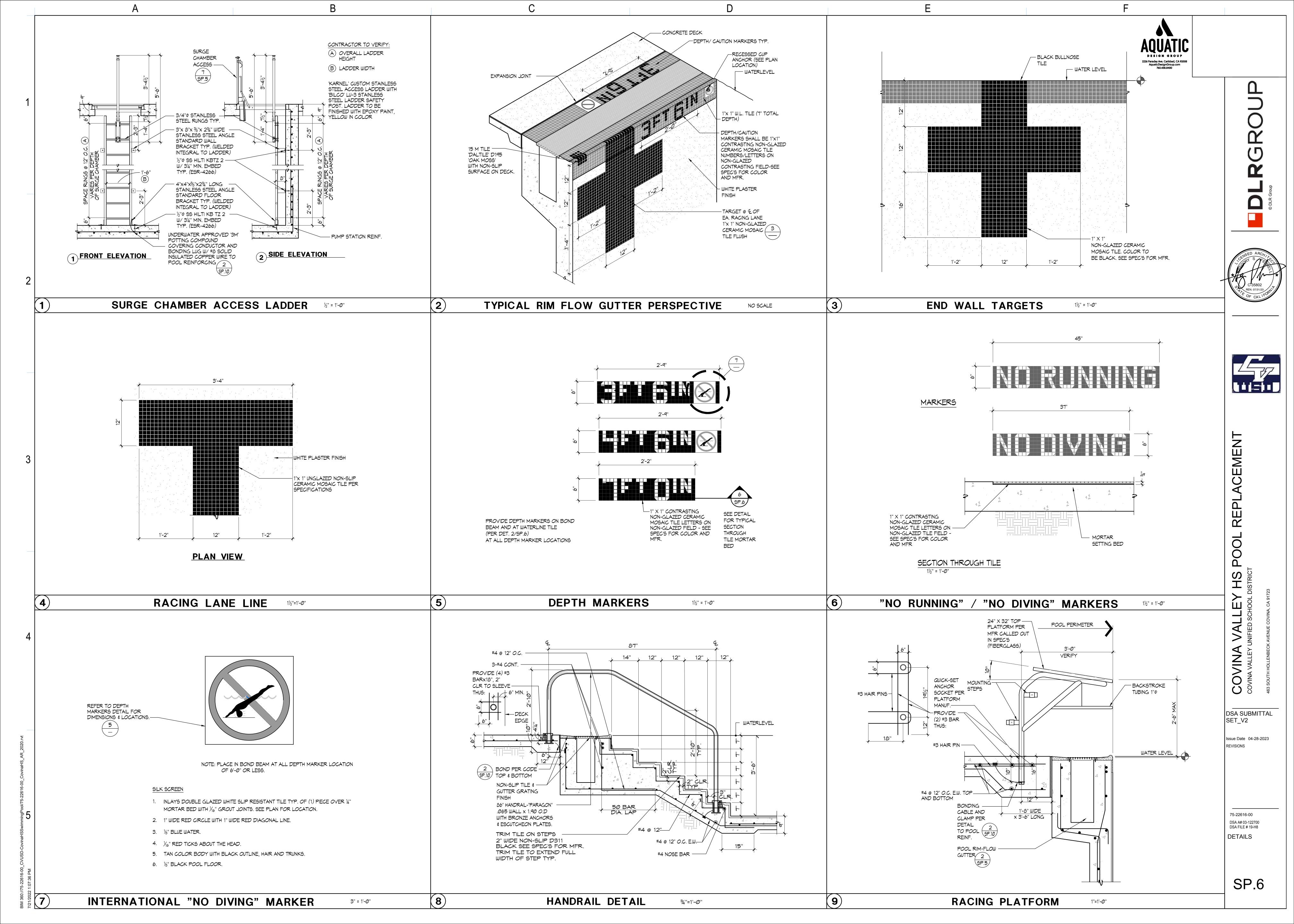


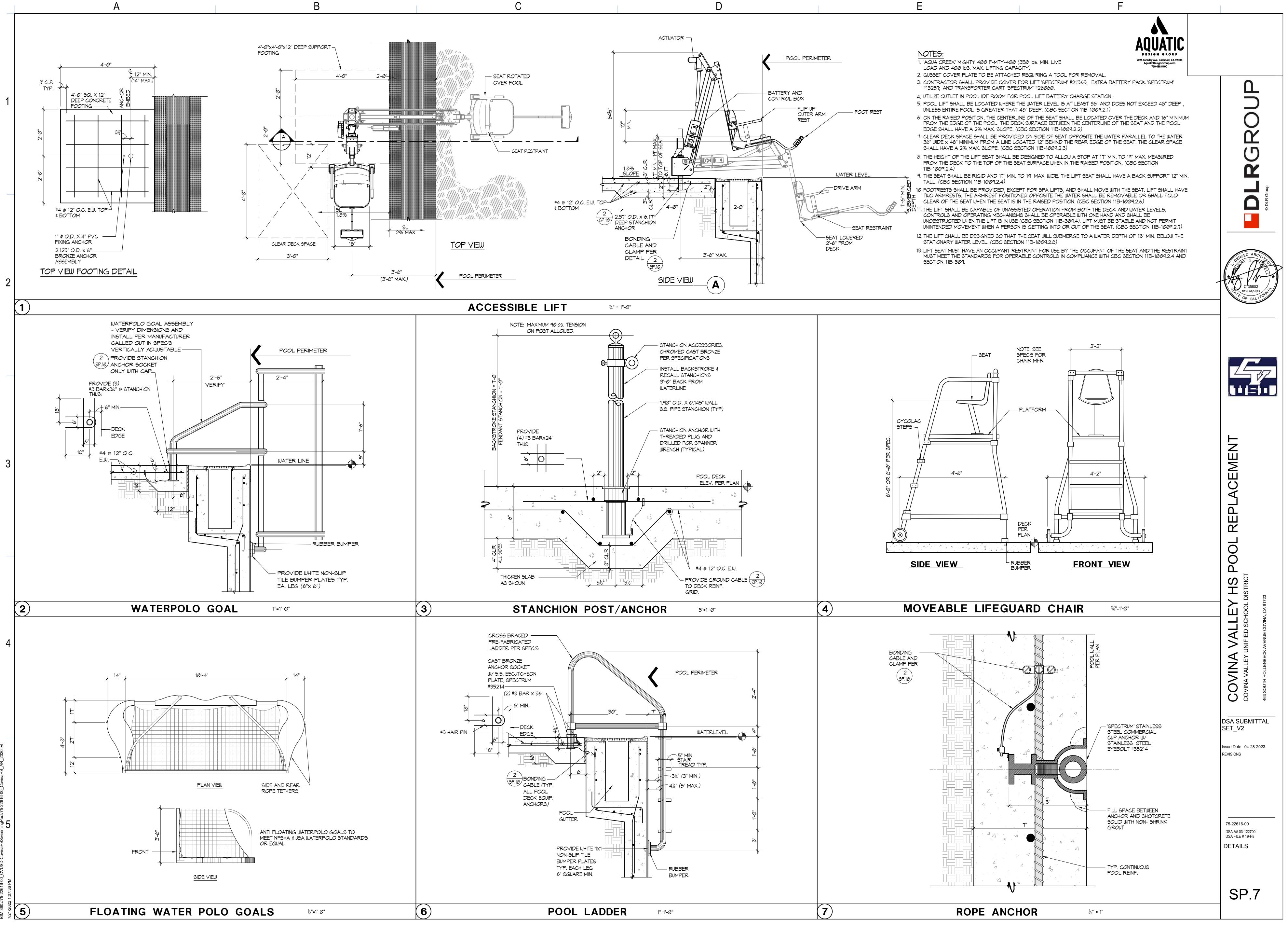
	⅓"=1'-⊘"	SECTION	POOL	SWIMMING			
WATER T" WATERLIN (1)5)2 (5P.5)5P.5)5P.5				4 4 4 5 9.5 5 9.5 5 9.5 5 9.6	9'-5" 4'-11" 4'-9" 6'-0" 13'-0" GR WP RA GR		=9 -E
	D)	<b>(D</b> )				1∕8"=1'-⊘"	

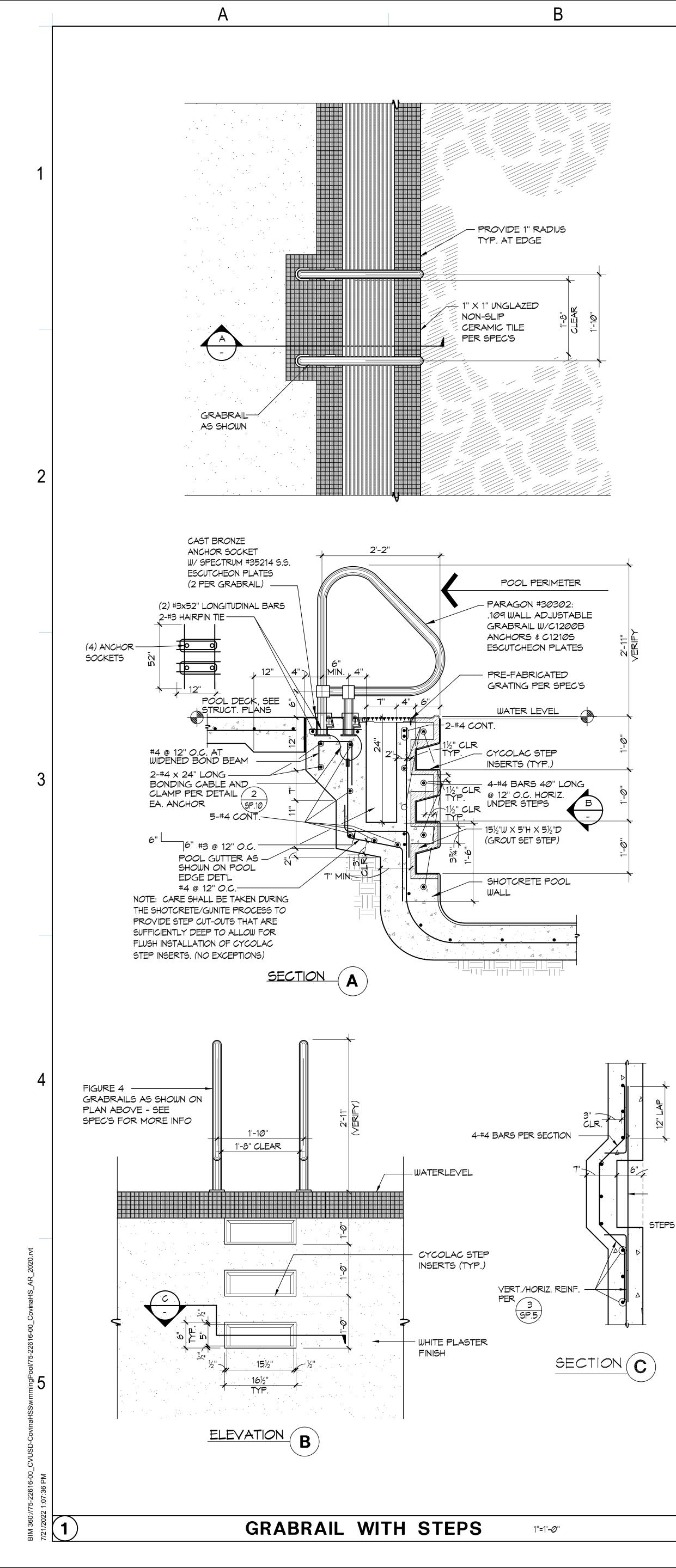


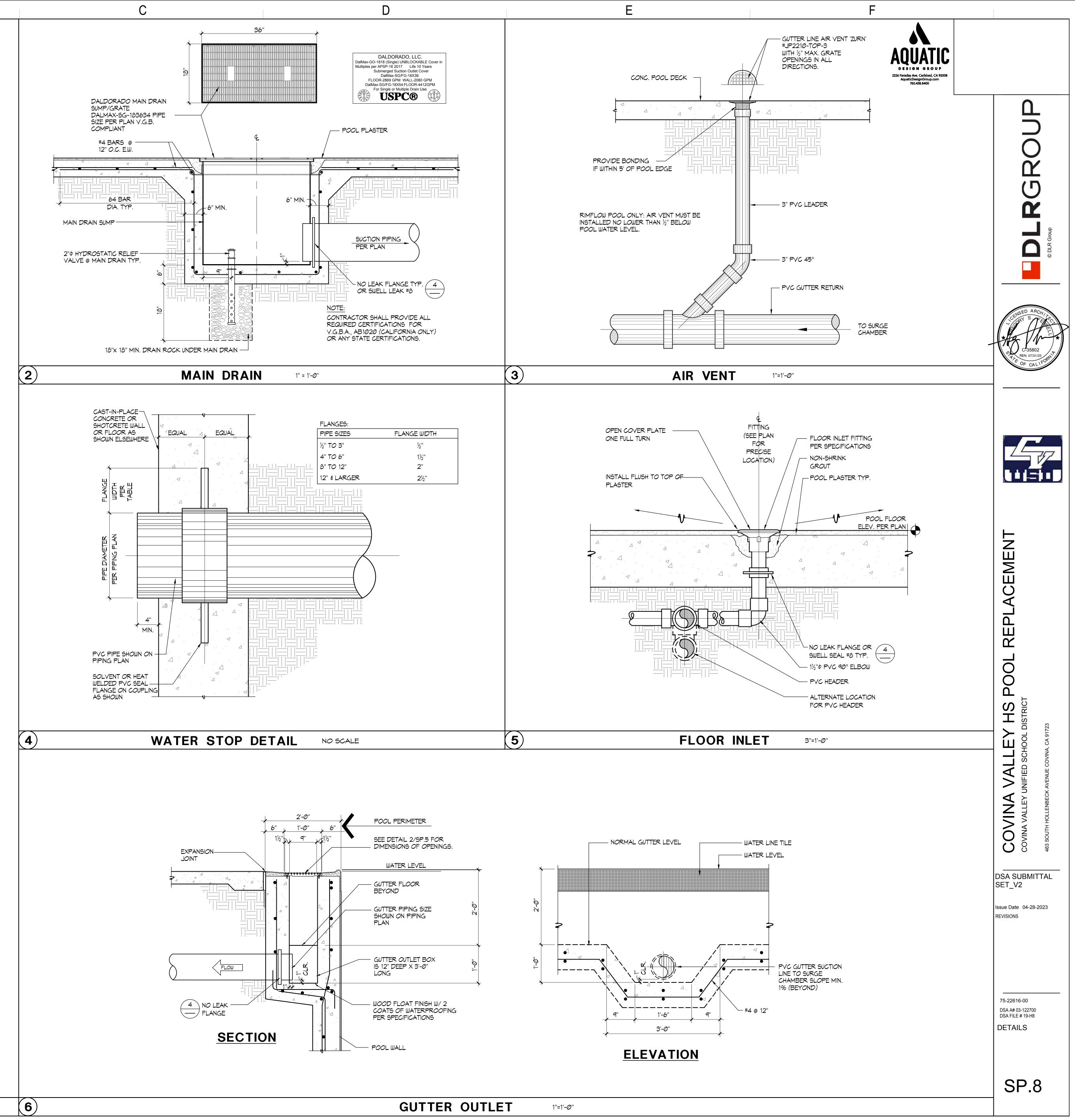
				E				F
				REINFC	DRCEMEN'	T TABLE		ΙΟΔ
	WATER DEPTH	"t"	"ds"	RADIUS	VERTICAL REINF.	HORIZONTAL REINF.	TRANSITION TO FLOOR REINF. BEYOND END RADIUS	DESI 2226 Faraday A
	3'-6"	6"	3"	6"	#4 @ 12" <i>O.C.</i>	#4 @ 12" O.C.	24"	Aquatici 76
	3'-7" TO 5'-0"	7"	4"	6" TO 18"	#4 @ 12" O.C.	#4 @ 12" O.C.	24"	
	5'-1" TO 7'-3"	8	5"	18" TO 2'-6"	#4 @ 6" O.C.	#4 @ 12" O.C.	24"	
LY NCE CONST. TS ATING	MAX. WATER POOL = SLAB-ON (2) CONTINUOUS DSA INSPECT CONCRETE P (3) ALL CEMEI CONFORM (4) FINE AND CO CONFORM TO OF AGGREG, (5) CONCRETE M UPON ACI-318 (6) CONCRETE S INSPECTED P 1905A.1.15. (7) REMOVAL OF ACI-318 SECT (8) ALL REINFOR GRADE 60, U LAPS SHALL	ULTIM, T 28 D T 20 A T	N PD TIRE ES. G.C. 19 M PD TIRE ES. G.C. 19 M B S S S S S S S S S S S S S S S S S S	JITH A 0.40-0.45 TIO 4000 PSI BY AN APPROVED RED OF ALL HALL 1. C-150 TYPE GATE SHALL 3. MAXIMUM SIZE HALL BE BASED 1.3.2 AND 26.4.2. TED AND CBC 1705A.3 AND LL COMPLY WITH BE ASTM A-615, RWISE NOTED. HA.	<ul> <li>PSI AT 28 D RATIO OF 0 2.5.3.3, WET</li> <li>(2) CONTINUOUS ALL SHOTCH</li> <li>(3) ALL CEMENT</li> <li>(4) FINE AND CO SHALL CONIT TABLE 1.1.1.</li> <li>(5) SHOTCRETE AND 1705A.</li> <li>(7) ANCHOR BO TIED IN PLAN</li> <li>(8) ALL REINFO NON-CONTA</li> <li>(9) THE FILM OF SHALL BE R APPLICATIO WITHIN TWO OR SAND B SHALL BE T SHOTCRETE</li> <li>(9) ALL REINFO NOTED. LAF</li> </ul>	SHALL HAVE A MINIMU AYS. SHOTCRETE MAT 40-0.45 PER ACI 506 -MIX PROCESS. INSPECTION BY AN AF RETE PLACEMENT. I USED SHALL CONFOR OARSE AGGREGATE SH FORM TO COARSE AGG MAXIMUM SIZE OF AGG SHALL BE TESTED AN 3. OLTS, ANCHORS, DOWE CE PRIOR TO PLACING RCEMENT WITHIN SHOT ACT SPLICES. I LAITANCE WHICH FOR EMOVED WITHIN APPRO N BY BRUSHING WITH A HOURS, IT SHALL BE RI LASTING. CONSTRUCTION HORUGHLY CLEANED W MAXIMUM SIZE OF AGG SHALL BE 64 BAR D	BE PER CBC SECTION 1908A D INSPECTED PER CBC SEC SLS, INSERTS, ETC. SHALL BE OF SHOTCRETE. CRETE SHALL MAINTAIN MIN MATELY TWO HOURS AFT STIFF BROOM. IF THIS IS NO EMOVED BY THOROUGH WIR ON JOINTS OVER EIGHT HOL UITH AIR AND WATER PRIOR 1 A-615, GRADE 60, UNLESS DIA.	R/CEMENT TION R IS REQUIRED OF II . C-33, AND PER ACI 506R A.2. TION 1908A.10 E SECURELY IMUM 2" CLEAR IE SHOTCRETE TER OT REMOVED RE BRUSHING JRS OLD TO RECEIVING
	(3)			RE	EINFORC	EMENT T	ABLE	

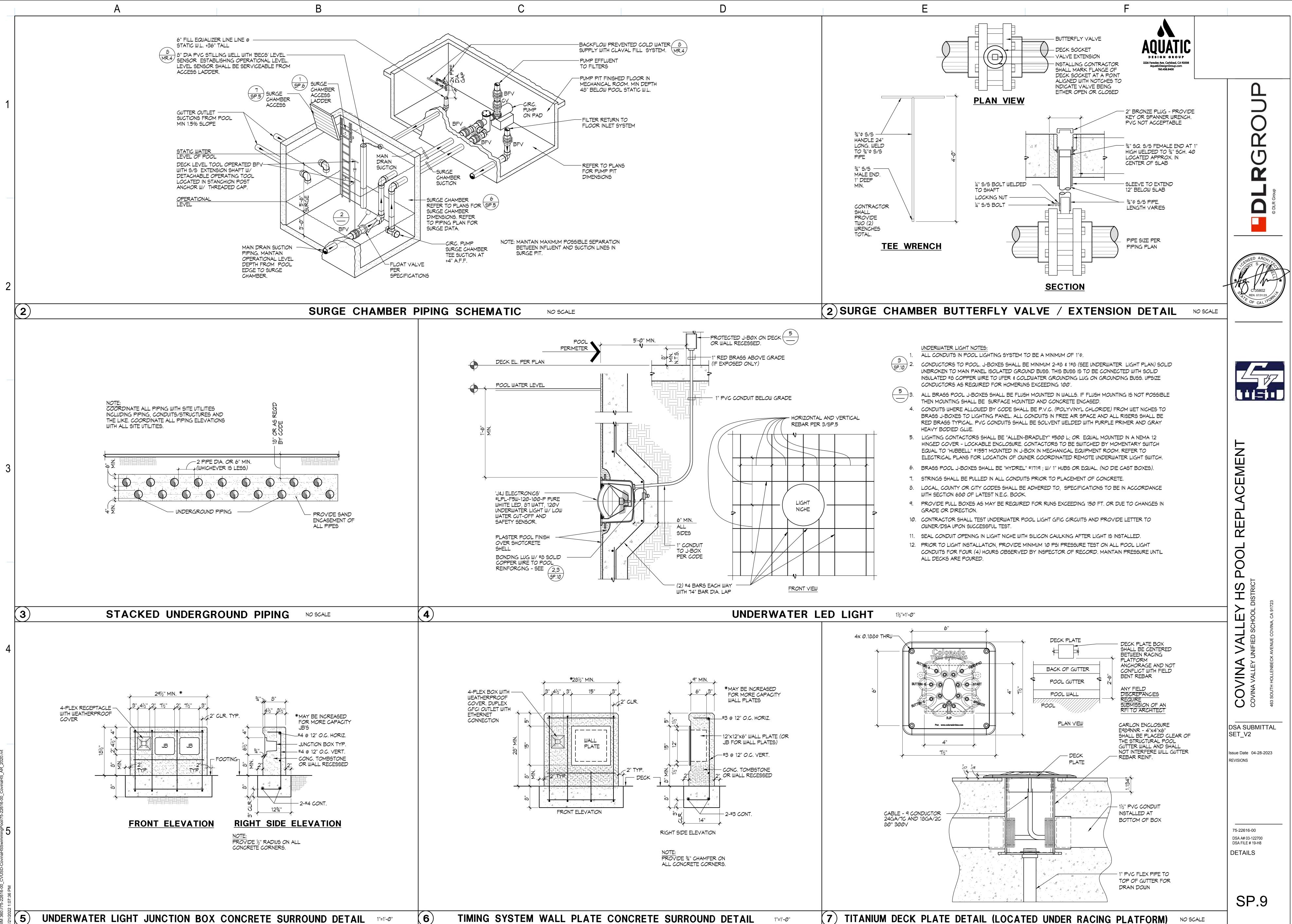


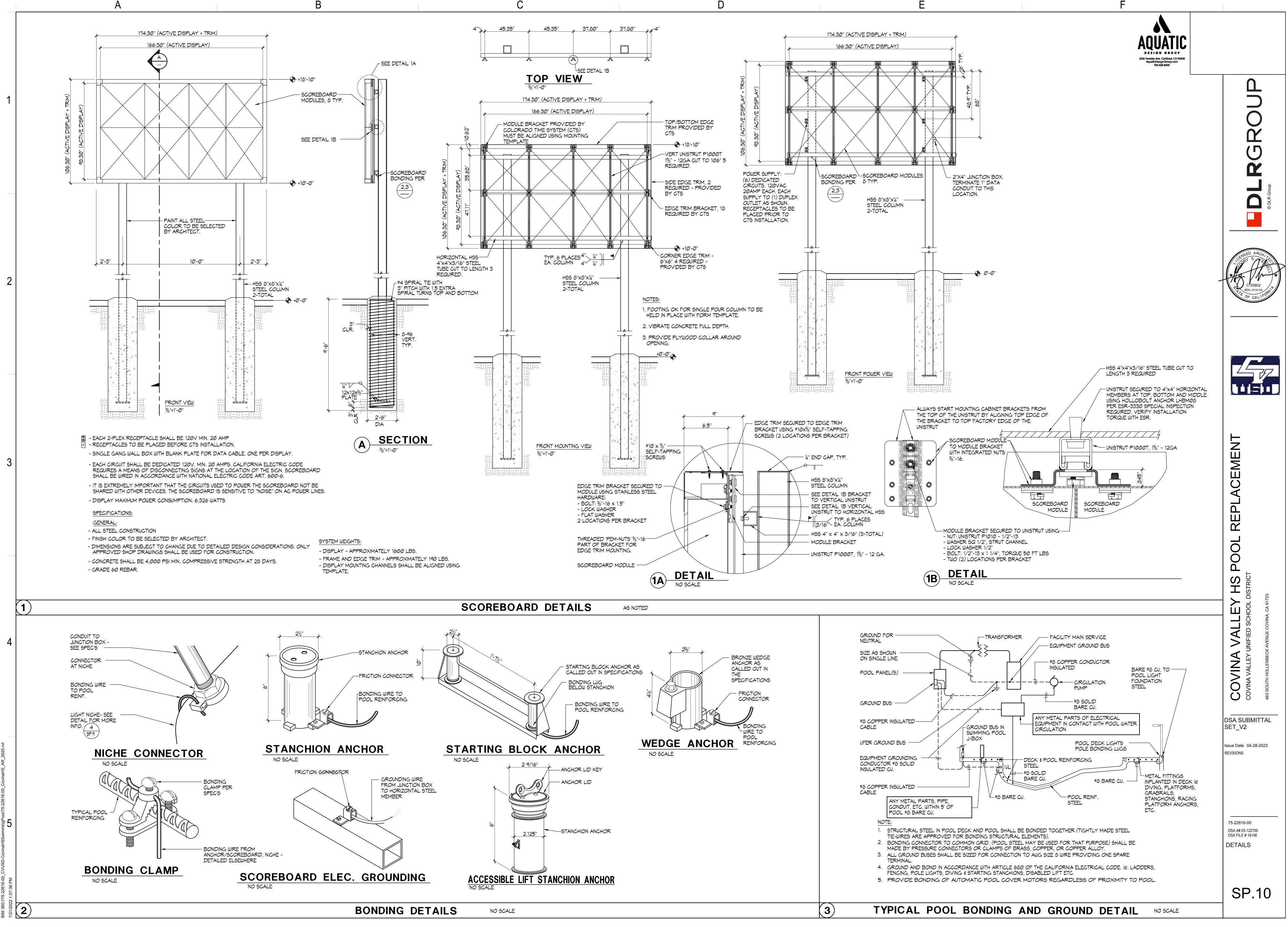


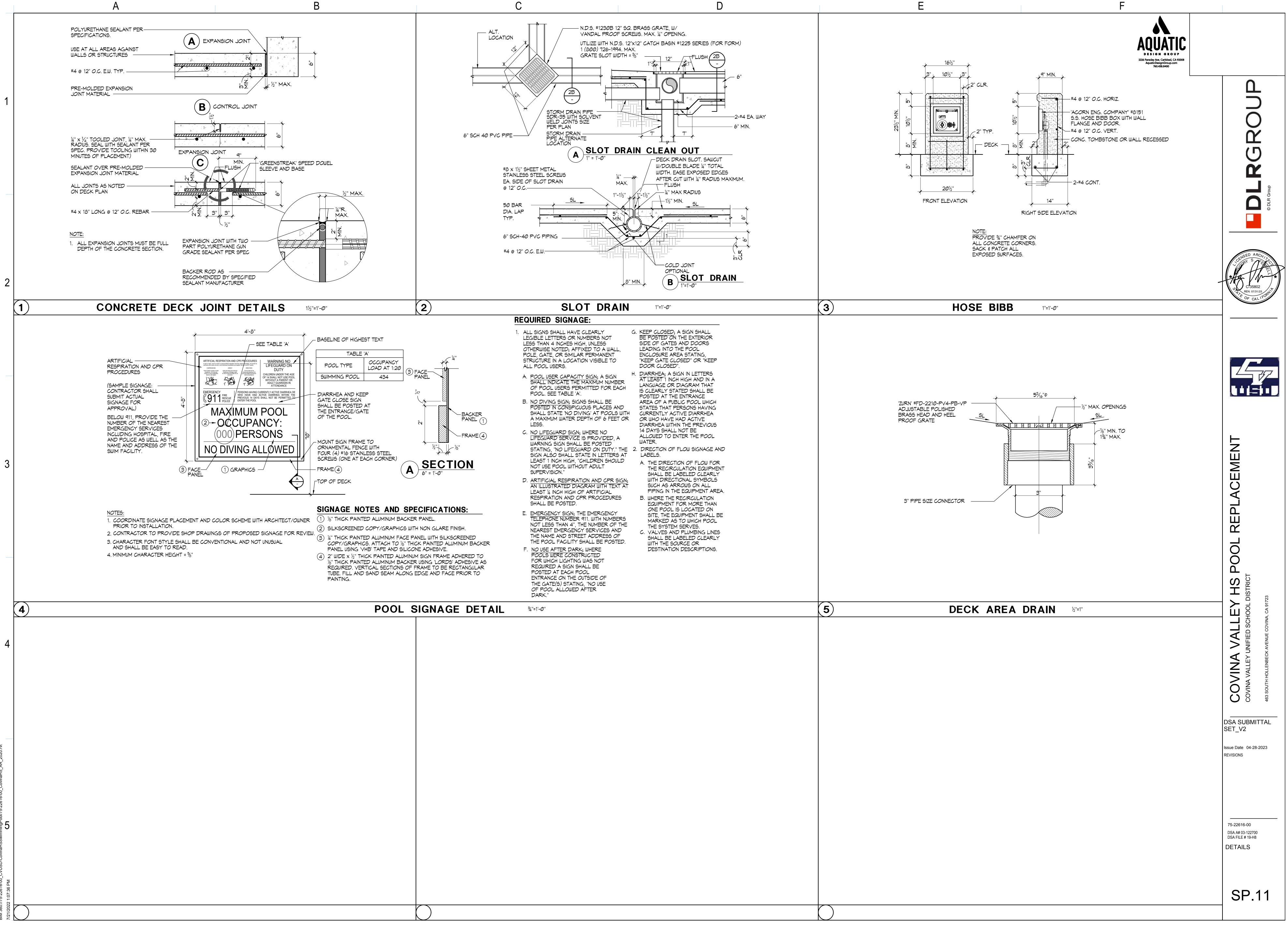


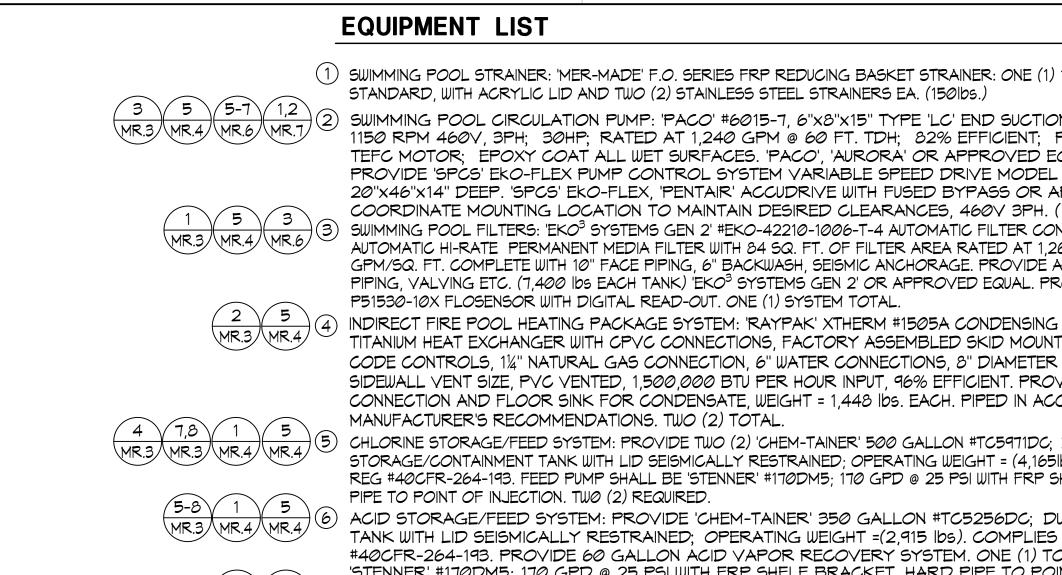










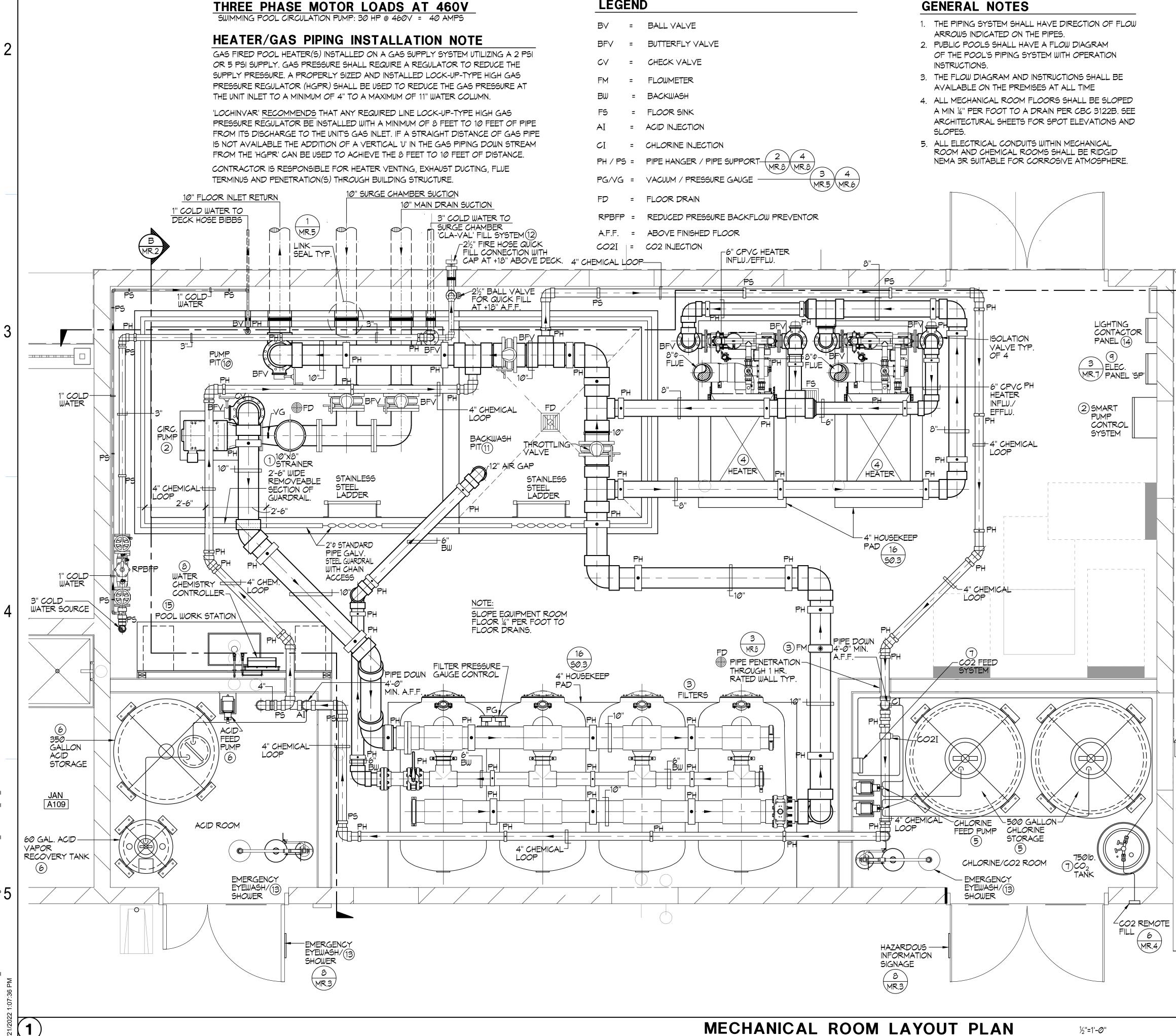


'STENNER' #170DM5; 170 GPD @ 25 PSI WITH FRP SHELF BRACKET, HARD PIPE TO PO (8) (1-5) (7) CARBON DIOXIDE STORAGE FEED SYSTEM: PROVIDE ONE (1) 'NOVO-750', 750 Ib. CR' CARBON DIOXIDE STORAGE FEED SYSTEM: PROVIDE ONE (1) 'NOVO-750', 750 Ib. CR' STORAGE TANK WITH REMOTE FILL PORT. 594 LIQUID Ibs., (5,195 CUBIC FEET OF GAS (1) TOTAL. PROVIDE EKO3 CO2 CONTROLLER, 20-2005CFH FLOW CONTROL, NSF 50 OR APPROVED EQUAL. ONE (1) SYSTEM TOTAL (921bs. EA.) PROVIDE HARD WIRED 'AN DETECTOR WITH AUDIBLE AND VISUAL ALARMS IN EACH CHEMICAL ROOM, UL 1971 STA TOTAL.

# THREE PHASE MOTOR LOADS AT 460V

PRESSURE REGULATOR BE INSTALLED WITH A MINIMUM OF 8 FEET TO 10 FEET OF PIPE





			С	D					
1) 10"×8"	5 7 MR.4 MR.4	2 4,5 MR.5 MR.5 8	WATER CHEMISTRY CONTROLLER: PROVIDE E CONTROLLER. PROVIDE COMPLETE SYSTEM						
ON CENTRIFUGAL F PREMIMUM EFFICIS EQUAL. (760 lbs.) EL SPCS030EF4 SY APPROVED EQUAL . (177 lbs.) ONTROL (AFC) FULLY .260 GPM AT 15 E ALL UTILITIES, PROVIDE SIGNET	ENCÝ STEM 	$ \begin{array}{c} 5 & 6 \\ MR.4 & MR.5 \\ \hline 0 \\ \hline 1 \\ \hline 0 \\ \hline 0 \\ \hline 1 \\ \hline 0 \\ \hline \hline \hline 0 \\ \hline \hline \hline \hline 0 \\ \hline \hline \hline \hline 0 \\ \hline \hline$	ELECTRICAL: PROVIDE ALL ELECTRICAL WIRIN AS REQUIRED FOR PROPER EQUIPMENT INST DRAWINGS. COORDINATE ALL WORK WITH OTH ADDITIONAL INFO. PUMP PIT: 7'-10"X12'-0"X5'-0" DEEP. PROVIDE TO WASTE. PROVIDE WATERPROOFING PER S BACKWASH PIT: 7'-10" X 7'-6" X 5'-0" DEE ERECUERCATIONS AND PROVIDE CTANK	ALLATION PER MANUFACTURERS RECO HER TRADES AS REQUIRED. REFER TO 2"Φ GALV. STANDARD STEEL PIPE GU SPECIFICATIONS. PROVIDE STAINLESS S EP WITH 8"Φ P-TRAP OUTLET TO SE	MMENDATIONS AND SHOP ELEC. PLANS FOR ALL ARDRAIL. PROVIDE FLOOI STEEL ACCESS LADDER. WER. PROVIDE WATERP				
G MODULATING BOI NTED PACKAGE. CA R AIR INLETAND 8" I OVIDE ¾" COLD WAT CCORDANCE WITH SIDS). COMPLIES WITH SHELF BRACKET. HA	LIFÓRNIA DIAMETER ER FED. RD		SPECIFICATIONS AND PROVIDE STAINLE FILL SYSTEM: 3" 'CLA-VAL' FILL SYSTEM TO IN EPOXY COATED BODY WITH CAST IRON DISC PATTERN, 120V AT 60HZ. SOLENOID WIRING S AT FILL POINT. PROVIDE 2½" POOL DECK FIT EYEWASH/SHOWER: HAWS MODEL #8300-830 EYE/FACE WASH WITH CORROSION RESISTAN TWO (2) TOTAL. LIGHTING CONTACTOR PANEL: 'ALLEN BRAD 12 HINGED COVER - LOCKABLE ENCLOSURE 'HUBBELL' #1557 MOUNTED IN J-BOX IN MECH OF OWNER COORDINATED REMOTE UNDERL	NGLUDE 3" 'CLA-VAL' SOLENOID CONTR RETAINER AND DIAPHRAGM WASHER, SHALL BE WIRED TO WATER CHEMISTRY 'TING FOR DECK ACCESS QUICK FILL. OGCRP BARRIER FREE COMBINATION SI T PROTECTION. SEE MEP SHEETS FOR DLEY' #500L; OR APPROVED EQUAL. E. CONTACTORS TO BE SWITCHED BY HANICAL EQUIPMENT ROOM. REFER TO	ROL VALVE #136-01BY, 3" BRONZE TRIM, FLANGED ( CONTROLLER. PROVIDE HOWER AND SUPPLY PIPING. PANEL SHALL BE MOUNTE MOMENTARY SWITCH EQU				
IS WITH FED. REG TOTAL. FEED PUMP OINT OF INJECTION. RYOGENIC LIQUID ( SEOUS CO2 AT NTF 60 CERTIFIED. 'EKO3 ANALOX' #API KIT C TANDARD LISTED, (	CO2 P) ONE B', 'TEK' O2	1 MR.8 (15)	POOL OPERATOR WORKSTATION DESK: 'TO END CABINETS. FURNISH WITH WALL MOUNTED FOR WATER SUPPLY PIPING.						

# LEGEND

# MECHANICAL ROOM LAYOUT PLAN

½"=1'-⊘"

NECT(S) ETC. SHOP

LOOR DRAIN

TERPROOFING PER CTURAL AND PLUMBING PLANS.

BY, 3" DUCT IRON, GED GLOBE VIDE 6" AIR GAP

OUNTED IN A NEMA I EQUAL TO S FOR LOCATION

SINK AND TWO (2) SEE MEP PLANS

MR.2

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, 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 2019 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

MECHANICAL PIPING (MP). MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E): MP ⋈ MD □ PP ⋈ E □ 1. SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM #) OPM #0043-13

# MEP COMPONENT ANCHORAGE NOTE

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA - APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2019 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26 AND 30.

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

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

- A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF
- DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.
- THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING

COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF 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 ABOVE REQUIREMENTS.

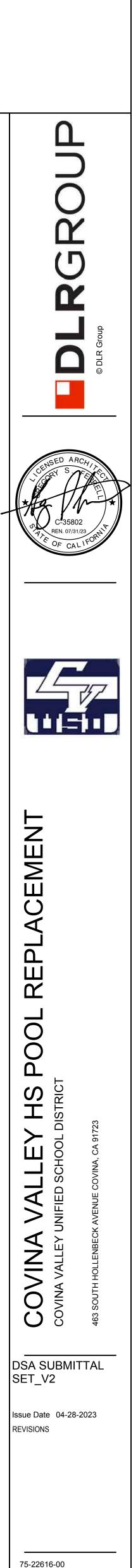
# **MECHANICAL ANCHORAGE**

- EXPANSION OR WEDGE ANCHORS INTO CONCRETE: HILTI KB TZ 2 (ICC ESR-4266) TO BE INSTALLED IN ACCORDANCE WITH ICC REPORT AND MANUFACTURER'S RECOMMENDATIONS. 2. EXPANSION OR WEDGE ANCHORS INTO MASONRY: HILTI KB TZ 2 (ICC ESR-4561) TO BE INSTALLED
- IN ACCORDANCE WITH ICC REPORT AND MANUFACTURER'S RECOMMENDATIONS. 3. FASTENERS SHALL BE STAINLESS STEEL FOR EXTERIOR USE OR WHEN EXPOSED TO WEATHER. PROVIDE GALVANIZED CARBON STEEL ANCHORS AT OTHER LOCATIONS, UNLESS OTHERWISE NOTED.
- 4. IF REINFORCEMENT IS ENCOUNTERED DURING DRILLING, ABANDON AND SHIFT THE HOLE LOCATION TO AVOID THE REINFORCEMENT. PROVIDE A MINIMUM OF 2 ANCHOR DIAMETERS OR 1 INCH, WHICHEVER IS LARGER, OF SOUND CONCRETE BETWEEN THE DOWEL AND THE ABANDONED HOLE. FILL THE ABANDONED HOLE WITH NON-SHRINK GROUT WITH CONCRETE STRENGTH EQUAL TO OR GREATER THAN BASE MATERIAL. IF THE ANCHOR OR DOWEL MAY NOT BE SHIFTED AS NOTED ABOVE, THE STRUCTURAL ENGINEER WILL DETERMINE A NEW LOCATION.
- 5. LOCATE REINFORCEMENT AND CONFIRM FINAL ANCHOR LOCATIONS PRIOR TO FABRICATING PLATES, MEMBERS, OR OTHER STEEL ASSEMBLIES ATTACHED WITH MECHANICAL ANCHORS.
- 6. ANCHORS SHALL BE PROOF-TESTED BY OWNER'S TESTING AND INSPECTION AGENCY
- TEST ANCHORS NO SOONER THAN 24 HOURS AFTER INSTALLATION.
- 8. APPLY TEST LOAD BY ANY METHOD THAT WILL EFFECTIVELY MEASURE THE TENSION OF THE ANCHOR SUCH AS DIRECT PULL WITH A HYDRAULIC JACK, TORQUE WRENCH, OR CALIBRATED SPRING LOADING DEVICES, ETC.
- 9. REACTION LOADS FROM TEST FIXTURES MAY BE APPLIED CLOSE TO THE ANCHOR BEING TESTED, PROVIDED THE ANCHOR IS NOT RESTRAINED FROM WITHDRAWING BY A BASE PLATE OR OTHER FIXTURE. IF RESTRAINT IS FOUND, LOOSEN AND SHIM OR REMOVE THE FIXTURE PRIOR TO TESTING.
- 10. UNLESS OTHERWISE NOTED, PROVIDE MINIMUM EMBEDMENT OF ANCHORS AS SHOWN IN TABLES BELOW.
- 11. TEST 50% OF ANCHORS PER ONE OF THE FOLLOWING METHODS AND IN ACCORDANCE WITH THE VALUES SHOWN IN THE TABLE:
- A. HYDRAULIC RAM METHOD: APPLY PROOF TEST LOAD WITHOUT REMOVING THE NUT. IF IT IS NOT POSSIBLE TO TEST WITH THE NUT INSTALLED, REPLACE THE NUT WITH A THREADED COUPLER TO THE LOAD. ANCHOR IS ACCEPTABLE IF NO MOVEMENT IS OBSERVED AT THE TEST LOAD. MOVEMENT MAY BE DETERMINED WHEN THE WASHER UNDER THE NUT BECOMES
- LOOSE. B. TORQUE WRENCH METHOD: TEST ANCHORS TO THE TORQUE LOAD INDICATED IN THE TABLE WITH ONE-HALF TURN OF THE NUT.
- 12. IF ANY ANCHOR FAILS TESTING, REPLACE ANCHOR AND TEST ADDITIONAL ANCHORS OF THE SAME CATEGORY NOT PREVIOUSLY TESTED UNTIL TWENTY (20) CONSECUTIVE TESTS PASS, THEN RESUME INITIAL TESTING FREQUENCY. CCD WILL BE REQUIRED.

		V	VEDGE, EXPA	NSION OR AD	IESIVE	ANCHOR I	EMBEDMENT DE	ΕΡΤΗ Α	ND TEST LOA	D
	HILTI KB TZ 2 (SS) ANCHORS IN CONCRETE					KB TZ 2 (SS) AN	NCHORS IN CMU	HILTI HIT-HY 200 ADHESIVE ANCHORS IN CONCRETE		
	SIZE	MIN. EMBED	TENSION LOAD (LBS)	TORQUE LOAD (FT-LBS)	MIN. EMBED	TENSION LOAD (LBS)	TORQUE LOAD (FT-LBS)	MIN. EMBED	PULL TEST LOAD (LBS)	TORQUE LOAD (FT-LBS)
/	14" DIA.	1½"	800	6	1¾"	145	6	-	-	-
/	%" DIA.	<b>2</b> ½"	1,500	30	З"	590	15	3"	2,910	15
	½" DIA.	3¼"	3,000	40	3¾"	640	25	4"	5,165	30
	%" DIA.	3¼"	4,900	60	4½"	940	35	5"	8,245	60
-	¾" DIA.	3¾"	6,300	125	5½"	1,385	50	6"	10,150	100

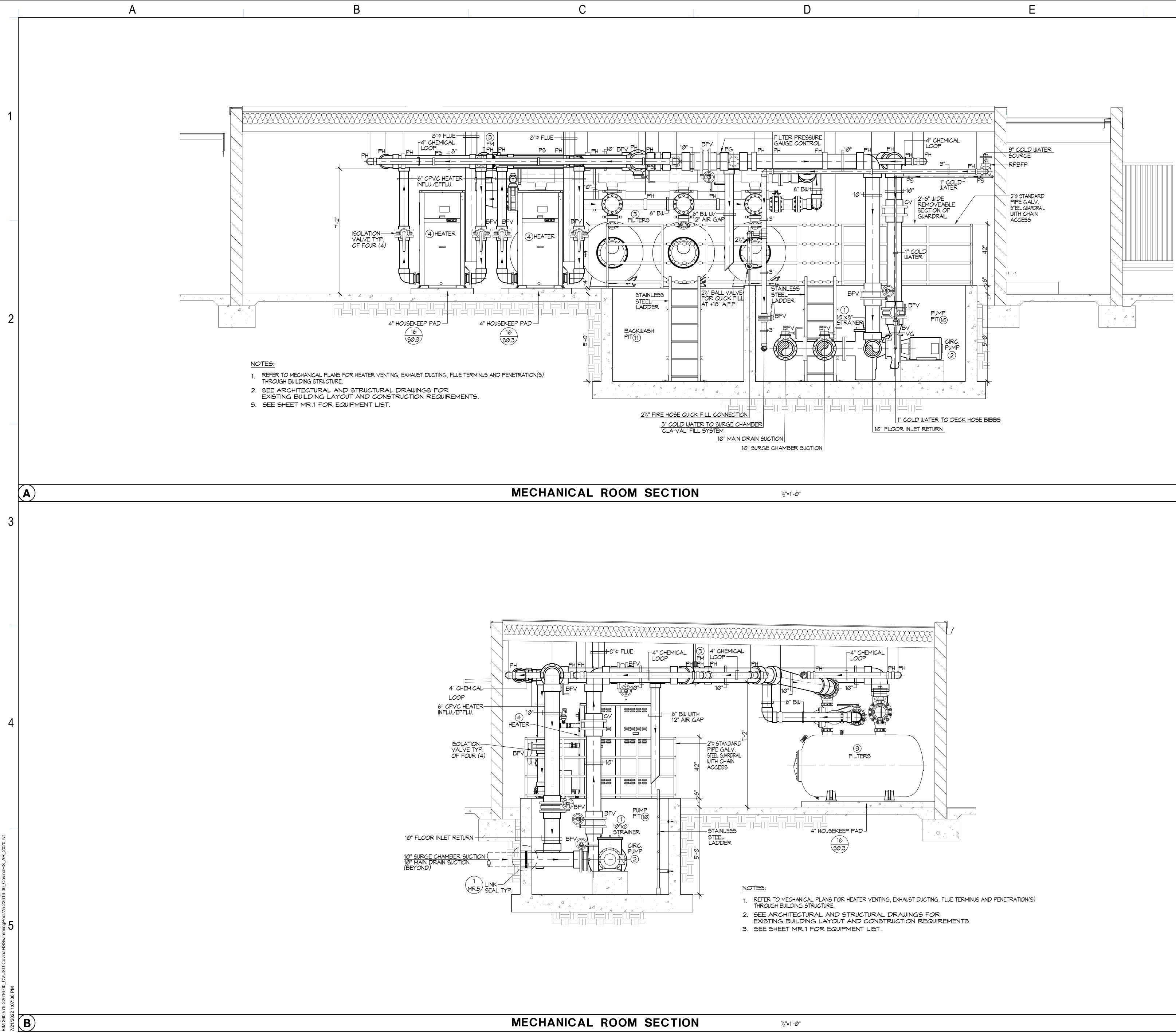




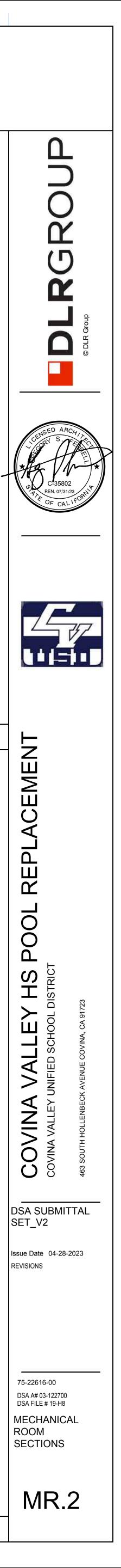


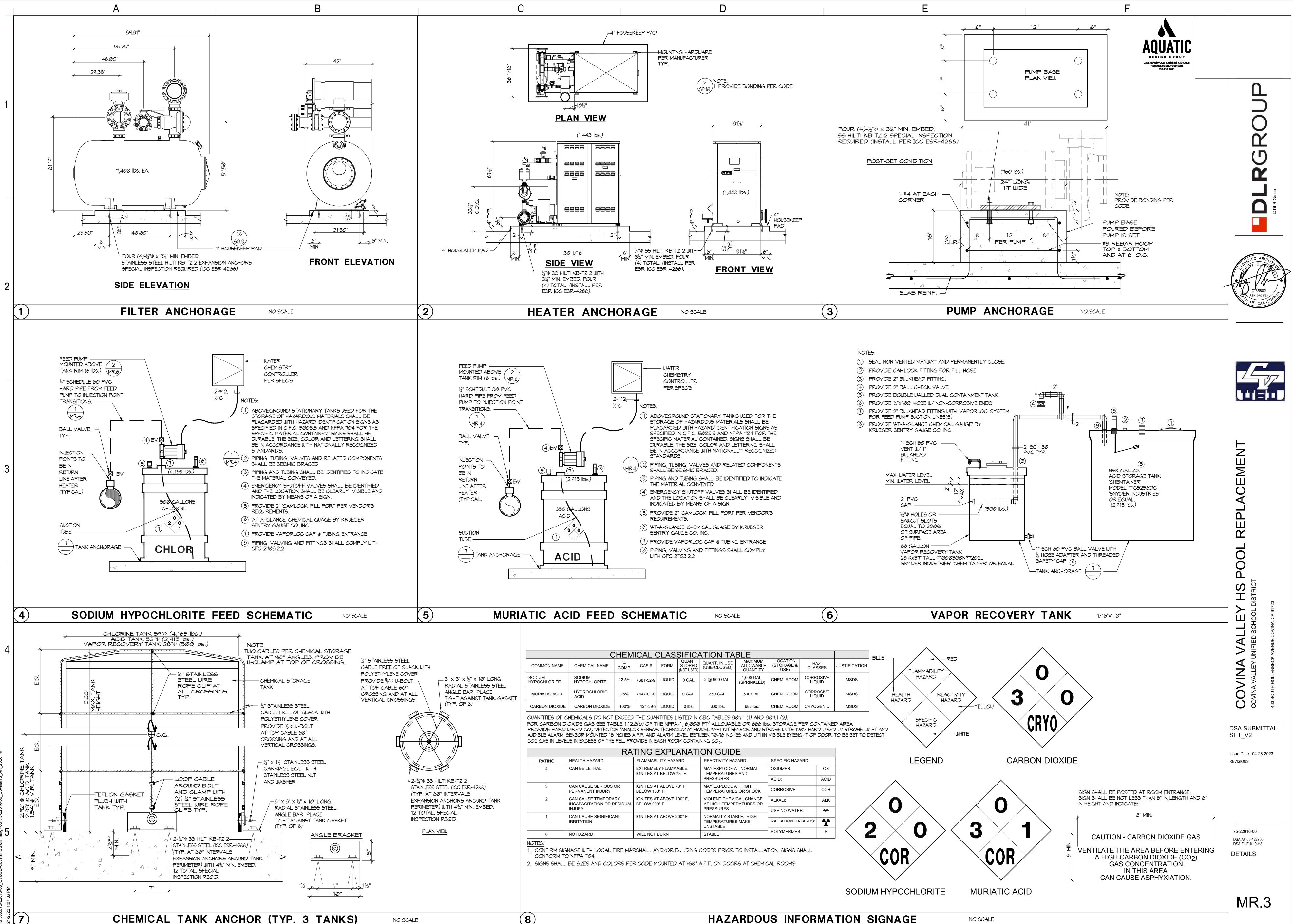
# DSA A# 03-122700 DSA FILE # 19-H8 MECHANICAL ROOM LAYOUT PLAN

**MR.1** 





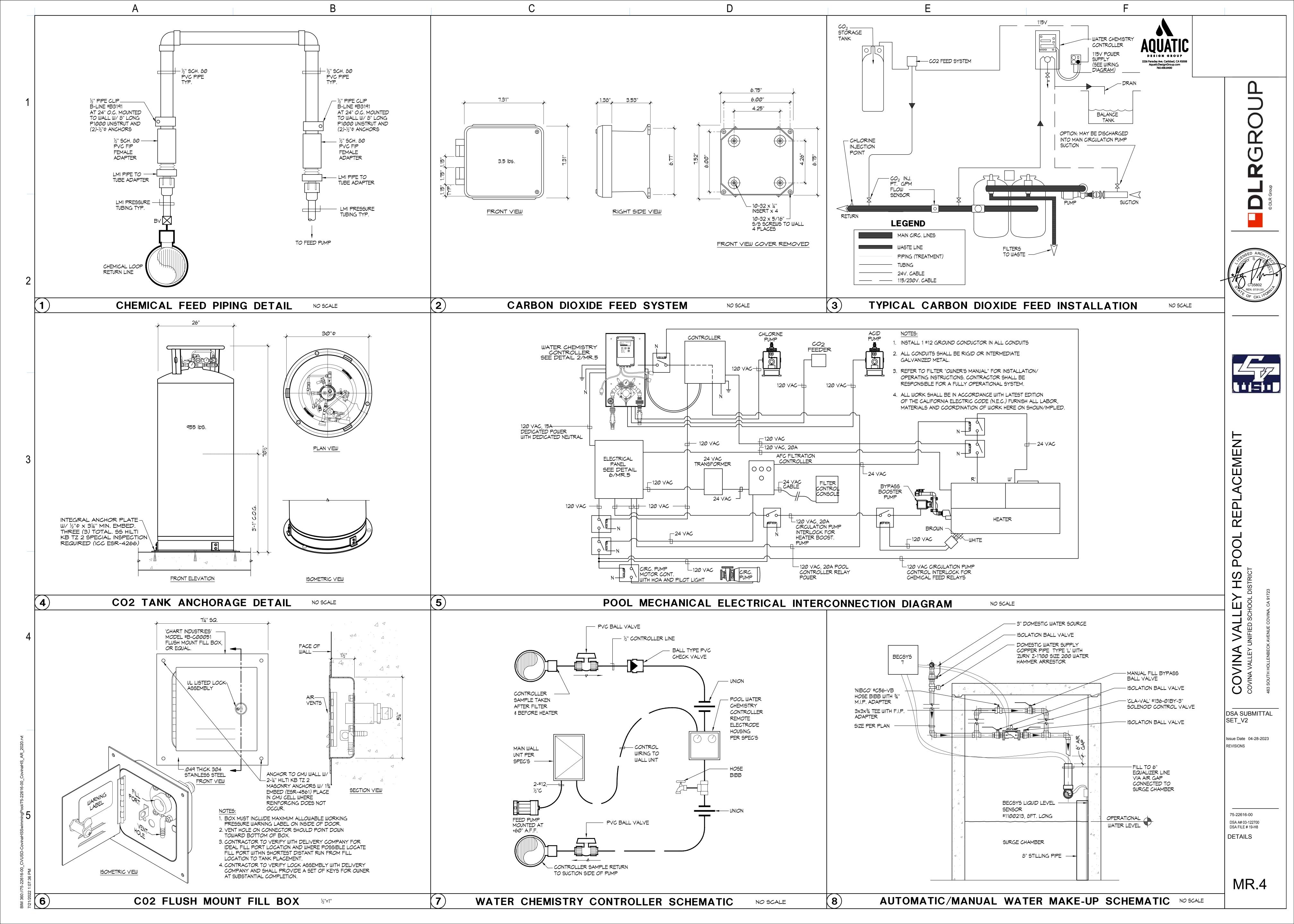


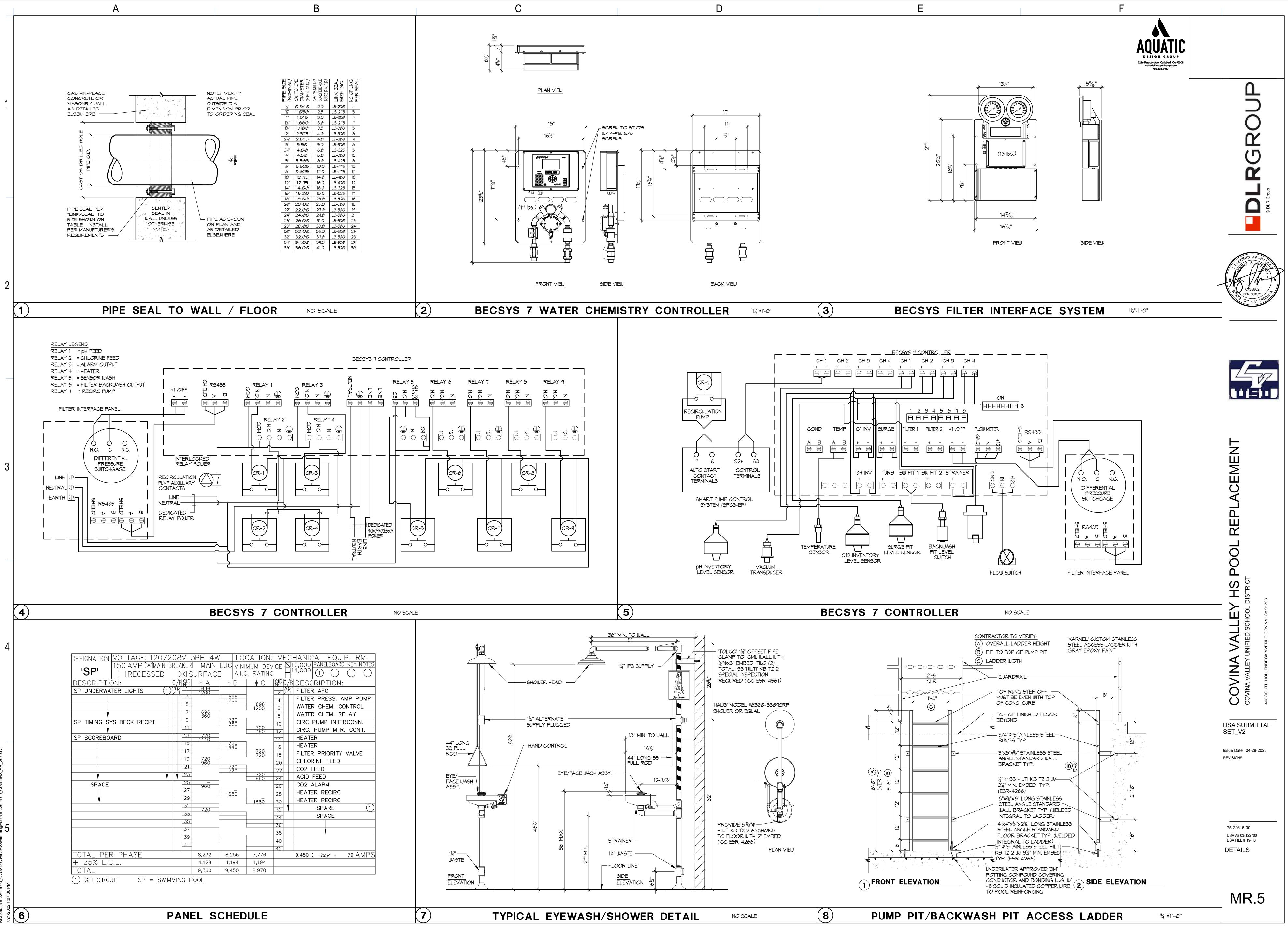


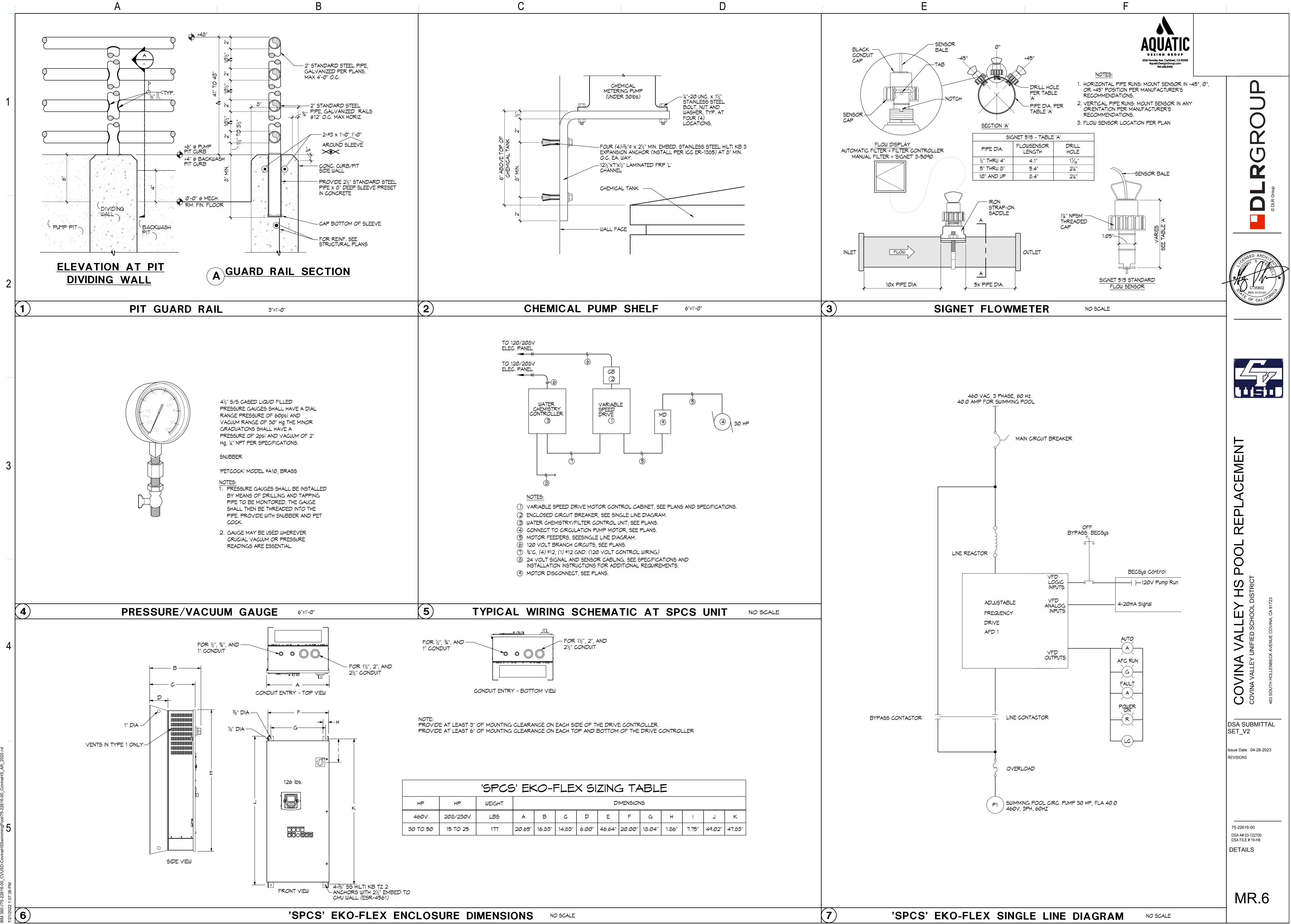
CHEMICAL TANK ANCHOR (TYP. 3 TANKS)

HAZARDOUS INFORMATION SIGNAGE

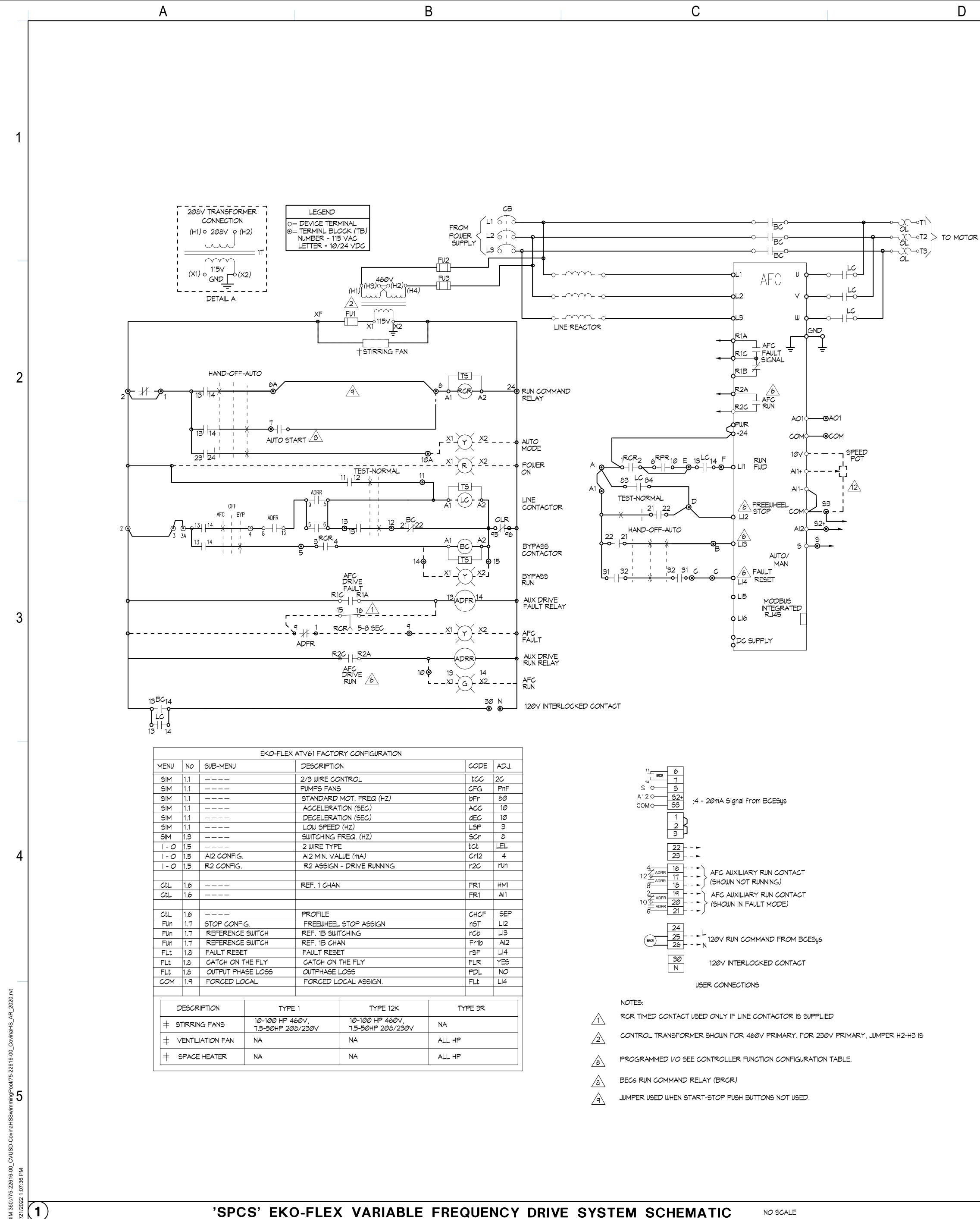
NO SCALE

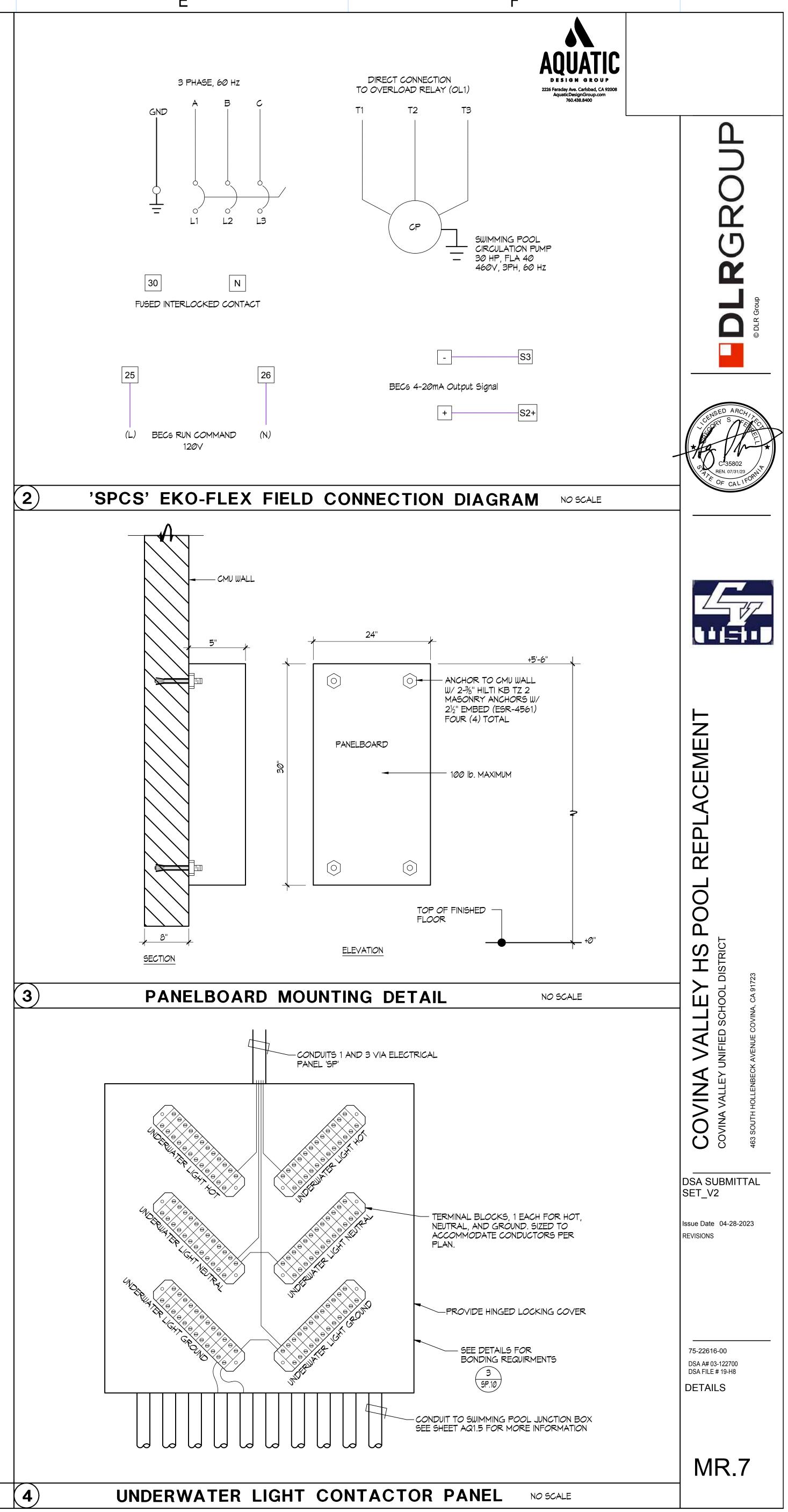


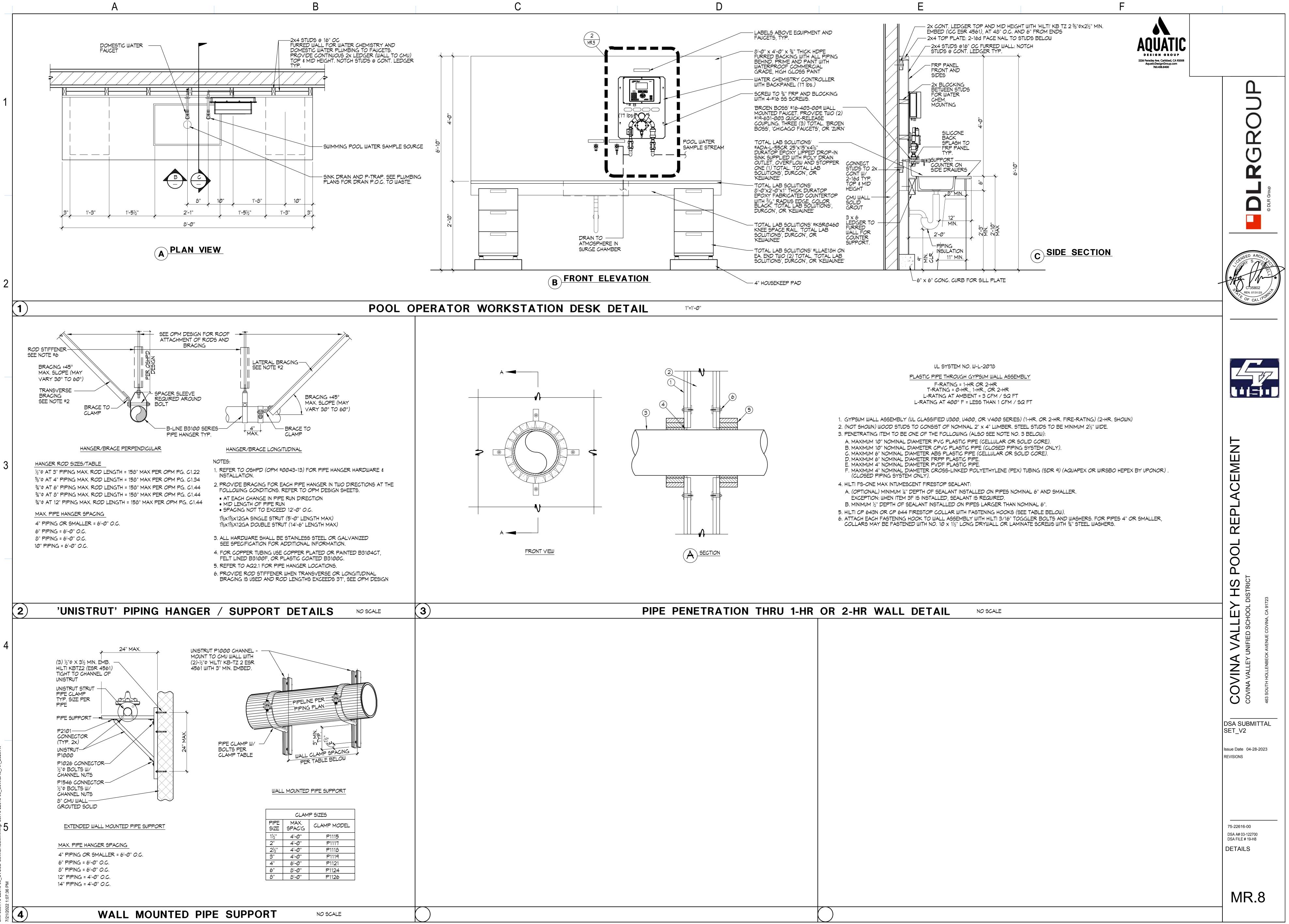


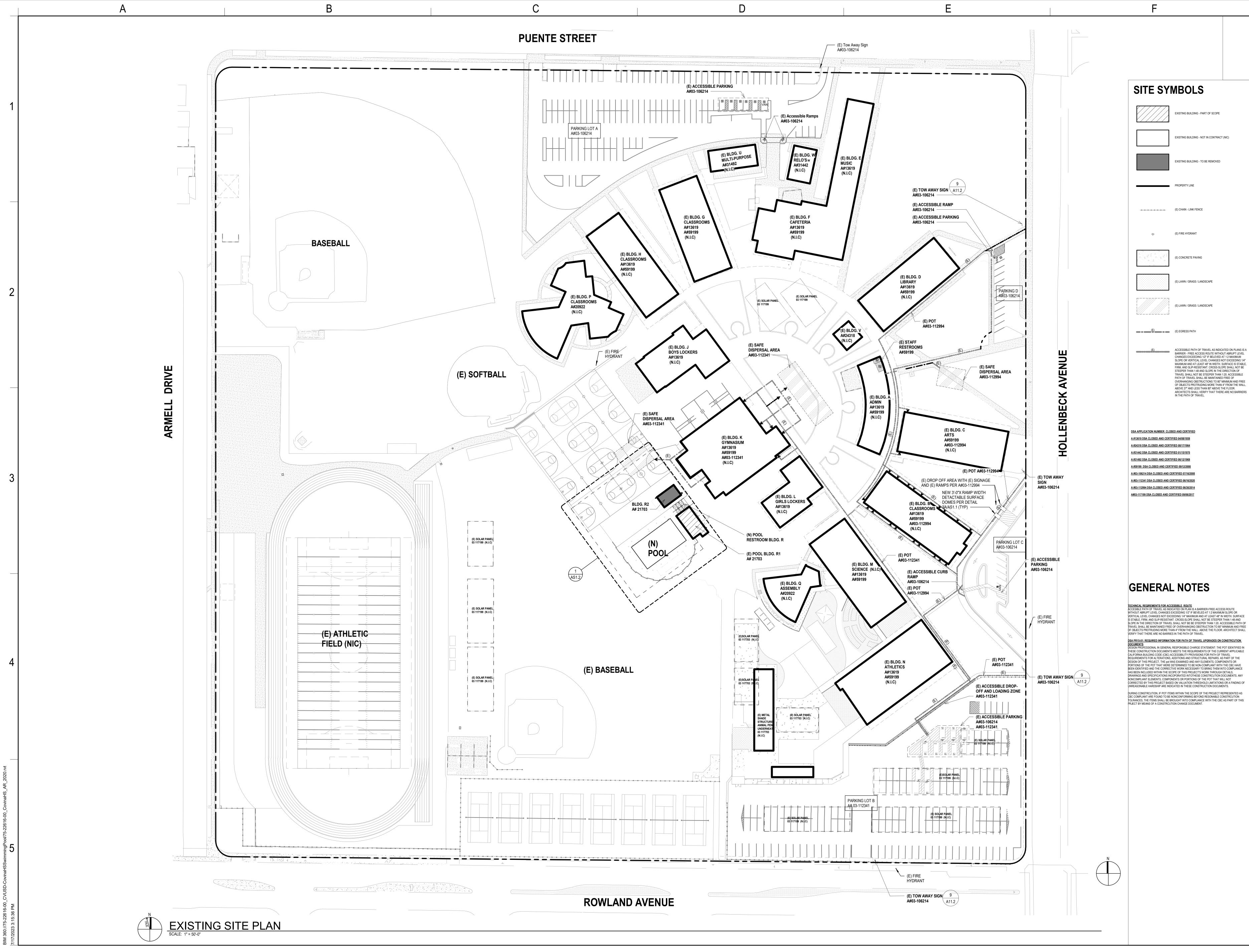


'SPCS' EKO-FLEX SIZING TABLE													
HP	HP	WEIGHT	DIMENSIONS										
460V	208/230V	LBS	A	в	C	D	E	F	G	н	I	L	к
30 TO 50	15 TO 25	177	20.65"	16.83"	14.83"	6.00"	46.64"	20.00"	18.04"	1.86"	7.75"	49.02"	47.83"



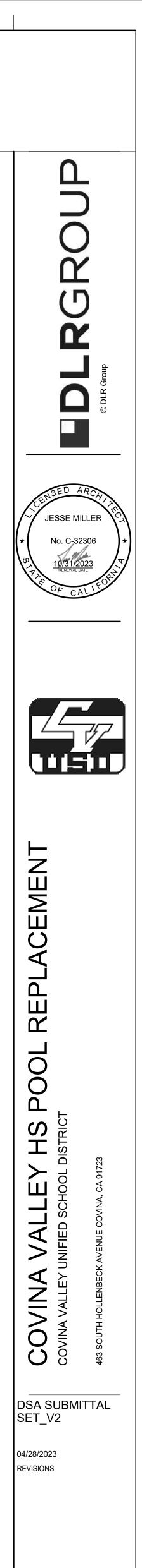






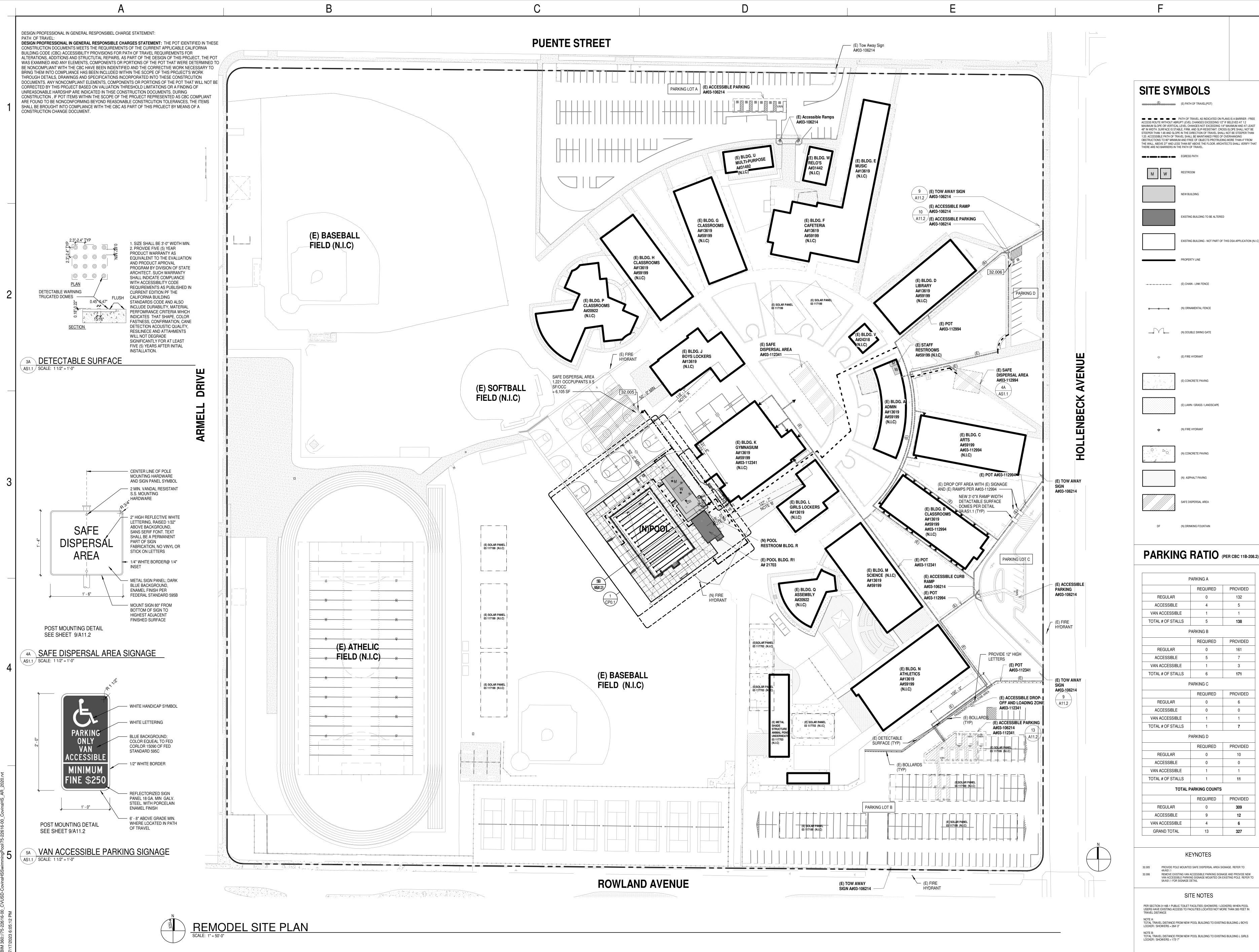
EXISTING BUILDING - NOT IN CONTRACT (NIC)

ACCESSIBLE PATH OF TRAVEL AS INDICATED ON PLANS IS A BARRIER - FREE ACCESS ROUTE WITHOUT ABRUPT LEVEL CHANGES EXCEEDING 1/2" IF BELEVED 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 THE 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. ARCHITECTS SHALL VERIFY THAT THERE ARE NO BARRIERS IN THE PATH OF TRAVEL.



75-22616-00 DSA A# 03-122700 DSA FILE # 19-H8 EXISTING SITE PLAN

AS1.0



NOTE A: TOTAL TRAVEL DISTANCE FROM NEW POOL BUILDING TO EXISTING BUILDING J BOYS

PER SECTION 3116B.1 PUBLIC TOILET FACILITIES (SHOWERS / LOCKERS) WHEN POOL USERS HAVE EXISTING ACCESS TO FACILITIES LOCATED NOT MORE THAN 300 FEET IN TRAVEL DISTANCE

PROVIDE POLE MOUNTED SAFE DISPERSAL AREA SIGNAGE. REFER TO

12

6

327

9

4

13

0	161
5	7
1	3
6	171
RKING C	
REQUIRED	PROVIDED
0	6
0	0
1	1
1	7
RKING D	
REQUIRED	PROVIDED
0	10
0	0
1	1
1	11
RKING COUNTS	
REQUIRED	PROVIDED
0	309

PARKING RATIO (PER CBC 11B-208.2)

REQUIRED PROVIDED

PROVIDED

132

5

1

138

(N) DRINKING FOUNTAIN

REQUIRED

0

4

1

5

SAFE DISPERSAL AREA

(N) ASPHALT PAVING

(N) CONCRETE PAVING

R

(J

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 $\square$ 

JESSE MILLER

No. C-32306

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SET\_V2

04/28/2023

REVISIONS

75-22616-00 DSA A# 03-122700

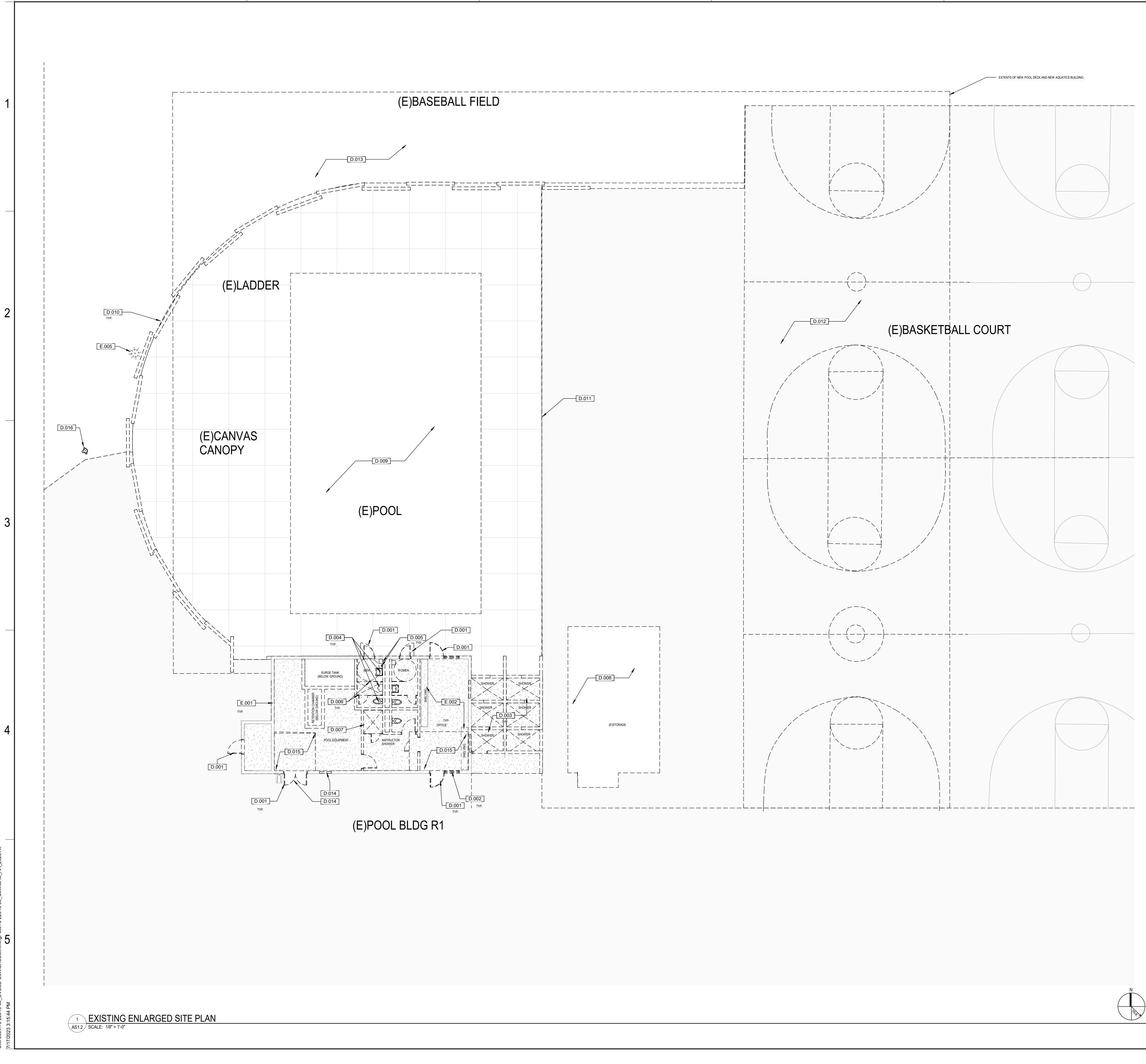
DSA FILE # 19-H8

PLAN

OVERALL SITE

AS1.1

DSA SUBMITTAL

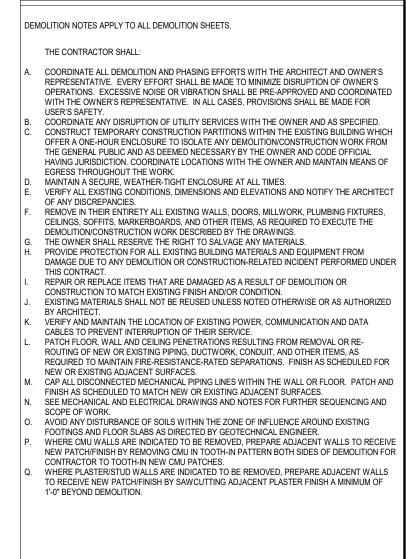


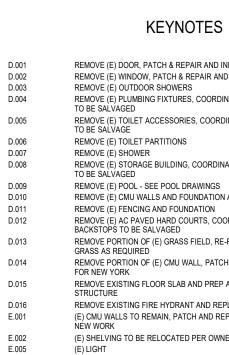
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(E) LIGHT

D.001

D.007

E.001

### DEMOLITION GENERAL NOTES

### KEYNOTES

REMOVE (E) DOOR, PATCH & REPAIR AND INFILL WALL IN KIND REQUIRED REMOVE (E) WINDOW, PATCH & REPAIR AND INFILL WALL IN KIND REQUIRED REMOVE (E) PLUMBING FIXTURES, COORDINATE WITH DISTRICT FOR ANY ITEMS TO BE SALVAGED REMOVE (E) TOILET ACCESSORIES, COORDINATE WITH DISTRICT FOR ANY ITEMS TO BE SALVAGE

REMOVE (E) STORAGE BUILDING, COORDINATE WITH DISTRICT FOR ANY ITEMS TO BE SALVAGED REMOVE (E) CMU WALLS AND FOUNDATION AND CHAIN LINK FENCING ABOVE

REMOVE (E) AC PAVED HARD COURTS, COORDINATE WITH OWNER FOR BACKSTOPS TO BE SALVAGED REMOVE PORTION OF (E) GRASS FIELD, RE-ROUTE IRRIGATION AND REPAIR GRASS AS REQUIRED REMOVE PORTION OF (E) CMU WALL, PATCH & REPAIR AS REQUIRED AND PREP

REMOVE EXISTING FLOOR SLAB AND PREP AREA FOR NEW SLAB. RE: REMOVE EXISTING FIRE HYDRANT AND REPLACE WITH NEW (E) CMU WALLS TO REMAIN, PATCH AND REPAIR AS REQUIRED AND PREP FOR NEW WORK (E) SHELVING TO BE RELOCATED PER OWNER

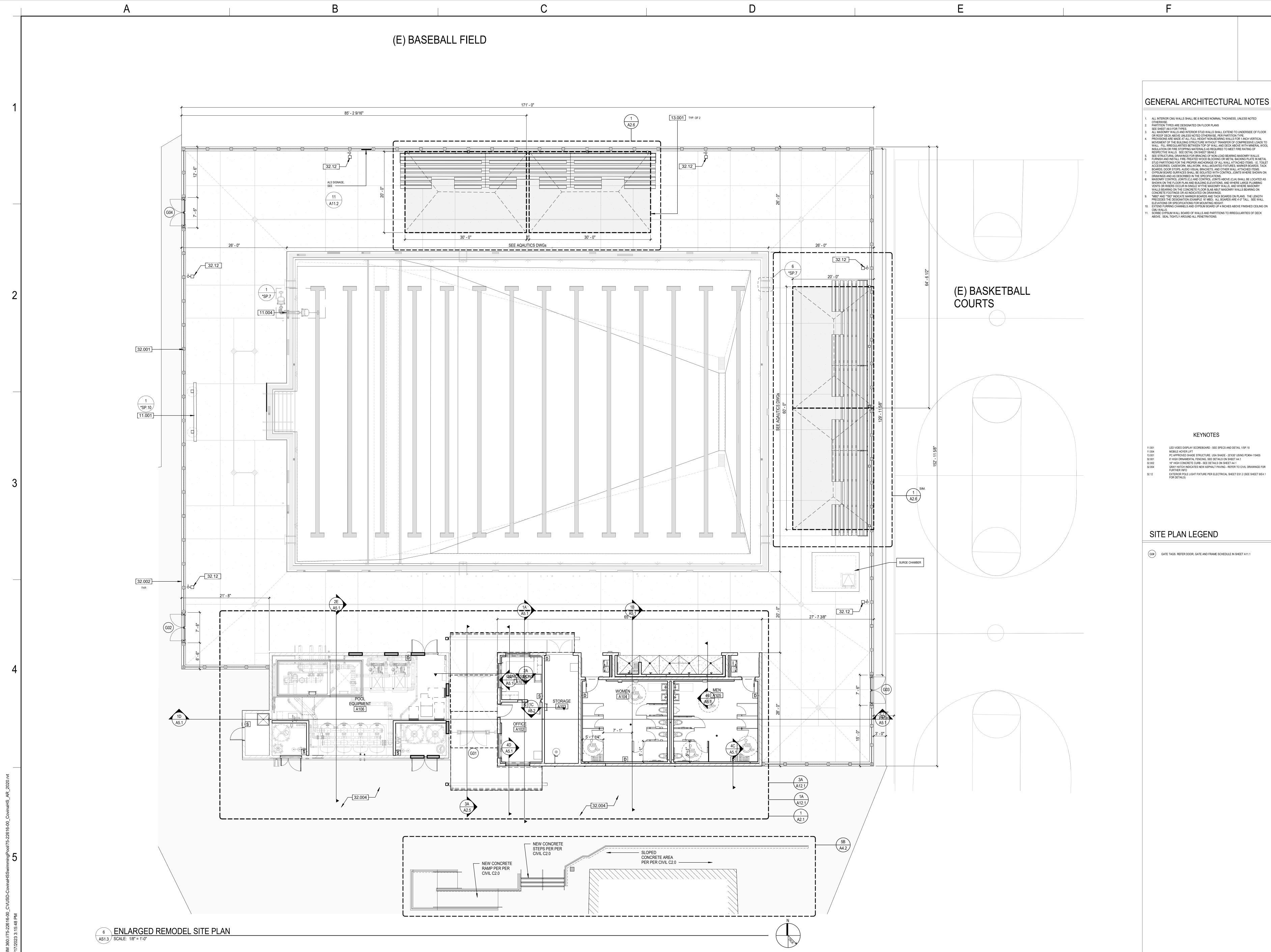






DSA A# 03-122700 DSA FILE # 19-H8 DEMO ENLARGED SITE PLAN

AS1.2



## GENERAL ARCHITECTURAL NOTES

ALL INTERIOR CMU WALLS SHALL BE 8 INCHES NOMINAL THICKNESS, UNLESS NOTED

CMU WALLS. I. SCRIBE GYPSUM WALL BOARD OF WALLS AND PARTITIONS TO IRREGULARITIES OF DECK ABOVE. SEAL TIGHTLY AROUND ALL PENETRATIONS.

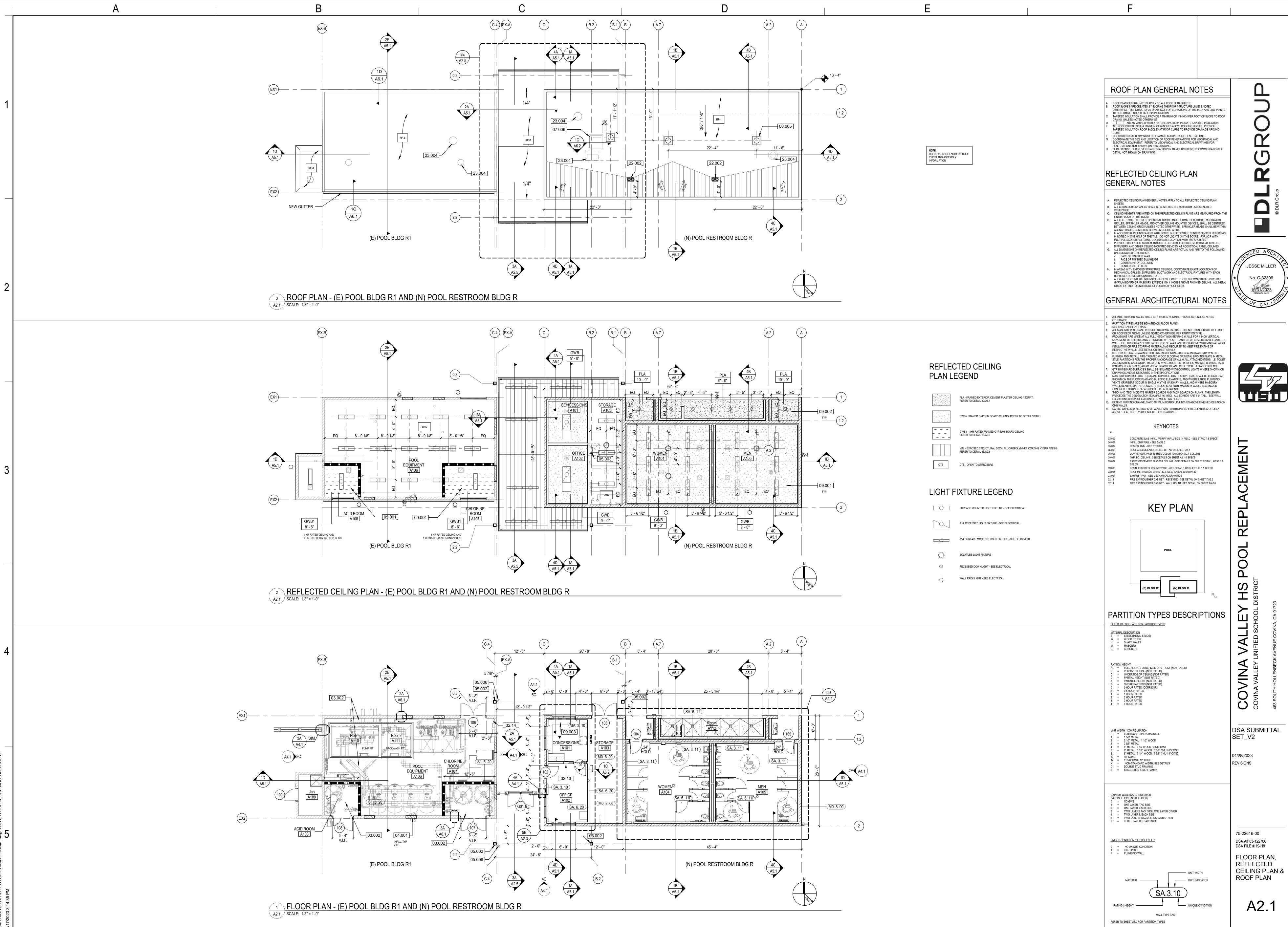


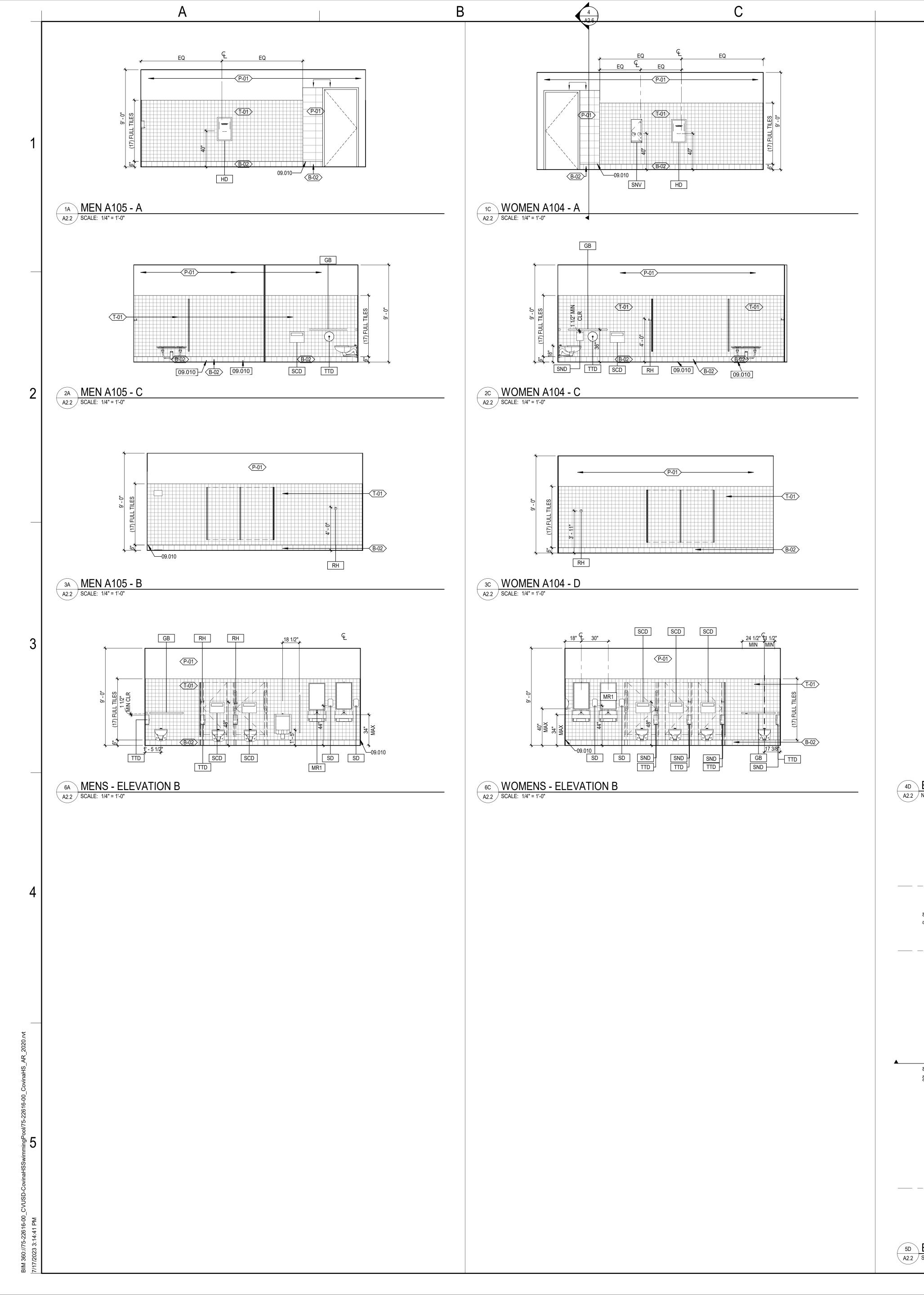


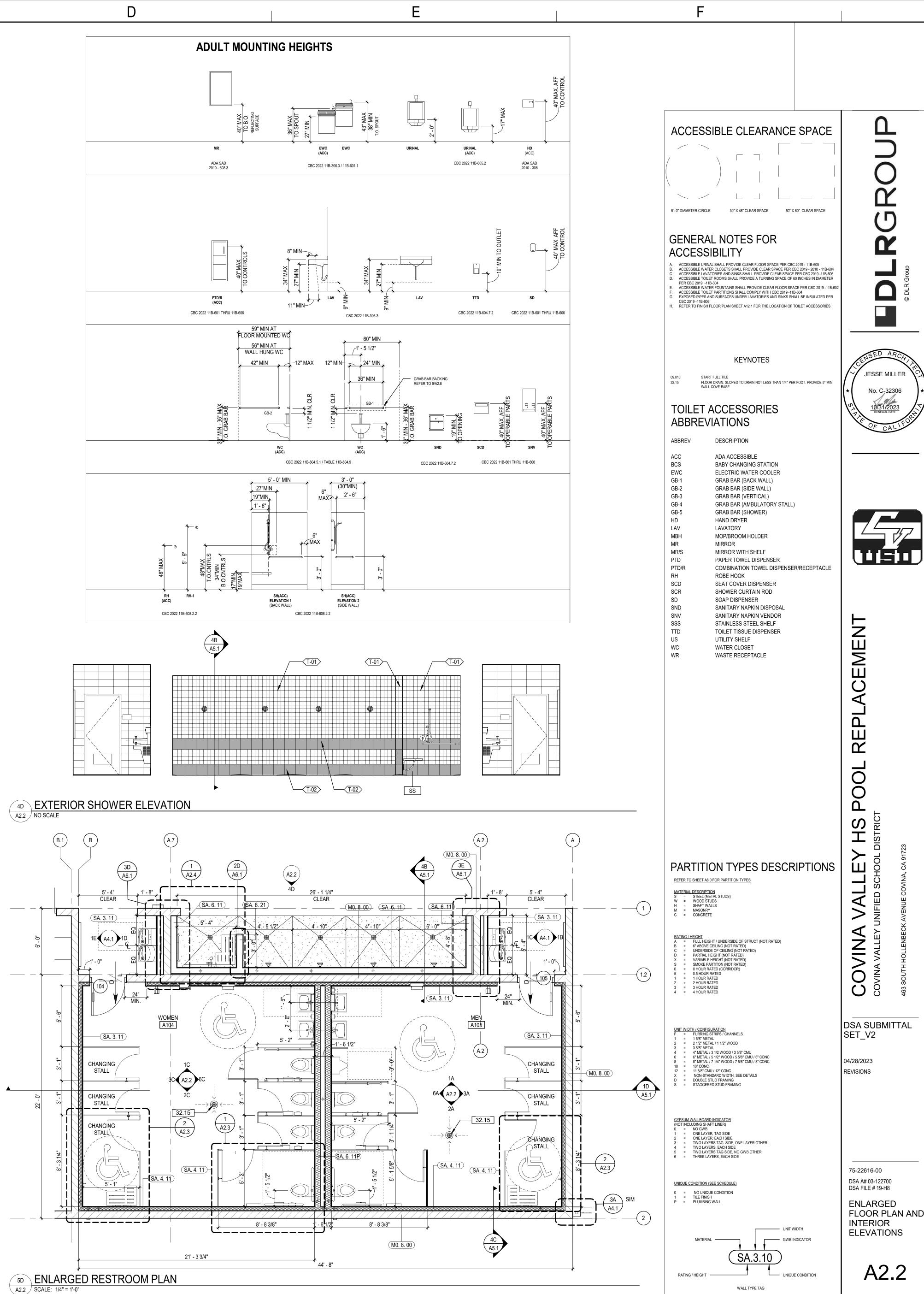
### KEYNOTES

LED VIDEO DISPLAY SCOREBOARD - SEE SPECS AND DETAIL 1/SP.10 MOBILE HOYER LIFT PC APPROVED SHADE STRUCTURE. USA SHADE - 20'X30' USING PC#04-119455 6' HIGH ORNAMENTAL FENCING, SEE DETAILS ON SHEET A4.1 16" HIGH CONCRETE CURB - SEE DETAILS ON SHEET A4.1 GRAY HATCH INDICATES NEW ASPHALT PAVING - REFER TO CIVIL DRAWINGS FOR FURTHER INFO EXTERIOR POLE LIGHT FIXTURE PER ELECTRICAL SHEET ES1.2 (SEE SHEET 9/E4.1 FOR DETAILS)



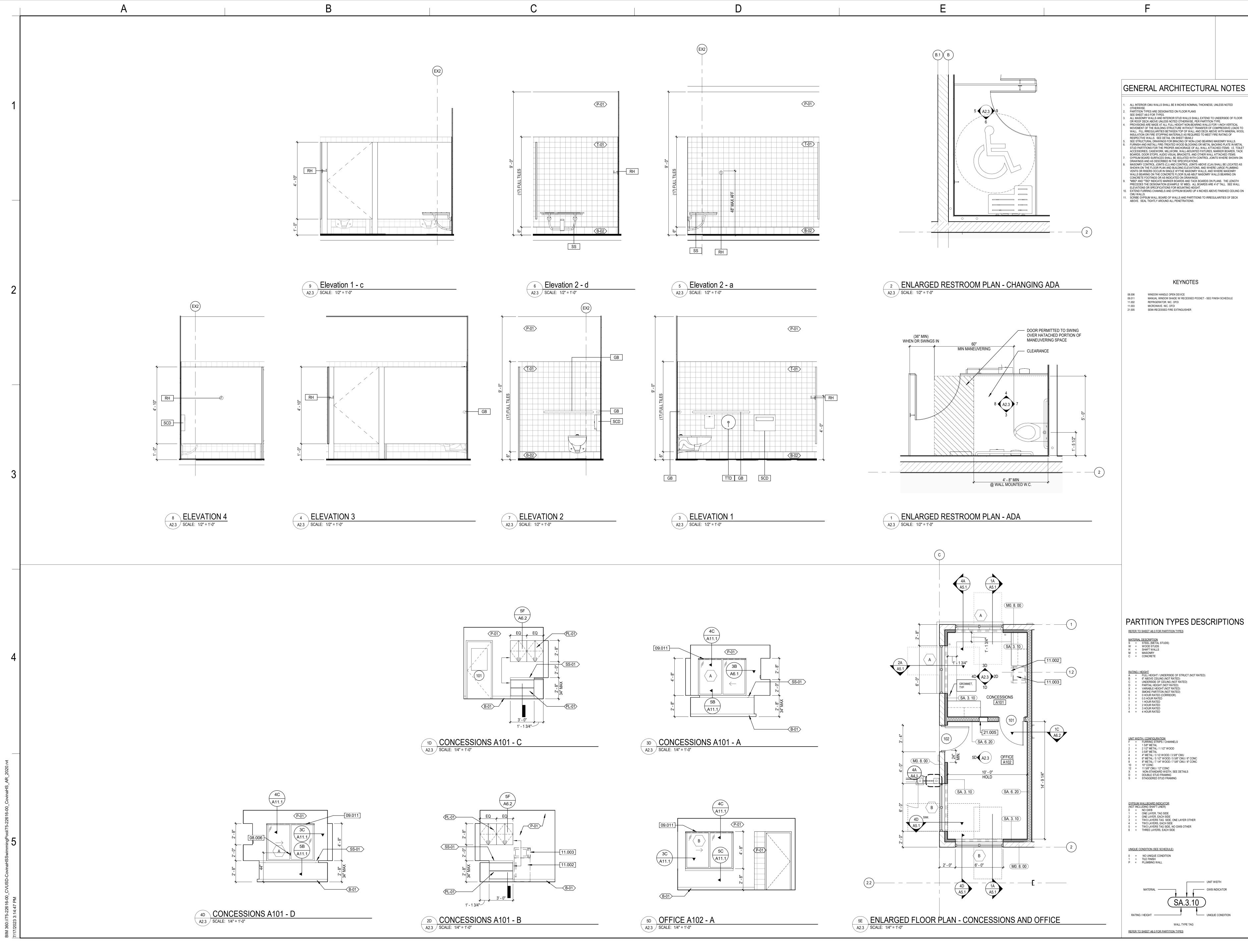






REFER TO SHEET A8.0 FOR PARTITION TYPES

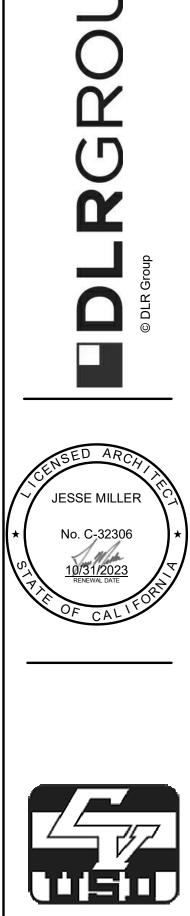
FLOOR PLAN AND



## GENERAL ARCHITECTURAL NOTES

### KEYNOTES

MANUAL WINDOW SHADE W/ RECESSED POCKET - SEE FINISH SCHEDULE



# PARTITION TYPES DESCRIPTIONS

UNIT WIDTH SA.3.10

GWB INDICATOR

WALL TYPE TAG



REVISIONS

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ENLARGED FLOOR PLAN AND INTERIOR ELEVATIONS

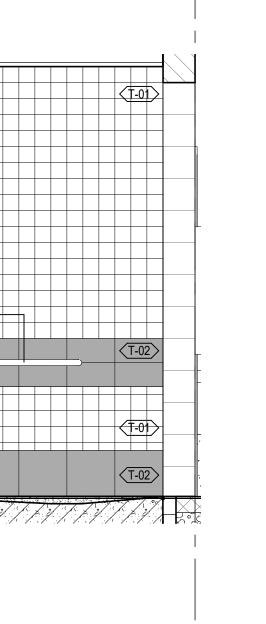
A2.3

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BIM 360://7 7/17/2023 3		(	A2.4 SCALE: 1/2" = 1'-0"

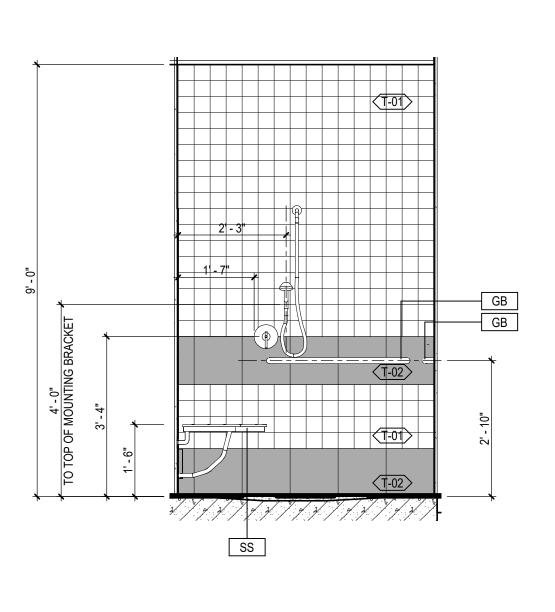
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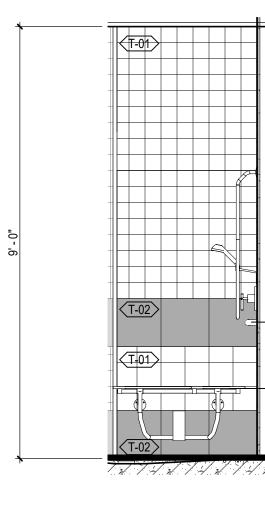
3 SHOWER ELEVATION A2.4 SCALE: 1/2" = 1'-0"

2 SHOWER ELEVATION A2.4 SCALE: 1/2" = 1'-0"



(EX1)

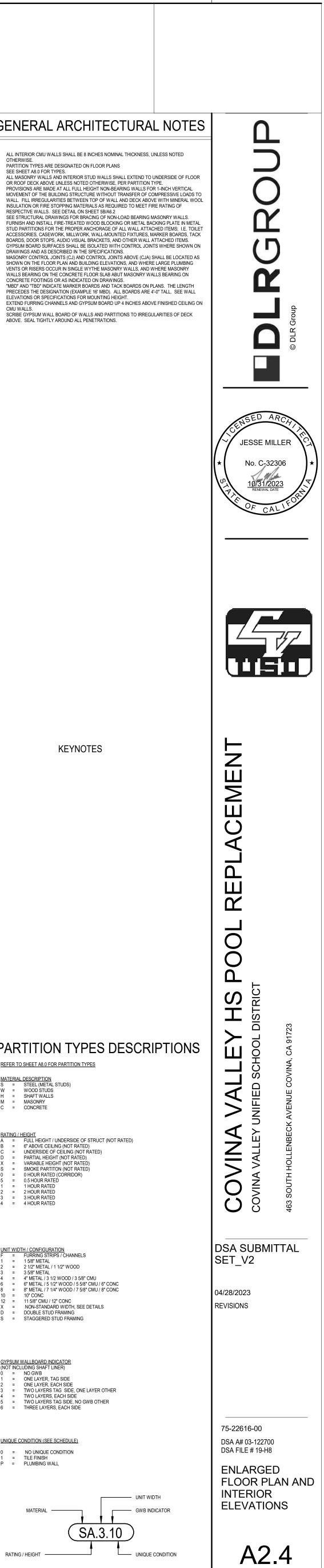


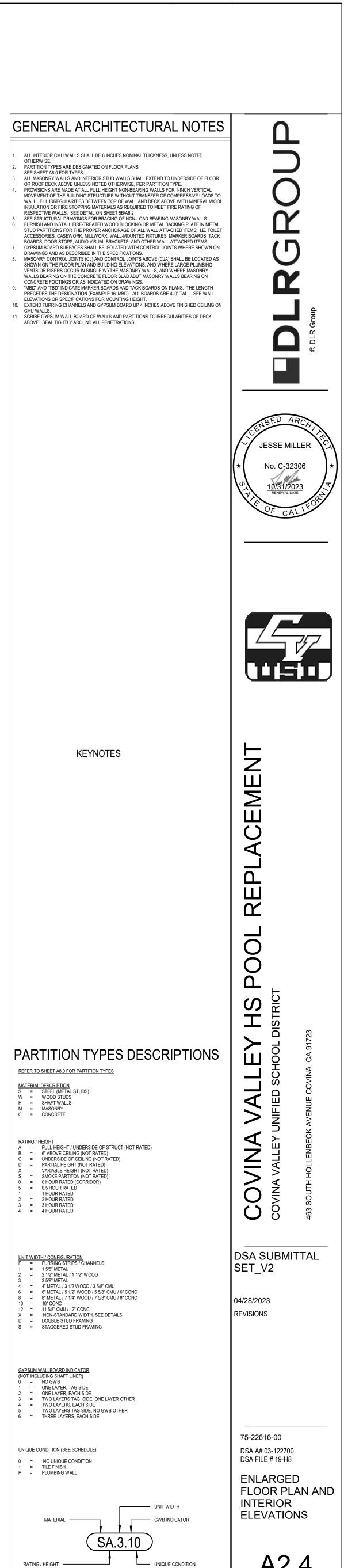


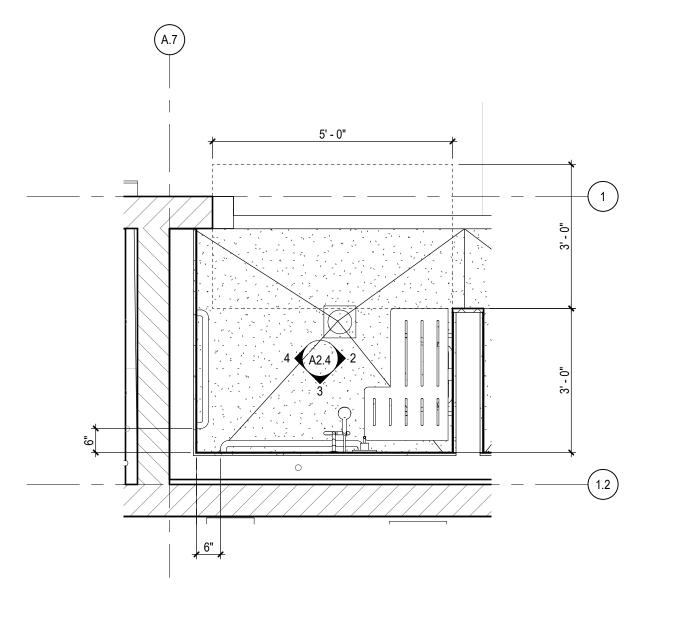
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1.	ALL INTERIOR CMU WALLS SHALL BE 8
2.	PARTITION TYPES ARE DESIGNATED ON SEE SHEET A8.0 FOR TYPES.
3.	ALL MASONRY WALLS AND INTERIOR S OR ROOF DECK ABOVE UNLESS NOTED
4.	PROVISIONS ARE MADE AT ALL FULL HE MOVEMENT OF THE BUILDING STRUCT WALL. FILL IRREGULARITIES BETWEEN INSULATION OR FIRE STOPPING MATER RESPECTIVE WALLS. SEE DETAIL ON S
5. 6.	SEE STRUCTURAL DRAWINGS FOR BRA FURNISH AND INSTALL FIRE-TREATED V STUD PARTITIONS FOR THE PROPER AT ACCESSORIES, CASEWORK, MILLWORK BOARDS, DOOR STOPS, AUDIO VISUAL
7.	GYPSUM BOARD SURFACES SHALL BE DRAWINGS AND AS DESCRIBED IN THE
Β.	MASONRY CONTROL JOINTS (CJ) AND C SHOWN ON THE FLOOR PLAN AND BUIL VENTS OR RISERS OCCUR IN SINGLE W WALLS BEARING ON THE CONCRETE FL CONCRETE FOOTINGS OR AS INDICATE
9.	"MBD" AND "TBD" INDICATE MARKER BO PRECEDES THE DESIGNATION (EXAMPL ELEVATIONS OR SPECIFICATIONS FOR
10.	
11	SCRIBE GVRSLIM WALL BOARD OF WAL



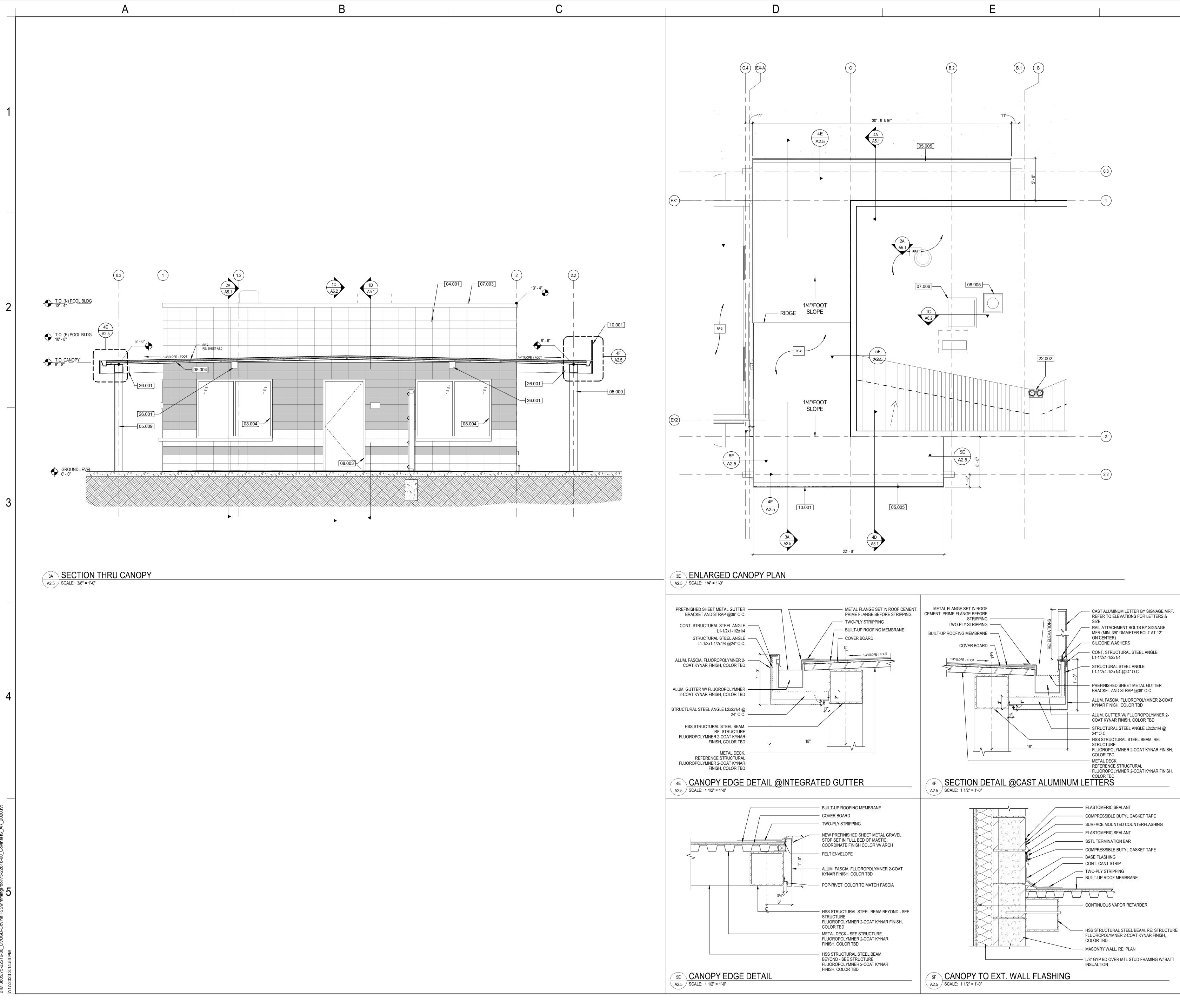


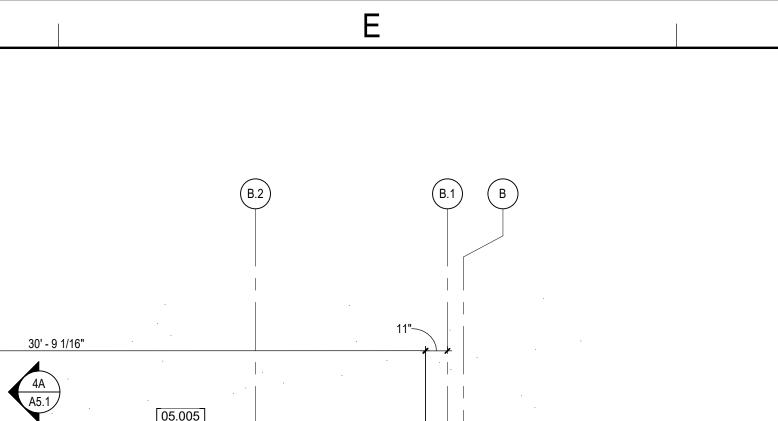


1 ENLARGED SHOWER COMPARTMENT PLAN A2.4 SCALE: 1/2" = 1'-0"

WALL TYPE TAG

REFER TO SHEET A8.0 FOR PARTITION TYPES





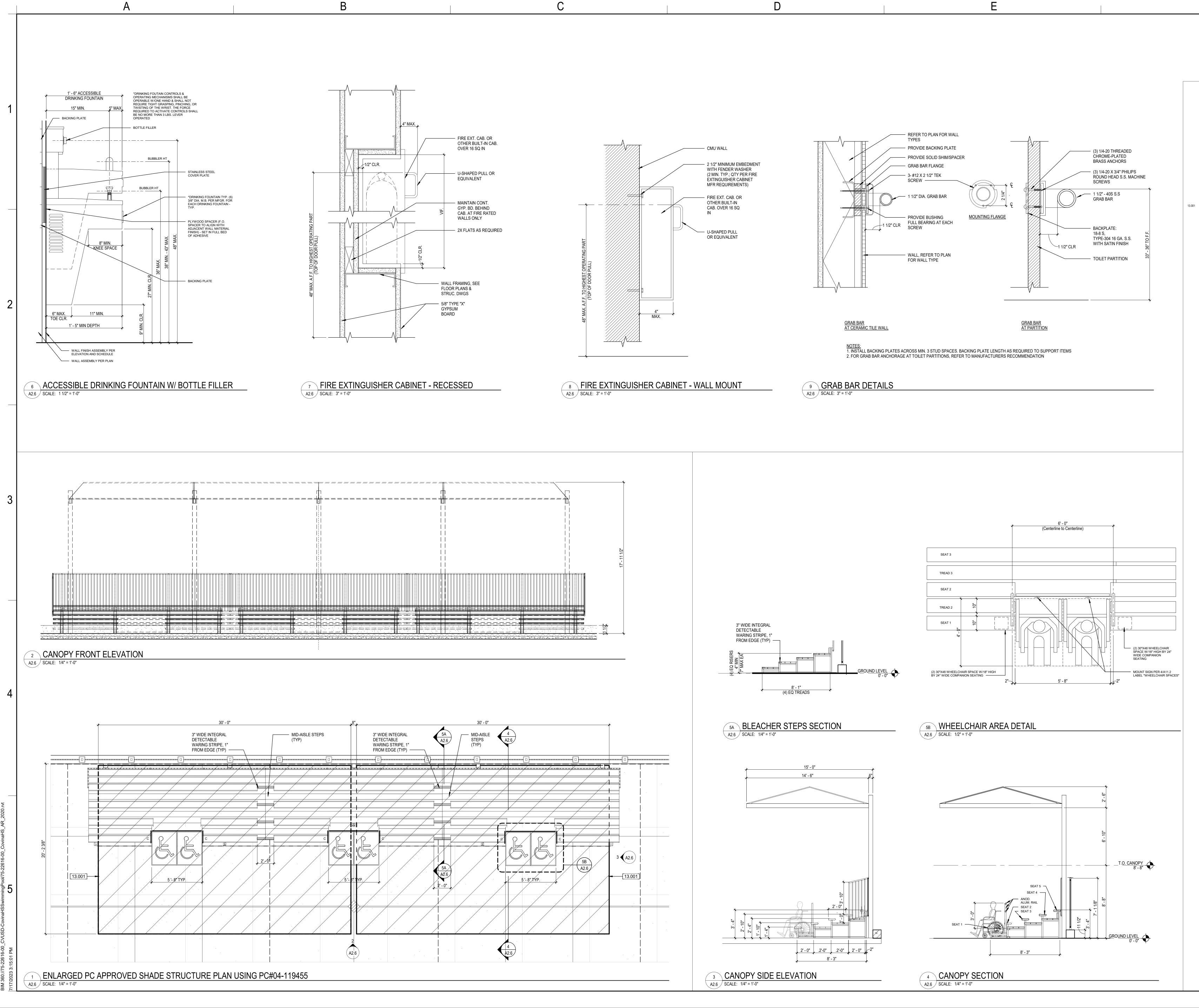


04.001 05.004 05.009 07.003 08.003 08.004 10.001 26.001

### KEYNOTES

INFILL CMU WALL - SEE 5A/A8.0 METAL DECK 1-1/2" - SEE STRUCT EXPOSED STRUCTURAL STEEL FRAMING, FLUOROPOLYMNER 2-COAT KYNAR FINISH, COLOR TBD, SEE STRUCTURE. SEE 05 12 13 FOR AESS SPECS 13 FOR AESS SPECS CMU WALL SHEET METAL PARAPET COPING CAP, MATCH EXISTING - SPEC 07 62 00 HOLLOW METAL DOOR AND FRAME EXTERIOR ALUMINUM WINDOW - SEE SCHEDULE CAST ALUMINUM LETTERS SIGNAGE - SEE 4F/A2.5 LIGHTING FIXTURE - SEE ELECTRICAL DRAWINGS





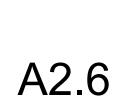












ENLARGED CANOPY PLAN & DETAILS

REVISIONS

75-22616-00

DSA A# 03-122700 DSA FILE # 19-H8

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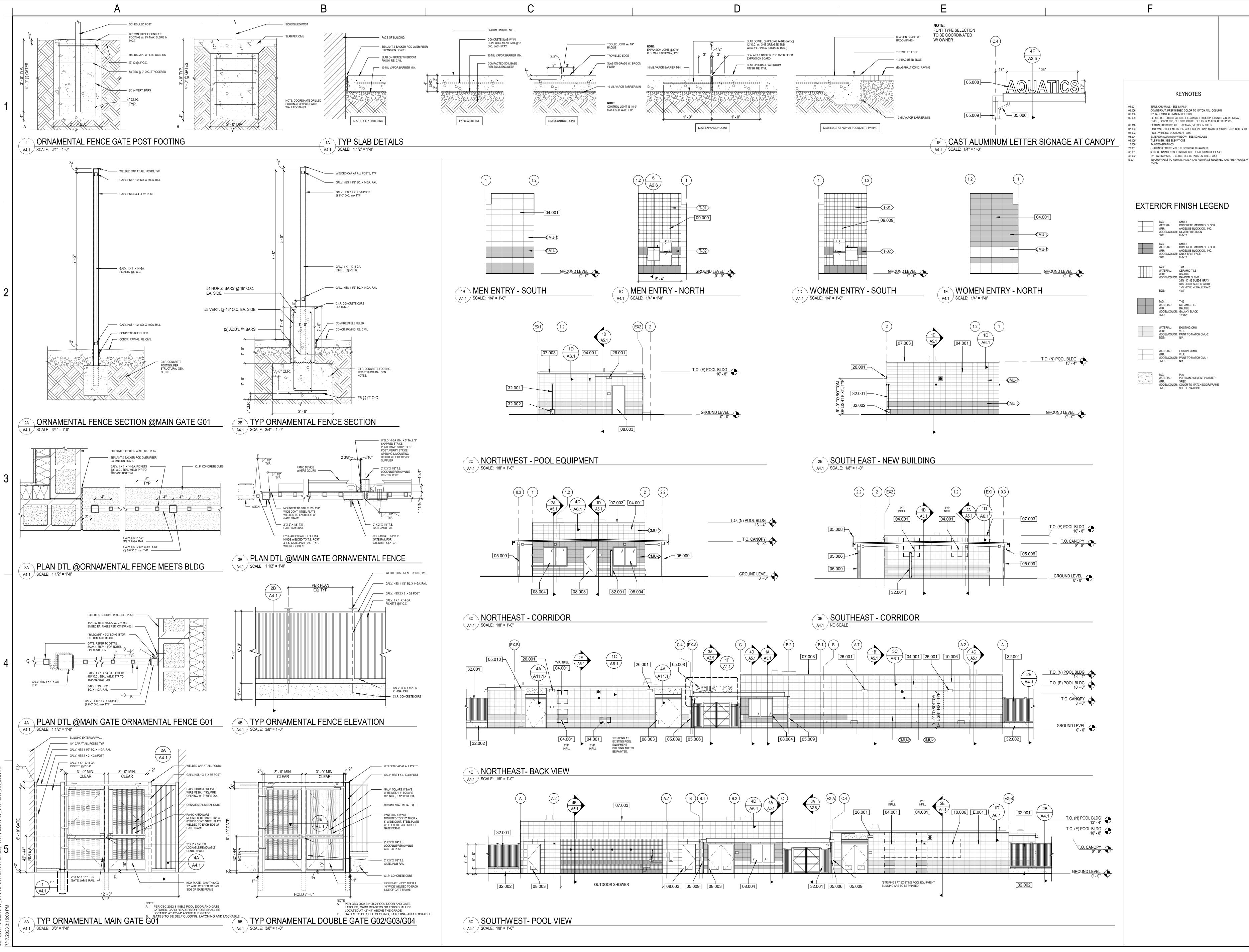


JESSE MILLER

No. C-32306

KEYNOTES

0 R C R PC APPROVED SHADE STRUCTURE. USA SHADE - 20'X30' USING PC#04-119455 



### **KEYNOTES**

DOWNSPOUT, PREFINISHED COLOR TO MATCH ADJ. COLUMN EXPOSED STRUCTURAL STEEL FRAMING, FLUOROPOLYMNER 2-COAT KYNAR FINISH, COLOR TBD, SEE STRUCTURE. SEE 05 12 13 FOR AESS SPECS EXISTING DOWNSPOUT TO REMAIN, VERIFY IN FIELD CMU WALL SHEET METAL PARAPET COPING CAP, MATCH EXISTING - SPEC 07 62 00

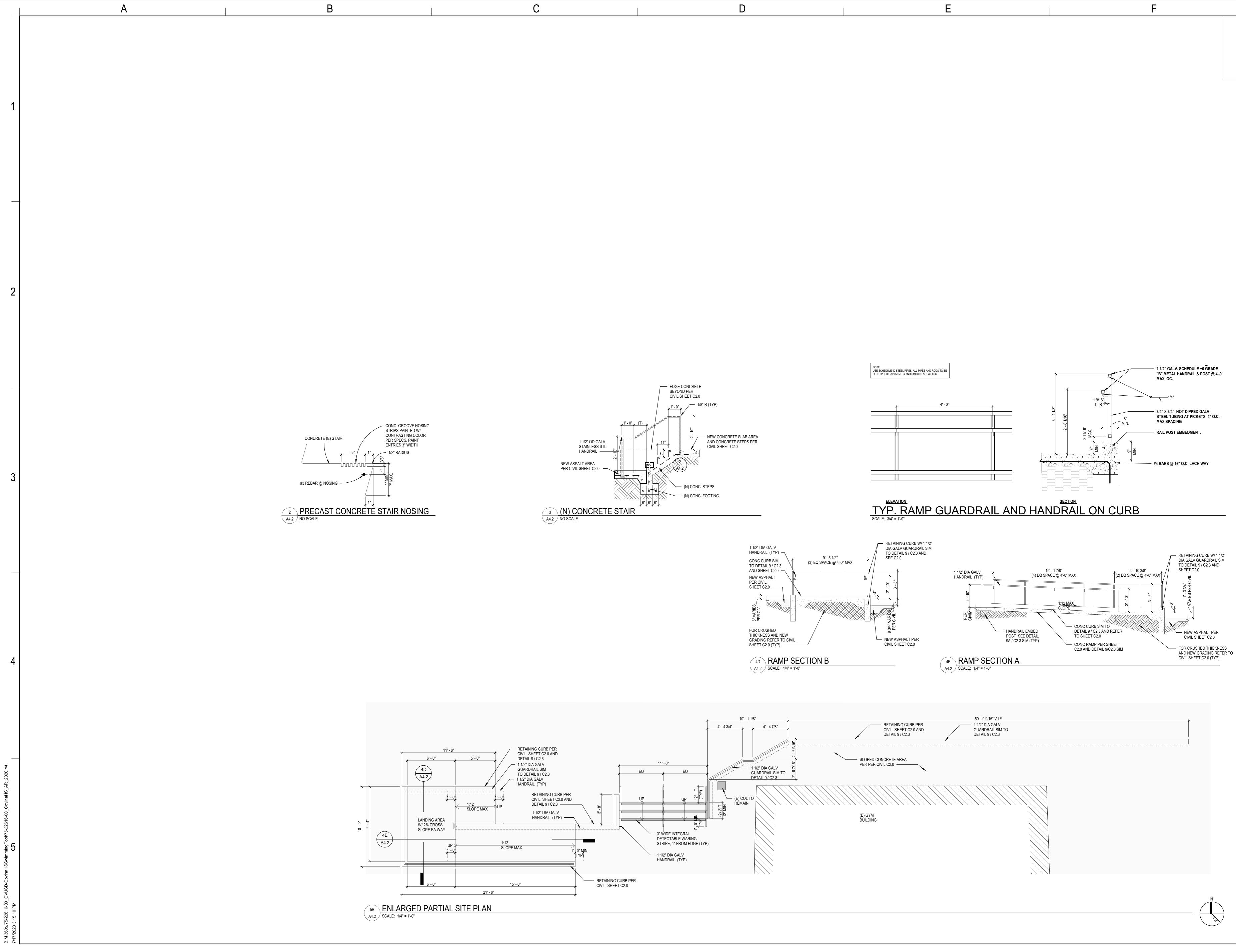
8x8x12

25% - D182 SUEDE GRAY 60% - D617 ARCTIC WHITE 15% - D180 - CHALKBOARD

MODEL/COLOR: PAINT TO MATCH CMU-1 SIZE: N/A

MFR: SPEC MODEL/COLOR: COLOR TO MATCH DOOR/FRAME SIZE: SEE ELEVATIONS





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A4.2

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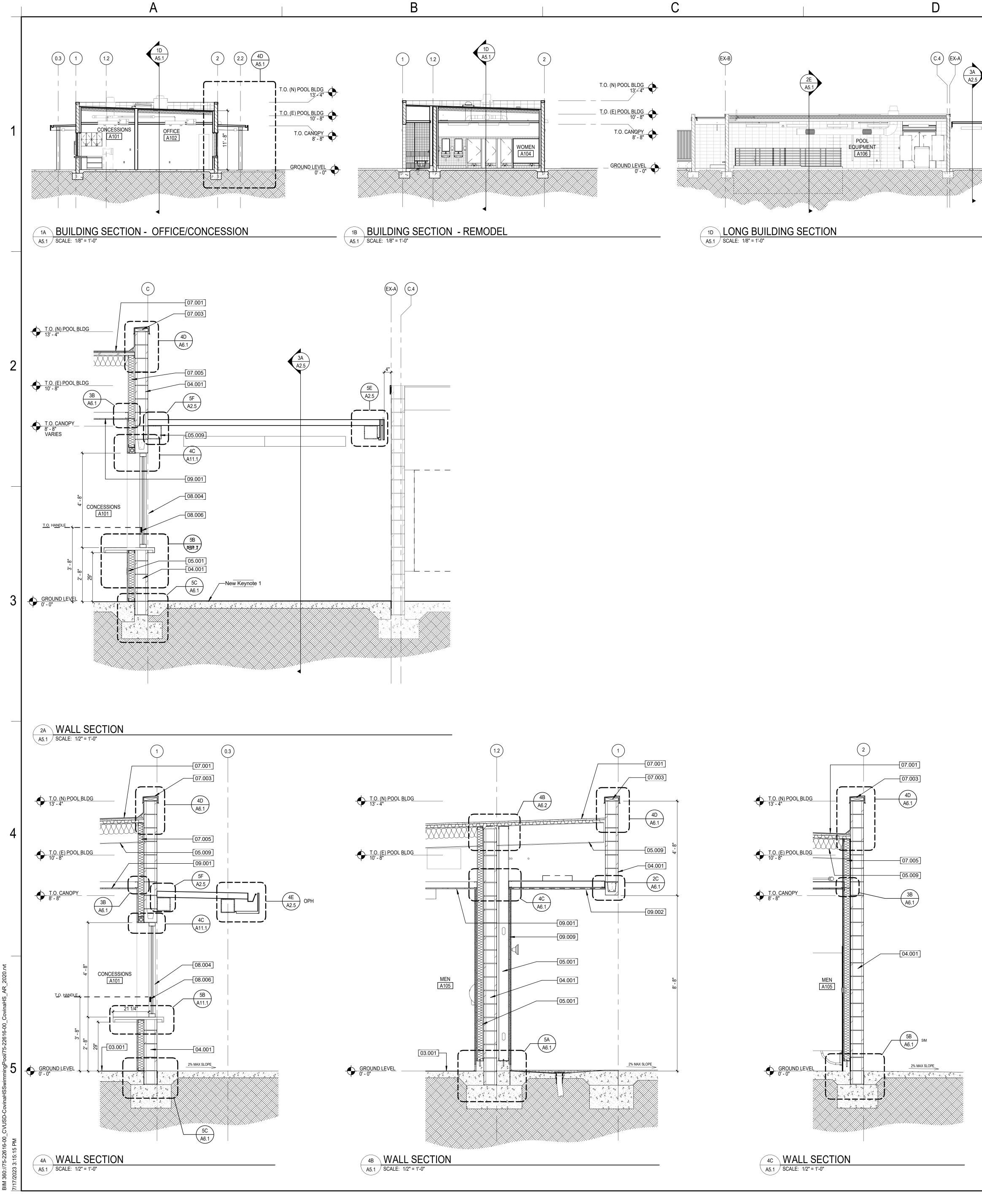
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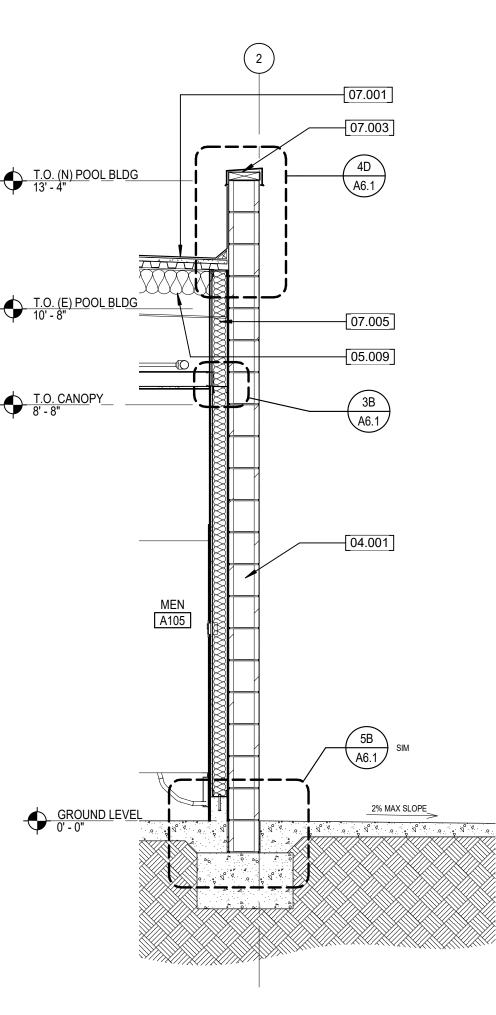
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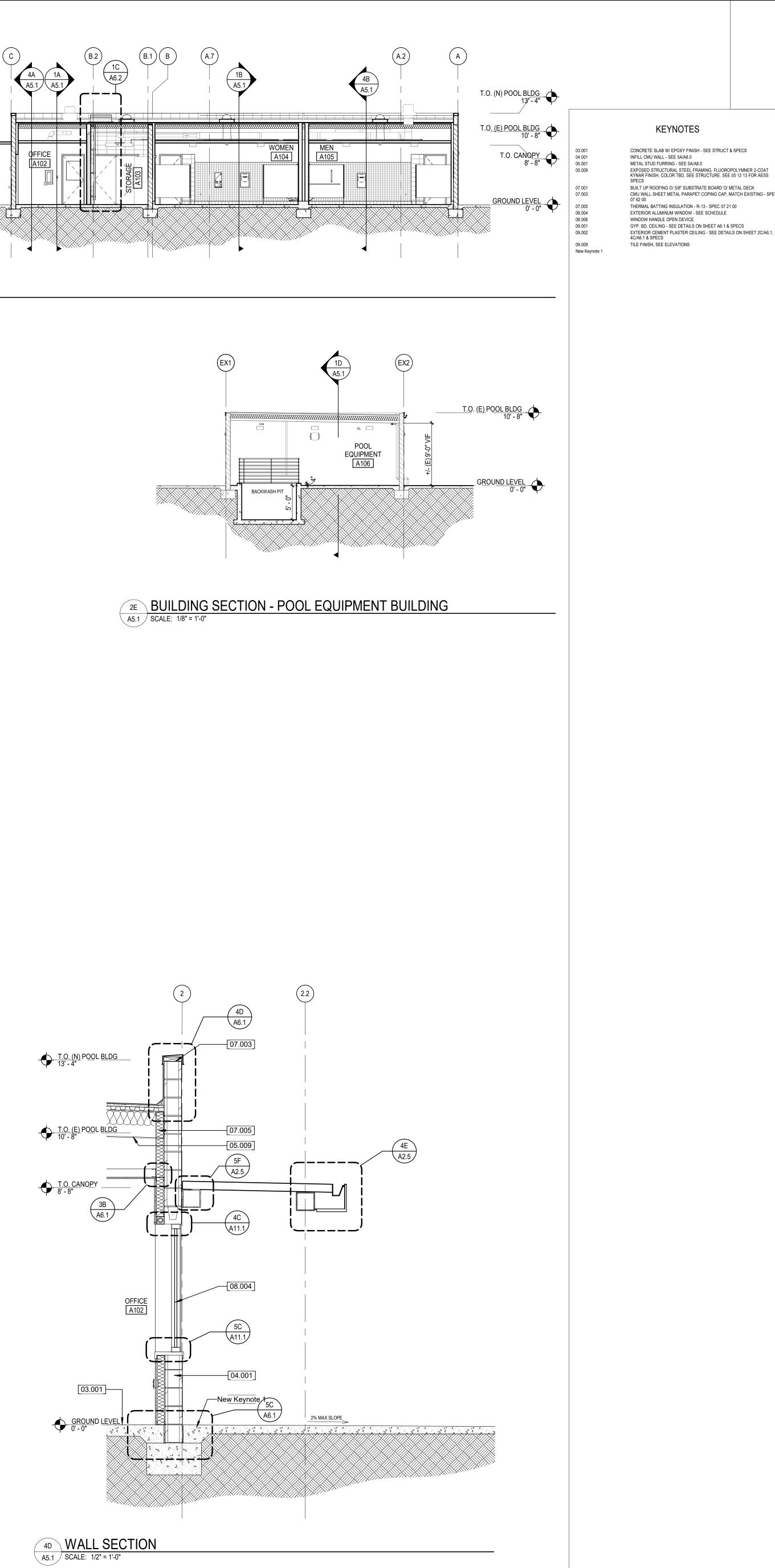
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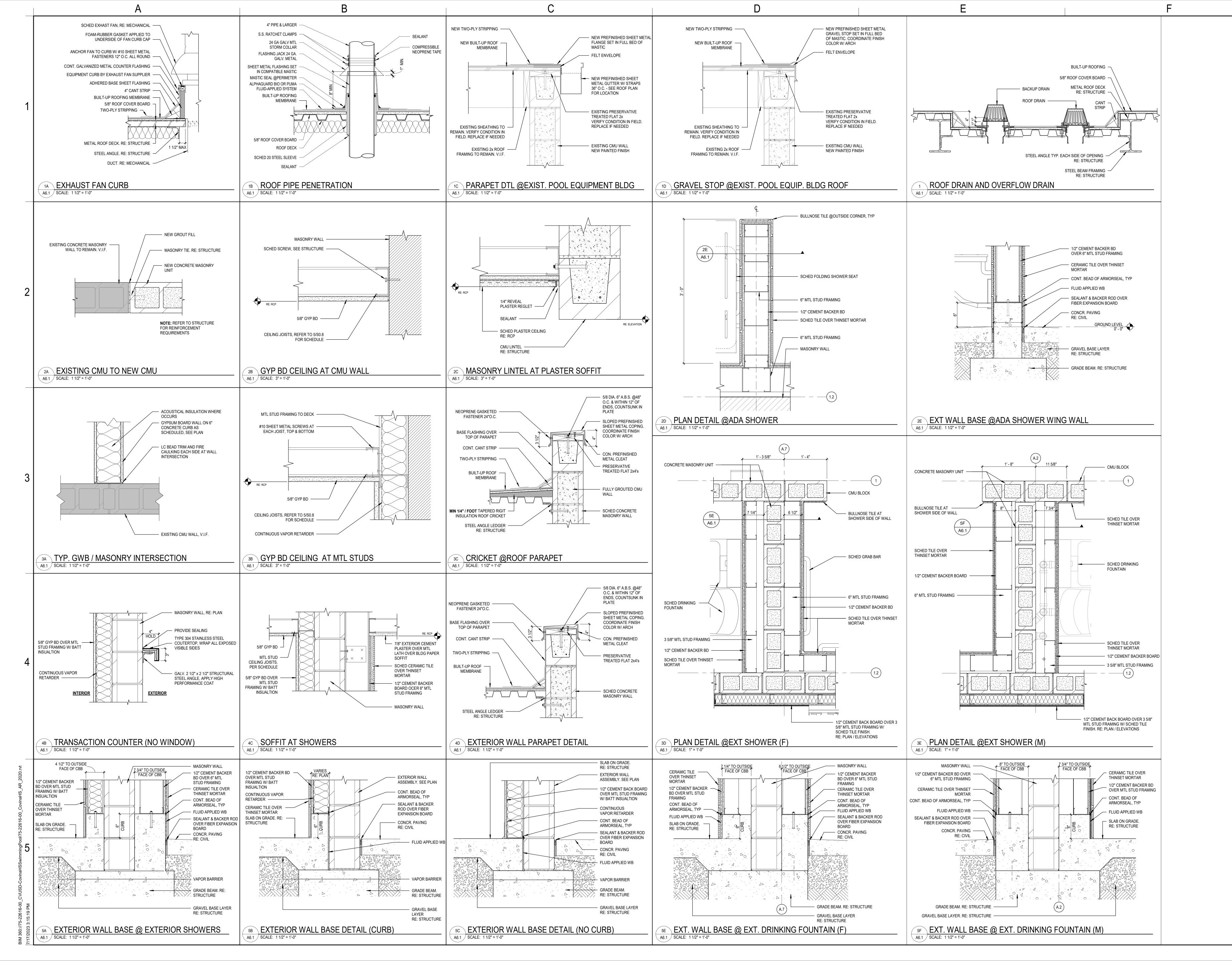


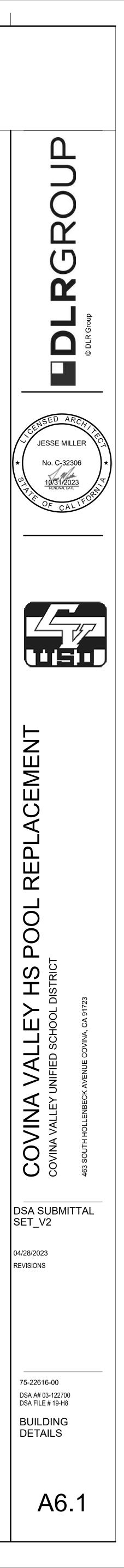
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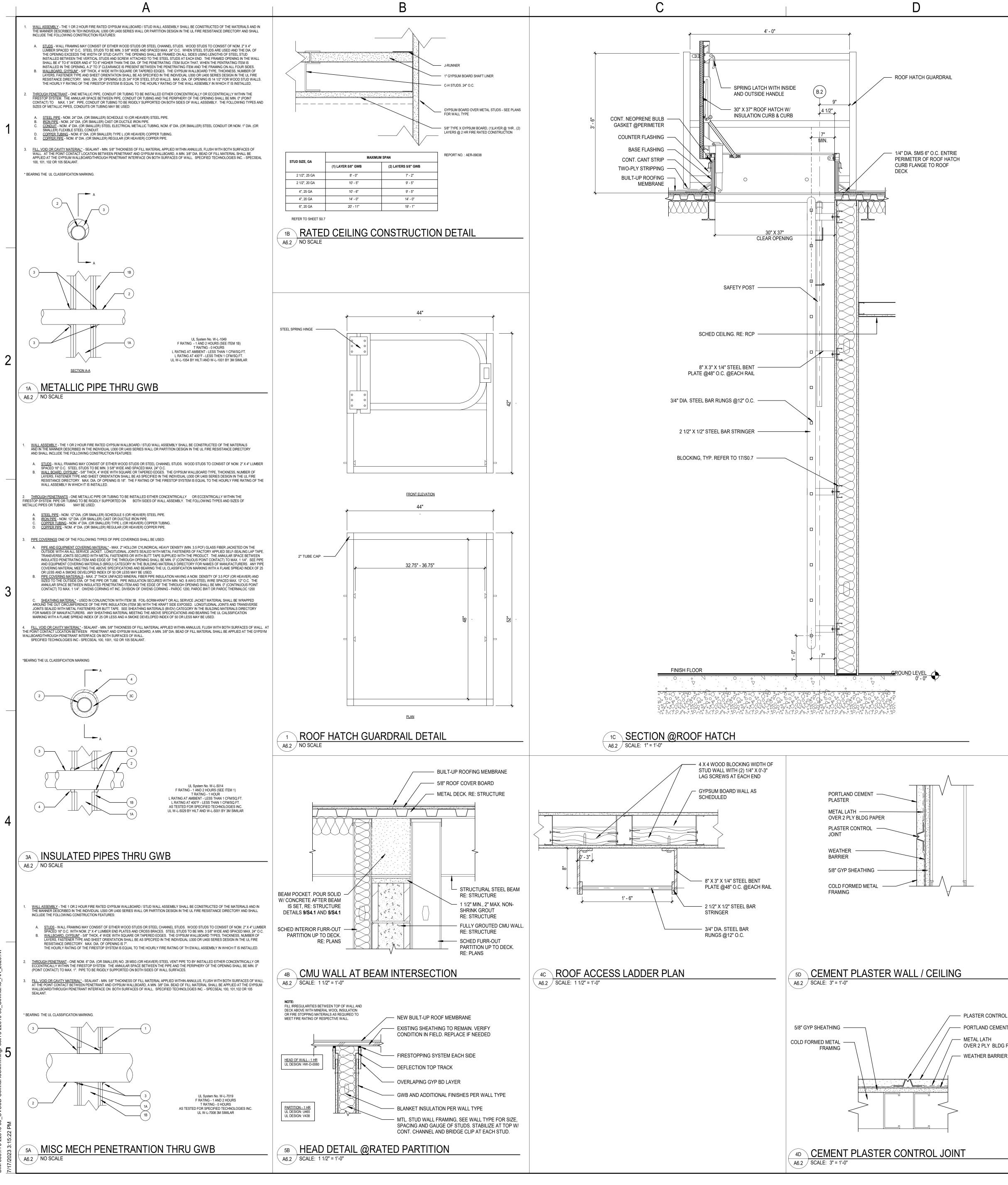
### KEYNOTES

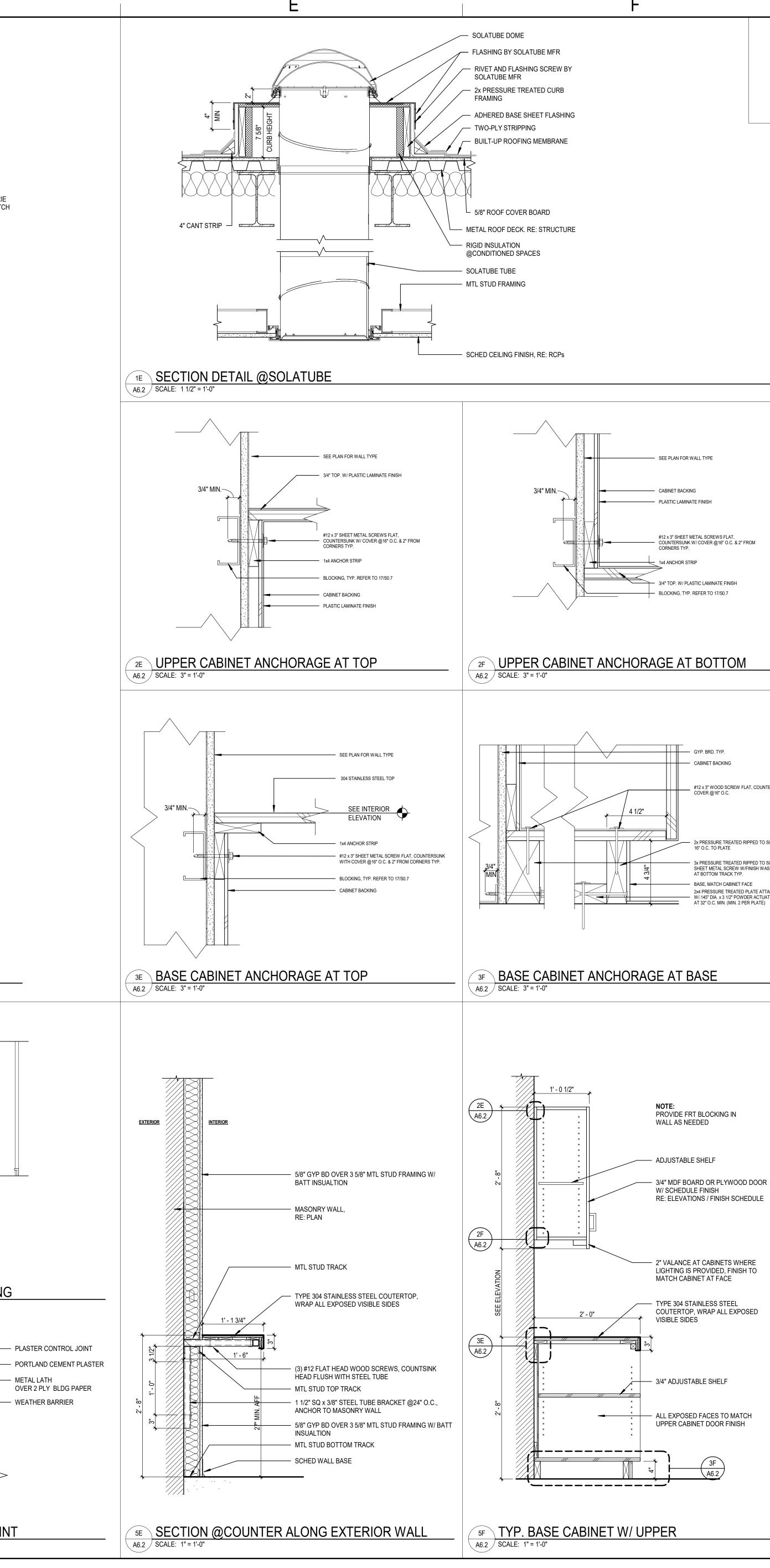
- BUILT UP ROOFING O/ 5/8" SUBSTRATE BOARD O/ METAL DECK CMU WALL SHEET METAL PARAPET COPING CAP, MATCH EXISTING SPEC 07 62 00
- EXTERIOR CEMENT PLASTER CEILING SEE DETAILS ON SHEET 2C/A6.1, 4C/A6.1 & SPECS











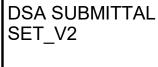
A6.2

2x4 PRESSURE TREATED PLATE ATTACH TO SLAB W/.145" DIA. x 3 1/2" POWDER ACTUATED ANCHOR AT 32" O.C. MIN. (MIN. 2 PER PLATE)

- 2x PRESSURE TREATED RIPPED TO SIZE W/ 16d @ 16" O.C. TO PLATE 3x PRESSURE TREATED RIPPED TO SIZE W/#12x4" SHEET METAL SCREW W/FINISH WASHER @16" 0.0 AT BOTTOM TRACK TYP. - BASE, MATCH CABINET FACE
- #12 x 3" WOOD SCREW FLAT, COUNTERSUNK W/ COVER @16" O.C.
- GYP. BRD. TYP CABINET BACKING

COUNTERSUNK W/ COVER @16" O.C. & 2" FROM





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BUILDING

DETAILS

A6.2

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CONTINUOUS VAPOR RETARDER 3 5/8" MTL STUD FRAMING 5/8" GYP BD R-19 BATT INSULATION CONCRETE MASONRY WALL CONCRETE SLAB. RE: STRUCTURE	
	. <u>3. 10</u>

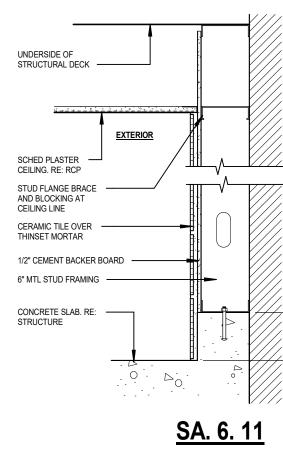
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UNDERSIDE OF STRUCTURAL DECK

16 GA. SLOTTED DEFLECTION TOP TRACK PER STRUCT. 1/S0.8

SCHED CEILING

STUD FLANGE BRACE --AND BLOCKING AT CEILING LINE



В

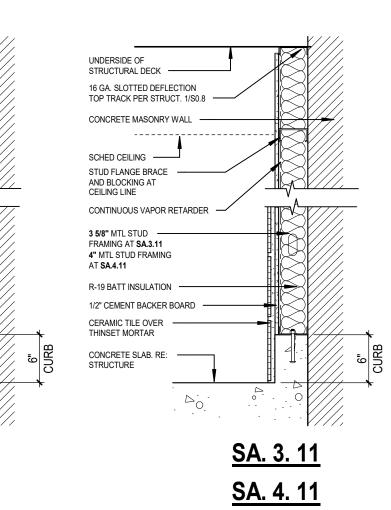
### WALL ASSEMBLIES

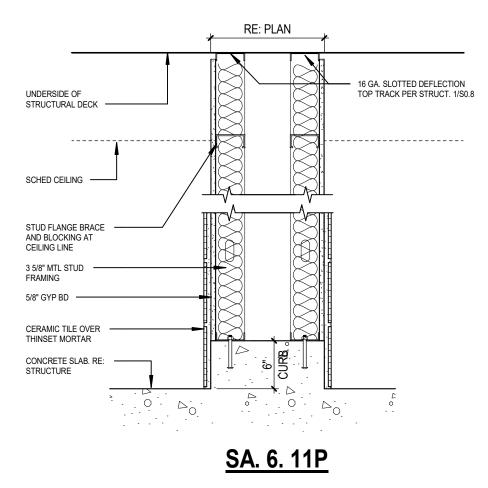
**RF1 - ROOF ASSEMBLY** ROOF CLASSIFICATION TYPE B

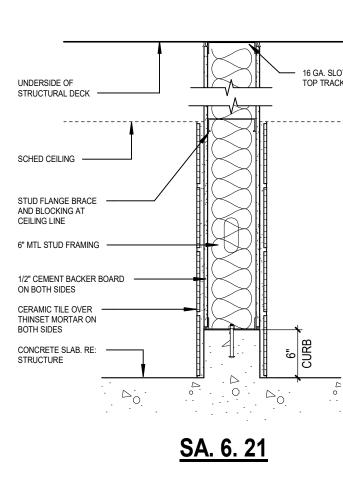
**ROOF ASSEMBLIES** 

A

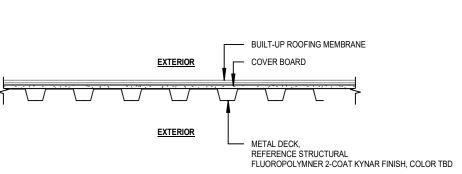
BUILT-UP ROOFING MEMBRANE - 5/8" ROOF COVER BOARD EXTERIOR UUUU METAL DECK, REFERENCE STRUCTURAL INTERIOR CONDITIONED R-30 BATT INSULATION

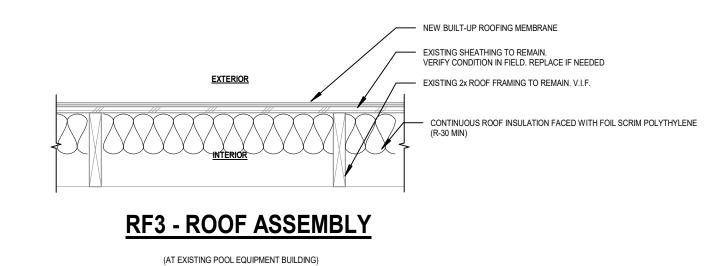


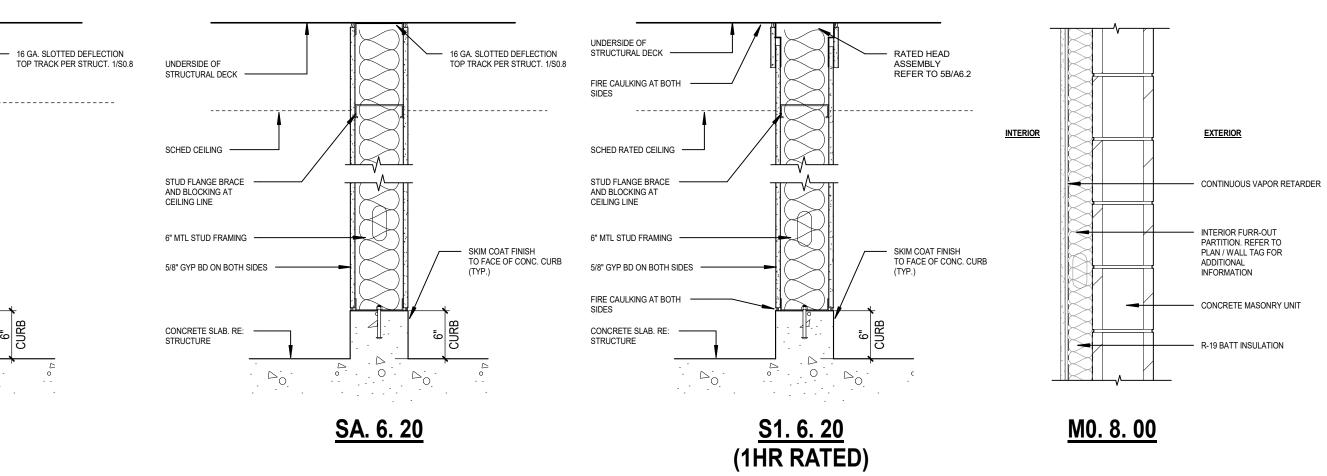




## **RF2 - CANOPY ASSEMBLY**







A8.0

TYPES, EXTERIOR

WALL ASSEMBLIES AND ROOF TYPES

75-22616-00 DSA A# 03-122700 DSA FILE # 19-H8 PARTITION

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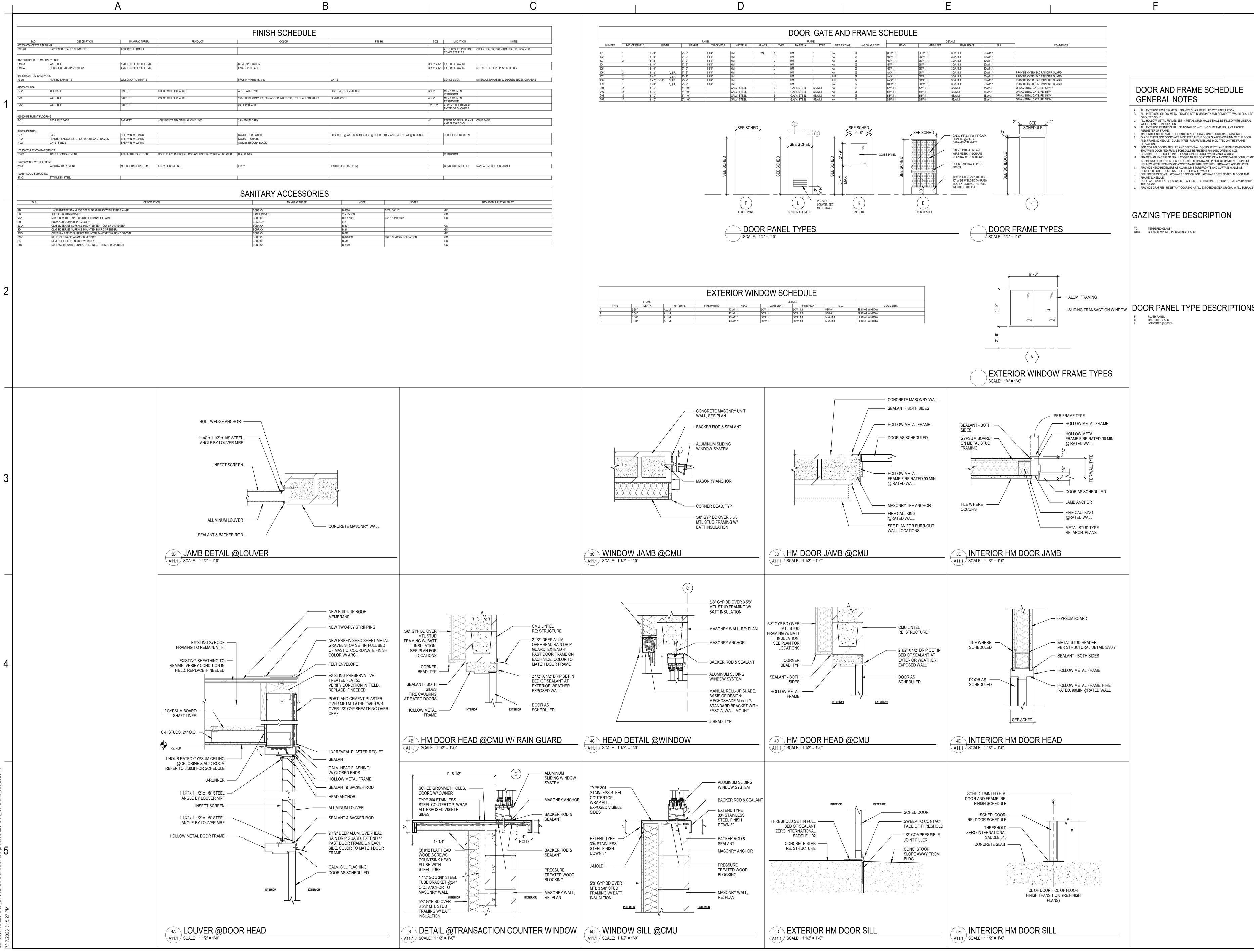
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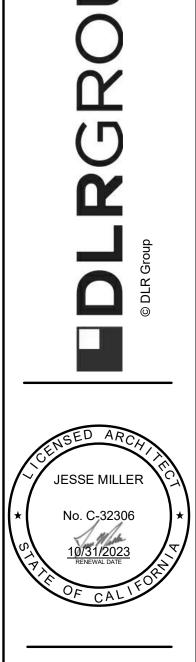
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 ALL INTERIOR HOLLOW METAL FRAMES SET IN MASONRY AND CONCRETE WALLS SHALL BE GROUTED SOLID. ALL HOLLOW METAL FRAMES SET IN METAL STUD WALLS SHALL BE FILLED WITH MINERAL WOOL BLANKET INSULATION.

AND FRAME SCHEDULE. GLASS TYPES FOR FRAMES ARE INDICATED ON THE FRAME ELEVATIONS. FOR COILING DOORS, GRILLES AND SECTIONAL DOORS, WIDTH AND HEIGHT DIMENSIONS SHOWN IN DOOR AND FRAME SCHEDULE REPRESENT FINISHED OPENING SIZE. CONTRACTOR TO COORDINATE EXACT SIZE OF DOOR WITH MANUFACTURER. FRAME MANUFACTURER SHALL COORDINATE LOCATIONS OF ALL CONCEALED CONDUIT AND J-BOXES REQUIRED FOR SECURITY SYSTEM HARDWARE PRIOR TO MANUFACTURING OF HOLLOW METAL FRAMES AND COORDINATE WITH SECURITY HARDWARE AND DEVICES. PROVIDE HEAD RECEIVERS AT ALUMINUM STOREFRONTS AND CURTAIN WALLS AS REQUIRED FOR STRUCTURAL DEFLECTION ALLOWANCE. SEE SPECIFICATIONS HARDWARE SECTION FOR HARDWARE SETS NOTED IN DOOR AND

DOOR AND GATE LATCHES, CARD READERS OR FOBS SHALL BE LOCATED AT 42"-44" ABOVE PROVIDE GRAFFITI - RESISTANT COARING AT ALL EXPOSED EXTERIOR CMU WALL SURFACES



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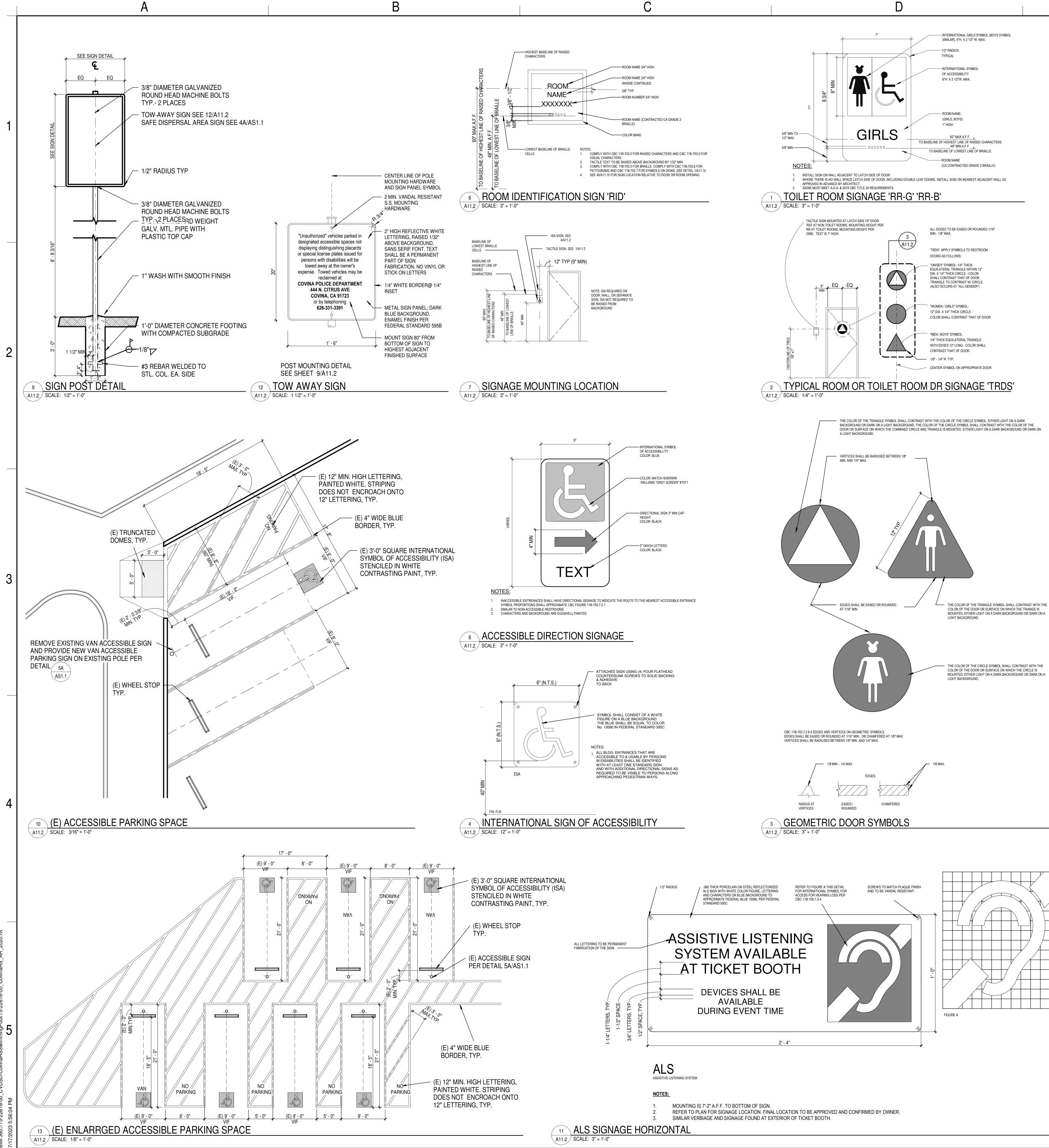




75-22616-00 DSA A# 03-122700 DSA FILE # 19-H8 FINISH, DOOR AND WINDOW

SCHEDULES AND DETAILS

A11.1

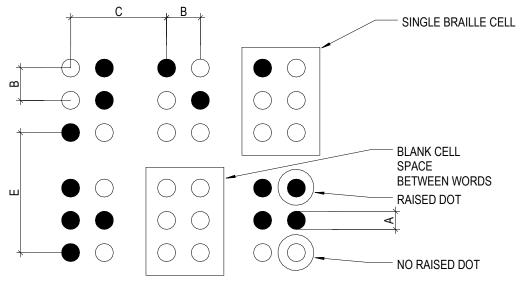


	E
AL GIRLS SYMBOL (BOYS SYMBOL	RAISED CHARACTERS, BRAILLE, AND PICTORIAL SYMBOL SIGNS
X 2 1/2" W. MAX.	1.CHARACTER TYPE: CHARACTERS ON SIGNS SHALL BE RAISED 1/32"( 0.794 mm) MINIMUM AND SHALL
AL SYMBOL	BE SANS SERIF UPPERCASE CHARACTERS, AND SHALL NOT BE ITALIC, OBLIQUE, SCRIPT, HIGHLY
LITY MAX.	DECORATIVE OR OF OTHER UNUSUAL FORM. ACCOMPANIED BY CONTRACTED (GRADE 2) BRAILLE.
	(SEE NOTE 6 BELOW) 2019 CBC 11B-703.2 , 703.2.1, 703.2.2, AND 703.2.3
	2.CHARACTER HEGHT: CHARACTER HEIGHT MEASURED VERTICALLY FROM THE BASELINE OF THE CHARACTER
	SHALL BE 5/8 INCH (15.9 MM) MINIMUM AND 2 INCHES (51 MM) MAXIMUM BASED ON THE HEIGHT OF THE UPPER CASE LETTER "I".
	2019 CBC 11B-703.2.5
A.F.F. ∠ E OF RAISED CHARACTERS \F.F. ∠ ST LINE OF BRAILLE	<b>3. PICTOGRAMS</b> PICTOGRAMS SHALL HAVE A FIELD HEIGHT OF 6 INCHES (152 MM) MINIMUM. CHARACTERS AND BRAILLE SHALL NOT BE LOCATED IN THE PICTOGRAM FIELD. <b>2019 CBC 11B-703.6.1</b>
red grade 2 braille)	PICTOGRAMS AND THEIR FIELD SHALL HAVE A NON-GLARE FINISH. PICTOGRAMS SHALL CONTRAST WITH THEIR FIELD WITH EITHER A LIGHT PICTOGRAM ON A DARK FIELD OR A DARK PICTOGRAM ON A LIGHT FIELD. <b>2019 CBC 11B-703.6.2</b>
NEAREST ADJACENT WALL AS	PICTOGRAMS SHALL HAVE TEXT DESCRIPTORS LOCATED DIRECTLY BELOW THE PICTOGRAM FIELD. TEXT DESCRIPTORS SHALL COMPLY WITH 2019 CBC 11B-703.2, 11B-703.3, AND 11B-703.4. 2019 CBC 11B-703.6.3
ED OR ROUNDED 1/16" S TO RESTROOM	<ul> <li>4.CHARACTER PLACEMENTCHARACTER SPACING SHALL BE MEASURED BETWEEN THE TWO CLOSEST POINTS OF ADJACENT RAISED CHARACTERS WITHIN A MESSAGE, EXCLUDING WORD SPACES. WHERE CHARACTERS HAVE RECTANGULAR CROSS SECTIONS SPACING BETWEEN INDIVIDUAL RAISED CHARACTERS SHALL BE 1/8 INCH (3.2 MM) MINIMUM AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM. WHERE CHARACTERS HAVE OTHER CROSS SECTIONS, SPACING BETWEEN INDIVIDUAL RAISED CHARACTERS SHALL BE 1/16 INCH (1.6 MM) MINIMUM AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM AT THE BASE OF THE CROSS SECTIONS, AND 1/8 INCH (3.2 MM) MINIMUM AND 4 TIMES THE RAISED CHARACTERS STROKE WIDTH MAXIMUM AT THE TOP OF THE CROSS SECTIONS. CHARACTERS SHALL BE SEPARATED CHARACTERS STROKE WIDTH MAXIMUM AT THE TOP OF THE CROSS SECTIONS. CHARACTERS SHALL BE SEPARATED FROM THE RAISED BORDERS AND DECORATIVE ELEMENTS 3/8 INCH (9.5 MM) MINIMUM.</li> <li>2019 CBC 11B-703.2.7</li> </ul>
THICK E WITHIN 12" .E - COLOR	LINE SPACING BETWEEN THE BASELINES OF SEPARATE LINES OF RAISED CHARACTERS WITHIN A MESSAGE SHALL BE 135 PERCENT MINIMUM AND 170 PERCENT MAXIMUM OF THE RAISED CHARACTER HEIGHT. 2019 CBC 11B-703.2.8
T OF DOOR. ST W/ CIRCLE. GENDER")	FORMAT OF TEXT SHALL BE IN A HORIZONTAL FORM. 2019 CBC 11B-703.2.9
30L: RCLE - AST THAT OF DOOR	TACTILE CHARACTERS ON SIGNS SHALL BE LOCATED 48 INCHES (1219 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE, MEASURED FROM THE BASELINE OF THE LOWEST BRAILLE CELLS AND 60 INCHES (1524 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE, MEASURED FROM THE BASELINE OF THE HIGHEST LINE OF RAISED CHARACTERS. 2019 CBC 11B-703.4.1
AL TRIANGLE - COLOR SHALL OOR PPROPRIATE DOOR	WHERE TACTILE SIGN IS PROVIDED AT A DOOR, THE SIGN SHALL BE LOCATED ALONGSIDE THE DOOR AT THE LATCH SIDE. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH ONE ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE LEAF. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH TWO ACTIVE LEAFS, THE SIGN SHALL BE LOCATED TO THE RIGHT OF THE RIGHT HAND DOOR. WHERE THERE IS NO WALL SPACE AT THE LATCH SIDE OF A SINGLE DOOR OR AT THE RIGHT SIDE OF DOUBLE DOORS, SIGNS SHALL BE LOCATED ON THE NEAREST ADJACENT WALL. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR SPACE OF 18 INCHES (457 MM) MINIMUM BY 18 INCHES (457 MM) MINIMUM, CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITIONS AND 45 DEGREE OPEN
NAGE 'TRDS'	POSITION. WHERE PERMANENT IDENTIFICATION SIGNAGE IS PROVIDED FOR ROOMS AND SPACES THEY SHALL BE LOCATED ON THE APPROACH SIDE OF THE DOOR AS ONE ENTERS THE ROOM OR SPACE. SIGNS THAT IDENTIFY EXISTS SHALL BE LOCATED ON THE APPROACH SIDE OF THE DOOR AS ONE EXITS THE ROOM OR SPACE. <b>2019 CBC 11B-</b> <b>703.4.2</b>
CIRCLE SYMBOL, EITHER LIGHT ON A DARK BOL SHALL CONTRAST WITH THE COLOR OF THE EITHER LIGHT ON A DARK BACKGROUND OR DARK ON	5.CHARACTER PROPORTIONS: RAISED CHARACTERS ON SIGNS SHALL BE SELECTED FROM FONTS WHERE THE WIDTH OF THE UPPER CASE LETTER "O" IS 60 PERCENT MINIMUM AND 110 PERCENT MAXIMUM OF THE HEIGHT OF THE UPPERCASE LETTER "I". STROKE THICKNESS OF THE UPPERCASE LETTER "I" SHALL BE 15 PERCENT MAXIMUM OF THE HEIGHT OF THE HEIGHT OF THE CHARACTER. 2019 CBC 11B-703.2.4 AND 2019 CBC 11B-703.2.6
	6. BRAILLE:BRAILLE SHALL BE CONTRACTED GRADE 2 AND SHALL COMPLY WITH SECTIONS 11B-703.3 AND 11B- 703.4.
	BRAILLE DOTS SHALL HAVE A DOMED OR ROUNDED SHAPE AND SHALL COMPLY WITH TABLE 11B-703.3.1. THE INDICATION OF AN UPPERCASE LETTER OR LETTERS SHALL ONLY BE USED BEFORE THE FIRST WORD OF SENTENCES, PROPER NOUNS AND NAMES, INDIVIDUAL LETTERS OF THE ALPHABET, INITIALS, AND ACRONYMS. 2019 CBC 11B-703.3.1

BRAILLE SHALL BE POSITIONED BELOW THE CORRESPONDING TEXT IN A HORIZONTAL FORMAT, FLUSH LEFT OR CENTERED. IF TEXT IS MULTI-LINED, BRAILLE SHALL NE PLACED BELOW THE ENTIRE TEXT. BRAILLE SHALL BE SEPARATED 3/8 INCH (9.5 MM) MINIMUM AND 1/2 INCH (12.7 MM) MAXIMUM FROM ANY OTHER TACTILE CHARACTERS AND 3/8 INCH (9.5 MM) MINIMUM FROM RAISED BORDERS AND DECORATIVE ELEMENTS. EXCEPTION: BRAILLE PROVIDED ON ELEVATOR CAR CONTROLS SHALL BE SEPARATED 3/16 INCH (4.8 MM) MINIMUM AND SHALL BE LOCATED EITHER DIRECTLY BELOW THE CORRESPONDING RAISED CHARACTERS OR SYMBOLS. 2019 CBC 11B-703.3.2

CBC 2019 TABLE 11B-703.3.1 MINIMUM IN INCHES MEASUREMENT RANGE MAXIMUM IN INCHES **A** DOT BASE DIAMETER 0.059 (1.5 MM) TO 0.063 (1.6 MM) **B** DISTANCE BETWEEN TWO DOTS IN THE SAME CELL 0.100 (2.5 MM) C DISTANCE BETWEEN CORRESPONDING DOTS IN ADJACENT CELLS 0.300 (7.6 MM) DOT HEIGHT 0.025 (0.6 MM) TO 0.037 (0.9 MM)

**E** DISTANCE BETWEEN CORRESPONDING DOTS FROM ONE CELL DIRECTLY BELOW 0.395 (10 MM) TO 0.400 (10.2 MM) 1. MEASURED CENTER TO CENTER



VISUAL CHARACTERS

7. FINISH AND CONTRAST: HARACTERS AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH. CHARACTERS SHALL CONTRAST WITH THEIR BACKGROUND WITH EITHER LIGHT CHARACTERS ON A DARK BACKGROUND OR A DARK BACKGROUND OR DARK CHARACTERS ON A LIGHT BACKGROUND. 2019 11B-703.5.1 8. PROPORTIONS CHARACTERS SHALL BE SELECTED FROM FONTS WHERE THE WIDTH OF THE UPPERCASE LETTER

"O" IS 60 PERCENT MINIMUM AND 110 PERCENT MAXIMUM OF OF THE HEIGHT OF THE UPPERCASE LETTER "I". 2019 STROKE THICKNESS OF THE UPPERCASE LETTER "I" SHALL BE 10 PERCENT MINIMUM AND 20 PERCENT MAXIMUM OF

CBC 11B-703.5.4 THE HEIGHT OF THE CHARACTER. 2019 CBC 11B-703.5.7 DECORATIVE, OR OF OTHER UNUSUAL FORM. 2019 CBC 11B-703.5.3

CHARACTERS SHALL BE UPPERCASE AND LOWERCASE OR A COMBINATION OF BOTH. 2019 CBC 11B-703.5.2 CHARACTERS SHALL BE CONVENTIONAL IN FORM. CHARACTERS SHALL NOT BE ITALIC, OBLIQUE, SCRIPT, HIGHLY

9. CHARACTER HEIGHT MINIMUM CHARACTER HEIGHT SHALL COMPLY WITH TABLE 11B-703.5.5 VIEWING DISTANCE SHALL BE MEASURED AS THE HORIZONTAL DISTANCE BETWEEN THE CHARACTER AND AN OBSTRUCTION

PREVENTING FURTHER APPROACH TOWARDS THE SIGN. CHARACTER HEIGHT SHALL BE BASED ON THE UPPERCASE LETTER "I".

EXCEPTION: WHERE PROVIDED, FLOOR PLANS PROVIDING EMERGENCY PROCEDURES INFORMATION IN ACCORDANCE WITH TITLE 19 SHALL NOT BE REQUIRED TO COMPLY. 2019 CBC 11B-703.5.5

CHARACTER SPACING SHALL BE MEASURED BETWEEN THE TWO CLOSEST POINTS OF ADJACENT CHARACTERS, EXCLUDING WORD SPACES. SPACING BETWEEN INDIVIDUAL CHARACTERS SHALL BE 10 PERCENT AND 35 PERCENT

MAXIMUM OF CHARACTER HEIGHT. 2019 CBC 11B-703.5.8

SPACING BETWEEN THE BASELINES OF SEPARATE LINES OF CHARACTERS WITHIN A MESSAGE SHALL BE 135 PERCENT MINIMUM AND 170 PERCENT MAXIMUM OF THE CHARACTER HEIGHT. TEXT SHALL BE IN A HORIZONTAL

40 INCHES (1015 MM) LESS THAN 72 INCHES (1830 MM) 5/8 INCH (16 MM) TO LESS THAN OR EQUAL 72 INCHES (1830) AND GREATER 5/8 INCH (16 MM) PLUS 1/8 INCH (3.2 MM) PER FOOT TO 70 INCHES (1780 MM) (305 MM) OF VIEWING DISTANCE ABOVE 72 INCHES (1830 MM)

LESS THAN 21 FEET (6400 MM) 3 INCHES (75 MM)

11. ATTACH SIGN USING TAMPER PROOF COUNTERSUNK SCREWS TO SOLID BACKING & ADHESIVE TO BACK

12. PLATE OF 1/8" THICK PHOTO SENSITIZED ACRYLIC ETCHED TO FORM A SINGLE PLAQUE. SIGNS WILL BE (2) COLOR SIGN WITH LIGHT BACKGROUND & DARK CHARACTERS. COLORS TO BE DETERMINED BY OWNER.

GRATER THAN 120 INCHES 21 FEET (6400 MM) AND GREATER 3 INCHES (75 MM) PLUS 1/8 INCH (3.2 MM) PER FOOT

(4570 MM)

(6400 MM)

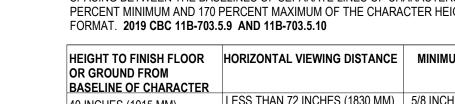
2 INCHES (51 MM) PLUS 1/8 INCH (3.2 MM) PER FOOT (305 MM) OF VIEWING DISTANCE ABOVE 180 INCHES

(305 MM) OF VIEWING DISTANCE ABOVE 21 FEET

HEIGHT TO FINISH FLOOR HORIZONTAL VIEWING DISTANCE MINIMUM CHARACTER HEIGHT

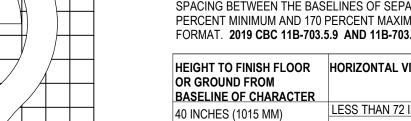
FORMAT. 2019 CBC 11B-703.5.9 AND 11B-703.5.10 OR GROUND FROM

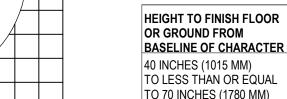
GRATER THAN 70 INCHES LESS THAN 180 INCHES (4570 MM) 2 INCHES (51 MM)



(1780 MM) TO LESS THAN OR 180 INCHES (4570 MM AND

EQUAL TO 120 INCHES (3050 GREATER





MM)

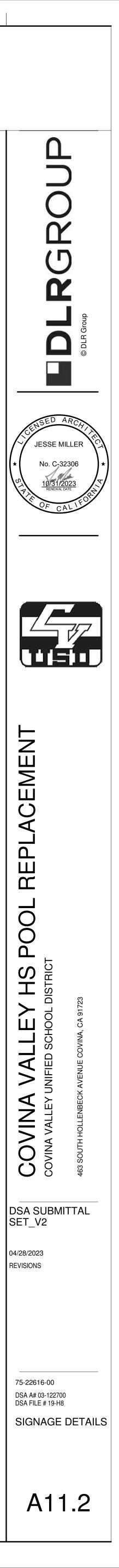
(3050 MM)

10. NOT USED

A11.2 SCALE: 3" = 1'-0"

NOTES

1. SIGNS MUST NOT BE INSTALLED BEHIND OBSTRUCTIONS & THE READER MUST BE ABLE TO APPROACH THE SIGN WITHIN WITHOUT BEING HIT BY THE SWING OF A DOOR OR ENCOUNTERING ANY PROTRUDED OBJECTS. 2. ALL ROOM LOCATION OF SIGNAGE SHALL BE REVIEWED AND APPROVED BY OWNER BEFORE INSTALLATION. **SIGNAGE KEYNOTES** 





π .			
	<ul> <li>A. ROOM FINISH S</li> <li>B. INTERIOR FINIS</li> <li>C. NOT ALL FLOOF FINISH SCHEDL</li> <li>D. FLOOR PATTEF</li> <li>BE MADE FOR I MAINTAINED.</li> <li>E. FOR FLOOR TIL THAT EQUAL LE</li> </ul>	SH PLAN GENER R AND WALL FIN ULE FOR FLOOR RN DIMENSIONS LAYOUT AND TC	AL NOTES APPL NISHES ARE NOT AND WALL FINI AND LOCATION MINIMIZE WAS
	FINISH	PLAN	LEG
	*		FLOOR FINISH
	<u> </u>	$\geq$	FINISH KEY TA SCHEDULE AN SCHEDULE SH
	F B W		Floor Finish Base Finish Wall Finish
			MILLWORK
	XXX	$\langle $	SANITARY ACC SCHEDULE ON

Е

## SH PLAN

F

OTES APPLY TO ALL ROOM FINISH SCHEDULE SHEETS. TES APPLY TO ALL INTERIOR FINISH PLAN SHEETS. ARE NOTED ON THE INTERIOR FINISH PLANS. SEE ROOM /ALL FINISHES NOT NOTED. DCATIONS ARE APPROXIMATE. MINOR ADJUSTMENTS MAY IZE WASTE AS LONG AS THE DESIGN INTENT IS LAYOUT AS NECESSARY TO AVOID USING CUT WIDTHS A TILE AT ROOM PERIMETER.

### GEND

FINISH TRANSITION SYMBOL

EY TAG REFER TO FINISH LE AND SANITARY ACCESSORIES LE SHEET A12.1 INISH

RY ACCESSORIES TAG PER ULE ON SHEET A11.1



	Α Ι		B	C	D
LIST OF	ABBREVIATIONS	LIST C	F ABBREVIATIONS (CONT'D)	PROJECT DESIGN CRITERIA	DEMOLITION
ADD'L. ALT. ACI	ADDITIONAL ALTERNATE AMERICAN CONCRETE INSTITUTE	RO. R.O.	ROUGH ROUGH OPENING	1. BASIC DESIGN LIVE LOADS: ROOF: 20 PSF (REDUCIBLE)	1. ALL DEMOLITION SHALL BE CARRIED ON IN SUCH A WAY EXISTING ELEMENTS, WHICH ARE TO REMAIN IN THE FIN
APA ASTM AWS	AMERICAN PLYWOOD ASSOCIATION AMERICAN SOCIETY FOR TESTING AND MATERIALS AMERICAN WELDING SOCIETY	SCHED. SEC. SEL.	SCHEDULE SECTION SELECT	2. WIND LOADS	<ol> <li>ALL ELEMENTS OF THE STRUCTURE, WHICH ARE TO REM DAMAGED DURING DEMOLITION WORK SHALL BE REPLACE COST. EXISTING ELEMENTS SHALL BE PROTECTED TO T</li> </ol>
A.B. APPROX.	ANCHOR BOLT(S) APPROXIMATELY	SEL. SEP. SFRS. SHTG.	SEPARATION STRUCTURAL FORCE RESISTING SYSTEM SHEATHING	RISK CATEGORY: III EXPOSURE CATEGORY: C	POSSIBLE, IN ORDER TO MITIGATE DAMAGE. 3. CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND REPLA
ARCH. Ø	ARCHITECT / ARCHITECTURAL AT	SHT. S.M. SMS	SHEET SHEET METAL SHEET METAL SCREWS	BASIC DESIGN WIND SPEED (3–SECOND GUST), V = 102 MPH VELOCITY PRESSURE EXPOSURE COEFFICIENT, $K_7 = 0.85$ (0–15 FT)	4. DO NOT CORE OR CUT NEW OPENINGS IN EXISTING CON
B. PL. BM. BRG.	BASE PLATE BEAM BEARING	SIM. SIMP	SIMILAR SIMPSON	TOPOGRAPHIC FACTOR, $K_{zt} = 1.0$ WIND DIRECTIONALITY FACTOR, $K_{d} = 0.85$ GROUND ELEVATION FACTOR, $Ke = 1.00$	WITHOUT SPECIFIC APPROVAL OF THE STRUCUTRAL ENGI DIMENSIONED LAYOUT OF ALL PROPOSED NEW OPENINGS REVIEW AND APPROVAL PRIOR TO CORING OR CUTTING (
BTWN. BLK. BLKG.	BETWEEN BLOCK BLOCKING	SPCG. SPECS. SQ.	SPACING SPECIFICATION SQUARE	GUST EFFECT FACTOR, $G = 0.85$	AT HIS OWN EXPENSE, SHALL USE NON-DESTRUCTIVE N EXISTING REINFORCING. EXISTING REINFORCING SHALL N
B.E. BOT. OR BOTT. B.N.	BOTH ENDS BOTTOM BOUNDARY NAILS	STGR. S.S. SPC	STAGGER STAINLESS STEEL STANDARD PIPE COLUMN	A. MWFRS – DIRECTIONAL PROCEDURE (ASCE 7–16, CH. 27 PART 1) $q_z = 0.00256 K_z K_{zt} K_d$ Ke V <sup>2</sup> = 19.24 PSF	SPECIFIC APPROVAL OF THE STRUCTURAL ENGINEER.
BLDG.	BUILDING	STD. STL. STIFF.	STANDARD STEEL STIFFENER	$P = qGC_P - q_i(GC_{Pi})$	FOUNDATION
CBC CIP CLG.	CALIFORNIA BUILDING CODE CAST IN PLACE CEILING	STIRR. STRUCT. SYM.	STIRRUP STRUCTURAL SYMMETRICAL	EXTERNAL PRESSURE COEFFICIENT, C <sub>P</sub> = [FIG. 27.4–1 THRU 27.4–3] INTERNAL PRESSURE COEFFICIENT, (GC <sub>Pi</sub> ) = TABLE 26.13–1	1. ALL PORTIONS OF WORK PERTAINING TO EXCAVATIONS, I RETAINING WALLS SHALL CONFORM TO TITLE 24, PART 2
CJ CJP	CEILING JOIST OR CONSTRUCTION JOINT OR CONTROL JOINT COMPLETE JOINT PENETRATION WELD CENTER LINE	TSG THK.	TAPERED STEEL GIRDER THICK	B. COMPONENTS & CLADDING (ASCE 7-16, CH. 30)	2. THE FOUNDATION DESIGN IS BASED ON A GEOTECHNICAL
CLR. COL. CONC.	CLEAR COLUMN CONCRETE	K OR KIP THRU TN	1,000 POUNDS THROUGH TOE NAIL	$q_h = 0.00256 K_Z K_{Zt} K_d V_{ULT}^2 = 19.24 PSF$ $P = q_h [(GC_P) - (GC_{Pi})]$	MTGL, INC. GEOTECHNICAL INVESTIGATION PROJECT NUMBER: 2460A27
CMU COND. CONN.	CONCRETE MASONRY UNIT CONDITION CONNECTION	T&G T&B T.O.F.	TONGUE AND GROOVE TOP AND BOTTOM TOP OF FOOTING	EXTERNAL PRESSURE COEFFICIENT, (G <sub>CP</sub> ) = [FIG. 30.3–1 THRU 30.3–7] INTERNAL PRESSURE COEFFICIENT, (GC <sub>Pi</sub> ) = TABLE 26.13–1	PROJECT DATE: NOVEMBER 28, 2022 3. AN ALLOWABLE SOIL BEARING PRESSURE OF 2,000 PSF
CONSTR. CONT'D	CONSTRUCTION CONTINUED	T.O.L. T.O.S. T.O.W.	TOP OF LEDGER TOP OF STEEL OR TOP OF SHEATHING TOP OF WALL	2. EARTHQUAKE LOADS	BOTTOM OF FOOTINGS SHALL BE 24" MINIMUM BELOW L GRADE AND BEAR ON APPROVED NATURAL GRADE OR C ALLOWABLE PASSIVE PRESSURE OF 250 PCF AND COEF
CONT. CONTR. CSK.	CONTINUOUS CONTRACTOR COUNTERSINK	TL TS TYP.	TOTAL LOAD TUBE STEEL TYPICAL	$\frac{\text{SEISMIC DESIGN CRITERIA}}{S_{S}} = 1.913$	0.35 WAS USED TO RESIST LATERIAL LOADS. CLASSIFICATION OF MATERIALS: SILTY S/
DL DP.	DEAD LOAD DEEP	U.N.O.	UNLESS NOTED OTHERWISE	$S_1 = 0.684$ SITE CLASS: D $F_A = 1.0$	AMOUNTS OF GRAVEL. 3. SEE SPECIFICATIONS FOR EARTHWORK OPERATIONS.
DEMO. DTL. OR DET. DIAG.	DEMOLISH DETAIL DIAGONAL	VIF VERT.	VERIFY IN FIELD VERTICAL	$F_V = 2.5$ $S_{DS} = 1.275$	5. THE CONTRACTOR SHALL PROVIDE FOR DE-WATERING OF EITHER SURFACE WATER, GROUND WATER OR SEEPAGE.
DIA. OR Ø DIM. DO	DIAMETER DIMENSION DITTO	WT. WWF	WEIGHT WELDED WIRE FABRIC	S <sub>D1</sub> = 1.14 RISK CATEGORY: III SEISMIC DESIGN CATEGORY: D	<ol> <li>THE CONTRACTOR SHALL PROVIDE FOR THE DESIGN, API INSTALLATION AND MONITORING OF ALL CRIBBING, SHEA</li> </ol>
DBL. D.F. DWL.	DOUBLE DOUGLAS FIR DOWEL	W/O WD.	WITH WITHOUT WOOD	SEISMIC DESIGN REQUIREMENTS	REQUIRED TO SAFELY RETAIN TEMPORARY EXCAVATIONS
DN. DWG.	DOWN DRAWING	WIJ WP W.S.	WOOD-I-JOIST WORK POINT WOOD SCREW	DESIGN BASE SHEAR $V = C_S W$ WHERE $C_S = S_{DS}/(R/l_e)$ BUT SHALL NOT BE LESS THAN $C_S = 0.044S_{DS}l_e > 0.01$	7. EXCAVATIONS FOR FOOTINGS SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACING CONCRETE AND REINFORG SHALL NOTIFY THE GEOTECHNICAL ENGINEER WHEN EXT INSPECTION. THE GEOTECHNICAL ENGINEER SHALL SUB
EA. E.F. E.S.	EACH EACH FACE EACH SIDE			BUT NEED NOT EXCEED $C_s = S_{D1}/[T(R/l_e)]$ R = 5.0	COMPLIANCE TO THE OWNER.
E.S. E.W. E.N. ELEC.	EACH SIDE EACH WAY EDGE NAIL(S) ELECTRICAL	GENE	RAL	$\Omega_{0} = 2.5$ T = 0.195 $\rho = 1.3 \text{ (REDUNDANCY FACTOR)}$	8. ALL EXCAVATIONS SHALL BE PROPERLY BACKFILLED. DO BEHIND RETAINING WALLS BEFORE CONCRETE HAS ATTA STRENGTH. THE CONTRACTOR SHALL BRACE OR PROTI
ELEV. EMBED.	ELEVATION EMBEDMENT		RUCTURAL DRAWINGS AND SPECIFICATIONS, INCLUDING ANY ADDENDA "ELY "THE PLANS") INCORPORATE ALL LEGAL AND INDUSTRY	$k_{e} = 1.25$ $C_{S} = 0.414$ V = 75.6 (ULT) (KIPS)	WALLS BELOW GRADE FROM LATERAL LOADS UNTIL ATT COMPLETELY IN PLACE AND HAVE ATTAINED FULL DESI CONTRACTOR SHALL PROVIDE FOR DESIGN, PERMITS AN
ENG. EQ. EQUIP.	ENGINEER EQUAL EQUIPMENT	ŘEQUIREME	INTS AND STANDÁRDS INCLUDING WITHOUT LIMITATION THE FOLLOWING:	PRIMARY LATERAL FORCE RESISTING SYSTEM: SPECIAL REINFORCED	REMOVAL OF SUCH BRACING. 9. FOOTING BACKFILL AND UTILITY TRENCH BACKFILL WITHIN
EXCAV. (E) EXP.	EXCAVATION EXISTING EXPANSION	ADMINI	STRATIVE CODE), 2022 EDITION.	MASONRY SHEAR WALLS (ASCE 7–16, TABLE 12.2–1, ITEM A7) ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE LOCATION OF BASE: TOP OF FOOTINGS	BE MECHANICALLY COMPACTED IN LAYERS, TO THE APP GEOTECHNICAL ENGINEER. FLOODING WILL NOT BE PE
EJ ES ESR	EXPANSION JOINT EVALUATION SERVICE EVALUATION SERVICE REPORT	BUILDI	ALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2 (CALIFORNIA NG CODE), 2019 EDITION.	STRUCTURAL IRREGULARITIES: NONE	10. ALL ABANDONED FOOTINGS, UTILITIES, ETC., THAT INTERF CONSTRUCTION, SHALL BE REMOVED.
EXT. F.O.C.	EXTERIOR FACE OF CONCRETE	OF TH SAFETY	REGULATING AGENCIES WHICH MAY HAVE AUTHORITY OVER ANY PORTION E WORK, INCLUDING THE STATE OF CALIFORNIA DIVISION OF INDUSTRIAL , AND THOSE CODES AND STANDARDS LISTED IN THESE NOTES AND	SUBMITTALS	11. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCH BURIED STRUCTURES, SUCH AS CESSPOOLS, CISTERNS FOUND.
F.O.M. F.O.S. F.S.	FACE OF MASONRY FACE OF STUD OR FACE OF SLAB FAR SIDE		ICATIONS. JNCTIONALITY STANDARDS SET FORTH IN TITLE 7 OF THE CALIFORNIA	1. SUBMITTALS, INCLUDING SHOP DRAWINGS AND CONCRETE MIX DESIGNS, REQUIRED BY THE SPECIFICATIONS SHALL BE SUBMITTED TO THE ARCHITECT AND	
FIN. F.F. FHWS	FINISH FINISHED FLOOR FLAT HEAD WOOD SCREW		ODE (THE "RIGHT TO REPAIR ACT").	STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION OF THE ITEMS. 2. A SCHEDULE FOR SUBMITTAL OF SHOP DRAWINGS SHALL BE PREPARED BY THE	CONCRETE BLOCK MASONRY (f
FLR. FD FTG.	FLOOR DRAIN FLOOR DRAIN FOOTING	INCORF	ORATED PRODUCTS.	GENERAL CONTRACTOR AND REVIEWED BY THE ARCHITECT AND STRUCTURAL ENGINEER PRIOR TO THE START OF FABRICATION. THE SCHEDULE SHALL PROPORTION THE QUANTITY OF SHOP DRAWINGS TO BE REVIEWED IN EACH	1. ALL PORTIONS OF WORK PERTAINING TO CONCRETE BLC SHALL CONFORM TO TITLE 24, PART 2, CHAPTER 21A.
FNDN. FRMG.	FOUNDATION FRAMING	AND S	TANDARDS, INCLUDING SUPPLEMENTS, UNLESS NOTED OTHERWISE.	SUBMITTAL TO ALLOW SUFFICIENT TIME, AS DEEMED REASONABLE IN THE PROFESSIONAL JUDGEMENT OF THE ARCHITECT AND STRUCTURAL ENGINEER, TO PERMIT ADEQUATE REVIEW.	2. THE STRENGTH OF CONCRETE BLOCK MASONRY CONSTR BY THE UNIT STRENGTH METHOD IN ACCORDANCE WITH
GALV. GA. GLU—LAM	GALVANIZE GAUGE GLUED LAMINATED	INTENDED TECHNIQUE	TO INDICATE OR REQUIRE ANY CONSTRUCTION MEANS, METHODS, IS, SEQUENCES OR PROCEDURES. IN PARTICULAR AND WITHOUT THE CONTRACTOR SHALL BE FULLY AND SOLELY RESPONSIBLE FOR	3. SHOP DRAWINGS SHALL INDICATE THE DATE OR REVISION OF DRAWING(S) FROM WHICH THE DRAWINGS WERE PREPARED. SUBMITTALS THAT DO NOT IDENTIFY THE	TMS 602 ARTICLE 1.4B.2b. 3. THE STRENGTH OF CONCRETE BLOCK MASONRY CONSTR
GLB GR.	GLUED LAMINATED BEAM GRADE	ANY AND A	ALL EXCAVATION, DEMOLITION, SHORING AND ERECTION PROCEDURES AND AND ALL SAFETY PROGRAMS AND PRECAUTIONS.	LATEST DATE OR REVISION OF DRAWING(S) WILL BE RETURNED WITHOUT REVIEW. ONLY SHOP DRAWINGS THAT ARE COMPLETE WILL BE ACCEPTED FOR REVIEW.	BY PRISM TESTING IN ACCORDANCE WITH CBC SEC. 210 1.4B.3 AND 1.4B.4.
HGR. HR HDR.	HANGER HARDROCK HEADER	CONTRACTO	THE PLANS FOR BIDDING OR CONSTRUCTION PURPOSES, THE OR IS REQUIRED TO REVIEW ALL OF THE PROJECT'S CONSTRUCTION	4. IF, AFTER REVIEW, THE SHOP DRAWINGS MUST BE REVISED AND RESUBMITTED, THE SHOP DRAWINGS SHALL IDENTIFY EACH REVISION AND/OR ADDITION BY CLOUDING OR OTHER MEANS TO ASSURE PROPER REVIEW.	<ol> <li>CONCRETE BLOCKS SHALL BE HOLLOW LOAD-BEARING ( CONFORMING TO ASTM C-90, MEDIUM WEIGHT UNITS, N OF 2,000 PSI. USE OPEN END UNITS AT VERTICAL REIN</li> </ol>
HT. HD HSS	HEIGHT HOLD DOWN HOLLOW STRUCTURAL SECTION		S AS A WHOLE IN ORDER TO IDENTIFY ALL REQUIREMENTS THAT DR INDIRECTLY AFFECT ITS PORTION OF THE STRUCTURAL WORK, EVEN INTS LOCATED IN SECTIONS DESIGNATED AS APPLICABLE TO OTHER	5. SUBMITTALS WILL NOT BE ACCEPTED DIRECTLY FROM SUBCONTRACTORS. SUBMITTALS WILL BE ACCEPTED FROM THE GENERAL CONTRACTOR ONLY AFTER	5. CEMENT SHALL BE AS SPECIFIED FOR CONCRETE.
HORIZ.	HORIZONTAL	DIRECTION	IN CASE OF CONFLICTS, THE CONTRACTOR SHALL EITHER OBTAIN FROM AN APPROPRIATE OWNER REPRESENTATIVE OR OTHERWISE APPLY STRINGENT REQUIREMENT.	BEING REVIEWED AND SIGNED BY THE GENERAL CONTRACTOR, INDICATING COMPLIANCE WITH THE REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS. SUBMITTALS NOT COMPLYING WITH THE REQUIREMENTS NOTED ABOVE OR IN THE	6. MORTAR SHALL CONFORM TO ASTM C-270, FOR TYPE S ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 1800 PS
I.D. INT.	INFORMATION INSIDE DIAMETER INTERIOR INTERNATIONAL BUILDING CODE		RETING THE PLANS, THE FOLLOWING GENERAL RULES APPLY:	SPECIFICATIONS WILL BE RETURNED WITHOUT REVIEW.	<ol> <li>GROUT SHALL CONFORM TO ARTICLE 2.2 OF TMS 602. CONFORM TO ASTM C-476, TABLE 1, FOR COARSE GRO FOR GROUT TO FLOW INTO ALL CELLS WITHOUT SEGREG</li> </ol>
IBC ICC INV.	INTERNATIONAL BOILDING CODE INTERNATIONAL CODE COUNCIL INVERT	SPECIF	N DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DRAWINGS. IC NOTES AND DETAILS SHALL TAKE PRECEDENCE OVER GENERAL NOTES		ADMIXTURE, OR APPROVED EQUAL, SHALL BE USED. GR COMPRESSIVE STRENGTH OF 2000 PSI AT 28 DAYS.
JST.	JOIST	• WORK	YPICAL DETAILS. NOT PARTICULARLY SHOWN OR SPECIFIED SHALL BE THE SAME AS	1. ALL INFORMATION SHOWN ON THE PLANS RELATIVE TO EXISTING CONDITIONS IS	8. PROVIDE A MINIMUM ONE BAR DIAMETER OF GROUT BET MASONRY UNITS. PROVIDE A MINIMUM OF $\frac{1}{2}$ " OF GROU EMBEDDED IN MASONRY.
KP KSI	KING POST KIPS PER SQUARE INCH	• SCALEI	R PARTS THAT ARE SHOWN OR SPECIFIED.	GIVEN AS THE BEST PRESENT KNOWLEDGE FROM PLANS SUPPLIED BY THE OWNER, BUT WITHOUT GUARANTEE OF ACCURACY.	9. CELLS SHALL BE IN VERTICAL ALIGNMENT. DOWELS IN ALIGN WITH CORES CONTAINING VERTICAL REINFORCING.
LAM. LDGR. LT. WT. OR LW	LAMINATED LEDGER LIGHT WEIGHT		DERED ONLY APPROXIMATE.	2. WHERE ACTUAL CONDITIONS ARE NOT IN ACCORDANCE WITH THE INFORMATION PRESENTED, THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY. NO MODIFICATIONS OF THE PLANS FOR NEW CONSTRUCTION SHALL BE MADE WITHOUT THE WRITTEN	10. ALL REINFORCING BARS, ANCHOR BOLTS, STEEL PLATES SHALL BE SECURED IN POSITION PRIOR TO PLACING GR
LL LG. LLH	LIVE LOAD LONG OR LENGTH LONG LEG HORIZONTAL	BECAU: CONST	SE THE PLANS ARE INTENDED TO SET FORTH THE REQUIREMENTS FOR RUCTION IN ONLY AN INDUSTRY—STANDARD LEVEL OF QUALITY AND	APPROVAL OF THE ARCHITECT.	DURING GROUT PLACEMENT AND CONSOLIDATION WITH M ADJACENT.
LLV LO—HY	LONG LEG VERTICAL LOW HYDROGEN	DETAIL, APPRO	AND THEREFORE ARE INTENDED TO BE SUPPLEMENTED BY PRIATE REQUESTS FOR CLARIFICATION AND INFORMATION, ERRORS AND ONS ARE TO BE EXPECTED AND ANTICIPATED; AND THE CONTRACTOR IS	EXISTING UNDERGROUND UTILITIES	11. ALL CELLS IN CONCRETE BLOCKS SHALL BE SOLIDLY F
M.B. MFR. MAS.	MACHINE BOLT(S) MANUFACTURER MASONRY	REQUIF AND T	DEC TO CAREFULLY REVIEW THE PLANS FOR ERRORS AND OMISSIONS D BRING THESE ERRORS AND OMISSIONS TO THE ATTENTION OF AN PRIATE OWNER REPRESENTATIVE IN A TIMELY MANNER AND ASSUMES	1. THE ARCHITECT AND ENGINEERS ARE NOT RESPONSIBLE FOR THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES WHETHER OR NOT SHOWN ON THE DRAWINGS.	AND SEC. 2104A.1.3.1.2.2. MAXIMUM GROUT POUR HEIC CONSTRUCTION SHALL BE 4 FEET.
M.O. MATL. MAX.	MASONRY OPENING MATERIAL MAXIMUM	THE R	SK OF THE CONSEQUENCES OF FAILING TO DO SO BEFORE BIDDING OR WISE PROCEEDING.	THE LOCATION OF ANY EXISTING UNDERGROUND UTILITIES SHOWN ON THE DRAWINGS, IF ANY, IS APPROXIMATE. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING ON THE SITE. THE CONTRACTOR SHALL	13. HIGH-LIFT GROUTED CONSTRUCTION SHALL CONFORM TO SEC. 2104A.1.3.1.2.3 AND DSA IR 21-2. MAXIMUM GRO
MAA. MECH. MTL. MIN.	MAXIMUM MECHANICAL METAL MINIMUM	STARTI	ONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS PRIOR TO NG CONSTRUCTION, AND NOTIFY THE ARCHITECT IMMEDIATELY OF ANY PANCIES OR INCONSISTENCIES.	IMMEDIATELY NOTIFY THE ARCHITECT SHOULD ANY SUCH UNIDENTIFIED CONDITIONS BE DISCOVERED.	EXCEED 12 FEET. PROVIDE CLEANOUT OPENINGS AND PREVENT FACE SHELL DAMAGE (BLOW—OUT) AT THE BO GROUT.
MIN. MISC. MU	MINIMUM MISCELLANEOUS MECHANICAL UNIT	6. SUBMITTAL	S WILL BE REVIEWED BY THE STRUCTURAL ENGINEER, IF AT ALL, ONLY	2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES WHICH MAY RESULT FROM HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ALL EXISTING	14. GROUT POURS SHALL BE CONSOLIDATED BY MECHANICA RECONSOLIDATED AFTER EXCESS MOISTURE HAS BEEN A
N.F. N.S.	NEAR FACE NEAR SIDE NELSON STUD ANCHOR	A201, AND LESSEN TH	TO THE INDUSTRY—STANDARD PROTOCOL SET FORTH IN AIA DOCUMENT IN NO EVENT WILL THE SUBMITTAL REVIEW PROCESS RELIEVE OR IE SUBMITTING CONTRACTOR'S RESPONSIBILITY FOR AN INAPPROPRIATE	UNDERGROUND UTILITIES.	WORKABILITY IS LOST. 15. HORIZONTAL REINFORCING SHALL BE PLACED IN BOND
NSA (N) NIC.	NELSON STUD ANCHOR NEW NOT IN CONTRACT		NT WILL ANY SITE VISITS BY THE STRUCTURAL ENGINEER CONCERN		16. REFER TO ARCHITECTURAL DRAWINGS FOR SURFACE TEX UNITS, LAYING PATTERN AND JOINT TYPE. USE RUNNING
NTS. NO. OR #	NOT TO SCALE NUMBER	CONSTRUC MATTERS S	TION MEANS AND METHODS OR CONSTRUCTION SAFETY, AND ALL SUCH HALL REMAIN THE SOLE RESPONSIBILITY OF THE CONTRACTOR.		NOTED OTHERWISE. 17. NO PIPES OR DUCTS SHALL BE PLACED IN MASONRY C
O.C. OPNG. OPP.	ON CENTER OPENING OPPOSITE	THE SAME	THE PLANS PROVIDED IN ANY ELECTRONIC FORM ARE SUBJECT TO PROVISIONS AS THE OTHER INSTRUMENTS OF SERVICE PREPARED BY HALF OF STRUCTURAL ENGINEER FOR THE PROJECT, INCLUDING WITHOUT		SPECIFICALLY NOTED OR DETAILED BE FLACED IN MASONICI C SPECIFICALLY NOTED OR DETAILED. WHERE PIPES ARE I MASONRY WALLS, PROVIDE SLEEVE OR CORED HOLE 2" DIAMETER OF PIPE.
0.H. 0.D.	OPPOSITE HAND OUTSIDE DIAMETER	LIMITATION RIGHTS, IN	THE ENGINEER'S COMMON LAW, STATUTORY OR OTHER RESERVED CLUDING COPYRIGHTS. A RECIPIENT IS GRANTED AT MOST A BLE NONEXCLUSIVE LICENSE TO REUSE THE PLANS SOLELY FOR		18. ELECTRICAL CONDUIT MAY BE ROUTED IN MASONRY WAL
PHWS P.J. d	PAN HEAD WOOD SCREW PANEL JOINT PENNY	PROJECT F	PURPOSES; AND NO RECIPIENT IS AUTHORIZED TO USE OR TO ALLOW DF ALL OR ANY PORTION OF THESE PLANS FOR ANY OTHER PURPOSE, JSE FOR ANY OTHER PURPOSE WOULD CONSTITUTE ACTIONABLE		A. MAXIMUM SIZE AND QUANTITY OF CONDUIT PER CEL BOXES) SHALL BE AS FOLLOWS: FOR 8" BLOCK, ON
PIL. PL. OR PL	PILASTER PLATE (STEEL OR WOOD)	PLAGIARISM FORM ONL	I. STRUCTURAL ENGINEER PROVIDES DOCUMENTS IN AN ELECTRONIC Y IN ITS STANDARD FORMATS AND CONVENTIONS AND WITH NO		$\frac{3}{4}$ " DIAMETER; FOR 12" BLOCK, TWO – 1" DIAMETE MULTIPLE CONDUITS SHALL BE BUNDLED TOGETHER.
PLY. PWJ PCF	PLYWOOD PLYWOOD WEB JOIST POUNDS PER CUBIC FOOT	AND ANY THE USE	OF COMPATIBILITY WITH ANY RECIPIENT'S SOFTWARE OR HARDWARE, JSE WITH OR CONVERSION TO OTHER FORMATS OR CONVENTIONS, OR WITH ANY PARTICULAR SOFTWARE OR HARDWARE, IS AT THE RECIPIENT'S		B. CONDUIT SHALL NOT BE PLACED IN A MASONRY CE C. CONDUIT SHALL NOT BE PLACED IN A PILASTER.
PSF PSI PT	POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH PRESSURE TREATED	SOLE RISK			D. CONDUIT SHALL BE PLACED AT THE CENTERLINE OF
PTDF PL	PRESSURE TREATED DOUGLAS FIR PROPERTY LINE	DIMEN	ISIONS		18. ALL STRUCTURAL MASONRY WORK SHALL BE CONTINUOU LAYING AND GROUTING BY A SPECIAL INSPECTOR SPECI ENFORCEMENT AGENCY FOR THAT PURPOSE.
RAD. RFTR. REF.	RADIUS RAFTER REFERENCE	1. DIMENSION	S SHALL BE DEFINED TO INCLUDE BOTH HORIZONTAL DIMENSIONS AND DIMENSIONS (ELEVATIONS).		LINI UNGEMIEINT AGEINGT FUR THAT PURPUSE.
REINF. REQ'D REQMT.	REINFORCING REQUIRED REQUIREMENT	2. WRITTEN D	IMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DRAWINGS.		
RF. R.D.	ROOF ROOF DRAIN	DRAWINGS.	TECTURAL DRAWINGS FOR DIMENSIONS NOT NOTED ON STRUCTURAL		
			TECTURAL AND/OR CIVIL DRAWINGS FOR FINISH FLOOR ELEVATIONS.		
		ELEVATIONS			

5. SEE ARCHITECTURAL DRAWINGS FOR ALL TOP OF SHEATHING AND/OR ROOF

DISCREPANCIES OR INCONSISTENCIES.

6. THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION. THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY OF ANY

- JRE, WHICH ARE TO REMAIN, AND WHICH ARE /ORK SHALL BE REPLACED AT NO ADDITIONAL L BE PROTECTED TO THE FULLEST EXTENT E DAMAGE.
- OR REMOVAL AND REPLACEMENT OF ALL EXISTING ' FOR THE INSTALLATION OF ALL NEW WORK. PENINGS IN EXISTING CONCRETE OR MASONRY THE STRUCUTRAL ENGINEER. SUBMIT ROPOSED NEW OPENINGS TO ARCHITECT FOR O CORING OR CUTTING OPENINGS. CONTRACTOR, JSE NON-DESTRUCTIVE METHODS TO LOCATE IG REINFORCING SHALL NOT BE CUT WITHOUT
- INING TO EXCAVATIONS, FOUNDATIONS AND RM TO TITLE 24, PART 2, CHAPTER 18A. SED ON A GEOTECHNICAL REPORT BY:
- INVESTIGATION ER: 2460A27
- NOVEMBER 28, 2022
- RESSURE OF 2,000 PSF WAS USED FOR DESIGN. 24" MINIMUM BELOW LOWEST ADJACENT FINAL NATURAL GRADE OR COMPACTED FILL. AN OF 250 PCF AND COEFFICENT OF FRICTION OF ERIAL LOADS.
- OF MATERIALS: SILTY SAND WITH VARIOUS RAVEL. WORK OPERATIONS.
- DE FOR DE-WATERING OF EXCAVATIONS FROM ND WATER OR SEEPAGE.
- DE FOR THE DESIGN, APPROVALS, PERMITS, OF ALL CRIBBING, SHEATHING AND SHORING **TEMPORARY EXCAVATIONS.**
- ALL BE APPROVED BY THE GEOTECHNICAL CONCRETE AND REINFORCING. THE CONTRACTOR CAL ENGINEER WHEN EXCAVATIONS ARE READY FOR AL ENGINEER SHALL SUBMIT A LETTER OF
- OPERLY BACKFILLED. DO NOT PLACE BACKFILL DRE CONCRETE HAS ATTAINED FULL DESIGN SHALL BRACE OR PROTECT ALL BUILDING AND PIT ATERAL LOADS UNTIL ATTACHING FLOORS ARE AVE ATTAINED FULL DESIGN STRENGTH. THE FOR DESIGN, PERMITS AND INSTALLATION AND
- TRENCH BACKFILL WITHIN BUILDING AREA SHALL IN LAYERS, TO THE APPROVAL OF THE DODING WILL NOT BE PERMITTED. ITIES, ETC., THAT INTERFERE WITH NEW
- IOVED.
- ATELY NOTIFY THE ARCHITECT SHOULD ANY CESSPOOLS, CISTERNS, FOUNDATIONS, ETC., BE

## (MASONRY (f'm = 2,000 PSI)

- INING TO CONCRETE BLOCK MASONRY CONSTRUCTION PART 2, CHAPTER 21A. BLOCK MASONRY CONSTRUCTION SHALL BE DETERMINED
- IN ACCORDANCE WITH CBC SEC. 2105A.6, AND
- BLOCK MASONRY CONSTRUCTION SHALL BE DETERMINED NCE WITH CBC SEC. 2105A.5 AND TMS 602 ARTICLE
- IOLLOW LOAD-BEARING CONCRETE MASONRY UNITS IEDIUM WEIGHT UNITS, NET COMPRESSIVE STRENGTH UNITS AT VERTICAL REINFORCING. FOR CONCRETE.
- STM C-270, FOR TYPE S MORTAR. MORTAR SHALL STRENGTH OF 1800 PSI AT 28 DAYS.
- TICLE 2.2 OF TMS 602. GROUT PROPORTIONS SHALL LE 1, FOR COARSE GROUT. USE SUFFICIENT WATER CELLS WITHOUT SEGREGATION. SIKA GROUT AID AL, SHALL BE USED. GROUT SHALL ATTAIN A MINIMUM 00 PSI AT 28 DAYS.
- DIAMETER OF GROUT BETWEEN MAIN REINFORCING AND INIMUM OF  $\frac{1}{2}$ " OF GROUT AROUND ALL BOLTS
- LIGNMENT. DOWELS IN FOOTINGS SHALL BE SET TO VERTICAL REINFORCING.
- R BOLTS, STEEL PLATES, AND OTHER CMU INSERTS PRIOR TO PLACING GROUT, TO PREVENT MOVEMENT CONSOLIDATION WITH MECHANICAL VIBRATOR DIRECTLY
- KS SHALL BE SOLIDLY FILLED WITH GROUT. ON SHALL CONFORM TO CBC SEC. 2104A.1.3.1.2.1 IMUM GROUT POUR HEIGHT FOR LOW-LIFT
- ION SHALL CONFORM TO CBC SEC. 2104A.1.3.1.2.1, IR 21-2. MAXIMUM GROUT POUR HEIGHT SHALL NOT EANOUT OPENINGS AND ADEQUATE PROVISIONS TO (BLOW-OUT) AT THE BOTTOM OF EACH POUR OF
- OLIDATED BY MECHANICAL VIBRATION AND MOISTURE HAS BEEN ABSORBED, BUT BEFORE
- . BE PLACED IN BOND BEAM UNITS. INGS FOR SURFACE TEXTURE, HEIGHT OF MASONRY INT TYPE. USE RUNNING BOND PATTERN, UNLESS
- PLACED IN MASONRY CONSTRUCTION UNLESS ED. WHERE PIPES ARE DETAILED TO PASS THROUGH EVE OR CORED HOLE 2" LARGER THAN OUTSIDE
- OUTED IN MASONRY WALLS AS FOLLOWS: Y OF CONDUIT PER CELL (EXCEPT AT JUNCTION
- DWS: FOR 8" BLOCK, ONE-1" DIAMETER OR TWO -DCK, TWO – 1" DIAMETER OR FOUR –  $\frac{3}{4}$ " DIAMETER. BE BUNDLED TOGETHER.
- ACED IN A MASONRY CELL CONTAINING REINFORCING. ACED IN A PILASTER.
- AT THE CENTERLINE OF THE WALL.
- RK SHALL BE CONTINUOUSLY INSPECTED DURING ECIAL INSPECTOR SPECIFICALLY APPROVED BY THE PURPOSE.

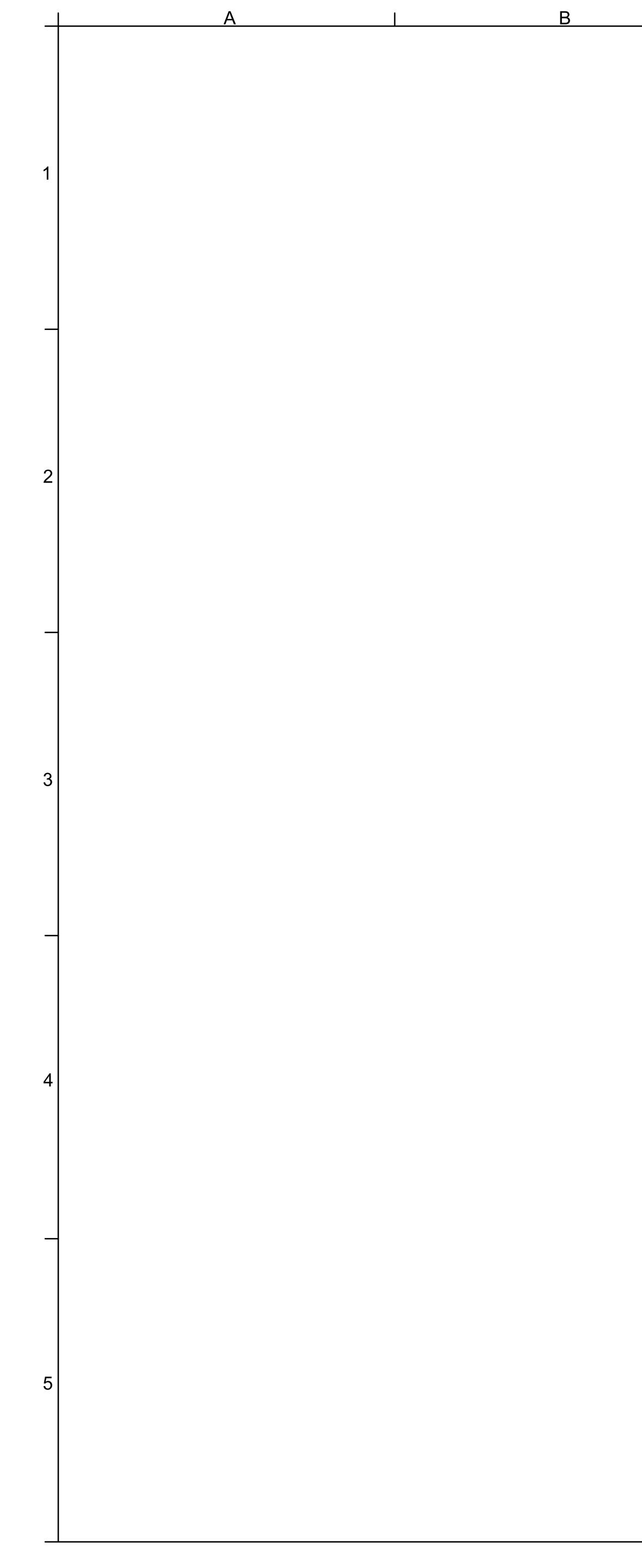
## CONCRETE

- 1. ALL PORTIONS OF WORK PERTAINING TO CONCRETE CONSTRUCTION SHALL CONFORM TO TITLE 24, PART 2, CHAPTER 19A.
- 2. CONCRETE MIXES SHALL BE DESIGNED BY A QUALIFIED TESTING LABORATORY. MIX DESIGNS SHALL CONFORM TO ACI 318, SEC. 26.4, CBC SEC.1903A AND
- 1904A. MIX DESIGNS SHALL INCORPORATE THE FOLLOWING CRITERIA: • MINIMUM OF 5 SACKS OF CEMENT PER CUBIC YARD OF CONCRETE. MAXIMUM OF 7 SACKS OF CEMENT PER YARD OF CONCRETE.
- MAXIMUM WATER/CEMENT RATIO (BY WEIGHT) OF CONCRETE IN CONTACT WITH SOIL SHALL BE 0.45.
- MAXIMUM SLUMP SHALL NOT EXCEED 3" ± 1" FOR FOOTINGS, SLABS ON GRADE, AND MASS CONCRETE: AND 4" ± 1" FOR OTHER CONCRETE. SLUMP LIMITATIONS NOTED SHALL APPLY TO CONCRETE MIX PRIOR TO THE ADDITION OF ANY WATER-REDUCING ADMIXTURES OR SUPER-PLASTICIZERS. MAXIMUM SLUMP MAY BE INCREASED TO 5 +/- 1" FOR MIX INCLUDING WATER-REDUCING ADMIXTURES OR SUPER-PLASTICIZERS.
- CALCIUM CHLORIDE OR ADMIXTURES CONTAINING CHLORIDE(S) SHALL NOT BE USED.
- 3. SCHEDULE OF STRUCTURAL CONCRETE 28 DAY MINIMUM STRENGTHS AND TYPES: FOOTINGS, CAISSONS,
- GRADE BEAMS 145 PCF, f'c = 4500 PSI SLABS ON GRADE 145 PCF, f'c = 4500 PSI
- ELSEWHERE UNLESS NOTED 145 PCF, f'c = 4500 PSI
- 4. PORTLAND CEMENT SHALL CONFORM TO ASTM C-150, TYPE II. CEMENT USED FOR CONCRETE IN CONTACT WITH SOIL SHALL CONFORM TO ASTM C-150, TYPE V.
- 5. AGGREGATE FOR NORMALWEIGHT CONCRETE SHALL CONFORM TO ASTM C-33. COMBINED AGGREGATE GRADATION OF  $\frac{3}{4}$ " MAXIMUM (PEA GRAVEL) SHALL NOT BE USED.
- 6. AGGREGATE FOR LIGHTWEIGHT CONCRETE SHALL CONFORM TO ASTM C-330. THE COURSE AGGREGATE SIZE SHALL NOT EXCEED  $\frac{3}{4}$ " and the absolute volume of COARSE AGGREGATE SHALL NOT EXCEED 9.0 CUBIC FEET PER CUBIC YARD OF CONCRETE.
- 7. READY MIXED CONCRETE SHALL CONFORM TO ASTM C-94.
- 8. PLACEMENT OF CONCRETE SHALL CONFORM TO ACI 304. CLEAN AND ROUGHEN TO  $\frac{1}{4}$ " AMPLITUDE ALL CONCRETE SURFACES AGAINST WHICH CONCRETE IS TO BE PLACED.
- 9. ALL REINFORCING BARS, ANCHOR BOLTS AND OTHER CONCRETE INSERTS SHALL BE SECURED IN POSITION PRIOR TO PLACING CONCRETE.
- 10. PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS IN CONCRETE BEFORE PLACING. DO NOT CUT ANY REINFORCING WHICH MAY CONFLICT. CORING IN CONCRETE IS NOT PERMITTED EXCEPT AS SHOWN. NOTIFY THE STRUCTURAL ENGINEER, IN ADVANCE, OF CONDITIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
- 11. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:
- CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH ...... 3" CONCRETE EXPOSED TO EARTH OR WEATHER: #6 THROUGH #18 BARS #5 BARS, W31 OR D31 WIRE, AND SMALLER CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND: SLABS, WALLS, JOISTS: #14 AND #18 BARS .
- #11 BAR AND SMALLER BEAMS, COLUMNS: PRIMARY REINFORCEMENT STIRRUPS, TIES, SPIRALS .....
- 12. CONDUITS OR PIPES SHALL NOT BE EMBEDDED WITHIN A SLAB, WALL, BEAM, OR COLUMN. UNLESS SPECIFICALLY DETAILED.
- 13. CONDUITS OR PIPES SHALL NOT BE EMBEDDED WITHIN CONCRETE FILL OVER METAL DECK.
- 14. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR ALL MOLDS, GROOVES, REVEALS, ORNAMENTS AND GROUNDS TO BE CAST IN CONCRETE.
- 15. DRYPACK WHERE NOTED ON DRAWINGS SHALL CONSIST OF 1 PART PORTLAND CEMENT AND 2% PARTS OF FINE AGGREGATE CONFORMING TO ASTM C-33 WITH ENOUGH WATER TO FORM A BALL WHEN SQUEEZED IN THE HAND. THE SPACE BETWEEN TWO SURFACES REQUIRING DRYPACK SHALL BE PACKED WITH THE DRYPACK MATERIAL BY TAMPING OR RAMMING WITH A BAR OR ROD UNTIL THE VOIDS ARE COMPLETELY FILLED.
- 16. NON-SHRINK GROUT WHERE NOTED ON DRAWINGS SHALL BE A PRE-MIXED COMPOUND CONSISTING OF NON-METALLIC AGGREGATE, CEMENT, WATER REDUCING AND PLASTICIZING ADDITIVES, CAPABLE OF DEVELOPING A MINIMUM COMPRESSIVE STRENGTH OF 8,000 PSI AT 28 DAYS. WHERE APPLICATION THICKNESS EXCEEDS MANUFACTURER'S LIMITATIONS, EXTEND WITH  $\frac{3}{8}$ " (GRAVEL) AGGREGATE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- 17. IF APPROVED BY DIVISION OF THE STATE ARCHITECT, BATCH PLANT INSPECTION MAY BE REDUCED TO PERIODIC SUBJECT TO THE REQUIREMENTS OF CBC SEC. 1705A.3.3.1.

## **REINFORCING STEEL**

- 1. ALL PORTIONS OF WORK PERTAINING TO FABRICATION AND PLACEMENT OF REINFORCING STEEL SHALL CONFORM TO TITLE 24, PART 2, CHAPTER 19A.
- 2. REINFORCING BARS SHALL CONFORM TO ASTM A-615 GRADE 60, EXCEPT #3 BARS MAY BE GRADE 40. REINFORCING BARS THAT ARE TO BE WELDED SHALL CONFORM TO ASTM A-706, GRADE 60.
- 3. WELDING OF REINFORCEMENT SHALL BE WITH LOW HYDROGEN ELECTRODES AND SHALL CONFORM TO STRUCTURAL WELDING CODE - REINFORCING STEEL, AWS D1.4, BY THE AMERICAN WELDING SOCIETY AND CBC SEC. 1903A.8. WELDING RODS USED FOR THE WELDING OF REINFORCING SHALL BE E80XX. ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS.
- 4. ALL REINFORCING BAR BENDS SHALL BE MADE COLD. ALL #5 OR LARGER REINFORCING BARS SHALL NOT BE RE-BENT.
- 5. FUSION WELDED REINFORCING STEEL ASSEMBLIES SHALL CONFORM TO SEC. 1903A.8. TIES/STIRRUP BARS IN FUSION WELDED ASSEMBLIES SHALL CONFORM TO ASTM A-706, AND LONGITUDINAL HOLDING WIRES SHALL CONFORM TO ASTM-1064. CONTRACTOR AT HIS OPTION MAY USE FUSION WELDED REINFORCING STEEL ASSEMBLIES AT LOCATIONS APPROVED BY DSA. CONTRACTOR SHALL PROVIDE DRAWINGS SUITABLE FOR SUBMITTAL AND APPROVAL BY DSA SHOWING PROPOSED LOCATIONS AND DETAILS NOT ALREADY DETAILED ON DSA APPROVED DRAWINGS. CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR ANY AND ALL DELAYS RELATED TO APPROVAL AND USE OF FUSION WELDED REINFORCING STEEL ASSEMBLIES.
- 6. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-1064, AND SHALL BE LAPPED  $1\frac{1}{2}$  SPACES AND 12" MINIMUM.
- 7. DOWELS BETWEEN FOOTINGS AND WALLS OR COLUMNS SHALL BE THE SAME GRADE, SIZE, SPACING AND NUMBER AS THE VERTICAL REINFORCEMENT, RESPECTIVELY.
- 8. REINFORCING SPLICES SHALL BE MADE AS INDICATED ON THE DRAWINGS.
- 9. ALL VERTICAL REINFORCING SHALL BE CONTINUOUS BETWEEN TWO DIAPHRAGM LEVELS, UNLESS NOTED OTHERWISE.





## STRUCTURAL STEEL AND MISCELLANEOUS METAL

- 1. ALL PORTIONS OF WORK PERTAINING TO STRUCTURAL STEEL CONSTRUCTION SHALL CONFORM TO TITLE 24, PART 2, CHAPTER 22A. 2. ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A-992, UNLESS NOTED
- OTHERWISE.
- 3. ROUND HOLLOW STRUCTURAL SECTION (HSS) SHALL CONFORM TO ASTM A-500, GRADE B.
- 4. SQUARE AND RECTANGULAR HOLLOW STRUCTURAL SECTIONS (HSS) SHALL CONFORM TO ASTM A-500, GRADE B.
- 5. CHANNELS, ANGLES AND PLATES SHALL CONFORM TO ASTM A-36, UNLESS NOTED OTHERWISE.
- 6. ALL BOLTS SHALL CONFORM TO THE FOLLOWING, UNLESS NOTED OTHERWISE:
- ANCHOR BOLT RODS: ASTM F1554, GRADE 36 • TYPICAL STEEL CONNECTIONS: ASTM F3125, GRADE A325N OR F1852
- (NON-SLIP-CRITICAL) • MOMENT AND DRAG CONNECTIONS: ASTM F3125, GRADE A325SC OR F1852
- (SLIP-CRITICAL) • MISCELLANEOUS CONNECTIONS NOT NOTED OTHERWISE: ASTM A-307
- 7. HIGH STRENGTH BOLTS SHALL CONFORM TO THE FOLLOWING, UNLESS NOTED OTHERWISE:
- JOINT ASSEMBLIES USING HIGH-STRENGTH BOLTS SHALL BE IN ACCORDANCE
- WITH SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH STRENGTH BOLTS, BY THE RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS.
- ALL HIGH STRENGTH BOLTS SHALL CONFORM TO ASTM F3125, GRADE A325 OR F1852 TWIST OFF TYPE, NUTS SHALL CONFORM TO ASTM A-563, AND WASHERS
- SHALL CONFORM TO ASTM F-436. PAINT SHALL NOT BE PERMITTED ON CONTACT SURFACES UNLESS NOTED
- OTHERWISE. CONTACT SURFACES OF BOLTED PARTS SHALL BE DESCALED AND FREE OF DIRT, OIL, BURRS, PITS, AND OTHER DEFECTS WHICH PREVENT SOLID SEATING OF PARTS. • SLIP-CRITICAL JOINT ASSEMBLIES SHALL BE FULLY PRE-TENSIONED BY
- TURN-OF-NUT TIGHTENING, CALIBRATED WRENCH TIGHTENING, INSTALLATION OF ALTERNATE DESIGN BOLTS OR BY DIRECT TENSION INDICATOR TIGHTENING.
- 8. STRUCTURAL STEEL IN SFRS LINES SHALL BE CONNECTED IN SLIP-CRITICAL JOINTS COMPLYING WITH AISC 341-16, SECTION D.2.2, CLASS A FAYING SURFACE.
- 9. ANCHOR BOLTS SHALL BE HEX HEADED. BENT BAR ANCHORS SHALL NOT BE USED.
- 10. STRUCTURAL STEEL SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
- 11. ALL WELDING SHALL CONFORM TO THE STRUCTURAL WELDING CODE STEEL, AWS D1.1 AND STRUCTURAL WELDING CODE SEISMIC SUPPLEMENT AWS D1.8, BY THE AMERICAN WELDING SOCIETY. WELDING RODS SHALL BE E70XX.
- 12. ALL WELDING IN SFRS LINES SHALL COMPLY WITH AWS D1.8 AND AISC 341-16 SECTION A3.4A. 13. THE FILLER METAL FOR ALL WELDING SHALL HAVE A NOTCH TOUGHNESS OF NOT
- LESS THAN 20 FT-LBS AT 0 DEGREES F, AS MEASURED BY A STANDARD CHARPY V-NOTCH TEST, ASTM E23, IN ACCORDANCE WITH THE APPLICABLE FILLER METAL SPECIFICATION REFERENCED IN AWS D1.1 AND SEISMIC SUPPLEMENT AWS D1.8.
- 14. ALL DEMAND CRITICAL WELDS SHALL HAVE A NOTCH TOUGHNESS OF NOT LESS THAN 40 FT-LBS AT 70 DEGREES F, AS MEASURED BY STANDARD CHARPY V-NOTCH TEST. ASTM E23. IN ACCORDANCE WITH THE APPLICABLE FILLER METAL SPECIFICATION REFERENCED IN AWS D1.1 AND SEISMIC SUPPLEMENT AWS D1.8.
- 15. ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS.
- 16. ALL WELDING SHALL HAVE CONTINUOUS INSPECTION BY AN AWS-CWI QUALIFIED INSPECTOR APPROVED BY DSA.
- 17. ALL WELDS NOT SPECIFIED SHALL BE CONTINUOUS FILLET WELDS. SIZE OF WELDS SHALL BE BASED ON AWS D1.1 FOR THICKER PART JOINED.
- 18. BOLT HOLES SHALL BE  $\frac{1}{16}$ " LARGER IN DIAMETER THAN NOMINAL SIZE OF BOLT USED, UNLESS NOTED OTHERWISE. BOLT HOLES AT COLUMN BASEPLATES MAY BE  $\frac{3}{6}$ " MAXIMUM LARGER IN DIAMETER THAN NOMINAL SIZE OF ANCHOR BOLT USED, UNLESS NOTED OTHERWISE.
- 19. DO NOT PAINT STRUCTURAL STEEL SURFACES THAT ARE TO RECEIVE SPRAY-APPLIED FIREPROOFING OR TO BE ENCASED IN CONCRETE OR MASONRY.
- 20. ALL STRUCTURAL STEEL AND MISCELLANEOUS METAL ITEMS, INCLUDING CONNECTORS, EXPOSED TO THE WEATHER SHALL BE HOT-DIPPED GALVANIZED, AFTER FABRICATION.
- 21. STRUCTURAL STEEL SHALL BE DELIVERED TO THE JOB SITE FREE OF EXCESSIVE RUST, MILL SCALE, GREASE, ETC.
- 22. CUTTING, BORING, SAWCUTTING OR DRILLING THROUGH THE NEW OR EXISTING STRUCTURAL ELEMENTS TO BE DONE ONLY WHEN SO DETAILED IN THE DRAWINGS OR ACCEPTED BY THE ARCHITECT AND STRUCTURAL ENGINEER WITH THE APPROVAL OF DSA REPRESENTATIVE.
- 23. THE CONTRACTOR SHALL IDENTIFY THE PROTECTED ZONES USING ANY SUITABLE NON-DESTRUCTIVE MEANS (SUCH AS YELLOW PAINT).
- 24. ONCE THE STEEL DECKING IS IN PLACE, THE CONTRACTOR SHALL USE ANY SUITABLE NON-DESTRUCTIVE MEANS TO IDENTIFY THE PROTECTED ZONES PRIOR TO THE INSTALLATION OF SHEAR STUDS, DECK ATTACHMENTS.
- 25. AFTER SPRAYED ON FIRE-RESISTIVE MATERIAL HAS BEEN APPLIED, THE CONTRACTOR SHALL USE ANY SUITABLE NON-DESTRUCTIVE MEANS TO IDENTIFY THE PROTECTED ZONES FOR OTHER DISCIPLINES TO PRECLUDE UNAUTHORIZED ATTACHMENTS.

### STEEL DECKING

- 1. SEE STRUCTURAL STEEL AND MISCELLANEOUS METAL NOTES FOR ADDITIONAL INFORMATION.
- 2. STEEL DECKING SHALL BE OF THE TYPE AND GAUGE AS NOTED ON THE DRAWINGS. DECKING AND ALL ACCESSORIES SHALL BE GALVANIZED AND SHALL CONFORM TO ASTM A-653 SS, GRADE 50 MINIMUM. GALVANIZING SHALL CONFORM TO COATING DESIGNATION G90, UNLESS NOTED OTHERWISE.
- 3. STEEL DECKING TO RECEIVE CONCRETE FILL SHALL BE COMPOSITE TYPE, DEFORMED TO PROVIDE MECHANICAL BOND WITH THE CONCRETE, UNLESS NOTED OTHERWISE.
- 4. STEEL DECKING SHALL HAVE BUILT-IN VENTS. UNITS SHALL HAVE SLOTTED AND VENTED WEBS WITH A MINIMUM 1.5% UNIFORMLY DISTRIBUTED OPEN AREA.
- 5. DECK UNITS SHALL BE CONTINUOUS OVER TWO OR MORE SPANS. PROVIDE SHORING AS REQUIRED BY MANUFACTURER'S CURRENT EVALUATION REPORT FOR NUMBER AND LENGTHS OF SPANS, AND AS REQUIRED BY MANUFACTURER TO SUIT JOB CONDITIONS.
- 6. MINIMUM BEARING OF DECKING ON SUPPORTS SHALL BE 2 INCHES. SHEETS SHALL BE ATTACHED TO ALL SUPPORTING STEEL MEMBERS (INCLUDING MEMBERS PARALLEL TO DECK UNDER UP-FLUTES) BY WELDING AS INDICATED ON DRAWINGS AND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. ADD METAL PLATE TO MATCH DECK THICKNESS, AS REQUIRED TO FACILITATE WELDING WHERE DECK DOWN FLUTES DO NOT LAND ON PARALLEL SUPPORTING MEMBERS. UPON COMPLETION OF ERECTION. ALL WELDS SHALL BE TOUCHED UP, DE-SLAGED, CLEANED AND PRIMED WITH A ZINC RICH PRIMER.
- 7. SEE ARCHITECTURAL, MECHANICAL, ELECTRICAL DRAWINGS, ETC., FOR SIZE AND LOCATION OF REQUIRED OPENINGS.
- 8. PROVIDE CLOSURE PLATES AT ALL DECK EDGES, INCLUDING CLOSURES AT COLUMNS, AND SHAFT OPENINGS OR DUCT PENETRATIONS. STEEL DECKING SUBCONTRACTOR SHALL SUPPLY ALL CLOSURES AND ALL SUPPORT FRAMING WHERE NECESSARY FOR SUCH OPENINGS.
- 9. STEEL DECKING SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO FABRICATION. SHOP DRAWINGS SHALL INDICATE LOCATION, GAUGE AND SIZE OF EACH PIECE OF DECKING. SHOP DRAWINGS SHALL ALSO SHOW ALL CLOSURE CONDITIONS, WELDS TO SUPPORTS AND SIDE LAP DETAILS.
- 10. STEEL DECKING SHOP DRAWINGS SHALL INDICATE SHEAR STUD CONNECTOR DETAILS AND STUD LAYOUT FOR EACH BEAM.
- 11. SHEAR STUDS SHALL BE WELDED THROUGH ONLY ONE THICKNESS OF DECK USING APPROVED WELDING METHODS. DECK SHALL BE PREPUNCHED WHERE MORE THAN ONE LAYER OF DECKING OCCURS AT A STUD LOCATION.
- 12. WELDING OF STEEL DECKING SHALL BE IN ACCORDANCE WITH THE STRUCTURAL WELDING CODE - SHEET STEEL, AWS D1.3 BY THE AMERICAN WELDING SOCIETY.

## **POST-INSTALLED ANCHORS**

- 1. ACCEPTABLE EQUIVALENT MANUFACTURERS OF POST-INSTALLED EXPANSION ANCHORS AND SCREW ANCHORS SHALL BE HILTI INC., SIMPSON STRONG-TIE COMPANY INC., OR DEWALT, UNO.
- 2. TESTS FOR POST-INSTALLED ANCHORS IN HARDENED CONCRETE SHALL CONFORM TO TITLE 24, PART 2, CHAPTER 19A, SECTION 1910A.5.
- 3. POST-INSTALLED ANCHOR INSTALLATION SHALL BE INSPECTED BY A SPECIAL
- PURPOSE.
- PROJECT INSPECTOR. 5. TEST QUANTITY OF POST-INSTALLED ANCHORS AS NOTED BELOW:
- **APPLICATION**
- SILL PLATES STRUCTURAL
- NON-STRUCTURAL (EQUIP. ANCHORAGE, ETC.) 6. IF ANY ANCHOR FAILS TESTING, TEST ALL ANCHORS OF THE SAME CATEGORY NOT
- RESUME INITIAL TESTING FREQUENCY. 7. TORQUE TESTING SHALL BE APPLIED BY CALIBRATED WRENCH. TENSION TESTING
- SPRING LOADING DEVICE.
- POST-INSTALLED ANCHORS: A. TORQUE WRENCH METHOD: THE APPLICABLE TEST TORQUE MUST BE ATTAINED WITHIN ONE-HALF (%) TURN OF THE NUT. SLEEVE ANCHORS  $\frac{3}{3}$  INCH DIAMETER OR LESS MUST ATTAIN THE SPECIFIED TEST TORQUE WITHIN AFTER INITIAL SEATING OF THE SCREW HEAD.
- 9. TEST LOADS (1)(2)(3)

ANCHOR DIAMETER (INCH)	ANCHOR DEPTH (INCHES)	REQ'D. ANCHOR DEPTH (INCHES NOMINAL)	TORQUE (FT-LBF)
<sup>3</sup> ⁄ <sub>8</sub>	2	2½	30
12	2	2½	50
1/2	31⁄4	33⁄4	50
5/8	31⁄4	33⁄4	40
78	4	4½	40
3/	33⁄4	4½	110
3⁄4	43⁄4	51/2	110

- (1) TEST VALUES ARE BASED ON KWIK BOLT TZ2 (KB-TZ2) EXPANSION ANCHORS BY
- HILTI, INC. (ICC EVALUATION REPORT NUMBER ESR-4266).
- (ICC ESR-3037) OR DEWALT POWER-STUD+SD2 (ICC ESR-2502)

TORQUE TEST VALUES – EXPANSION ANCHORS GROUT FILLED CMU					
ANCHOR DIAMETER (INCH)	ANCHOR DEPTH (INCHES)	REQ'D. ANCHOR DEPTH (INCHES NOMINAL)	TORQUE (FT–LBF)		
3%8	2 <sup>1</sup> /2	3	15		
1/	2	2½	25		
1/2	31⁄4	33⁄4	25		
5%	23⁄4	31⁄4	35		
	4	4½	35		
3/	31⁄4	4	50		
3⁄4	43⁄4	51/2	50		

(1) TEST VALUES ARE BASED ON KWIK BOLT TZ2 (KB-TZ2) EXPANSION ANCHORS BY HILTI, INC. (ICC EVALUATION REPORT NUMBER ESR-4561). (2) TEST VALUES ARE BASED ON CARBON STEEL ANCHORS.

(3) VERIFY TORQUE VALUES WITH MANUFACTURER FOR SIMPSON WEDGE-ALL (ICC ESR-1396) OR DEWALT POWER-STUD+SD1 (ICC ESR-2966)

	EST VALUES – SCREW RMAL WEIGHT CONCRE	
ANCHOR DIAMETER (INCH)	ANCHOR DEPTH (INCHES)	TORQUE (FT–LBF)
1/	1	24
<i>Y</i> 4 -	2 ½"	24
3/	2¾	50
<sup>3</sup> ⁄8	31/2	50
۲	33⁄4	65
1/2	4 <sup>1</sup> / <sub>2</sub>	65
5%8 -	41/2	100
78	6	100
3⁄4 -	6	150
74	6¾	150

(1) TEST VALUES ARE BASED ON TITEN HD SCREW ANCHORS BY SIMPSON STRONG-TIE, (ICC EVALUATION REPORT NUMBER ESR-2713). (3) VERIFY TORQUE VALUES WITH MANUFACTURER FOR HILTI KWIK HUS-EZ SCREW

ANCHORS (ICC ESR-3027) OR DEWALT SCREW-BOLT+SCREW ANCHOR (ICC ESR-3889)

INSPECTOR SPECIFICALLY APPROVED BY THE ENFORCEMENT AGENCY FOR THAT

4. POST-INSTALLED ANCHOR TESTING SHALL BE DONE IN THE PRESENCE OF THE

QUAN		Ĺ
100%	OF	BOLTS BOLTS BOLTS

PREVIOUSLY TESTED UNTIL TWENTY (20) CONSECUTIVE ANCHORS PASS, THEN

(WHERE INDICATED) SHALL BE APPLIED BY HYDRAULIC JACK OR CALIBRATED

8. THE FOLLOWING CRITERIA SHALL APPLY FOR THE ACCEPTANCE OF INSTALLED

ONE-QUARTER ( $\frac{1}{4}$ ) TURN OF THE NUT, AND THREADED ANCHORS MUST ATTAIN THE SPECIFIED TEST TORQUE WITHIN ONE-QUARTER ( $\frac{1}{4}$ ) TURN OF THE SCREW

B. HYDRAULIC RAM METHOD: (FOR TENSION TESTING WHERE INDICATED) ANCHORS SHALL MAINTAIN THE TENSION TEST LOAD FOR A MINIMUM OF 15 SECONDS AND SHALL EXHIBIT NO DISCERNABLE MOVEMENT DURING THE TENSION TEST. (AN EXAMPLE OF DISCERNABLE MOVEMENT WOULD BE LOOSENING OF THE WASHER UNDER THE NUT).

> TORQUE TEST VALUES - EXPANSION ANCHORS NORMAL WEIGHT CONCRETE

(2) TEST VALUES ARE BASED ON CARBON STEEL ANCHORS.

(3) VERIFY TORQUE VALUES WITH MANUFACTURER FOR SIMPSON STRONG-BOLT 2

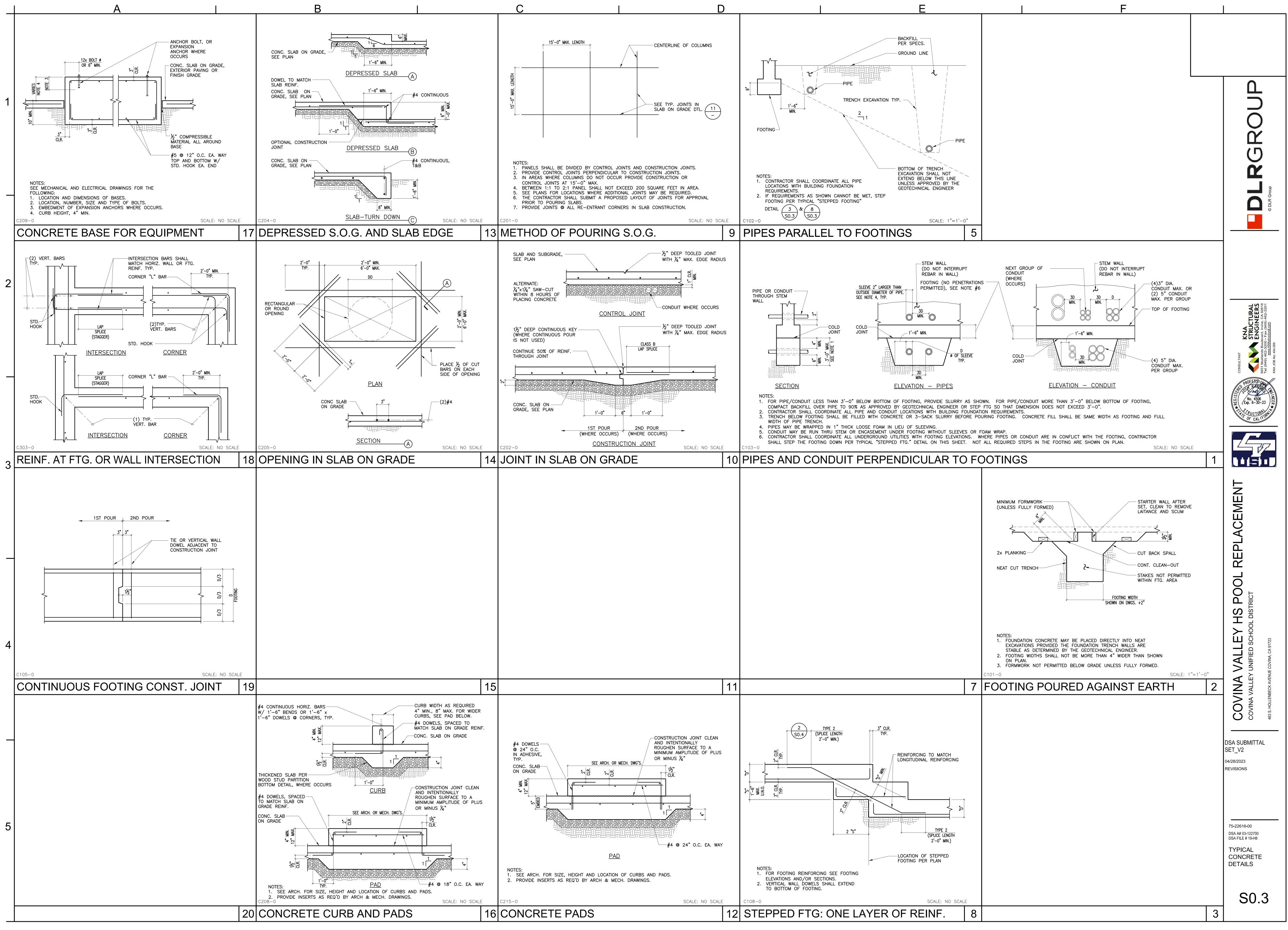
ANCHORS AND/OR DOWELS INSTALLED WITH ADHES	SIVE
1. ANCHORS AND/OR DOWELS SHALL BE INSTALLED WITH ADHESIVE ONLY WE INDICATED ON DRAWINGS.	IERE

- . ANCHORS AND/OR DOWELS SHALL BE INSTALLED IN CONCRETE USING ONE OF THE FOLLOWING PRODUCTS IN ACCORDANCE WITH THE APPLICABLE ICC/IAPMO REPORT:
- HILTI HIT-HY 200 V3 ADHESIVE ICC NO. ESR-4868 SIMPSON SET-XP ADHESIVE ICC NO. ESR-2508 ICC NO. ESR-3298 DEWALT PURE110+ ADHESIVE
- 3. ANCHORS AND/OR DOWELS SHALL BE INSTALLED IN GROUTED MASONRY USING ONE OF THE FOLLOWING PRODUCTS IN ACCORDANCE WITH THE APPLICABLE ICC REPORT:
- HILTI HIT-HY 200 V3 ADHESIVE ICC NO. ESR-4878 SIMPSON SET-XP ADHESIVE IAPMO NO. ER-265
- 4. ADHESIVE SYSTEMS OTHER THAN THOSE SPECIFIED SHALL BE SUBMITTED AS A SUBSTITUTION, AND ARE SUBJECT TO THE REVIEW AND APPROVAL OF THE ENFORCEMENT AGENCY, THE ARCHITECT, AND THE STRUCTURAL ENGINEER.
- 5. HOLES SHALL BE DRILLED WITH NON-REBAR-CUTTING DRILL BITS.
- 6. HOLES SHALL BE CLEAN OF CONCRETE DUST AND DEBRIS USING A STEEL WIRE BRUSH AND OIL-FREE COMPRESSED AIR. HOLES SHALL ALSO BE FREE OF STANDING WATER.
- 7. PROJECT INSPECTOR SHALL VERIFY INSTALLATION OF ANCHORS OR DOWELS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, INCLUDING CLEANLINESS OF DRILL HOLES AND PROPER EMBEDMENT.
- ANCHORS SET IN CONCRETE AND GROUTED MASONRY SHALL BE TESTED TO 2 TIMES THE ASD ALLOWABLE TENSION LOAD, 1.25 TIMES THE LRFD STRENGTH CAPACITY, OR 80% OF THE YIELD STRENGTH OF THE BOLT FOR THE SPECIFIC LOCATION OF THE ANCHOR TO BE TESTED, WHICHEVER IS LESS. TORQUE TESTING IS NOT PERMITTED. SEE DETAILS FOR TEST LOADS.
- 9. ADHESIVE ANCHORS INSTALLED IN HORIZONTAL TO VERTICALLY OVERHEAD ORIENTATION TO SUPPORT SUSTAINED TENSION LOADS SHALL BE DONE BY A CERTIFIED ADHESIVE ANCHOR INSTALLER (AAI) AS CERTIFIED THROUGH ACI/CRSI (ACI 318-14 17.8.2.2). PROOF OF CURENT CERTIFICATION SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCEMENT OF INSTALLATION.
- 10. ADHESIVE ANCHORS MUST BE INSTALLED IN CONCRETE AGED A MINIMUM OF 21 DAYS

## **COLD-FORMED STEEL FRAMING**

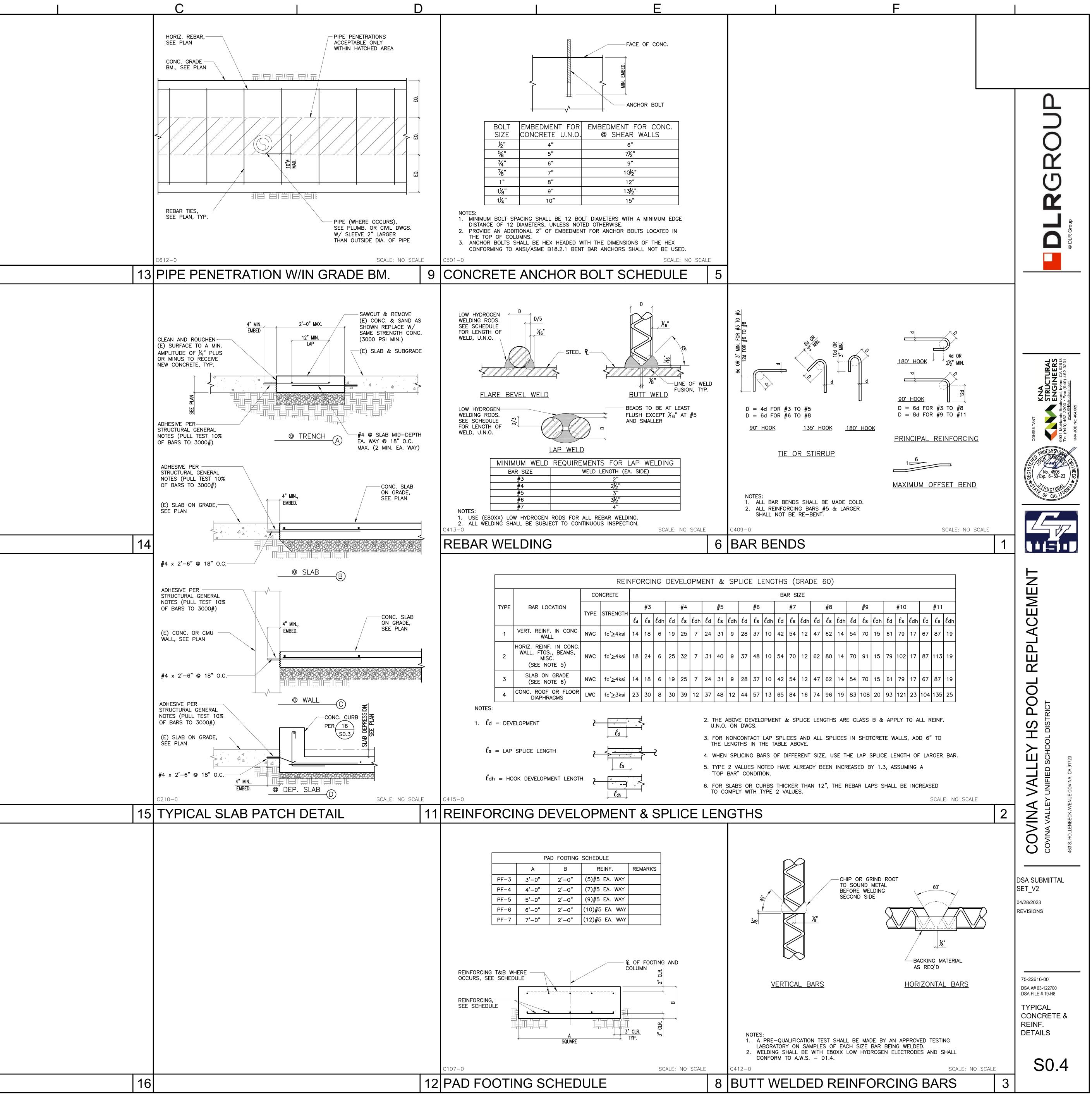
- 1. ALL PORTIONS OF WORK PERTAINING TO COLD-FORMED STEEL CONSTRUCTION SHALL CONFORM TO TITLE 24, PART 2, CHAPTER 22A.
- 2. ALL LIGHT GAUGE METAL FRAMING SHALL BE GALVANIZED AND SHALL CONFORM TO ASTM A-653 SS, GRADE 50, CLASS 1, WITH A MINIMUM YIELD STRENGTH OF 50 KSI FOR 16 GAUGE AND HEAVIER FRAMING, AND ASTM A-653 SS, GRADE 33, WITH A MINIMUM YIELD STRENGTH OF 33 KSI FOR 18 GAUGE AND LIGHTER FRAMING.
- 3. DIMENSIONS, PROPERTIES AND TYPES NOTED ARE BASED ON METAL STUDS AND TRACKS BY STEEL STUD MANUFACTURERS ASSOCIATION, ICC NO. ESR-3064P, UNLESS NOTED OTHERWISE.
- 4. ALL STUDS AT JAMBS OF DOOR AND WINDOW OPENINGS SHALL BE 16 GAUGE, UNLESS NOTED OTHERWISE.
- 5. WELDING SHALL BE IN ACCORDANCE WITH THE STRUCTURAL WELDING CODE -SHEET STEEL, AWS D1.3, BY THE AMERICAN WELDING SOCIETY.
- 6. ALL SHEET METAL SCREWS SHALL PROTRUDE 3 EXPOSED THREADS MINIMUM THROUGH BASE METAL FRAMING.
- 7. ALL METAL STUDS SHALL HAVE STIFFENED FLANGES.
- 8. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR SIZE AND GAUGE OF STUDS.





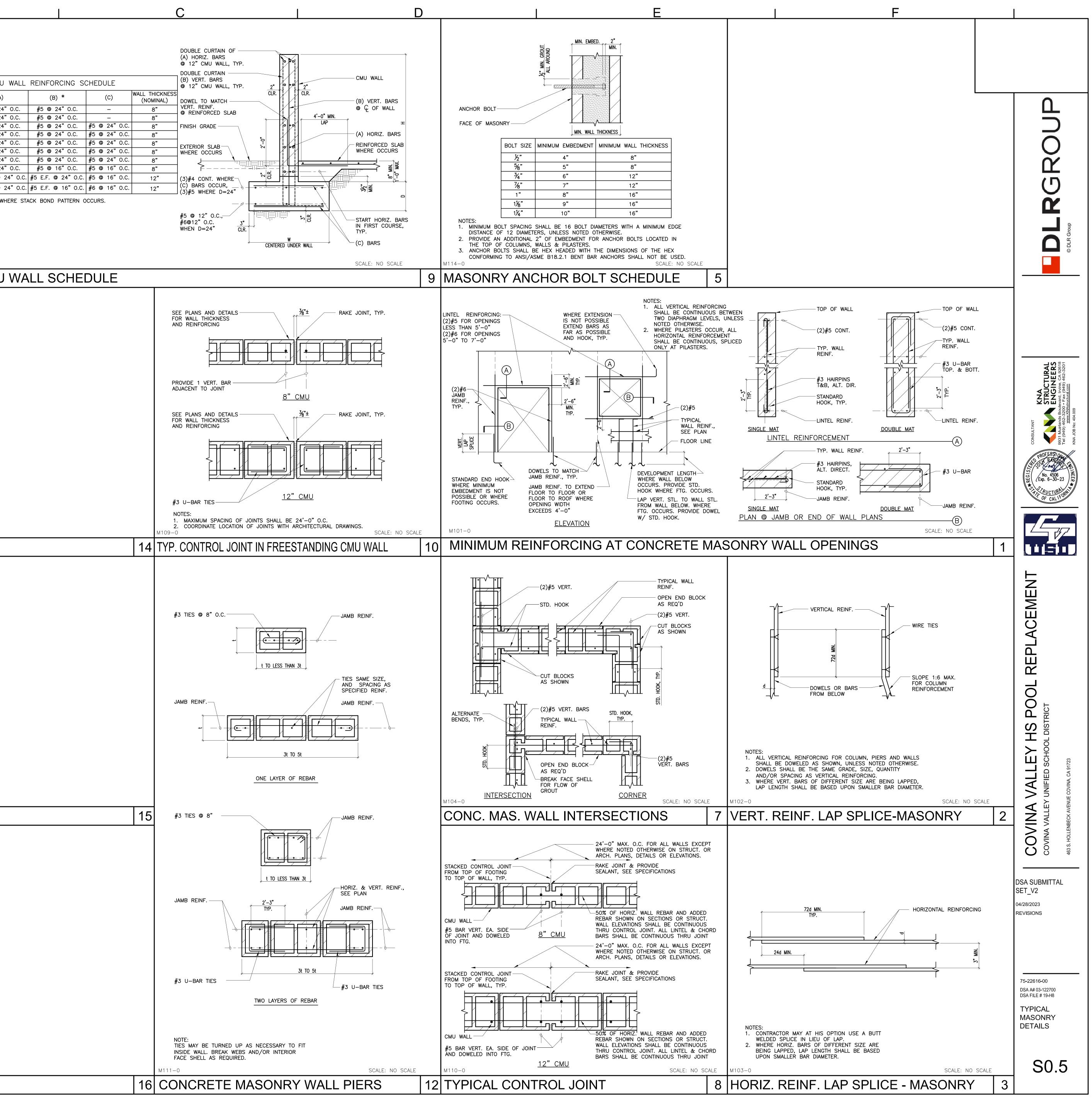
	Α Ι	В
1		
1		
	17	
2		
3	18	
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	19	
5		
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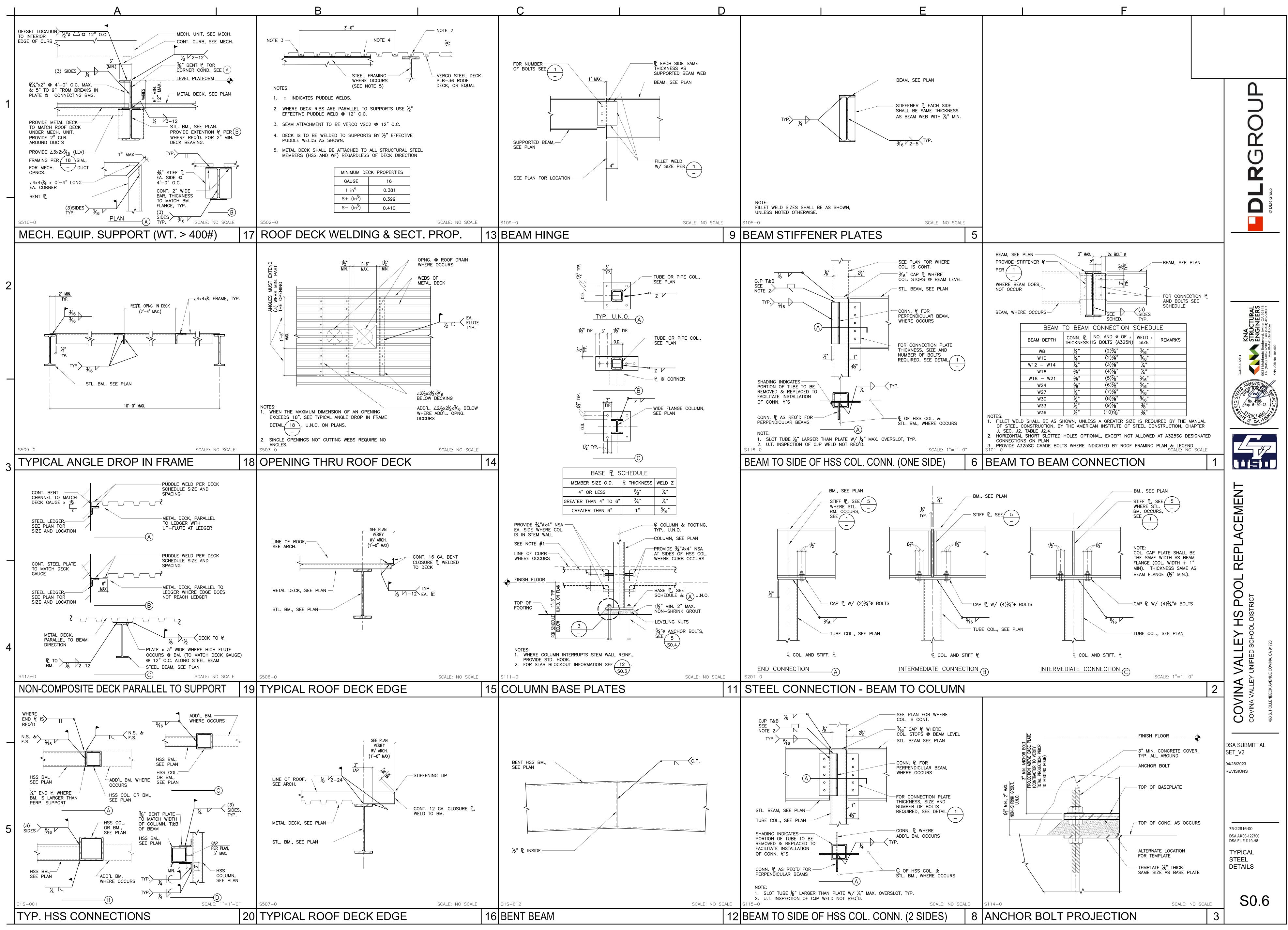
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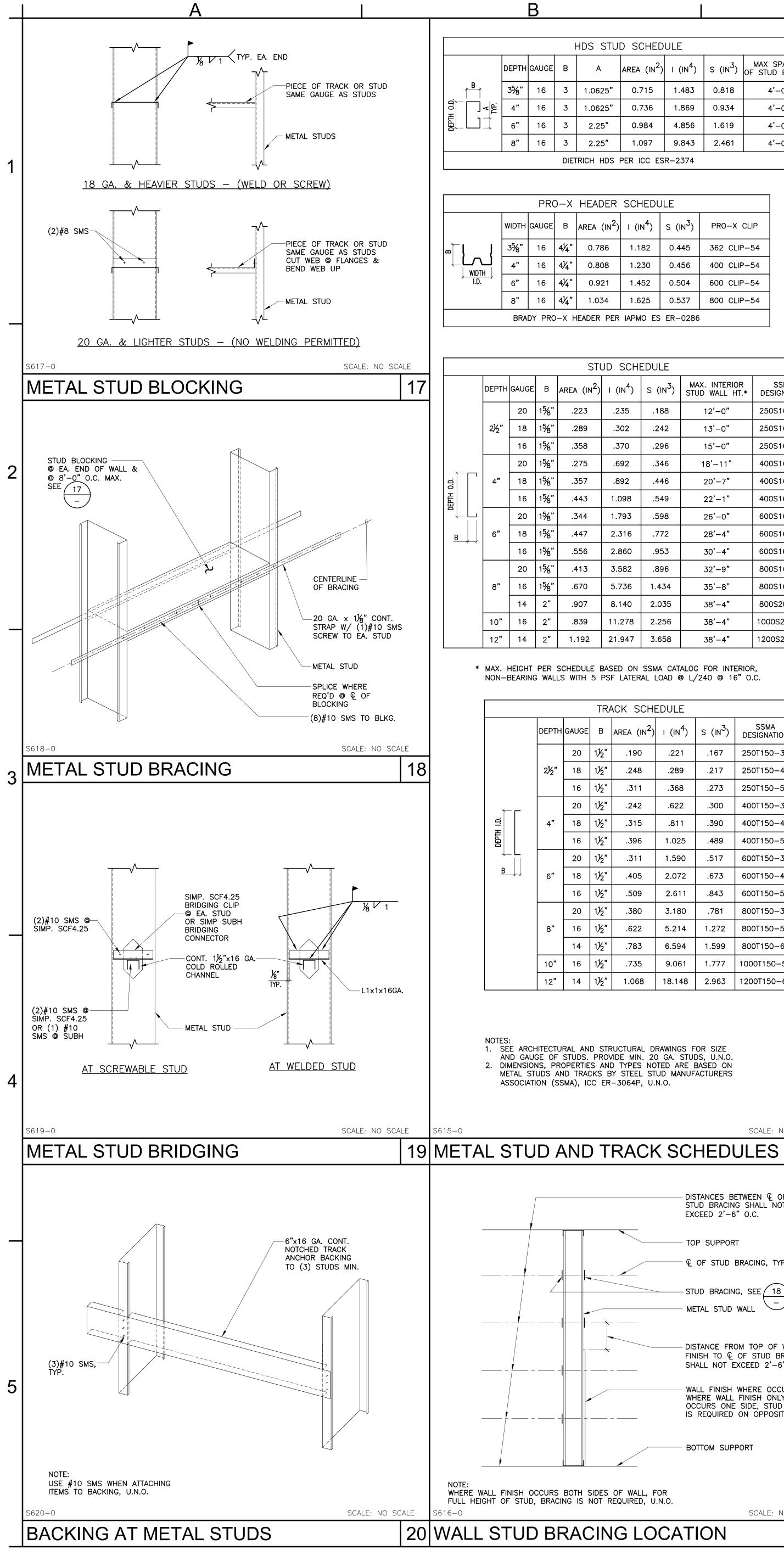


	Α		В
			FREESTANDING CMU       H     W     D     (A)
1			1'-0" TO $2'-0"$ $1'-6"$ 12#5 @ 24" $2'-1"$ TO $3'-0"$ $2'-0"$ 12#5 @ 24" $3'-1"$ TO $4'-0"$ $2'-6"$ 12#5 @ 24" $4'-1"$ TO $5'-0"$ $2'-6"$ 12#5 @ 24"
			4 - 1 $10$ $3 - 0$ $2 - 6$ $12$ $#0$ $2 + 1$ $5' - 1$ " $TO$ $6' - 0$ " $3' - 0$ " $12$ $#5$ $24$ " $6' - 1$ " $TO$ $7' - 0$ " $3' - 6$ " $12$ $#5$ $24$ " $7' - 1$ " $TO$ $8' - 0$ " $4' - 0$ " $12$ $#5$ $24$ "
			8'-1" TO 9'-0"       4'-6"       18       #5 @ 24"         9'-1" TO 10'-0"       5'-6"       24       #5 E.F. @ 2         10'-1" TO 11'-0"       6'-0"       24       #5 E.F. @ 2
			* SPACE VERTICAL REINFORCING @ 16" O.C. WH
			M108-0
		17	FREESTANDING CMU
2			
3		18	
Α			
4			
		19	
5			
_		20	

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ļ	D SCHEDULE					
	area (in <sup>2</sup> )	I (IN <sup>4</sup> )	s (IN <sup>3</sup> )	MAX SPACING OF STUD BRACING		
	0.715	1.483	0.818	4'-0"		
	0.736	1.869	0.934	4'-0"		
	0.984	4.856	1.619	4'-0"		
	1.097	9.843	2.461	4'-0"		

 $S(IN^3)$ PRO-X CLIP 1.182 | 0.445 | 362 CLIP-54 1.230 0.456 400 CLIP-54 1.452 0.504 600 CLIP-54 1.625 0.537 800 CLIP-54

SCHEDULE				
(IN <sup>4</sup> )	s (IN <sup>3</sup> )	MAX. INTERIOR STUD WALL HT.*	SSMA DESIGNATION	
235	.188	12'-0"	250S162-33	
302	.242	13'-0"	250S162-43	
370	.296	15'–0"	250S162-54	
692	.346	18'—11"	400S162-33	
392	.446	20'-7"	400S162-43	
098	.549	22'-1"	400S162-54	
793	.598	26'-0"	600S162-33	
316	.772	28'-4"	600S162-43	
860	.953	30'-4"	600S162-54	
582	.896	32'-9"	800S162-33	
736	1.434	35'–8"	800S162-54	
140	2.035	38'-4"	800S200-68	
.278	2.256	38'-4"	1000S200-54	
.947	3.658	38'-4"	1200S200-68	

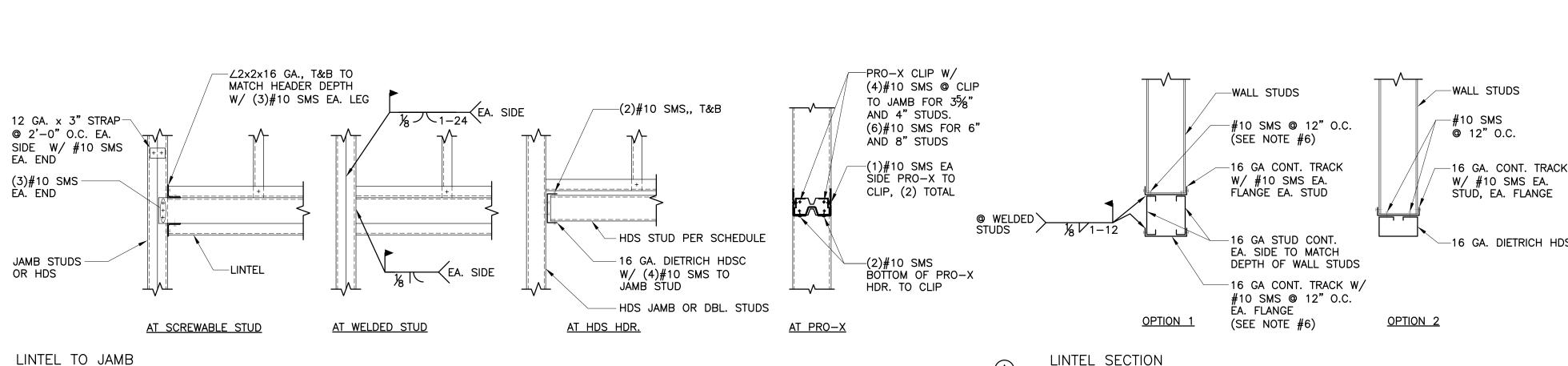
K SCHEDULE				
rea (in <sup>2</sup> )	I (IN <sup>4</sup> )	s (IN <sup>3</sup> )	SSMA DESIGNATION	
.190	.221	.167	250T150-33	
.248	.289	.217	250T150-43	
.311	.368	.273	250T150-54	
.242	.622	.300	400T150-33	
.315	.811	.390	400T150-43	
.396	1.025	.489	400T150-54	
.311	1.590	.517	600T150-33	
.405	2.072	.673	600T150-43	
.509	2.611	.843	600T150-54	
.380	3.180	.781	800T150-33	
.622	5.214	1.272	800T150-54	
.783	6.594	1.599	800T150-68	
.735	9.061	1.777	1000T150-54	
1.068	18.148	2.963	1200T150-68	

 $\frac{1}{1}$  EA. SIDE SCALE: NO SCALE CUT WEB @ FLANGES & BEND WEB DOWN 15 12 GA. x 3" STRAP -╥ᠠᢉ᠋ <u>16</u> **@** 2'-0" O.C. EA. SIDE W/ #10 SMS EA. END -16 GA. CONT. TRACK (1)#10 SMS DISTANCES BETWEEN & OF ÈÁ. SIDE STUD BRACING SHALL NOT EXCEED 2'-6" O.C. (2)#10 SMS JAMB STUDS TOP SUPPORT OR HDS € OF STUD BRACING, TYP. -- EA. SIDE 16 GA. CONT. TRACK -- STUD BRACING, SEE 18, TYP. AT SCREWABLE STUD AT WELDED STUD AT SCREWABLE STUD METAL STUD WALL TRACK TO JAMB STUD TO TRACK ()DISTANCE FROM TOP OF WALL FINISH TO & OF STUD BRACING SHALL NOT EXCEED 2'-6" WALL FINISH WHERE OCCURS, WHERE WALL FINISH ONLY OCCURS ONE SIDE, STUD BRACING IS REQUIRED ON OPPOSITE SIDE BOTTOM SUPPORT SCALE: NO SCALE S604A-0 16 METAL STUD WALL FRAMING

STEEL BEAM WHERE OCCURS PERPENDICULAR TO WALL, SEE PLAN -STEEL BEAM WHERE OCCURS PARALLEL 6 \ S0.8 \S0.8/ TO WALL, SEE PLAN \_\_\_\_\_ BOTTOM OF SUPPORT -CEILING KING STUDS, SEE HEADER SPAN SCHEDULE TYP. U.N.O., PROVIDE DOUBLE QUANTITY PER SCHEDULE **@** JAMBS OF ADJACENT OPENINGS EF-∕ **G** -||| WALL STUD BRACING -WHERE REQUIRED, SEE 18 BOTTOM TRACK -T.O. CONC. SLAB -OR CONC. CURB WHERE OCCURS  $-\mathbb{D}$ S0.8 HEADER SPAN, SEE SCHED.

	HEADER	SPAN SCHEDULE	-
SPAN	CONDITION	HEADER	KING STUDS*
4'-0"	ALL	SINGLE 16GA. TRACK	(2) x 16GA.
4'-1" TO 8'-0"	EXTERIOR	BOX HDR. PER 'B'	(3) x 16GA.
4'-1" TO 12'-0"	INTERIOR	BOC HDR. PER 'B'	(3) x 16GA.
> SPANS NOTED	ALL	SEE SIZE ON PLAN	(3) x 16GA. U.N.O.
*NOTE: (1) 16CA		MAY PEPLACE (2) 16	

\*NOTE: (1) 16GA. DIETRICH HDS MAY PEPLACE (2) 16GA. KING STUDS



- METAL STUDS

MIN., U.N.O.

Θ̈́HDS

- CONT. BOTTOM TRACK

-#10 SMS EA. FLANGE, (2)#10 SMS EA. FLANGE

TO MATCH GA. OF STUD,

3. ALL TOP AND BOTTOM TRACKS SHALL BE SAME GAUGE AS STUDS, U.N.O. 4. ALL STUDS AT JAMBS OF DOOR AND WINDOW OPENINGS SHALL BE 16 GAUGE, U.N.O. 5. WELDING SHALL BE IN ACCORDANCE WITH STRUCTURAL WELDING CODE - SHEET STEEL,

OUTLINE OF WALL,-

TYP. STUDS-

(SEE NOTE 6)

#10 SMS @ 3'-0" O.C.

2. SEE ARCHITECTURAL AND STRUCTURAL

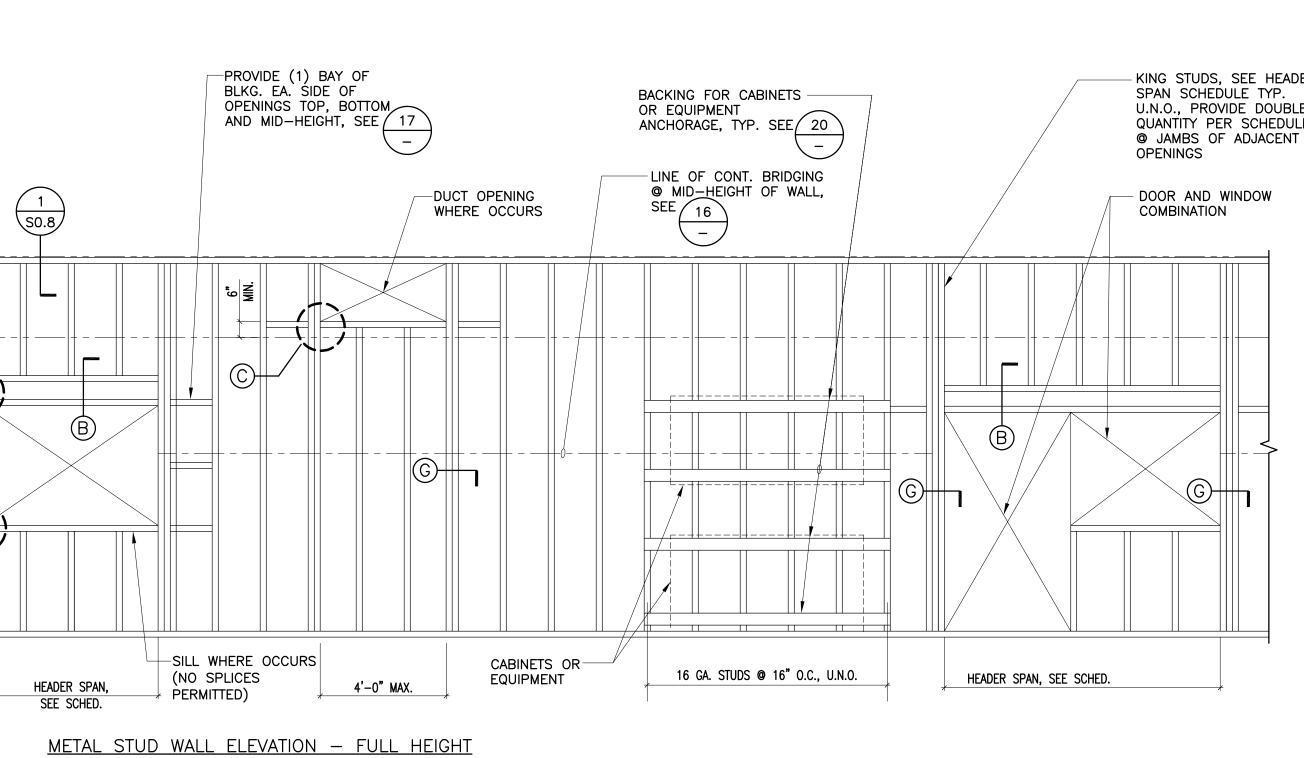
DRAWINGS FOR SIZE OF STUDS.

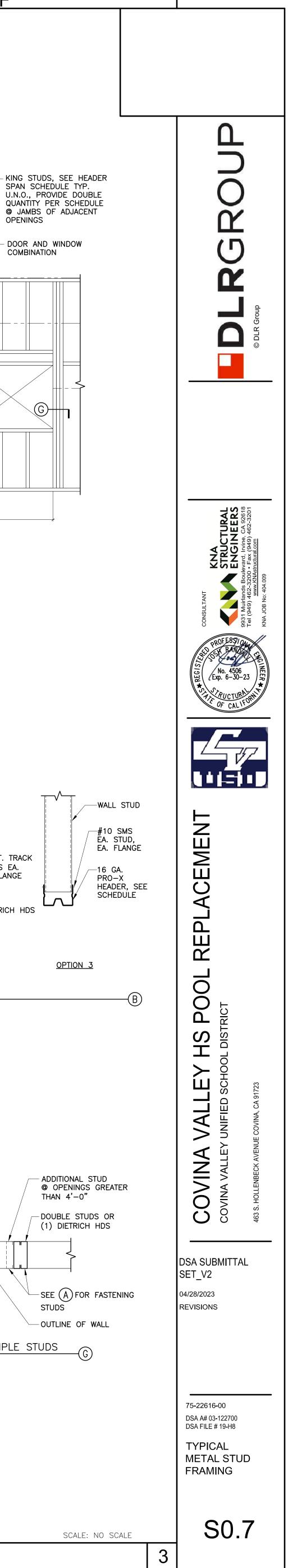
- AWS D1.3, BY THE AMERICAN WELDING SOCIETY.

- 6. OMIT SHEET METAL SCREWS @ WELDED STUD CONDITIONS.
- -(D) NOTES: 1. SEE "METAL STUD AND TRACK SCHEDULES" ON THIS SHEET FOR ADDITIONAL INFORMATION.

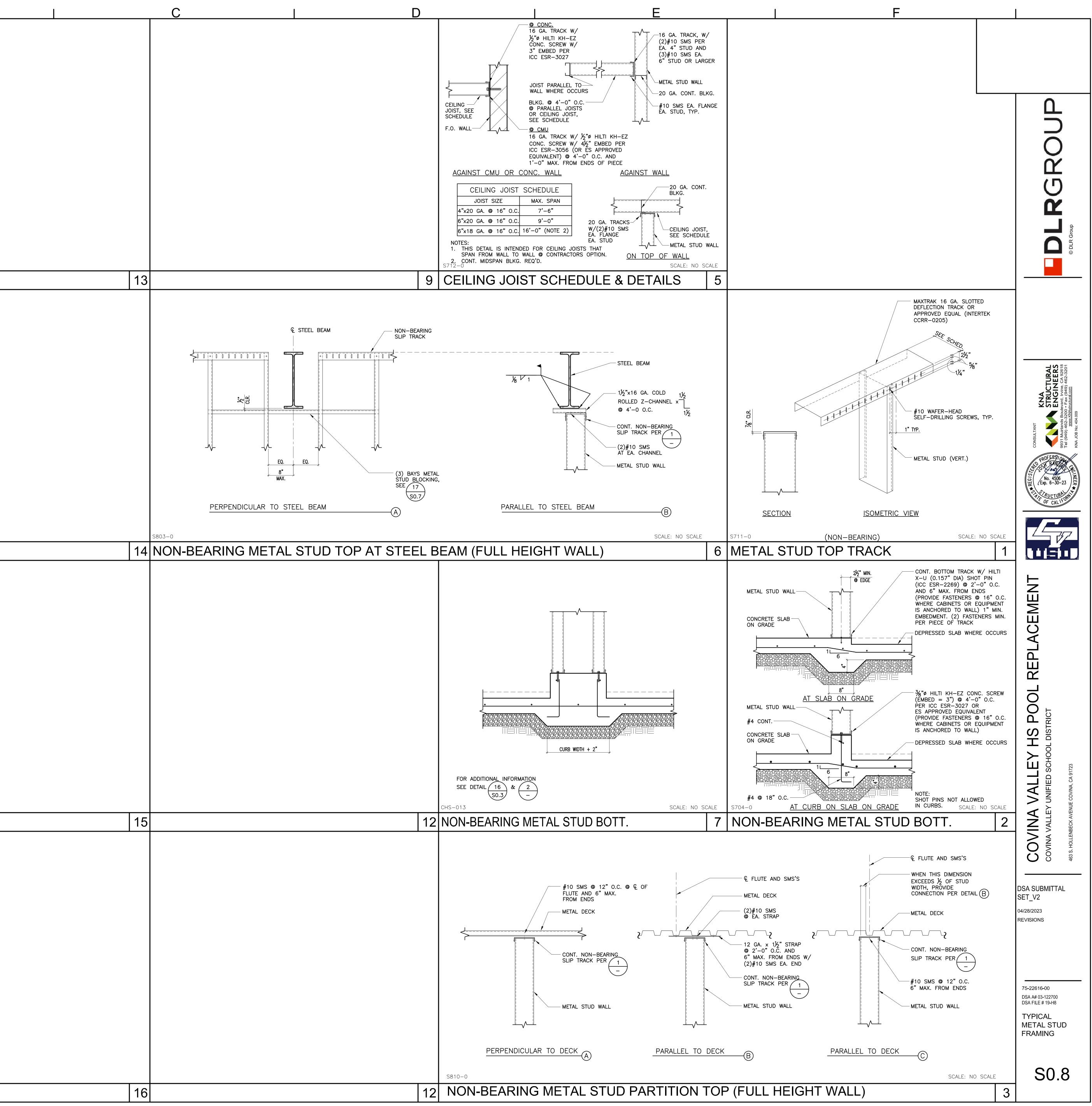
TYP. INTERSECTION

- ∕AT WELDED AT WELDED STUDS STUDS ONLY  $\frac{1}{8}$  / 1-18 1/2 1-18 ONLY, TYP. -#10 SMS @ 2'-0" O.C. (SEE NOTE 6) TYP. STUDS -OUTLINE OF WALL, MULTIPLE STUDS TYPICAL CORNER
- -16 GA. CONT. TRACK 16 GA. DIETRICH HDS LINTEL SECTION (A)





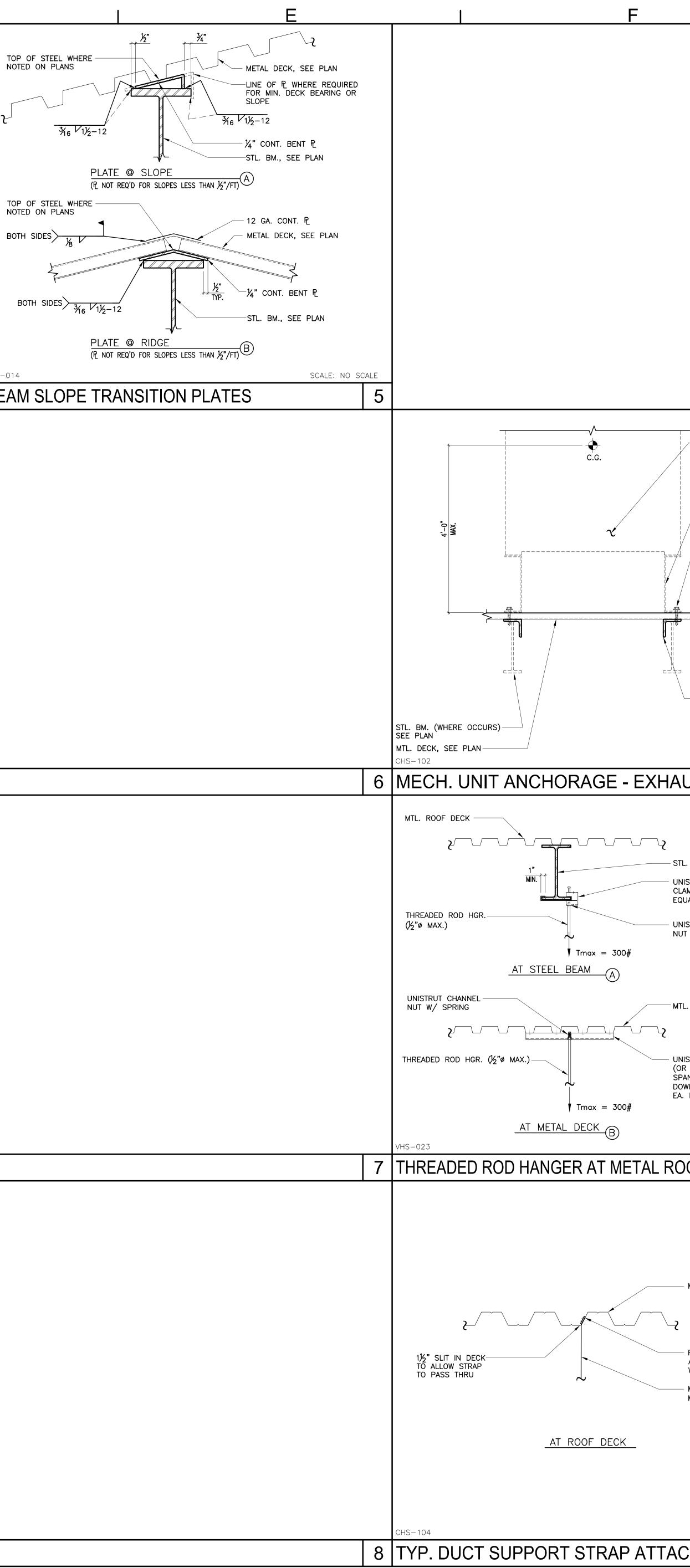
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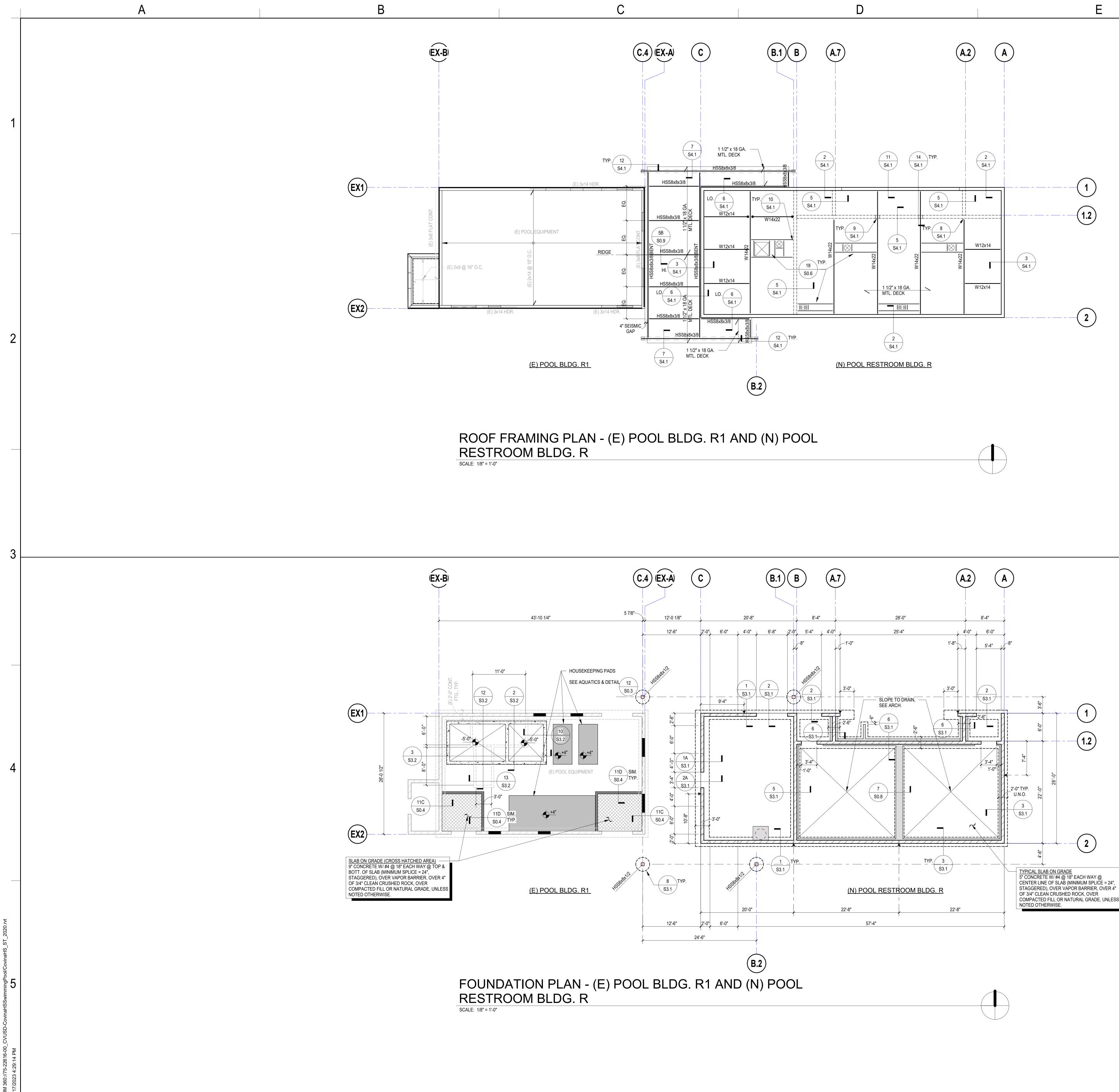
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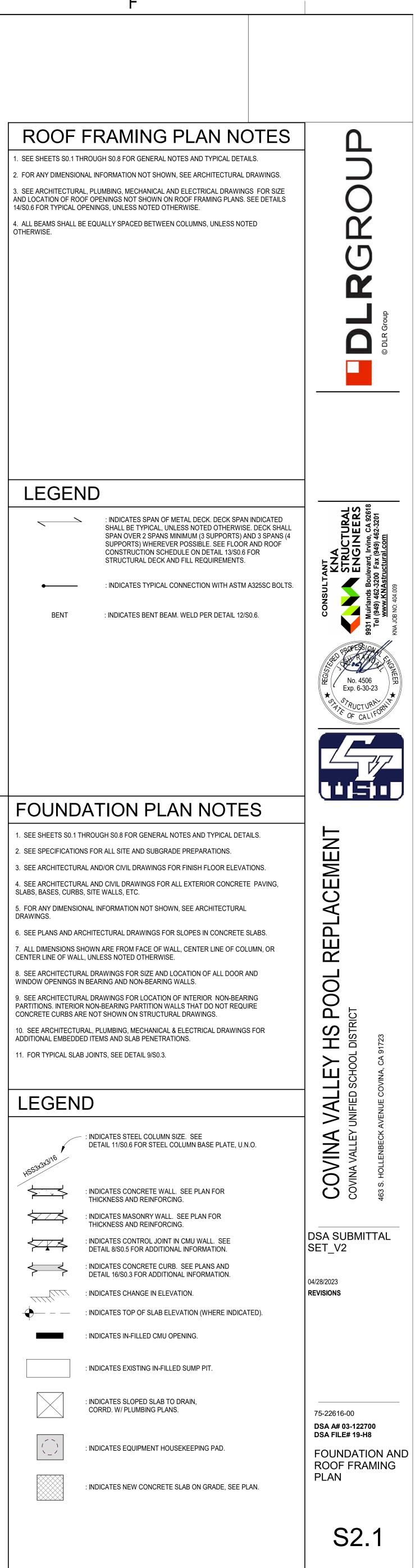
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15		11	1
16		12	2

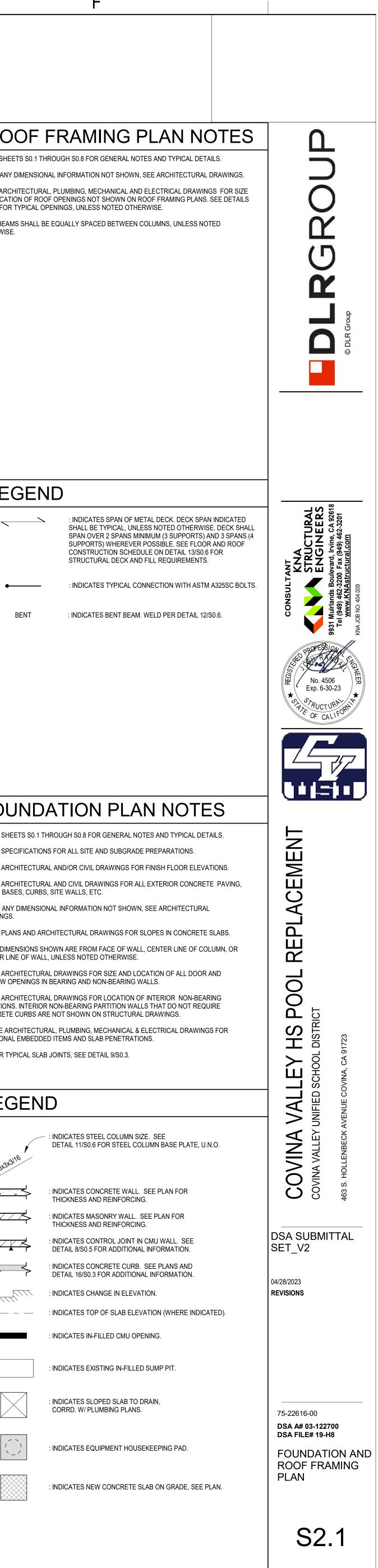


	BLAGROUP © LR Group
MECH. UNIT (MAX. WT.=500#)	
→ METAL CURB PER MANUF. (3)#12 TEK SCREW @ EA. CORNER & 6" O.C., (4) MIN. PER SIDE OF UNIT.	CONSULTANT CONSULTANT CONSULTANT RNA STRUCTURAL B931 Muirlands Boulevard, Irvine, CA 92618 Tel (949) 462-3200 Mww.KNAstructural.com KNA JOB No: 404.009
STL. Z, WHERE NO BMS ARE SHOWN ON PLAN PER SO.6 SCALE: 1"=1'-0" UST FAN 1	PROFESSION No. 4506 Exp. 6-30-23 Fr OF CALIFORNIA CALIFICA CALIFORNIA CALIFICA CALIF
TL. ROOF BM. NISTRUT P2676 BM. AMP (OR APPROVED QUAL) W/ RETAINER STRAP NISTRUT P2679 SWIVEL JT (OR APPROVED EQUAL)	IL REPLACEMENT
TL. ROOF DECK (20 GA. MIN.) NISTRUT P1000 CHANNEL OR APPROVED EQUAL) PANNING TO MINIMUM (4) OWNFLUTES W/ #12 SMS A. FLUTE	COVINA VALLEY HS POC COVINA VALLEY UNIFIED SCHOOL DISTRICT 463 S. HOLLENBECK AVENUE COVINA, CA 91723
SCALE: NO SCALE	COVINA VALLEY UNIFIED SC GOVINA VALLEY UNIFIED SC 463 S. HOLLENBECK AVENUE COVINA, CA 91723
– MTL. DECK, SEE PLAN	DSA SUBMITTAL SET_V2 04/28/2023 REVISIONS
<ul> <li>FOLD STRAP OVER 2" &amp; ATTACH TO VERT. DECK WEB W/ (2)#12 SMS</li> <li>MTL. HGR. STRAP PER MECH. DWGS (20# MAX.)</li> </ul>	75-22616-00 DSA A# 03-122700 DSA FILE # 19-H8 TYPICAL METAL DECK DETAILS
scale: no scale CHMENT 3	S0.9





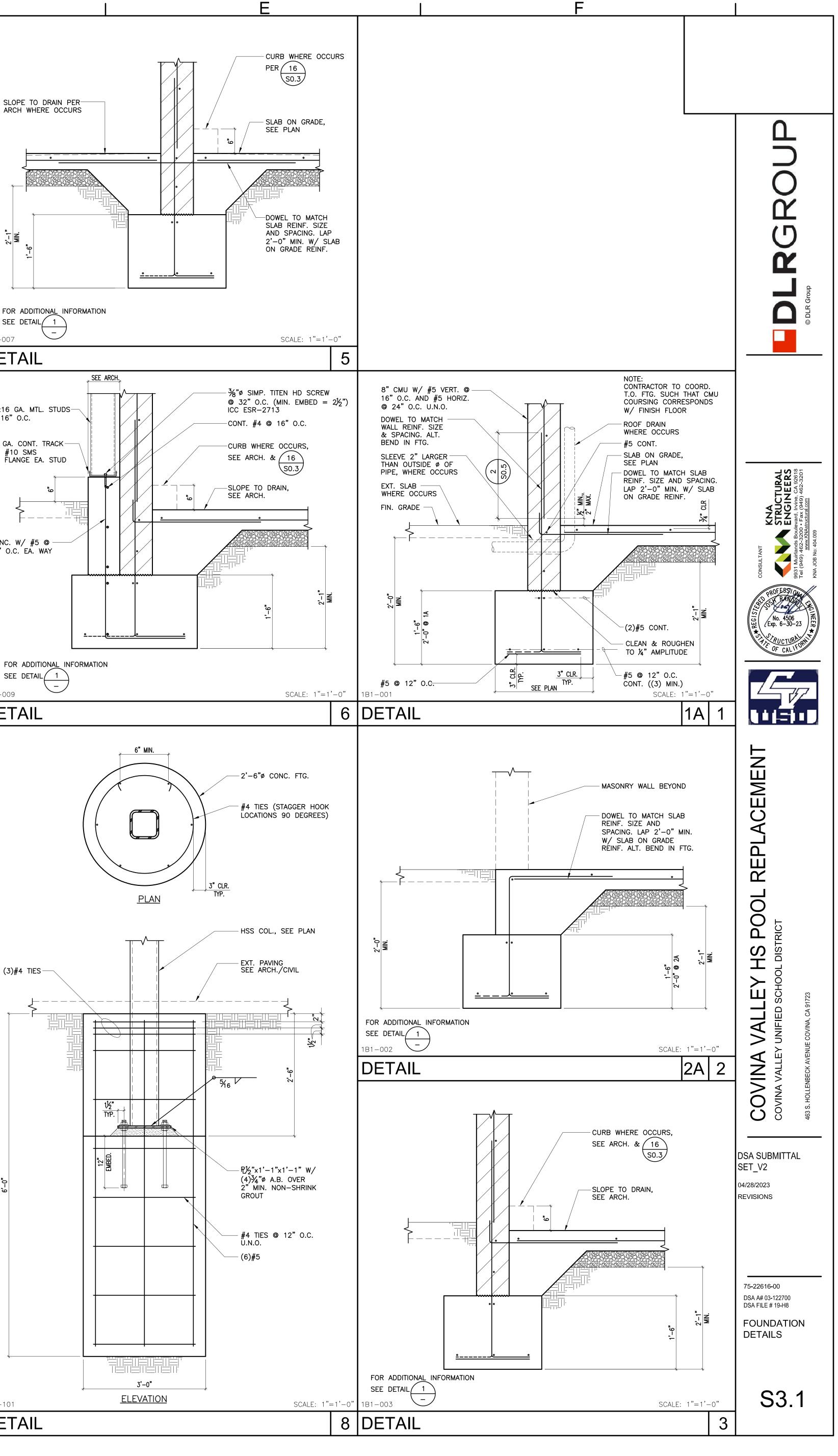
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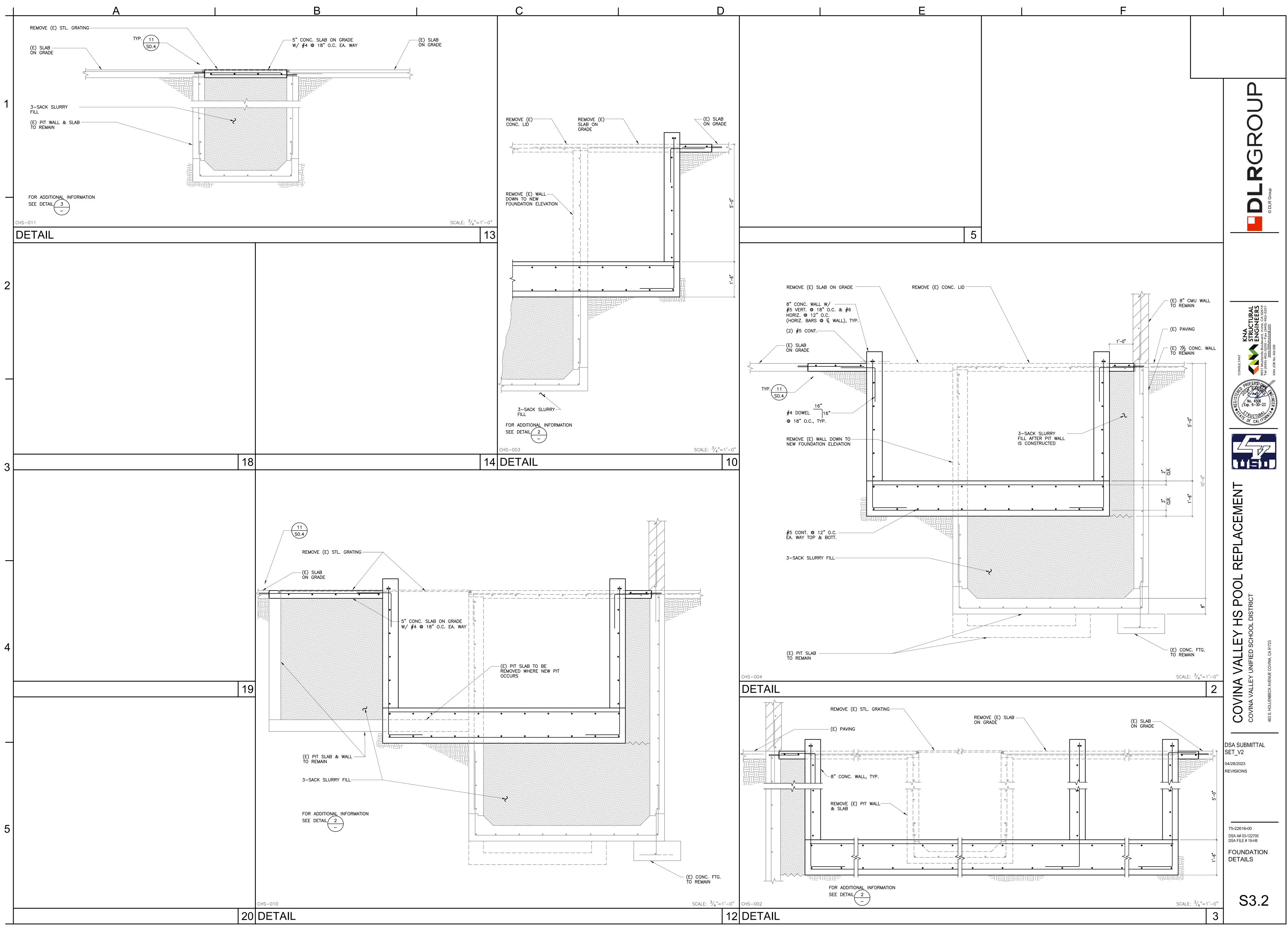


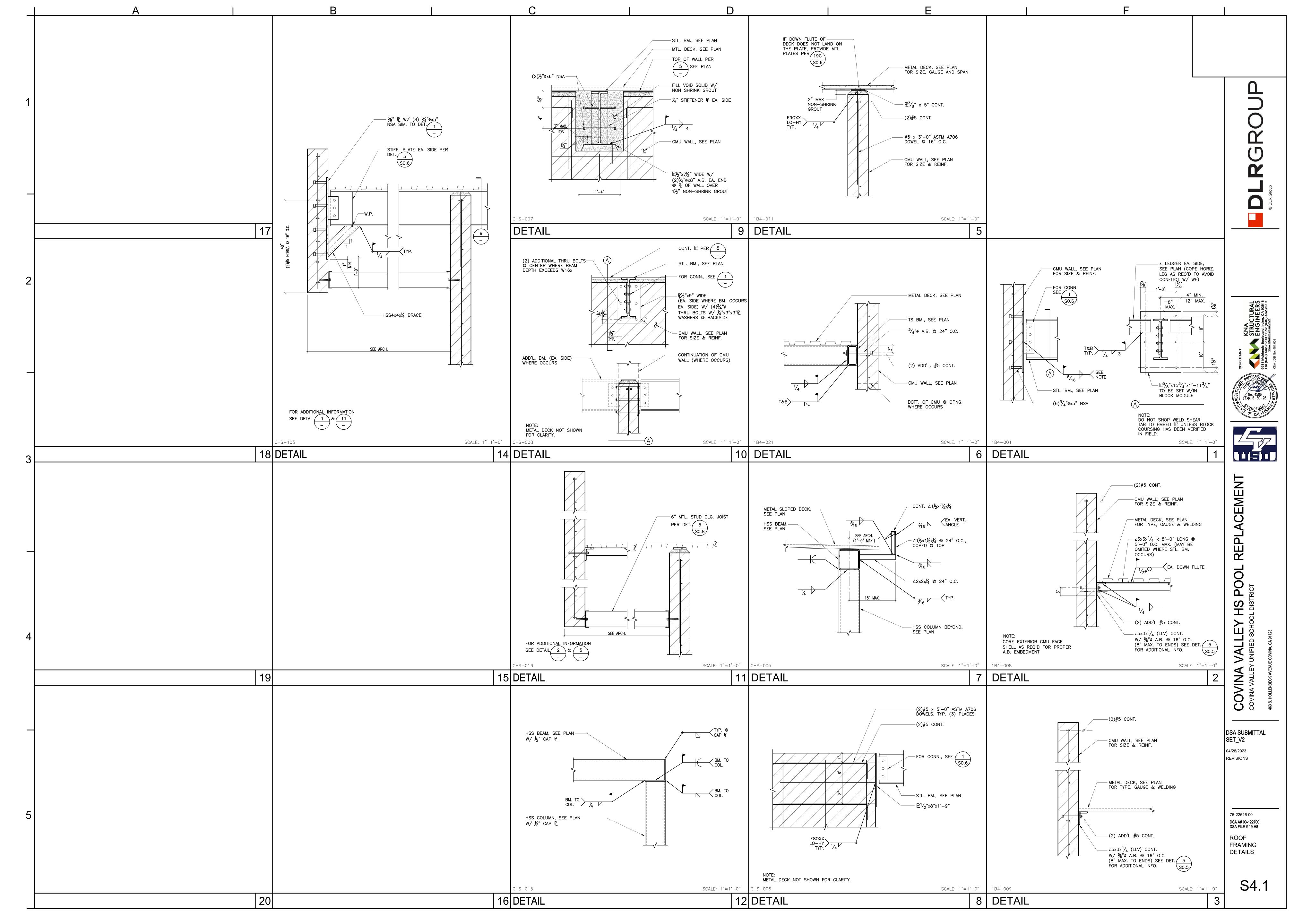
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	l D	С		
SL0 AR				
FOF SEE 1B1-007	9		13	
6"x16 @ 16" 16 GA. W/ #1 EA. FL				
CONC. 12" 0. F0 SE CHS-009 DET	10		14	
(3)				
1	11		15	
e, –0,				
CHS-10 <sup>7</sup> 2 DET	12		16	







	A	D
	<ol> <li>PROJECT RECORD DOCUMENTS. USE A COMPUTER AIDED DRAFTING (CAD) SYSTEM THE PREPARATION OF RECORD DRAWINGS FOR THIS PROJECT. ACCEPTABLE CAD SYSTEMS SHALL BE CAPABLE OF PRODUCING FILES COMPATIBLE WITH THE LATEST VERSION OF AUTOCAD IN DWG OR DXF FORMAT. OWNER'S CONSULTANT WILL FURNI CAD BACKGROUNDS FOR USE BY THE CONTRACTOR AFTER CONSTRUCTION IS 90% COMPLETE EXCEPT WHERE PROHIBITED BY CONTRACT.</li> </ol>	ASSEMB SYSTEM
1	<ol> <li>ALL ELECTRICAL PREFABRICATED EQUIPMENT SHALL BE DESIGNED AND CONSTRUC IN SUCH A MANNER THAT ALL PORTIONS, ELEMENTS, SUB-ASSEMBLIES AND/OR PART OF SAID EQUIPMENT, AND THE EQUIPMENT AS A WHOLE INCLUDING ITS ATTACHMENT WILL RESIST A LOAD WHICH EXCEEDS THE FORCE LEVEL USED TO RESTRAIN AND ANCHOR THE EQUIPMENT TO THE SUPPORTING STRUCTURE.</li> </ol>	TS OCC TS, DIST NEEI TO C
	3. ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL BE LISTED UNDERWRITER'S LABORATORIES (UL) AND BEAR THEIR LABEL, OR LISTED AND CERTI BY A NATIONALLY RECOGNIZED TESTING AUTHORITY, WHERE UL DOES NOT HAVE A LISTING. CUSTOM MADE EQUIPMENT SHALL HAVE COMPLETE TEST DATA SUBMITTED THE MANUFACTURER ATTESTING TO ITS SAFETY. IN ADDITION, THE MATERIALS, EQUIPMENT, AND INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF THE FOLLOWING:	IFIED THE SQU
	AMERICAN SOCIETY OF TESTING MATERIALS (ASTM) INSULATED POWER CABLE ENGINEERS ASSOCIATION (IPCEA) NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA) AMERICAN STANDARD ASSOCIATION (ASA) NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) AMERICAN NATIONAL STANDARD INSTITUTE (ANSI) CALIFORNIA ELECTRICAL CODE (CEC) - LATEST EDITION CALIFORNIA	STEEL EI ALL OTH BY AN AF FIRESTO 3M C
_	CODE OF REGULATIONS TITLE 24 (CCR) INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE) ALL LOCAL CODES HAVING JURISDICTION. WHERE THE CODES HAVE DIFFERENT LEVELS OF REQUIREMENTS, THE MOST STRING	
	<ul> <li>RULE SHALL APPLY.</li> <li>4. THE CONTRACTOR SHALL VISIT THE SITE INCLUDING ALL AREAS INDICATED ON THE DRAWINGS. HE SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS AND BY SUBMITTING A BID, ACCEPTS THE CONDITIONS UNDER WHICH H</li> </ul>	
	<ul> <li>SHALL BE REQUIRED TO PERFORM HIS WORK.</li> <li>5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A COMPLETE SET OF CONTRACT DOCUMENTS AND ADDENDA (DRAWINGS AND SPECIFICATIONS.) HE SHAL CHECK THE CONTRACT DOCUMENTS OF THE OTHER TRADES AND DETERMINE HIS RESPONSIBILITIES. FAILURE TO DO SO SHALL NOT RELEASE THE CONTRACTOR FROM</li> </ul>	OAK STEEL U L PROTEC
2	<ul> <li>COMPLETING ALL RESPONSIBLE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.</li> <li>6. SECURE AND PAY FOR ALL PERMITS, FEES, CHARGES, AND INCIDENTAL COSTS NECESSARY FOR EXECUTION AND COMPLETION OF ELECTRICAL WORK, INCLUDING A</li> </ul>	GYPSUM AND THE THE 1/8 I
2	<ul> <li>CHARGES BY STATE, COUNTY AND LOCAL GOVERNMENTAL AGENCIES.</li> <li>7. ALL ELECTRICAL WORK REFERENCED HEREIN SHALL BE COORDINATED WITH OTHER TRADES AND SITE CONDITIONS. ANY COSTS TO INSTALL WORK TO ACCOMPLISH SAID</li> </ul>	D ARCHITE
	COORDINATION WHICH DIFFERS FROM THE WORK AS SHOWN ON THE CONTRACT DOCUMENTS SHALL BE INCURRED BY THE CONTRACTOR. ANY DISCREPANCIES, AMBIGUITIES OR CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHIT DURING BID TIME FOR CLARIFICATION. ANY SUCH CONFLICTS NOT CLARIFIED PRIOR BID SHALL BE SUBJECT TO THE INTERPRETATION OF THE ARCHITECT AT NO ADDITIO COST TO THE OWNER.	TO MECHAN
	8. PROVIDE TEMPORARY POWER FACILITIES AND CONNECTIONS FOR ALL FEEDERS, BRANCH CIRCUITS, OR SIGNAL AND COMMUNICATIONS SYSTEMS BEING DISCONNECTION OF TO MAINTAIN SYSTEMS IN OPERATION.	TED 29. REFER T CONDUC EQUIPME
_	9. ALL INTERRUPTION OF ELECTRICAL POWER SHALL BE KEPT TO A MINIMUM. HOWEVE WHEN AN INTERRUPTION IS NECESSARY, THE SHUTDOWN MUST BE COORDINATED V THE OWNER AND ENGINEER 14 DAYS PRIOR TO THE OUTAGE. ANY OVERTIME PAY SH BE INCLUDED IN THE CONTRACTOR'S BID. WORK IN EXISTING SWITCHBOARDS OR PANELBOARDS SHALL BE COORDINATED WITH THE OWNER PRIOR TO REMOVING ACCESS PANELS OR DOORS.	VITH
	10. AFTER ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS HAVE BEEN FULLY COMPLETED, REPRESENTATIVES OF THE OWNERS WILL INSPECT THE WORK. THE CONTRACTOR SHALL PROVIDE COMPETENT PERSONNEL TO DEMONSTRATE THE OPERATION OF ANY ITEM OR SYSTEM TO THE FULL SATISFACTION OF EACH REPRESENTATIVE. FINAL ACCEPTANCE OF THE WORK WILL BE MADE BY THE OWNER AFTER RECEIPT OF APPROVAL AND RECOMMENDATION OF ACCEPTANCE FROM EAC REPRESENTATIVE.	31. MAXIMUN CONFOR OUTLET AWG CO
	11. FURNISH A ONE YEAR WRITTEN GUARANTEE OF MATERIALS AND WORKMANSHIP FRO THE DATE OF SUBSTANTIAL COMPLETION.	OM 4" S0 4" S0 4-11/ 4-11/
3	<ol> <li>REVIEW AND COORDINATE WITH THE MECHANICAL, FIRE PROTECTION AND PLUMBING CONTRACT DOCUMENTS FOR DUCTS, LINES AND EQUIPMENT.</li> <li>ALL FINAL CONNECTIONS TO OWNER FURNISHED EQUIPMENT SHALL BE MADE BY TH CONTRACTOR.</li> </ol>	ALL OUT DEVICES
	<ul> <li>14. COORDINATE WITH OTHER TRADES AS TO THE EXACT LOCATION OF THEIR RESPECT EQUIPMENT. SUPPLY POWER AND MAKE CONNECTION TO MOTORS AND EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS AS INDICATED ON THE SINGLE LINE DIAGRAM ELECTRICAL DRAWINGS, AND DRAWINGS OF OTHER TRADES. REVIEW THE DRAWING OTHER TRADES FOR CONTROL DIAGRAMS, SIZE AND LOCATION OF EQUIPMENT. DISCONNECT SWITCHES, STARTERS, WIRING, CONTROLS, AND CONDUIT FOR MECHANICAL AND PLUMBING OPERATIONS SHALL BE PROVIDED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING MANUFACTURER'S SHOP DRAWINGS PRIOR</li> </ul>	IVE PANELBO AND ROL 33. RECESSE S OF STUBBEL OTHERW 34. THE LOC
	<ul> <li>15. EXACT METHOD AND LOCATION OF CONDUIT PENETRATION AND OPENINGS IN CONCRETE OR MASONRY WALLS, GRADEBEAMS, FLOORS OR STRUCTURAL STEEL MEMBERS SHALL BE AS DIRECTED BY THE STRUCTURAL ENGINEER. PERFORM CORIN SAWCUTTING, PATCHING, AND REFINISHING OF WALLS AND SURFACES WHEREVER IT NECESSARY TO PENETRATE. OPENINGS SHALL BE SEALED IN AN APPROVED METHO TO MEET THE FIRE RATING OF THE PARTICULAR WALL, FLOOR OR CEILING. EXACT</li> </ul>	NG, "ACCESS
	<ul> <li>16. CONNECTIONS TO MECHANICAL, PLUMBING AND VIBRATING EQUIPMENT AND SEISMI SEPARATIONS:</li> <li>LIQUID-TIGHT FLEXIBLE STEEL CONDUIT IN DRY INTERIOR LOCATIONS.</li> </ul>	E ARCHITE GOVERN INDICATE
	LIQUID-TIGHT FLEXIBLE STEEL CONDUIT IN AREAS EXPOSED TO WEATHER, DAMP LOCATIONS, CONNECTIONS TO TRANSFORMER ENCLOSURES, AND FINAL CONNECTIONS TO MOTORS. 17. EQUIPMENT OUTLETS, LIGHTING FIXTURES, CONDUIT, WIRE, AND CONNECTION METH	ALL CAS CABINET MOUNTIN CENTER
	<ul> <li>17. EQUIPMENT OUTLETS, LIGHTING FIXTORES, CONDULT, WIRE, AND CONNECTION METHING FIXTORES, CONDUCTORES, CONDUCT, WIRE, AND CONNECTION METHING FIXTORES, CONDUCT, WIRE, AND CONNECTION METHING FIXTORES, CONDUCT, WIRE, AND CONNECTION METHING FIXTORES, CONDUCT, WIRE, AND CONNECTION METHING FIXTORES, CONDUCT, WIRE, AND CONNECTION METHING, FIXTORES, CONDUCT, AND CONDUCT, AND CONDUCT, AND CONDUCT, AND CONDUCT, AND CONDUCT, AND CONDUCT, WIRE, AND CONNECTION, AND CONDUCT, WIRE, AND CONNECTION METHING, FIXTORES, CONDUCT, WIRE, AND CONNECTION METHING, FIXTORES, CONDUCT, WIRE, AND CONNECTION METHING, FIXTORES, AND CONDUCT, AND CONDU</li></ul>	
4	<ul> <li>PARALLEL AND PERPENDICULAR TO WALLS AND ADJACENT PIPING. ARRANGE CONDITION TO MAINTAIN HEADROOM AND TO PRESENT A NEAT APPEARANCE.</li> <li>19. CONDUIT SHALL NOT BE INSTALLED IN ANY FLOOR SLAB. CONDUIT SHALL BE INSTALL CONCEALED IN THE CEILING SPACE, CONCEALED IN WALLS, OR 24" MINIMUM BELOW SLAB ON GRADE UNLESS NOTED OTHERWISE.</li> </ul>	LED STRUCTI
	20. LOCATE ELECTRICAL EQUIPMENT AND BOXES, IN ACCESSIBLE CEILING SPACE OR PROVIDE AN ACCESS PANEL FOR INACCESSIBLE CEILING SYSTEMS. ACCESS DOORS SHALL BE A MINIMUM DIMENSION OF 24"x24". ACCESS DOOR LOCATIONS SHALL SUIT ACCESSIBILITY AND CONSTRUCTION CONDITIONS. ACCESS DOORS SHALL HAVE A FIL RATING EQUAL TO THE CEILING ASSEMBLY IN WHICH THEY ARE INSTALLED.	DEVICE.
	21. COORDINATE REQUIRED ACCESS DOORS IN NON-ACCESSIBLE CEILINGS TO SUIT FIEL CONDITIONS. THE EXACT SIZES AND PHYSICAL LOCATIONS SHALL SUIT ACCESSIBILIT AND CONSTRUCTION CONDITIONS. ACCESS DOORS SHALL BE PROVIDED IN OTHER SECTIONS OF THE SPECIFICATIONS. ACCESS DOORS SHALL HAVE A FIRE RATING EQ TO THE CEILING ASSEMBLY IN WHICH THEY ARE INSTALLED.	LD INSULATI NOT BE U IY CONDUC
	22. PROVIDE ALL SAWCUTTING, TRENCHING, BACKFILLING, COMPACTION AND PATCHING CONCRETE, ASPHALT AND LANDSCAPING AS REQUIRED TO PERFORM THIS WORK. TH CONTRACTOR SHALL USE EXTREME CAUTION WHEN TRENCHING FOR HIS WORK AND SHALL BE RESPONSIBLE FOR DETERMINING AND/OR VERIFYING ALL EXISTING UNDERGROUND SYSTEMS PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR	G OF HE 38. ALL CON THHN/TH CELSIUS SMALLEF
	<ul> <li>SHALL BE RESPONSIBLE FOR THE PROPER AND APPROVED REPAIR OF ANY AND ALL DAMAGES CAUSED BY HIM OR HIS WORK.</li> <li>23. WHENEVER A DISCREPANCY OF ANY SYSTEM AND/OR EQUIPMENT ARISES ON THE CONTRACT DOCUMENTS OR SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL MATERIAL AND SERVICES REQU BY THE STRICTEST CONDITIONS NOTED ON THE DRAWINGS OR SPECIFICATIONS TO</li> </ul>	39. REVIEW BEAMS. F OF CONE
	ENSURE COMPLETE AND OPERABLE SYSTEMS AS REQUIRED BY THE OWNER AND ARCHITECT/ENGINEER. 24. VERIFY TYPE OF CEILING SYSTEMS AND FURNISH APPROVED LIGHTING FIXTURES OF THE TYPE REQUIRED FOR MOUNTING IN THE SPECIFIC CEILING. WHERE FIXTURES AF	
5	RECESSED IN PLASTER OR DRYWALL CEILINGS, THEY SHALL BE COMPLETE WITH NECESSARY MOUNTING HARDWARE AND PLASTER FRAMES. 25. ALL EQUIPMENT/DEVICES INSTALLED RECESSED IN FIRE RATED CEILINGS OR WALLS SHALL BE ENCLOSED WITH AN APPROVED UL LISTED ENCLOSURE CARRYING THE SA FIRE RATING AS THE CEILING OR WALL.	42. COORDIN 43. REFER T

			U
GENERAL NOTES			
TY PENETRATIONS OF ANY KIND IN FIRE AND SMOKE PARTITIONS AND CEILING MBLIES, SHALL BE FIRESTOPPED AND SEALED WITH AN APPROVED UL LISTED EM OR MATERIAL. L ELECTRICAL OUTLET BOXES WHICH DO NOT EXCEED 16 SQUARE INCHES IN AREA, NOT BE PROTECTED IN ONE HOUR OR TWO HOUR FIRE RATED WALLS, PARTITIONS, NGS, OR AREA SEPARATION UNLESS THEY: DOCUR ON OPPOSITE SIDES OF THE WALL WITHIN 24 INCH HORIZONTAL DISTANCE OF ONE ANOTHER. IN THIS CASE, ONLY ONE OUTLET BOX IEED TO PROTECTED BY AN APPROVED FIRESTOP MATERIAL OR DETAIL TO CORRECT THIS CONDITION.	44. 45. 46.	LIGHTS, SPEAKERS AND FIRE ALARM HORNS.	HED, SWITCH Sa SHALL CONTROL THE CONTROL THE REMAINING LAMPS IN
ACCINENTIAL AND THE REPORT OF THE FEATURE FOR THE FORLED FOR THE ACCINENT AND THE AND THE ACCINENT AND THE AND THE ACCINENT AND			
L ELECTRICAL OUTLET BOXES WHICH EXCEED 16 SQUARE INCHES IN AREA, AND OTHER STEEL UTILITY OUTLET BOXES REGARDLESS OF SIZE, SHALL BE PROTECTED			
	1		

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	DEMOLITION NOTES	SHEET I	NDEX
1. 2.	IN GENERAL, THE DEMOLITION PLAN INDICATES ALL EXISTING EQUIPMENT TO BE REMOVED; HOWEVER, ELECTRICAL EQUIPMENT, WHETHER SHOWN ON THIS DRAWING OR NOT, THAT IS LOCATED IN REMOVED WALLS, FLOORS OR CEILINGS, SHALL BE REMOVED/RELOCATED UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL VISIT THE SITE AND ALL AREAS INCLUDED IN THE DRAWINGS. CONTRACTOR SHALL THOROUGHLY FAMILIARIZE THEMSELVES WITH THESE EXISTING CONDITIONS, AND BY SUBMITTING A BID ACCEPTS CONDITIONS UNDER WHICH THE CONTRACTOR WILL BE REQUIRED TO PERFORM HIS WORK.	SHEETDESCRIPTIONE0.1ELECTRICAL GENERAL NOTESE0.2ELECTRICAL SYMBOLS LIST ANDE0.3LIGHTING FIXTURE SCHEDULE AE0.4SINGLE LINE DIAGRAM & BRANCES1.1ELECTRICAL SITE PLANES1.2ENLARGED ELECTRICAL POOL F	ND NOTES CH CIRCUIT VOLTAGE DRO
3. 4. 5. 7.	IT SHALL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO DISCONNECT AND REMOVE ALL EXISTING LIGHTING FIXTURES, RECEPTACLES, ELECTRICAL EQUIPMENT, ETC., AFFECTED BY THE REMODELED AREA. THIS WILL INCLUDE REROUTING, OR THE EXTENSION OF EXISTING CONDUIT AND FEEDERS WHERE NECESSARY TO MAINTAIN THE CONTINUITY OF EQUIPMENT TO REMAIN. ALL CIRCUIT NUMBERS AND EXISTING CONDUIT HOMERUNS SHOWN ON THESE DRAWINGS WERE TAKEN FROM EXISTING RECORD DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF HOMERUNS, AND ADJUST CIRCUIT NUMBERS ACCORDING TO EXISTING CONDITIONS AS REQUIRED. EXISTING CONDUIT FEEDS UP THROUGH FLOOR SHALL BE CUT OFF AND PLUGGED FLUSH WITH FLOOR WHERE EXISTING WALLS, ETC., ARE REMOVED. REMOVE CONDUCTORS FROM THIS POINT BACK TO LAST OUTLET REMAINING IN SERVICE. WHERE EXISTING WALLS HAVE BEEN REMOVED, AND THERE ARE EXISTING CONDUIT FEEDS WHICH HAVE BEEN CUT-OFF AND CAPPED FLUSH WITH FLOOR, IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY AND DIMENSION ALL SUCH CONDUITS ON THE "AS-BUILT" DRAWINGS UNLESS OTHERWISE NOTED. IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO MAINTAIN CONTINUITY OF ALL ELECTRICAL SYSTEMS, EQUIPMENT, ETC., REMAINING IN OPERATION WHICH ARE BEING FED BY AN ABANDONED OUTLET. MAINTAINING CONTINUITY SHALL CONSIST OF REROUTING CONDUIT, WIRING, ETC., AS REQUIRED.	E2.1ELECTRICAL DEMOLITION, LIGHTE2.2COMMUNICATION, FIRE ALARME3.0COMMUNICATION RISER DIAGRAFE3.1FIRE ALARM SYMBOLS AND NOTE3.2FIRE ALARM WIRING DIAGRAM DE3.3FIRE ALARM WIRING DIAGRAME3.4FIRE ALARM RISER DIAGRAME4.1ELECTRICAL DETAILSE4.2ELECTRICAL DETAILSE4.3ELECTRICAL DETAILSE5.1PANEL SCHEDULESE6.1TITLE 24E6.3TITLE 24E6.3TITLE 24TOTAL SHEETS = 20	& ELECTRICAL ROOF PLAN AM 'ES DETAILS
8. 9. 10.	ALL ELECTRICAL FIXTURES, OUTLETS, DEVICES, ETC., THAT ARE REMOVED SHALL BE REMOVED COMPLETELY, INCLUDING CONDUIT AND WIRING BACK TO THE LAST FIXTURE, OUTLET, DEVICE, ETC., REMAINING IN SERVICE. EXISTING CIRCUITS WHICH ARE REMOVED AND NOT REUSED SHALL BE IDENTIFIED ON THE PANEL SCHEDULE AS "SPARE". THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE OWNER PRIOR TO REMOVAL OF EXISTING ELECTRICAL EQUIPMENT AND CONDUCTORS. CONTRACTOR SHALL TURN OVER REMOVED EQUIPMENT THAT THE OWNER REQUESTS IN AN "AS-FOUND" CONDITION. EQUIPMENT THAT IS TO BE TURNED OVER SHALL BE BOXED AND TAGGED TO IDENTIFY THE SPECIFIC EQUIPMENT.	UNLESS SPECIFICALLY SHO STRUCTURAL MEMBERS DRILLED, OR NOTCHED WIT AUTHORIZATION FROM THE AND THE DIVISION OF TH	OWN ON THESE PLAN SHALL NOT BE CUT, THOUT PRIOR WRITT STRUCTURAL ENGIN
15.	<ul> <li>WHERE NEW CIRCUITS ARE SHOWN TO EXISTING PANELS, INSTALL NEW BRAKERS (MINIMUM 20 AMP, SINGLE POLE) AS REFERENCED ON DRAWINGS. IDENTIFY EACH NEW CIRCUIT ON THE ASSOCIATED PANEL SCHEDULE DIRECTORY.</li> <li>EXISTING CONDUIT MAY BE REUSED IF ADEQUATELY SIZED, BUT IN NO CASE SHALL ANY EXISTING CONDUCTORS BE REUSED.</li> <li>IN SOME INSTANCES, IT MAY BE NECESSARY FOR THE ELECTRICAL CONTRACTOR TO TEMPORARILY RELOCATE, REROUTE, ETC., EXISTING ELECTRICAL EQUIPMENT. THIS SHALL BE DONE SO THAT THE SYSTEMSI NALL PHASES (THOSE COMPLETED AND THOSE YET TO BEGIN), ARE IN COMPLETE, OPERABLE, CONDITION AS CONSTRUCTION PROCEEDS THROUGH EACH PHASE.</li> <li>WHERE NEW CIRCUITS ARE SHOWN CROSSING PHASING BOUNDARIES (I.E. CORRIDOR LIGHTING, ETC.) THE CONTRACTOR SHALL CONNECT ALL EQUIPMENT, FIXTURES, ETC., IN THE PHASE WHICH IS THEN UNDER CONSTRUCTION. CONTRACTOR SHALL STUB-OUT ALL REQUIRED CONDUIT AND WIRING ACROSS PHASE BOUNDARIES, THEN PICK UP AND EXTEND THESE CONDUIT RUNS WHEN CONSTRUCTION BEGINS IN THE ADJACENT PHASE.</li> <li>DURING EACH PHASE OF DEMOLITION, ALL CIRCUITS FROM EXISTING PANELS WHICH FEED AREAS OUTSIDE THE BOUNDARIES OF THAT PHASE, SHALL BE MAINTAINED.</li> <li>PANELS OR TERMINAL CABINETS WHICH ARE LOCATED IN A WALL THAT IS TO BE DEMOLISHED, SHALL REMAIN IN AN OPERATIVE CONDITION UNTIL ALL AREAS FED BY THE RELATED PANELS HAVE BEEN DEMOLISHED. THIS CONTRACTOR SHALL PROVALOF SUPPORTS. IT SHALL ALSO BE THE CONTRACTOR'S SHALL PROVALD FO SUPPORTS. IT SHALL ALSO BE THE CONTRACTOR'S SHALL PROVALD FO SUPPORTARILY PRESTANDING, MOUNTED IN TEMPORARY PORTION OF WALLS TO BE DEMOLISHED, SHALL REMAIN IN AN OPERATIVE CONDITION UNTIL ALL AREAS FED BY THE RELATED PANELS HAVE BEEN DEMOLISHED. THIS CONTRACTOR'S HALL PROVALD FO SUPPORTS. IT SHALL ALSO BE THE CONTRACTOR'S RESPONSIBILITY TO RELOCATE AND RECONNECT ALL CIRCUITS ON A TEMPORARY PORTION OF WALLS TO BE DEMOLISHED LATER, ETC., CHECK WITH ARCHITECT AND BENGINSER FOR APPROVAL OF SUPPORTS. IT SHALL ALSO DE CHE CONTRACTOR'S RESPONSIBILITY TO RELOCATE AND RECONNECT ALL CRR</li></ul>	EQUIPMENT ANCH EQUIPMENT ANCH ALL MECHANICAL, PLUMBING, AND ELECTRICAL COM PER THE DETAILS ON THE DSA APPROVED CONSTRU COMPONENTS SHALL BE ANCHORED OR BRACED TO REQUIREMENTS PRESCRIBED IN THE 2019 CBC, SECT 7-16 CHAPTERS 13, 26 AND 30. 1. ALL PERMANENT EQUIPMENT AND COMPONE 2. TEMPORARY, MOVABLE OR MOBILE EQUIPME HARD WIRED) TO THE BUILDING UTILITY SER "PERMANENTLY ATTACHED" SHALL INCLUDE FOR 110/220 VOLT RECEPTACLES HAVING A I 3. TEMPORARY, MOVABLE OR MOBILE EQUIPM HAS A CENTER OF MASS LOCATED 4 FEET OI LEVEL THAT DIRECTLY SUPPORT THE COMP MANNER APPROVED BY DSA. THE FOLLOWING MECHANICAL AND ELECTRICAL COM THE STRUCTURE BUT NEED NOT DEMONSTRATE DES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FI THE COMPONENT AND ASSOCIATED DUCTWORK, PIP MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND A. COMPONENTS WEIGHING LESS THAN 400 PC LOCATED 4 FEET OR LESS ABOVE THE ADJAC SUPPORT THE COMPONENT. B. COMPONENTS WEIGHING LESS THAN 20 POU SYSTEMS, LESS THAN 5 POUNDS PER FOOT, FLOOR OR HUNG FROM A WALL. THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL SUBJECT TO THE APPROVAL OF THE DESIGN PROFE	ICHORAGE NOTE PONENTS SHALL BE ANCH CTION DOCUMENTS. THE I MEET THE FORCE AND DIS TIONS 1617A.1.18 THROUG ENTS. ENT THAT IS PERMANENTL VICES SUCH AS ELECTRIC ALL ELECTRICAL CONNEC FLEXIBLE CABLE. ENT WHICH IS HEAVIER TH R MORE ABOVE THE ADJAC ONENT IS REQUIRED TO B MPONENTS SHALL BE POS SIGN COMPLIANCE WITH TH LEXIBLE CONNECTIONS PR PING, AND CONDUIT. FLEXIB D LONGITUDINAL DIRECTIO DUNDS AND HAVING A CEN CENT FLOOR OR ROOF LET JNDS, OR IN THE CASE OF WHICH ARE SUSPENDED AND PLUMBING COMPONE
	SECTION 901.7, & CCR TITLE 19 SECTION 1.14. CONTRACTOR TO INCLUDE FIRE WATCH AS PART OF BASE BID. FIRE WATCH COST SHALL NOT BE PAID FOR BY THE OWNER.	STRUCTURAL ENGINEER DELEGATED RESPONSIBILIT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AN ACCORDANCE WITH THE ABOVE REQUIREMENTS. <u>PIPING, DUCTWORK, AND ELECTRICAL DI</u>	ID EQUIPMENT HAVE BEEN

THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 2019 CBC, SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PRE-APPROVED 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), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

PROJECT SPECIFIC NOTES AND DETAILS. MP MD PP EX OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM#) #0043-13.

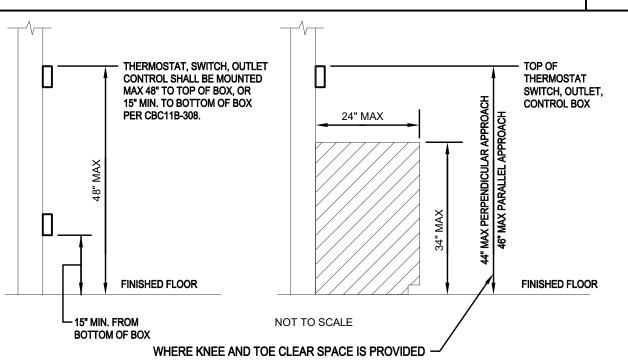
### CODE ANALYSIS

THE CONSTRUCTION OF THIS PROJECT SHALL CONFORM TO THE REQUIREMENTS OF:

- CALIFORNIA CODE OF REGULATIONS (CCR), TITLE 24, PART 2

   CALIFORNIA BUILDING CODE (CBC) 2019 EDITION.
- 2. CALIFORNIA CODE OF REGULATIONS (CCR), TITLE 24, PART 3 - CALIFORNIA ELECTRICAL CODE (CEC) - 2019 EDITION.
- 3. CALIFORNIA CODE OF REGULATIONS (CCR), TITLE 24, PART 9 - CALIFORNIA FIRE CODE (CFC) - 2019 EDITION.

## ACCESSIBLE DEVICE MOUNTING HEIGHTS

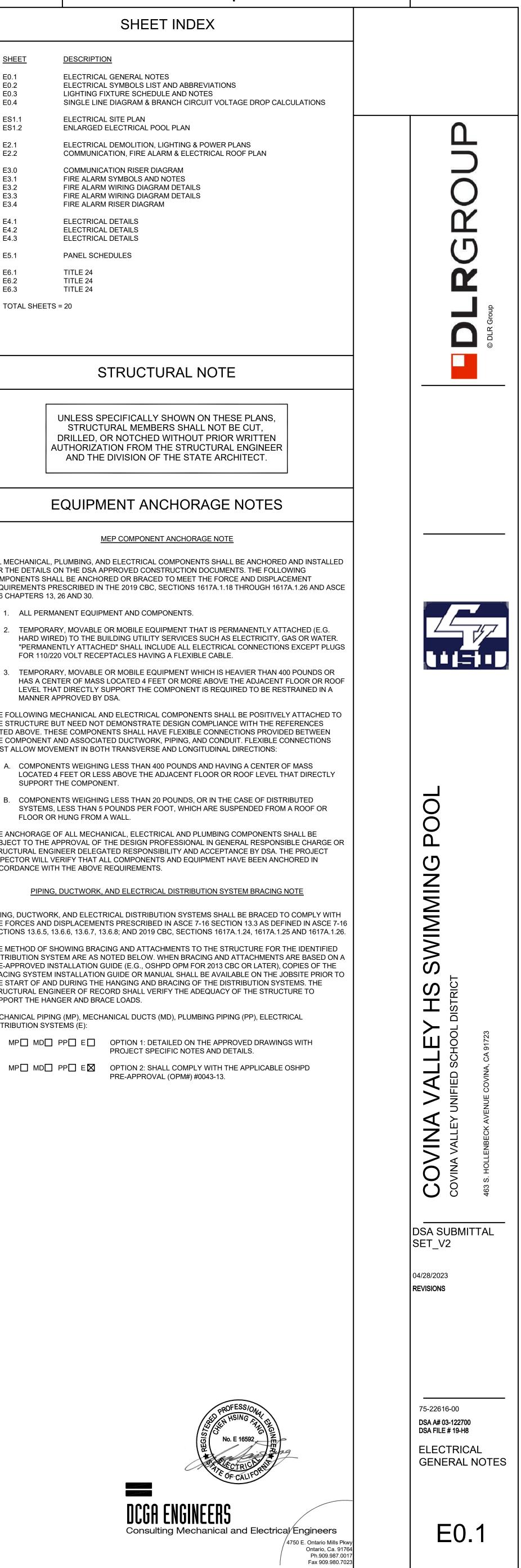


\* PROVIDE MINIMUM 30"x48" CLEAR FLOOR SPACE FOR PERPENDICULAR APPROACH AT EACH CONTROL OR DEVICE.

ANS, TEN ו.

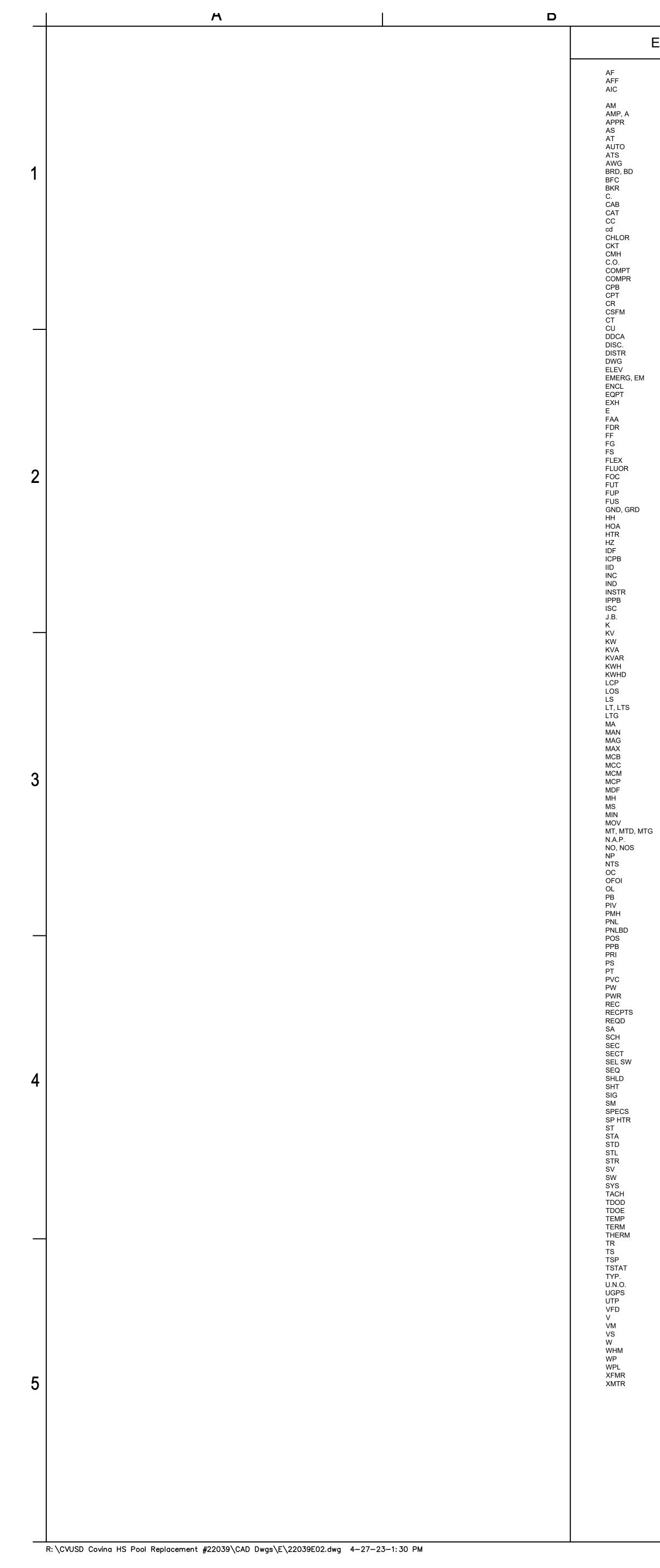
## PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH

DCGA #22039



DCGA ENGINEERS

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AMPERE FUSE RATING ABOVE FINISHED FLOOR AMPS INTERRUPTED CAPACITY RATING (RMS	(E) <b>⊕</b>	EQUIPMENT WITH "E" ADJACENT IS EXISTING TO REMAIN. EXISTING EQUIPMENT WITH "R" ADJACENT IS TO BE COMPLETELY
SYMMETRICAL MINIMUM) AMMETER AMPERES		DISCONNECTED AND REMOVED. EXISTING EQUIPMENT WITH "RR" ADJACENT IS TO BE
APPROVED AMPERE SWITCH RATING AMPERE TRIP RATING OR BREAKER AUTOMATIC		DISCONNECTED, REMOVED AND RELOCATED TO NEW LOCATION AND RECONNECTED AS REQUIRED.
AUTOMATIC AUTOMATIC TRANSFER SWITCH AMERICAN WIRE GAUGE BOARD	(ER) O	RELOCATED EQUIPMENT SHOWN IN NEW LOCATION. EXISTING CONDUIT RUN TO REMAIN. EXISTING CONDUCTORS TO
BELOW FINISHED CEILING BREAKER CONDUIT	—EA	REMAIN UNLESS NOTED OTHERWISE ON DRAWINGS. EXISTING CONDUIT RUN TO BE ABANDONED. REMOVE
CABINET CATEGORY CENTER TO CENTER	—_EX—	CONDUCTORS AND CAP ENDS OF CONDUIT. EXISTING CONDUIT RUN TO BE REWIRED. REFER TO PLANS FOR WIRING REQUIREMENTS.
CANDELA CHLORINE, CHLORINATION CIRCUIT	R	EXISTING CONDUIT AND WIRE RUN TO BE COMPLETELY DISCONNECTED AND REMOVED BACK TO LAST REMAINING OUTLET
COMMUNICATION MANHOLE CONDUIT ONLY COMPARTMENT	—	OR DEVICE.
COMPRESSOR COMMUNICATION PULLBOX CONTROL POWER TRANSFORMER CONTROL RELAY (MAGNETICALLY HELD U.N.O.) CALIFORNIA STATE FIRE MARSHALL	−R <del>-X</del> -E−	EXISTING CONDUIT RUN. CONDUIT TO BE REMOVED AT "R" SIDE OF "X". REMOVE ALL CONDUCTORS PRIOR TO CUTTING CONDUIT. EXACT LOCATION OF ALL CONDUITS SHALL BE FIELD VERIFIED. CONDUIT RUN CONCEALED IN WALLS OR UNDER FLOORS.
CURRENT TRANSFORMER COPPER DOUBLE DETECTOR CHECK ASSEMBLY DISCONNECT		CONDUIT RUN EXPOSED.
DISTRIBUTION DRAWING ELEVATION		CONDUIT RUN UNDERGROUND. CONDUIT STUBBED OUT AND CAPPED. PULL LINE IN
ELEVATION EMERGENCY ENCLOSURE EQUIPMENT		PLACE. CROSS LINES ON CONDUIT RUNS INDICATE NUMBER OF #12
EXHAUST EXISTING FIRE ALARM ANNUNCIATOR		CURRENT CARRYING CONDUCTORS CONTAINED THEREIN. TWO #12 AND MINIMUM OF ONE #12 GROUND WIRE ARE INDICATED WHEN CROSS LINES ARE NOT SHOWN. NUMERALS ADJACENT TO
FEEDER FINISHED FLOOR FINISHED GRADE		CROSS LINES ON CONDUIT RUNS INDICATE SIZE OF CONDUCTORS IN LIEU OF #12. ALL CONDUITS SHALL CONTAIN ONE GROUND WIRE SIZED PER C.E.C. TABLE 250.122. BUT NOT SMALLER THAN
ELOW SWITCH ELEXIBLE ELUORESCENT		#12. WHERE ISOLATED GROUND RECEPTACLES ARE INDICATED, PROVIDE ADDITIONAL #12 GROUND WIRE IN CONDUIT RUNS, CONNECTED FROM ISOLATED GROUND BUS IN PANEL TO DEVICE.
FIBER OPTIC CABLE FUTURE FUSE, CPT PRIMARY	B-1,3 →	CONDUIT HOMERUN TO PANELBOARD. LETTER AND NUMERALS
EUSE, CPT SECONDARY GROUND HAND HOLE		SURFACE MOUNTED BRANCH CIRCUIT PANELBOARD.
IAND-OFF-AUTOMATIC IEATER	PNL	RECESSED BRANCH CIRCUIT PANELBOARD. PANEL DESIGNATION.
HERTZ NTERMEDIATE DISTRIBUTION FRAME NTERCEPT COMMUNICATION PULLBOX		SURFACE MOUNTED COMMUNICATION TERMINAL CABINET.
MPERIAL VALLEY IRRIGATION DISTRICT NCANDESCENT NDICATION		REFER TO DRAWINGS AND SPECIFICATIONS. RECESSED COMMUNICATION TERMINAL CABINET. REFER TO
NSTRUMENT NTERCEPT POWER PULLBOX SHORT CIRCUIT CURRENT		DRAWINGS AND SPECIFICATIONS. JUNCTION BOX IN ACCESSIBLE CEILING SPACE OR FLUSH IN
JUNCTION BOX THOUSAND (KILO) KILOVOLTS		WALL WITH BLANK COVER PLATE TO MATCH DEVICE PLATES. JUNCTION BOX FLUSH FLOOR MOUNTED.
KILOWATTS KILOVOLT AMPERES KILOVOLT AMPERES REACTIVE	J	JUNCTION BOX PEDESTAL TYPE FLOOR MOUNTED.
KILOWATT HOURS KILOWATT HOUR DEMAND METER LIGHTING CONTROL PANEL	(M)	THREE PHASE FRACTIONAL OR INTEGRAL HORSEPOWER MOTOR. NUMERAL IN PLACE OF "M" INDICATES HORSEPOWER. (SINGLE LINE DIAGRAM ONLY).
PUSH BUTTON WITH "LOCK-OUT-STOP" LIMIT SWITCH LIGHT, LIGHTS	100A	MOLDED CASE CIRCUIT BREAKER AND NUMBER OF POLES AS INDICATED. "A" INDICATES TRIP RATING. SUBSCRIPT INDICATES
LIGHTING MILLIAMPS MANUAL	3P J	TYPE.
MAGNETIC MAXIMUM MAIN CIRCUIT BREAKER		NO SUBSCRIPTTHERMAL MAGNETICNANON-AUTOMATICMOMAGNETIC ONLY
MOTOR CONTROL CENTER THOUSAND CIRCULAR MILS MOTOR CIRCUIT PROTECTOR	100AS 90AF (3P	CL CURRENT LIMITING SS SOLID STATE
MAIN DISTRIBUTION FRAME MANHOLE MANUAL MOTOR STARTER		FUSED SWITCH. "AS" INDICATES AMPERE SWITCH RATING, "AF" INDICATES AMPERE FUSE RATING, NUMBER OF POLES AS INDICATED.
MINUTES, MINIMUM MOTOR OPERATED VALVE, METAL OXIDE VARISTER MOUNT, MOUNTED, MOUNTING NEUTRALIZATION ALARM PANEL NUMBER, NUMBERS NAMEPLATE		ENCLOSED VOLTAGE TRANSFORMER PER SPEC'S. COPPER WOUND, DRY TYPE, U.N.O.
NOT TO SCALE ON CENTER OWNER FURNISHED OWNER INSTALLED OVERLOAD	₹ <b>Σ</b> (M)	UTILITY METER SOCKET, WITH C.T.'S, CLIPS, ETC., PER SERVING UTILITY COMPANY.
PULLBOX POST INDICATOR VALVE	[]][]].	GROUND, "GRD", "GND".
POWER MANHOLE PANEL PANELBOARD	GF	BREAKER EQUIPPED WITH THE GROUND FAULT PROTECTION "GROUND FAULT INTERRUPTER"
POSITION POWER PULLBOX PRIMARY	EM H1-1O <sub>a</sub>	CEILING LIGHT FIXTURE AND OUTLET, LED. LOWER CASE LETTER INDICATES CONTROLLING SWITCH, NUMERAL AND PANEL ID INDICATES CIRC
PRESSURE SWITCH POTENTIAL TRANSFORMER POLYVINYL CHLORIDE	H1-1 a	"EM" ADJACENT INDICATES FIXTURE WITH EMERGENCY POWER PROVISIONS.
PART WINDING POWER RECEPTACLE RECEPTACLES REQUIRED STATUS ANNUNCIATOR	EM H1-1 1a	LED LIGHT FIXTURE AND OUTLET. LOWER CASE LETTER INDICATES CONTROLLING SWITCH, NUMERAL AND PANEL ID INDICATES CIRCUIT. "EM" ADJACENT INDICATES FIXTURE WITH EMERGENCY POWER PROVISIONS.
SCHEDULE SECONDS, SECONDARY SECTION SELECTOR SWITCH SEQUENCE	EM H1-1 a	BRACKET OR WALL MOUNTED SURFACE OR RECESSED LIGHT FIXTURE AND OUTLET, LED. LOWER CASE LETTER INDICATES CONTROLLING SWITCH, NUMERAL AND PANEL ID INDICATES CIRCUIT. "EM" ADJACENT INDICATES FIXTURE WITH EMERGENCY POWER PROVISIONS.
SHIELDED SHEET SIGNAL START CONTACTOR COIL SPECIFICATIONS	⊗↑	ILLUMINATED EXIT LIGHT FIXTURE. SIDE, BACK, CEILING, OR PENDANT MOUNTED, SINGLE OR DOUBLE FACED AS NOTED BY SHADED ARC, WITH OR WITHOUT DIRECTIONAL ARROW AS NOTED ON THE DRAWINGS. EXIT SIGN SHALL NOT BE USED AS JUNCTION
SPACE HEATER SHUNT TRIP STATION STANDARD STEEL	L ⊗↑	BOX OR "THROUGH-WIRE" LOW LEVEL EXIT LIGHT FIXTURE, WALL MOUNTED WITH OR WITHOUT DIRECTIONAL ARROW AS NOTED ON THE DRAWINGS.
STARTER SOLENOID VALVE SWITCH SYSTEM FACHOMETER		BOTTOM OF FIXTURE AT +10" ABOVE FINISHED FLOOR AND WITHIN FOUR INCHES OF DOOR FRAME WHERE APPLICABLE. LIGHTING FIXTURE IDENTIFICATION SYMBOL. LETTER INDICATES FIXTURE TYPE. NUMERALS IN LOWER HALF OF HEXAGON
FIGURE TERMINAL FIME DELAY ON DE-ENERGIZATION FIME DELAY ON ENERGIZATION FEMPERATURE FERMINAL FIERMIOSTAT	O 72 +12'-0"	INDICATE FIXTURE WATTAGE (INCLUDING BALLAST WHERE APPLICABLE). NUMERAL OUTSIDE TOP OF HEXAGON INDICATES NUMBER OF FIXTURES USED FOR LOAD CALCULATIONS. NUMERAL OUTSIDE BOTTOM OF HEXAGON INDICATES MOUNTING HEIGHT FROM FLOOR TO BOTTOM OF FIXTURE. OMISSION OF MOUNTING
FIME DELAY RELAY FAMPER SWITCH FWISTED SHIELDED PAIR FHERMOSTAT	Ľ	HEIGHT INDICATES CEILING MOUNTING. WALL MOUNTED DUAL HEAD EMERGENCY LIGHTING FIXTURE UNIT.
TYPICAL JNLESS NOTED OTHERWISE JNDERGROUND PULL SECTION JNSHIELDED TWISTED PAIR /ARIABLE FREQUENCY DRIVE /OLTS	$\mathbb{D}_{a}^{4}$	LOW VOLTAGE WALL SWITCH WITH "ON/OFF" AND DIMMING CAPABILITY. REFER TO DETAIL #4/E4.03 FOR MANUFACTURERS AND MODEL NUMBERS. NUMERAL ADJACENT INDICATES QUANTITY OF BUTTONS. LOWER CASE LETTER AT BOTTOM INDICATES FIXTURES CONTROLLED. MOUNT AT +48" PER DETAIL #1/E0.01.
/OLTMETER /OLTMETER SWITCH WATTS	S	WALL MOUNTED PASSIVE INFRARED OCCUPANCY SENSOR. MOUNT AT +48". LEVITON #OSSMT-GDW OR APPROVED EQUAL.
WATT HOUR METER WEATHERPROOF WEATHERPROOF LOCKING IRANSFORMER IRANSMITTER	os	INFRARED/ULTRASONIC DUAL TECHNOLOGY TYPE OCCUPANCY SENSOR COMPLETE WITH ALL POWER SUPPLIES, RELAY PACKS AND CONNECTIONS. REFER TO DETAIL #4/E4.03 FOR MANUFACTURER AND MODEL NUMBER.
	RLa	DIGITAL ROOM CONTROLLER/POWER PACK WITH 0-10V DIMMING AND LOW VOLTAGE CABLE CONNECTIONS. REFER TO DETAIL #4/E4.03 FOR MANUFACTURE AND MODEL NUMBERS. LOWER CASE LETTER ADJACENT INDICATES LIGHT FIXTURES CONTROLLED.
	ତ୍ର <sub>RC</sub>	INFRARED/ULTRASONIC DUAL TECHNOLOGY TYPE OCCUPANCY SENSOR COMPLETE WITH ALL POWER SUPPLIES, RELAY PACKS AND CONNECTIONS. SENSOR TO BE EQUIPPED WITH AN INTEGRATED ROOM CONTROLLER AND HAVE 0-10V DIMMING, DAYLIGHT HARVESTING AND PLUG LOAD CONTROL

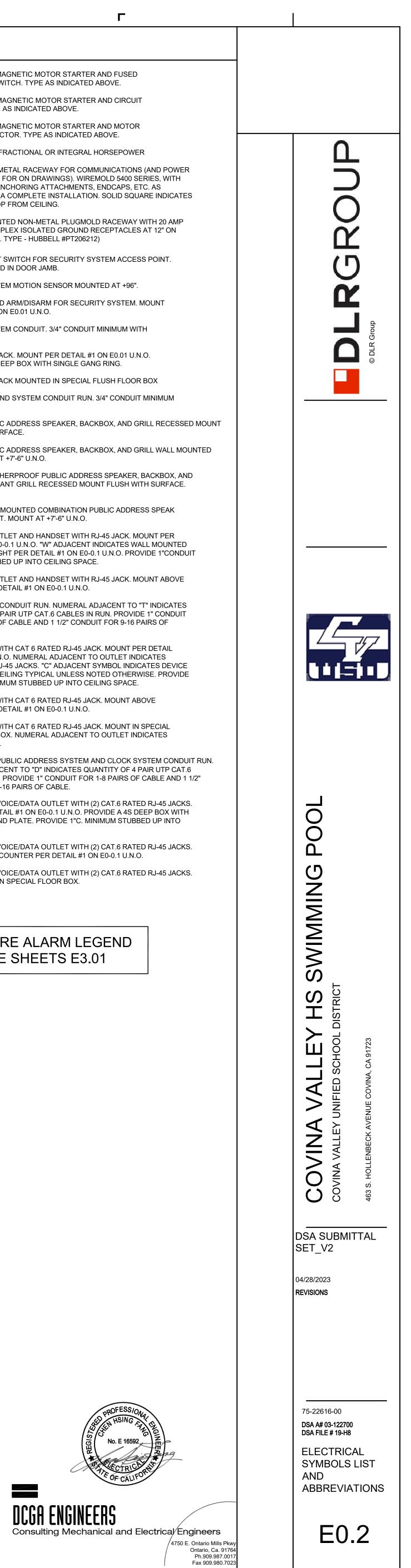
ELECTRICAL SYMBOLS LIST	

	ELECTRICAL SYMBOLS LIST		
PC <sub>a1</sub>	LOW VOLTAGE PHOTOCELL. REFER TO DETAIL #4/E4.03 FOR MANUFACTURER AND MODEL NUMBER. LOWER CASE LETTER	لـالھ اا ج	COMBINATION MAGNETIC MOTOR STARTER AND FUSED DISCONNECT SWITCH. TYPE AS INDICATED ABOVE.
	ADJACENT INDICATES LIGHT FIXTURES CONTROLLED. NUMERAL ADJACENT INDICATES DAYLITE ZONE CONTROL.		COMBINATION MAGNETIC MOTOR STARTER AND CIRCUIT BREAKER. TYPE AS INDICATED ABOVE.
PL A-1	LOW VOLTAGE PLUG LOAD CONTROLLER POWER PACK WITH 20 AMP RATED RELAY AND LOW VOLTAGE CONNECTIONS CONNECTIONS. REFER TO DETAIL #4/E4.03 FOR MANUFACTURER AND MODEL NUMBERS. CIRCUIT ADJACENT SYMBOL INDICATES CIRCUIT TO BE CONTROLLED.		COMBINATION MAGNETIC MOTOR STARTER AND MOTOR CIRCUIT PROTECTOR. TYPE AS INDICATED ABOVE.
k3 Sa	SWITCH. LOWER CASE LETTER AT BOTTOM INDICATES OUTLETS CONTROLLED. CAPITAL SUPERSCRIPT INDICATES SWITCH TYPE.		SINGLE PHASE FRACTIONAL OR INTEGRAL HORSEPOWER SURFACE NON-METAL RACEWAY FOR COMMUNICATIONS (AND P
	MOUNT PER DETAIL #1 ON E0.01 U.N.O. NO SUPERSCRIPT - SINGLE POLE SWITCH 2 - DOUBLE POLE 3 - THREE WAY	⊢wm–	WHERE CALLED FOR ON DRAWINGS). WIREMOLD 5400 SERIES, W ALL OFFSETS, ANCHORING ATTACHMENTS, ENDCAPS, ETC. AS REQUIRED FOR A COMPLETE INSTALLATION. SOLID SQUARE IND WIREMOLD DROP FROM CEILING.
	4 - FOUR WAY I - ILLUMINATED HANDLE K - KEYED SWITCH LC - LOCKABLE COVER	┝──ҎМ──┤	SURFACE MOUNTED NON-METAL PLUGMOLD RACEWAY WITH 20 GROUNDING DUPLEX ISOLATED GROUND RECEPTACLES AT 12" ( CENTER. (2 CKT. TYPE - HUBBELL #PT206212)
	M - MANUAL MOTOR STARTER WITH THERMAL OVERLOAD PROTECTION		DOOR CONTACT SWITCH FOR SECURITY SYSTEM ACCESS POINT FLUSH MOUNTED IN DOOR JAMB.
	MC - MOMENTARY CONTACT P - PILOT LIGHT PR - PRESS TYPE	ø	SECURITY SYSTEM MOTION SENSOR MOUNTED AT +96".
	TP-THREE POSITIONT-TIMER-0-4 HR ROTARY	К	DIGITAL KEY PAD ARM/DISARM FOR SECURITY SYSTEM. MOUNT PER DETAIL #1 ON E0.01 U.N.O.
	WITH HOLD-ON FEATURE L - LOCKABLE POSITION TOGGLE SWITCH	—si—	SECURITY SYSTEM CONDUIT. 3/4" CONDUIT MINIMUM WITH WIRING.
	POLE MOUNTED PARKING LOT LIGHTING FIXTURE, SINGLE	MC	MICROPHONE JACK. MOUNT PER DETAIL #1 ON E0.01 U.N.O. PROVIDE A 4S DEEP BOX WITH SINGLE GANG RING.
	POLE MOUNTED PARKING LOT LIGHTING FIXTURE, DOUBLE FEEDER DESIGNATION. SEE SINGLE LINE DIAGRAM, FEEDER	М	MICROPHONE JACK MOUNTED IN SPECIAL FLUSH FLOOR BOX
< <u>MS−1</u> >	SCHEDULES AND ELECTRICAL SITE PLAN. DUPLEX GROUNDING TYPE RECEPTACLE, 20 AMP, 125 VOLT,	—ss—	MULTI-USE SOUND SYSTEM CONDUIT RUN. 3/4" CONDUIT MINIMU WITH CABLING.
<del>¢-</del>	2 POLE, 3 WIRE. MOUNT PER DETAIL #1 ON E0.01 U.N.O. "C" ADJACENT SYMBOL INDICATES DEVICE MOUNTED ON CEILING TYPICAL UNLESS NOTED OTHERWISE. "IG" ADJACENT	S	IP BASED PUBLIC ADDRESS SPEAKER, BACKBOX, AND GRILL REC FLUSH WITH SURFACE.
	INDICATES ISOLATED GROUND TYPE RECEPTACLE.	S-1	IP BASED PUBLIC ADDRESS SPEAKER, BACKBOX, AND GRILL WA TYPE. MOUNT AT +7'-6" U.N.O.
₽	DUPLEX GROUND FAULT INTERRUPTING TYPE RECEPTACLE, 20 AMP, 125 VOLT, 2 POLE, 3 WIRE. MOUNT PER DETAIL #1 ON E0.01 U.N.O. "WP" ADJACENT INDICATES METAL COVERED PAD- LOCKABLE WEATHERPROOF COVER. "WPL" ADJACENT INDICATES RECESSED METAL HINGED WEATHERPROOF LOCKING COVER	©⊲	IP BASED WEATHERPROOF PUBLIC ADDRESS SPEAKER, BACKBO VANDAL RESISTANT GRILL RECESSED MOUNT FLUSH WITH SURF
	EQUAL TO LEGRAND-PASS & SEYMOUR #4600 SERIES & ALL MOUNTING HARDWARE. DUPLEX GROUNDING TYPE CONTROLLED RECEPTACLE, 20AMP,	SO	IP BASED WALL MOUNTED COMBINATION PUBLIC ADDRESS SPEA AND CLOCK UNIT. MOUNT AT +7'-6" U.N.O. TELEPHONE OUTLET AND HANDSET WITH RJ-45 JACK. MOUNT PE
4	125 VOLT, 2 POLE, 3 WIRE. MOUNT PER DETAIL #1 ON E0.01 U.N.O. RECEPTACLE SHALL HAVE PERMANENT IDENTIFICATION. FLUSH FLOOR MOUNTED DUPLEX GROUNDING TYPE RECEPTACLE,	⋖ <sub>w</sub>	DETAIL #1 ON E0-0.1 U.N.O. "W" ADJACENT INDICATES WALL MOU AT SWITCH HEIGHT PER DETAIL #1 ON E0-0.1 U.N.O. PROVIDE 1"C MINIMUM STUBBED UP INTO CEILING SPACE.
Φ	20 AMP, 125 VOLT, 2 POLE, 3 WIRE IN SPECIAL FLOOR BOX.	*	TELEPHONE OUTLET AND HANDSET WITH RJ-45 JACK. MOUNT AE COUNTER PER DETAIL #1 ON E0-0.1 U.N.O.
⊕ Æ	PEDESTAL TYPE FLOOR MOUNTED DUPLEX GROUNDING TYPE RECEPTACLE, 20 AMP, 125 VOLT, 2 POLE, 3 WIRE. DUPLEX GROUNDING TYPE RECEPTACLE, 20 AMP, 125 VOLT 2 POLE, 3 WIRE. MOUNT ABOVE COUNTER PER DETAIL #1 ON	—T1—	VOICE SYSTEM CONDUIT RUN. NUMERAL ADJACENT TO "T" INDIC QUANTITY OF 4 PAIR UTP CAT.6 CABLES IN RUN. PROVIDE 1" CON FOR 1-8 PAIRS OF CABLE AND 1 1/2" CONDUIT FOR 9-16 PAIRS OF CABLE.
Æ	E0.01 U.N.O. DUPLEX GROUND FAULT INTERRUPTING TYPE RECEPTACLE, 20 AMP, 125 VOLT, 2 POLE, 3 WIRE. MOUNT ABOVE COUNTER PER DETAIL #1 ON E0.01 U.N.O.	4	DATA OUTLET WITH CAT 6 RATED RJ-45 JACK. MOUNT PER DETA #1 ON E0-0.1 U.N.O. NUMERAL ADJACENT TO OUTLET INDICATES QUANTITY OF RJ-45 JACKS. "C" ADJACENT SYMBOL INDICATES DI MOUNTED ON CEILING TYPICAL UNLESS NOTED OTHERWISE. PR
<del>\$</del>	TWO DUPLEX GROUNDING TYPE RECEPTACLES IN 4S BOX, 20 AMP, 125 VOLT, 2 POLE, 3 WIRE. MOUNT PER DETAIL #1 ON E0.01 U.N.O.	4	1"CONDUIT MINIMUM STUBBED UP INTO CEILING SPACE. DATA OUTLET WITH CAT 6 RATED RJ-45 JACK. MOUNT ABOVE COUNTER PER DETAIL #1 ON E0-0.1 U.N.O.
#	TWO DUPLEX GROUND FAULT INTERRUPTING TYPE RECEPTACLES IN 3-GANG BOX WITH 2-GANG RING AND PLATE. 20A., 125 VOLT 2 POLE, 3 WIRE. MOUNT PER DETAIL #1 ON E0.01 U.N.O.	Ø	DATA OUTLET WITH CAT 6 RATED RJ-45 JACK. MOUNT IN SPECIAI FLUSH FLOOR BOX. NUMERAL ADJACENT TO OUTLET INDICATES OF RJ-45 JACKS.
<b>#</b>	TWO 20 AMP DUPLEX RECEPTACLES IN SPECIAL FLOOR BOX.	D1	DATA SYSTEM PUBLIC ADDRESS SYSTEM AND CLOCK SYSTEM C NUMERAL ADJACENT TO "D" INDICATES QUANTITY OF 4 PAIR UTF
<del>¢</del>	DUPLEX GROUNDING TYPE RECEPTACLE, 20 AMP, 125 VOLT, 2 POLE, 3 WIRE, SPLIT WIRED WITH LOWER OUTLET SWITCHED. MOUNT PER DETAIL #1 ON E0.01 U.N.O.		CABLES IN RUN. PROVIDE 1" CONDUIT FOR 1-8 PAIRS OF CABLE A CONDUIT FOR 9-16 PAIRS OF CABLE. COMBINATION VOICE/DATA OUTLET WITH (2) CAT.6 RATED RJ-45
₽	DUPLEX GROUNDING TYPE USB CHARGING RECEPTACLE, 20 AMP 125 VOLT, 2 POLE, 3 WIRE. EQUIPPED WITH (2) TYPE-A USB PORTS. MOUNT PER DETAIL #1 ON E0.01 U.N.O.		MOUNT PER DETAIL #1 ON E0-0.1 U.N.O. PROVIDE A 4S DEEP BOX 2 GANG RING AND PLATE. PROVIDE 1"C. MINIMUM STUBBED UP IN CEILING SPACE.
	RECESSED MOUNTED COMBINATION POWER/DATA FLOOR BOX. PROVIDE WITH (2) DUPLEX GROUNDING TYPE RECEPTACLES, 20 AMP, 125 VOLT, 2 POLE,	4	COMBINATION VOICE/DATA OUTLET WITH (2) CAT.6 RATED RJ-45 MOUNT ABOVE COUNTER PER DETAIL #1 ON E0-0.1 U.N.O.
	3 WIRE. REFER TO AV/IT DRAWINGS FOR ADDITIONAL REQUIREMENTS. FLOOR BOX SHALL BE EQUAL TO LEGRAD #RFB4 SERIES. COORDINATE COVER TYPE WITH THE ARCHITECT PRIOR TO ORDERING.	9	COMBINATION VOICE/DATA OUTLET WITH (2) CAT.6 RATED RJ-45 FLUSH MOUNT IN SPECIAL FLOOR BOX.
<sup>A</sup> ଡ଼ <sub>L</sub>	SPECIAL PURPOSE OUTLET MOUNTED IN FLUSH WALL BOX. LETTER INDICATES TYPE. "L" ADJACENT INDICATES TWIST LOCK TYPE		
	A - NEMA TYPE 5-30R (125 VOLT, 1 PHASE, 30 AMP)		FOR FIRE ALARM LEGEND SEE SHEETS E3.01
	B - NEMÁ TYPE 5-50R (125 VOLT, 1 PHASE, 50 AMP)		
	<ul> <li>C - NEMA TYPE 6-20R (250 VOLT, 1 PHASE, 20 AMP)</li> <li>D - NEMA TYPE 6-30R (250 VOLT, 1 PHASE, 30</li> </ul>		
	AMP) E - NEMA TYPE 6-50R (250 VOLT, 1 PHASE, 50 AMP)		
	F - NEMÁ TYPE 11-20R (250 VOLT, 3 PHASE, 20 AMP)		
	<ul> <li>G - NEMA TYPE 11-30R (250 VOLT, 3 PHASE, 30 AMP)</li> <li>H - NEMA TYPE 11-50R (250 VOLT, 3 PHASE, 50</li> </ul>		
	AMP) J - NEMA TYPE 14-20R (125/250 VOLT, 1 PHASE,		
	20 AMP) K - NEMA TYPE 14-30R (125/250 VOLT, 1 PHASE, 30 AMP)		
	<ul> <li>M - NEMA TYPE 14-50R (125/250 VOLT, 1 PHASE, 50 AMP)</li> </ul>		
	N - NEMA TYPE 6-40R (250 VOLT, 1 PHASE, 40 AMP)		
100AS 🖓	NON-FUSED DISCONNECT SWITCH. "AS" INDICATES SWITCH AMPERE RATING UNLESS NOTED OTHERWISE ON DRAWINGS.		
F	FUSED DISCONNECT SWITCH. "AS" INDICATES SWITCH AMPERE RATING. "AF" INDICATES FUSE AMPERE RATING.		
VFD II	MAGNETIC MOTOR STARTER. ROMAN NUMERAL INDICATES NEMA STARTER SIZE. ADDITIONAL SUBSCRIPTS INDICATE STARTER TYPE AND SIZE. (TYPICAL FOR ALL MAGNETIC STARTER SYMBOLS.)		
	NO SUBSCRIPT - FULL VOLTAGE, NON REVERSING PR - PRIMARY RESISTOR REDUCED		
	VOLTAGE AT - AUTOTRANSFORMER REDUCED VOLTAGE		
	WD - WYE-DELTA REDUCED VOLTAGE PW - PART WINDING REDUCED VOLTAGE		
	SS - SOLID STATE REDUCED VOLTAGE REV - REVERSING TYPE		
	2S-TWO SPEED2W-TWO WINDINGSCH-CONSTANT HORSEPOWER		
	CT - CONSTANT TORQUE VT - VARIABLE TORQUE		
	VFD - VARIABLE FREQUENCY DRIVE COMBINATION MAGNETIC MOTOR STARTER AND NON-FUSED		BOFESS/ON
	DISCONNECT SWITCH. TYPE AS INDICATED ABOVE.	1	

COMBINATION MAGNETIC MOTOR STARTER AND NON-FUSED DISCONNECT SWITCH. TYPE AS INDICATED ABOVE. 

DCGA #22039

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			LIGH	TING FIX	TURE SCHEDULE	
		DESCRIPTION           SURFACE MOUNTED 2X4 LED TROFFER WITH CURVED FROSTED DIFFUSER AND CENTER SPINE. MINIMUM 5000 LUMEN OUTPUT, 277 VOLT.	FINISH	LAMP(S) LED 4000K	REMARKS TYPE "A": PROVIDE FIXTURE WITH MOUNTING KIT FOR SURFACE APPLICATION.	MANUFACTURER & NO. VISIONEERING #OCRV2X4-LED840K050LUNV-C108-SMK6-TR2X4 EQUAL BY DAY-BRITE #SDL OR METALUX #24SR
1		PENDENT MOUNTED VAPOR TIGHT FIXTURE WITH POLYCARBONATE HOUSING AND LENS. NEMA 4X/IP66 RATED. MINIMUM 4000 LUMEN OUTPUT, 277 VOLT.	WHITE	LED 4000K	TYPE "B": FIXTURE SHALL BE SUPPLIED WITH SUSPENSION MOUNTING KIT.	VISIONEERING #LSVB48-LED840K040LUNV-KIT00072 EQUAL BY DAY-BRITE #V3W OR METALUX #APVT
	$\begin{pmatrix} C \\ 53 \end{pmatrix}$	SURFACE MOUNTED VANDAL RESISTANT FIXTURE WITH MARINE GRADE EXTRUDED ALUMINUM HOUSING AND 0.156 THICK POLYCARBONATE LENS. MINIMUM 4800 LUMEN OUTPUT, 277 VOLT. UL LISTED OR WET LOCATION.	WHITE	LED 4000K		CERTOLUX #VRSE-355648LED840K048LUNV EQUAL BY LC DOANE #VSA OR FAIL-SAFE#HVL8
		RECESSED MOUNTED 6" ROUND LED DOWNLIGHT WITH MICRO PRISMATIC POLYCARBONATE LENS. MINIMUM 2000 LUMEN OUTPUT, 277 VOLT. UL LISTED FOR WET LOCATION.	CLEAR SEMI- SPECULAR	LED 4000K		HE WILLIAMS #V6DR-L38/840-DIM-UNV-RW-OF-CS-WET/CC-N-F1 EQUAL BY LIGHTOLIER #C6RDL OR FAIL-SAFE #FLD6B
	$ \begin{array}{c} \\ \hline E \\ \hline 30 \end{array} \end{array} $	WALL MOUNTED LED FIXTURE WITH DIE CAST ALUMINUM HOUSING WITH TYPE 2 SILICONE REFRACTOR. MINIMUM 3000 LUMEN OUTPUT, 277V. UL LISTED FOR WET LOCATION.	COLOR BY ARCHITECT	LED 4000K		LSI INDUSTRIES #XWM-2-LED-3L-40-UE-xx EQUAL BY STONCO #LPW16 OR MCGRAW-EDISON #GWC
	$\left\{ \begin{array}{c} F\\ 23 \end{array} \right\}$	SURFACE MOUNTED LED FIXTURE WITH EXTRUDED ALUMINUM HOUSING AND SEALED LENS. MINIMUM 3500 LUMEN OUTPUT, 277 VOLT. UL LISTED FOR WET LOCATION.	COLOR BY ARCHITECT	LED 4000K	TYPE "F": PROVIDE CUSTOM BRACKET FOR SIDE ATTACHMENT TO STEEL BEAM.	E STARFIRE LIGHTING #MDNW1-L-8-40-M-S-48-*-*-* EQUAL BY PAL #ML5WL65 OR NULITE #RXT
	G 20	SURFACE MOUNTED LED INDUSTRIAL FIXTURE WITH STEEL HOUSING AND REFLECTOR. MINIMUM 3200 LUMEN OUTPUT, 277 VOLT.	COLOR BY ARCHITECT	LED 4000K		HE WILLIAMS #804-L32-840-RA80-DIM-UNV EQUAL BY DAY-BRITE #5FL OR LAMAR #INLL
	$\begin{pmatrix} H\\ 63 \end{pmatrix}$	POLE MOUNTED LED LIGHT FIXTURE WITH DIE CAST ALUMINUM HOUSING AND SILICONE REFRACTOR OPTICAL SYSTEM. TYPE 5 DISTRIBUTION, MINIMUM 9,000 LUMEN OUTPUT. 277V AND UL LISTED FOR WET LOCATION. PROVIDE WITH 20'-0" SQUARE ALUMINUM WITH SPEAKED REACKETS WHERE NOTED ON BLAN	COLOR BY ARCHITECT	LED 4000K	TYPE "H": MINIMUM BUG RATING SHALL BE B3, U0, G2. FIXTURE OCCUPANCY SENSOR SHALL BE SET TO REDUCE FIXTURE OUTPUT BY 50% WHEN AREA IS UNOCCUPIED.	LSI INDUSTRIES #MRS-LED-9L-SIL-5W-UNV-DIM-40-70CRI-IMSBT1 EQUAL BY GARDCO #ECF-S OR MCGRAW-EDISON #GPC
2		SPEAKER BRACKETS WHERE NOTED ON PLAN.				
3						
1						
4						
5						
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A

PRIOR TO INSTALLATION.

### LIGHTING CONTROL SYSTEM SEQUENCE OF OPERATIONS

## CALIFORNIA ENERGY CODE (CEC) SECTION 130.1 MINIMUM.

SWITCH.

LIGHT FIXTURES WHICH ARE REQUIRED TO HAVE AUTOMATIC "DAYLIGHTING" CONTROLS SHALL ALSO BE CONTROLLED WITH A PHOTOCELL IN ADDITION TO OCCUPANCY SENSORS AND WALL DIMMERS. THE PHOTOCELL SHALL MEASURE THE AMOUNT OF DAYLIGHT ENTERING THE SPACE AND REDUCE THE LIGHT OUTPUT OF THE LIGHT FIXTURES TO MAINTAIN THE DESIGNED FOOT CANDLE LEVELS IN THE ROOM. WALL DIMMERS SHALL ALLOW THE LIGHT FIXTURES TO DIM LOWER THAN THE LIGHT BEING MEASURED IN THE ROOM, BUT NOT HIGHER.

FOR CONTROLLING THE RECEPTACLES.

CLASSROOMS/MULTI-PURPOSE ROOMS/GYMNASIUMS - ROOM OCCUPANCY SENSOR(S) SHALL TURN LIGHT FIXTURES OFF WHEN ROOM HAS BEEN UNOCCUPIED FOR 20 MINUTES. LIGHT FIXTURES SHALL BE TURNED ON TO 50 PERCENT WHEN ROOM BECOMES OCCUPIED. WHEN LIGHT FIXTURES ARE TURNED ON AT WALL SWITCH, THEY SHALL BE SET OR COME ON TO FULL BRIGHTNESS OR PRESET FOOT CANDLE LEVELS.

WALL DIMMERS SHALL BE USED FOR MANUAL CONTROL OF LIGHT FIXTURES AND SHALL BE EQUIPPED WITH AN ON/OFF SWITCH. WHERE MULTI-BUTTON SWITCH(S)/DIMMER(S) ARE USED, EACH BUTTON SHALL BE PROGRAMMED FOR A SPECIFIC LIGHTING SCENE. ACTIVATION OF A SPECIFIC BUTTON SHALL AUTOMATICALLY RECALL THE LIGHTING SCENE. "ON/OFF" AND MANUAL DIMMING CONTROL FUNCTIONS SHALL OVERRIDE PRESET SCENES. REFER TO LIGHTING CONTROL WIRING DIAGRAMS FOR SCENE SETTINGS AND SWITCH BUTTON IDENTIFICATION WHERE REQUIRED.

LIGHT FIXTURES WHICH ARE REQUIRED TO HAVE AUTOMATIC "DAYLIGHTING" CONTROLS SHALL ALSO BE CONTROLLED WITH A PHOTOCELL IN ADDITION TO OCCUPANCY SENSORS AND WALL DIMMERS. THE PHOTOCELL SHALL MEASURE THE AMOUNT OF DAYLIGHT ENTERING THE SPACE AND REDUCE THE LIGHT OUTPUT OF THE LIGHT FIXTURES TO MAINTAIN THE DESIGNED FOOT CANDLE LEVELS IN THE ROOM. WALL DIMMERS SHALL ALLOW THE LIGHT FIXTURES TO DIM LOWER THAN THE LIGHT BEING MEASURED IN THE ROOM, BUT NOT HIGHER.

CORRIDORS - CORRIDOR OCCUPANCY SENSORS SHALL REDUCE THE LIGHTING POWER BY 50% WHEN CORRIDOR HAS BEEN UNOCCUPIED FOR 5 MINUTES. LIGHT FIXTURES SHALL BE COMPLETELY TURNED OFF WHEN SPACE HAS BEEN UNOCCUPIED FOR 20 MINUTES. LIGHT FIXTURES SHALL BE AUTOMATICALLY TURNED ON WHEN SPACE IS OCCUPIED. WHEN LIGHT FIXTURES ARE TURNED ON, THEY SHALL BE SET TO FULL BRIGHTNESS OR PRESET FOOT CANDLE LEVELS.

EQUIPPED WITH AN "ON/OFF" SWITCH.

EQUIPPED WITH AN "ON/OFF" SWITCH.

CANDLE LEVELS.

### LIGHT LEVELS: GUIDELINES. THE FOLLOWING LIGHTING LEVELS WILL BE PROVIDED:

<u>AREA</u> TOILETS

### ACCEPTANCE TESTING

MANDATORY ACCEPTANCE TESTING PER TITLE 24, PART 6 SECTION 130.4 SHALL BE AS FOLLOWS:

THE CONTRACTOR SHALL PROVIDE THE ACCEPTANCE TESTING AGENT. THE ACCEPTANCE TESTING AGENT SHALL BE A CERTIFIED LIGHTING CONTROLS ACCEPTANCE TEST TECHNICIAN (CLCATT). THE CLCATT SHALL PERFORM ALL LIGHTING CONTROL INSTALLATION CERTIFICATION AS REQUIRED BY TITLE 24, PART 6 SECTION 130.4 (a) AND 130.4 (b). THIS SHALL INCLUDE, BUT NOT LIMITED TO, FILLING OUT, SIGNING AND SUBMITTING ALL REQUIRED DOCUMENTATION,

THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE LIGHTING CONTROL SYSTEMS WITH THE CLCATT

REFER TO LIGHTING PLANS FOR QUANTITY AND LOCATION OF ALL LIGHTING CONTROL COMPONENTS AND LIGHT FIXTURES; IDENTIFICATION OF LIGHT FIXTURE AND DEVICE SWITCH LEG IDENTIFICATION. REFER TO THE LIGHTING CONTROL WIRING DIAGRAMS FOR ADDITIONAL INFORMATION. LIGHTING CONTROLS SHALL BE INSTALLED IN COMPLIANCE WITH 2019

OFFICE/WORKROOMS/RECEPTION AREAS/LIBRARIES (GENERAL LIGHTING) - ROOM OCCUPANCY SENSOR(S) SHALL TURN LIGHT FIXTURES OFF WHEN ROOM HAS BEEN UNOCCUPIED FOR 20 MINUTES. LIGHT FIXTURES SHALL BE TURNED ON TO 50 PERCENT WHEN ROOM BECOMES OCCUPIED. WHEN LIGHT FIXTURES ARE TURNED ON AT WALL SWITCH, THEY SHALL BE SET OR COME ON TO FULL BRIGHTNESS OR PRESET FOOT CANDLE LEVELS.

WALL DIMMERS SHALL BE USED FOR MANUAL CONTROL OF LIGHT FIXTURES AND SHALL BE EQUIPPED WITH AN ON/OFF

WHERE CONTROLLED RECEPTACLES ARE SHOWN, THEY SHALL BE CONTROLLED BY THE ROOM OCCUPANCY SENSOR AND LIGHTING CONTROL SYSTEM. OCCUPANCY SENSOR SETTINGS USED FOR CONTROLLING LIGHT FIXTURES SHALL BE USED

WALL SWITCHES SHALL BE USED FOR MANUAL "ON/OFF" CONTROL OF LIGHT FIXTURES.

RESTROOMS - ROOM OCCUPANCY SENSOR(S) SHALL TURN LIGHT FIXTURES OFF WHEN ROOM HAS BEEN UNOCCUPIED FOR 15 MINUTES. LIGHT FIXTURES SHALL BE AUTOMATICALLY TURNED ON WHEN ROOM BECOMES OCCUPIED. WHEN LIGHT FIXTURES ARE TURNED ON, THEY SHALL BE SET TO FULL BRIGHTNESS OR PRESET FOOT CANDLE LEVELS.

WALL SWITCHES SHALL BE USED FOR MANUAL "ON/OFF" CONTROL OF LIGHT FIXTURES.

WHERE SHOWN ON PLANS, WALL DIMMERS SHALL BE USED FOR MANUAL CONTROL OF LIGHT FIXTURES AND SHALL BE STORAGE ROOMS - ROOM OCCUPANCY WALL SENSOR(S) SHALL TURN LIGHT FIXTURES OFF WHEN ROOM HAS BEEN

UNOCCUPIED FOR 15 MINUTES. LIGHT FIXTURES SHALL BE MANUALLY TURNED ON WHEN ROOM IS OCCUPIED. WHEN LIGHT FIXTURES ARE TURNED ON, THEY SHALL BE SET TO FULL BRIGHTNESS OR PRESET FOOT CANDLE LEVELS. WALL SWITCHES SHALL BE USED FOR MANUAL "ON/OFF" CONTROL OF LIGHT FIXTURES.

WHERE SHOWN ON PLANS, WALL DIMMERS SHALL BE USED FOR MANUAL CONTROL OF LIGHT FIXTURES AND SHALL BE

LIBRARY STACK AISLE - OCCUPANCY SENSORS CONTROLLING LIGHT FIXTURES ILLUMINATING BOOK STACK AISLES MATCHING THE REQUIREMENTS OF CEC 131(C),6,B SHALL REDUCE THE LIGHTING POWER BY 50% WHEN THE BOOK STACK AISLE IS UNOCCUPIED FOR 5 MINUTES. LIGHT FIXTURES SHALL BE COMPLETELY TURNED OFF WHEN BOOK STACK AISLES HAVE BEEN UNOCCUPIED FOR 20 MINUTES. LIGHT FIXTURES SHALL AUTOMATICALLY COME ON WHEN BOOK STACK AISLES ARE OCCUPIED. WHEN LIGHT FIXTURES ARE TURNED ON, THEY SHALL BE SET TO FULL BRIGHTNESS OR PRESET FOOT

LIGHTING LEVELS (FOOTCANDLES) WILL BE DESIGNED IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY (IES)

CONCESSIONS/OFFICE STORAGE/JANITORS ROOMS ELECTRICAL/MECHANICAL ROOMS

POOL EQUIPMENT ROOMS

MAINTAINED LIGHTING LEVEL AT THE WORK PLANE 40-50 10-20 20-30 20-30 30-40

- EXIT SIGNS WITH THROUGH WIRING SHALL BE EQUIPPED WITH A SEPARATE JUNCTION BOX FOR TERMINATION OF CONDUITS. FURNISH A SEPARATE BOX FOR EACH CIRCUIT. CONTRACTOR SHALL VERIFY ALL MOUNTING REQUIREMENTS FOR ALL RECESSED
- LIGHTING FIXTURES, PRIOR TO SHOP DRAWINGS SUBMITTALS. IT IS THE CONTRACTORS RESPONSIBILITY TO SECURE THE MOUNTING HARDWARE THAT IS COMPATIBLE WITH THE CEILING AND THE CONFIGURATION OF THE LIGHTING LAYOUT.
- VERIFY FIXTURE AND DRIVER VOLTAGES WITH BRANCH CIRCUIT WIRING.
- LAMP COLOR FOR LED FIXTURES SHALL BE 4000°K U.N.O.
- EQUAL TO KSH-K12 WHERE APPLICABLE.
- MOUNTED OUTLET BOXES, ACCESSIBLE FROM INSIDE FIXTURE.
- FIXTURES SHALL BE U.L. LISTED FOR INTENDED LOCATION.
- 2. LIGHTING FIXTURES IN MECHANICAL SPACES ARE SHOWN IN THEIR APPROXIMATE LOCATION ONLY. DO NOT INSTALL LIGHT OUTLETS FOR FIXTURES UNTIL MECHANICAL PIPING AND DUCTWORK ARE INSTALLED; THEN LIGHTING FIXTURES SHALL BE INSTALLED IN LOCATIONS BEST SUITED FOR EQUIPMENT ARRANGEMENT AND AS APPROVED BY THE PROJECT MANAGER.
- 10. THE CONTRACTOR SHALL VERIFY ALL WINDOW HEIGHTS AND DAYLIT ZONES PRIOR TO INSTALLATION OF LIGHTING CONTROLS.
- 11. ALL LED LIGHT FIXTURES SHALL BE TESTED TO LM-79 AND LM-80 IES STANDARDS.
- 12. DMX LIGHT FIXTURES THE CONTRACTOR SHALL PROVIDE ALL REQUIRED COMPONENTS (CONNECTORS, CABLES, HEAD-END, ETC.) REQUIRED FOR PROGRAMMING AND CONTROL OF DMX ENABLE LIGHT FIXTURES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL PROGRAMMING, FIXTURE ID, COLOR SCHEME, SCHEDULING, ETC. REQUIRED FOR ALL DMX LIGHT FIXTURES. ALL PROGRAMMING SHALL BE COORDINATED WITH THE OWNER PRIOR TO START UP.

SUSPENDED ACOUSTICAL CEILINGS:

HEAVY DUTY GRID SYSTEM: FLUSH OR RECESSED LIGHT FIXTURES WEIGHING LESS THAN 56 POUNDS MAY BE SUPPORTED DIRECTLY ON THE RUNNERS OF A HEAVY DUTY GRID SYSTEM. IN ADDITION, THEY SHALL HAVE A MINIMUM OF TWO 12 GAUGE SLACK SAFETY WIRES ATTACHED TO THE FIXTURE AT DIAGONAL CORNERS AND ANCHORED TO THE STRUCTURE ABOVE. ALL 4 FOOT BY 4 FOOT LIGHT FIXTURES SHALL HAVE SLACK SAFETY WIRES AT EACH CORNER. ALL FLUSH OR RECESSED LIGHT FIXTURES WEIGHING 56 POUNDS OR MORE SHALL BE INDEPENDENTLY SUPPORTED BY NOT LESS THAN 4 TAUT 12 GAUGE WIRES EACH ATTACHED TO THE FIXTURE AND TO THE STRUCTURE ABOVE. REGARDLESS OF THE TYPE OF CEILING GRID SYSTEM USED. THE 4 TAUT 12 GAUGE WIRES INCLUDING THEIR ATTACHMENT TO THE STRUCTURE ABOVE SHALL BE CAPABLE OF SUPPORTING 4 TIMES THE WEIGHT OF THE UNIT.

SURFACE MOUNTED FIXTURES: SUPPORT SURFACE MOUNTED LIGHT FIXTURES BY AT LEAST TWO POSITIVE DEVICES WHICH SURROUND THE CEILING RUNNER AND WHICH ARE EACH SUPPORTED FROM THE STRUCTURE ABOVE BY A 12 GAUGE WIRE. SPRING CLIPS OR CLAMPS THAT CONNECT ONLY TO THE RUNNER ARE NOT ACCEPTABLE. PROVIDE ADDITIONAL SUPPORTS WHEN LIGHT FIXTURES ARE EIGHT FEET OR LONGER.

SUSPENDED DRYWALL CEILINGS: ALL RECESSED OR DROP-IN LIGHT FIXTURES SHALL BE SUPPORTED DIRECTLY BY MAIN RUNNERS OR BY SUPPLEMENTAL FRAMING WHICH IS SUPPORTED BY MAIN RUNNERS. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE CEILING CONTRACTOR TO PROVIDE APPROPRIATE FRAMING AND LOCATION FOR FIXTURES. SURFACE MOUNTED FIXTURES SHALL BE ATTACHED TO A MAIN RUNNER WITH A POSITIVE CLAMPING DEVICE MADE OF MATERIAL WITH A MINIMUM OF 14 GAUGE. ROTATIONAL SPRING CATCHES SHALL NOT BE ALLOWED.

PENDANT MOUNTED FIXTURES: PENDANT MOUNTED FIXTURES SHALL BE SUPPORTED BY A WIRE OR (SAFETY) CABLE PASSING THROUGH EACH PENDANT HANGER AND CAPABLE OF

SUPPORTING 4 TIMES THE WEIGHT OF THE FIXTURE. WHERE PENDANT MOUNTED FIXTURES ARE INSTALLED ON A GRID CEILING OR WHERE THE FIXTURE WEIGHS 50 POUNDS OR MORE, THE WIRE OR CABLE PASSING THROUGH THE PENDANT HANGER SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE.

SHALL BE CAPABLE OF SWINGING 45 DEGREES IN ANY DIRECTION FROM PLUMB WITHOUT OBSTRUCTION. FIXTURES SHALL HAVE STEMS WHICH ARE ONE PIECE WITHOUT COUPLING AND ARE TO HAVE THE SAME FINISH AS THE FIXTURE AND SWIVEL HANGER CANOPY. INDUSTRIAL TYPE FLUORESCENT FIXTURES INSTALLED IN AREAS OR ROOMS WITH EXPOSED STRUCTURE (NO CEILING) MAY BE CHAIN HUNG IN LIEU OF PROVIDING A STEM AND CANOPY. WHERE FIXTURES CAN NOT SWING UNOBSTRUCTED 45 DEGREES IN ANY DIRECTION, ADDITIONAL GUY WIRES OR SOLID BRACING IS REQUIRED. THE CONTRACTOR SHALL SUBMIT THE METHOD OF BRACING TO THE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.

13. LIGHT FIXTURE SUBSTITUTIONS:

LISTED EQUAL MUST BE SUBMITTED WITH SUBSTATION REQUEST FORM AS LISTED IN THE SPECIFICATIONS. NON-SPECIFIED OR EQUAL LISTED LIGHT FIXTURES WHICH ARE SUBMITTED AND DO NOT HAVE THE REQUIRED SUBSTATION REQUEST FORMS AND/OR DO NOT FOLLOW THE SUBSTATION REQUIREMENTS LISTED IN THE SPECIFICATIONS WILL BE REJECTED AND RETURNED WITHOUT REVIEW.



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Size-	Copper AWG 8 (Max ampacity - 40 amps 60°)																																
Ampacity	Copper	· AWG	8 (Max	ampao	city - 40	amps	60°)										Coppe	r AWG	<u>6 (Max</u>	k ampac	ity - 55	amps 6	60°)			Copper /	AWG 4	<u>(Max a</u>	mpacit	<u>y - 70 a</u> r	mps 60	/°)	
Strands	7	1	7	1	7	1	7	1	7	1	7	1	7	1	7	1	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Phase	1	1	1	1	3	3	1	1	3	3	1	1	1	1	3	3	1	1	3	1	3	1	3	1	3	1	1	3	1	3	1	1	3
Voltage	120	120	208	208	208	208	240	240	240	240	277	277	480	480	480	480	120	208	208	240	240	277	277	480	480	120	208	208	240	240	277	480	480
Amps	Maximum lenghts of wire at 3% voltage drop in feet       Maximum lenghts of wire at 3% voltage drop in feet												<b></b>																				
1	2313.6	2356.0	4010.3	4083.8	4630.7	4715.5	4627.2	4712.0	5343.1	5441.0	5340.6	5438.5	9254.5	9424.1	10686.2	10882.0	3666.0	6354.4	7337.4	7332.0	8466.2	8462.3	9771.4	14664.0	16932.5	5844.2	10129.9	11697.0	11688.3	13496.5	13490.3	23376.6	26993.0
2	1156.8	1178.0	2005.1	2041.9	2315.3	2357.8	2313.6	2356.0	2671.5	2720.5	2670.3	2719.2	4627.2	4712.0	5343.1	5441.0	1833.0	3177.2	3668.7	3666.0	4233.1	4231.2	4885.7	7332.0	8466.2	2922.1	5064.9	5848.5	5844.2	6748.2	6745.1	11688.3	13496.5
3	771.2	785.3	1336.8	1361.3	1543.6	1571.8	1542.4	1570.7	1781.0	1813.7	1780.2	1812.8	3084.8	3141.4	3562.1	3627.3	1222.0	2118.1	2445.8	2444.0	2822.1	2820.8	3257.1	4888.0	5644.2	1948.1	3376.6	3899.0	3896.1	4498.8	4496.8	7792.2	8997.7
4	578.4	589.0	1002.6	1020.9	1157.7	1178.9	1156.8	1178.0	1335.8	1360.2	1335.2	1359.6	2313.6	2356.0	2671.5	2720.5	916.5	1588.6	1834.4	1833.0	2116.6	2115.6	2442.9	3666.0	4233.1	1461.0	2532.5	2924.2	2922.1	3374.1	3372.6	5844.2	6748.2
5	462.7	471.2	802.1	816.8	926.1	943.1	925.4	942.4	1068.6	1088.2	1068.1	1087.7	1850.9	1884.8	2137.2	2176.4	733.2	1270.9	1467.5	1466.4	1693.2	1692.5	1954.3	2932.8	3386.5	1168.8	2026.0	2339.4	2337.7	2699.3	2698.1	4675.3	5398.6
6	385.6	392.7	668.4	680.6	771.8	785.9	771.2	785.3	890.5	906.8	890.1	906.4	1542.4	1570.7	1781.0	1813.7	611.0	1059.1	1222.9	1222.0	1411.0	1410.4	1628.6	2444.0	2822.1	974.0	1688.3		1948.1	2249.4	2248.4	3896.1	4498.8
7	330.5	336.6	572.9	583.4	661.5	673.6	661.0	673.1	763.3	777.3	762.9	776.9	1322.1	1346.3	1526.6	1554.6	523.7	907.8	1048.2	1047.4	1209.5	1208.9	1395.9	2094.9	2418.9	834.9	1447.1		1669.8		1927.2	3339.5	3856.1
8	289.2	294.5	501.3	510.5	578.8	589.4	578.4	589.0	667.9	680.1	667.6	679.8	1156.8	1178.0	1335.8	1360.2	458.2	794.3	917.2	916.5	1058.3	1057.8	1221.4		2116.6	730.5	1266.2		1461.0		1686.3	2922.1	3374.1
0	257.1	261.8	445.6	453.8	514.5	523.9	514.1	523.6	593.7	604.6	593.4	604.3	1028.3	1047.1	1187.4	1209.1	407.3	706.0	815.3	814.7	940.7	940.3	1085.7	1629.3	1881.4	649.4	1125.5		1298.7	1499.6	1498.9	2597.4	2999.2
10	231.4	235.6	401.0	408.4	463.1	471.6	462.7	471.2	534.3	544.1	534.1	543.8	925.4	942.4	1068.6	1088.2	366.6	635.4	733.7	733.2		846.2	977.1	1466.4	1693.2	584.4	1013.0		1168.8	1349.6	1349.0	2337.7	2699.3
10																					846.6												
15	154.2	157.1	267.4	272.3	308.7	314.4	308.5	314.1	356.2	362.7	356.0	362.6	617.0	628.3	712.4	725.5	244.4	423.6	489.2	488.8	564.4	564.2	651.4	977.6	1128.8	389.6	675.3		779.2		899.4	1558.4	1799.5
16	144.6	147.3	250.6	255.2	289.4	294.7	289.2	294.5	333.9	340.1	333.8	339.9	578.4	589.0	667.9	680.1	229.1	397.1	458.6	458.2	529.1	528.9	610.7	916.5	1058.3	365.3	633.1		730.5		843.1	1461.0	1687.1
17	136.1	138.6	235.9	240.2	272.4	277.4	272.2	277.2	314.3	320.1	314.2		544.4	554.4	628.6	640.1	215.6	373.8	431.6	431.3	498.0	497.8	574.8		996.0	343.8	595.9		687.5		793.5	1375.1	1587.8
18	128.5	130.9	222.8	226.9	257.3	262.0	257.1	261.8	296.8	302.3	296.7	302.1	514.1	523.6	593.7	604.6	203.7	353.0	407.6	407.3	470.3	470.1	542.9	814.7	940.7	324.7	562.8	649.8	649.4	749.8	749.5	1298.7	1499.6
19	121.8	124.0	211.1	214.9	243.7	248.2	243.5	248.0	281.2	286.4	281.1	286.2	487.1	496.0	562.4	572.7	192.9	334.4	386.2	385.9	445.6	445.4	514.3	771.8	891.2	307.6	533.2	615.6	615.2	710.3	710.0	1230.3	1420.7
20	115.7	117.8	200.5	204.2	231.5	235.8	231.4	235.6	267.2	272.0	267.0	271.9	462.7	471.2	534.3	544.1	183.3	317.7	366.9	366.6	423.3	423.1	488.6	733.2	846.6	292.2	506.5	584.8	584.4	674.8	674.5	1168.8	1349.6
25	92.5	94.2	160.4	163.4	185.2	188.6	185.1	188.5	213.7	217.6	213.6	217.5	370.2	377.0	427.4	435.3	146.6	254.2	293.5	293.3	338.6	338.5	390.9	586.6	677.3	233.8	405.2	467.9	467.5	539.9	539.6	935.1	1079.7
30	77.1	78.5	133.7	136.1	154.4	157.2	154.2	157.1	178.1	181.4	178.0	181.3	308.5	314.1	356.2	362.7	122.2	211.8	244.6	244.4	282.2	282.1	325.7	488.8	564.4	194.8	337.7	389.9	389.6	449.9	449.7	779.2	899.8
35	66.1	67.3	114.6	116.7	132.3	134.7	132.2	134.6	152.7	155.5	152.6	155.4	264.4	269.3	305.3	310.9	104.7	181.6	209.6	209.5	241.9	241.8	279.2	419.0	483.8	167.0	289.4	334.2	334.0	385.6	385.4	667.9	771.2
40	57.8	58.9	100.3	102.1	115.8	117.9	115.7	117.8	133.6	136.0	133.5	136.0	231.4	235.6	267.2	272.0	91.6	158.9	183.4	183.3	211.7	211.6	244.3	366.6	423.3	146.1	253.2	292.4	292.2	337.4	337.3	584.4	674.8
45	51.4	52.4	89.1	90.8	102.9	104.8	102.8	104.7	118.7	120.9	118.7	120.9	205.7	209.4	237.5	241.8	81.5	141.2	163.1	162.9	188.1	188.1	217.1	325.9	376.3	129.9	225.1	259.9	259.7	299.9	299.8	519.5	599.8
50	46.3	47.1	80.2	81.7	92.6	94.3	92.5	94.2	106.9	108.8	106.8	108.8	185.1	188.5	213.7	217.6	73.3	127.1	146.7	146.6	169.3	169.2	195.4	293.3	338.6	116.9	202.6	233.9	233.8	269.9	269.8	467.5	539.9
60	38.6	39.3	66.8	68.1	77.2			78.5		90.7	89.0		154.2		178.1	181.4	61.1	105.9	122.3	122.2			162.9		282.2	97.4			194.8				449.9
70										`							52.4	90.8	104.8	104.7			139.6		241.9	83.5	144.7		167.0		192.7	334.0	385.6
80																	45.8	79.4	91.7	91.6			122.1		211.7	73.1			146.1	168.7	168.6	292.2	337.4
90																	40.0	1 3.4	31.7	31.0	105.0	103.0	122.1	105.5	211.1				129.9				
																										64.9					149.9	259.7	299.9
100																										58.4	101.3	117.0	116.9	135.0	134.9	233.8	269.9

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Size- Ampacity	Copper	AWG	12 (Ma	x ampa	acity - 2	5 amps	s 60°)										Copper AWG 10 (Max ampacity - 30 amps 60°)															
Strands	7	1	7	1	7	1	7	1	7	1	7	1	7	1	7	1	7	1	7	1	7	1	7	1	7	1	7	1	7	1	7	1
Phase	1	1	1	1	3	3	1	1	3	3	1	1	1	1	3	3	1	1	1	1	3	3	1	1	3	3	1	1	1	1	3	3
/oltage	120	120	208	208	208	208	240	240	240	240	277	277	480	480	480	480	120	120	208	208	208	208	240	240	240	240	277	277	480	480	480	480
Amps	Maximum le	enghts of	wire at 3%	voltage dro	op in feet		<b>.</b>										Maximum I	enghts of	wire at 3%	voltage dro	p in feet											
1	909.1	932.6	1575.8	1616.6	1819.5	1866.7	1818.2	1865.3	2099.5	2153.8	2098.5	2152.8	3636.4	3730.6	4198.9	4307.7	1451.6	1487.6	2516.1	2578.5	2905.4	2977.4	2903.2	2975.2	3352.4	3435.5	3350.8	3433.9	5806.5	5950.4	6704.7	6870
2	454.5	466.3	787.9	808.3	909.8	933.3	909.1	932.6	1049.7	1076.9	1049.2	1076.4	1818.2	1865.3	2099.5	2153.8	725.8	743.8	1258.1	1289.3	1452.7	1488.7	1451.6	1487.6	1676.2	1717.7	1675.4	1716.9	2903.2	2975.2	3352.4	3435
3	303.0	310.9	525.3	538.9	606.5	622.2	606.1	621.8	699.8	717.9	699.5	717.6	1212.1	1243.5	1399.6	1435.9	483.9	495.9	838.7	859.5	968.5	992.5	967.7	991.7	1117.5	1145.2	1116.9	1144.6	1935.5	1983.5	2234.9	2290
4	227.3	233.2	393.9	404.1	454.9	466.7	454.5	466.3	524.9	538.5	524.6	538.2	909.1	932.6	1049.7	1076.9	362.9	371.9	629.0	644.6	726.3	744.4	725.8	743.8	838.1	858.9	837.7	858.5	1451.6	1487.6	1676.2	171
5	181.8	186.5	315.2	323.3	363.9	373.3	363.6	373.1	419.9	430.8	419.7	430.6	727.3	746.1	839.8	861.5	290.3	297.5	503.2	515.7	581.1	595.5	580.6	595.0	670.5	687.1	670.2	686.8	1161.3	1190.1	1340.9	1374
6	151.5	155.4	262.6	269.4	303.3	311.1	303.0	310.9	349.9	359.0	349.7	358.8	606.1	621.8	699.8	717.9	241.9	247.9	419.4	429.8	484.2	496.2	483.9	495.9	558.7	572.6	558.5	572.3	967.7	991.7	1117.5	114
7	129.9	133.2	225.1	230.9	259.9	266.7	259.7	266.5	299.9	307.7	299.8	307.5	519.5	532.9	599.8	615.4	207.4	212.5	359.4	368.4	415.1	425.3	414.7	425.0	478.9	490.8	478.7	490.6	829.5	850.1	957.8	98
8	113.6	116.6	197.0	202.1	227.4	233.3	227.3	233.2	262.4	269.2	262.3	269.1	454.5	466.3	524.9	538.5	181.5	186.0	314.5	322.3	363.2	372.2	362.9	371.9	419.0	429.4	418.9	429.2	725.8	743.8	838.1	858
9	101.0	103.6	175.1	179.6	202.2	207.4	202.0	207.3	233.3	239.3	233.2	239.2	404.0	414.5	466.5	478.6	161.3	165.3	279.6	286.5	322.8	330.8	322.6	330.6	372.5	381.7	372.3	381.5	645.2	661.2	745.0	763
10	90.9	93.3	157.6	161.7	182.0	186.7	181.8	186.5	209.9	215.4	209.8	215.3	363.6	373.1	419.9	430.8	145.2	148.8	251.6	257.9	290.5	297.7	290.3	297.5	335.2	343.5	335.1	343.4	580.6	595.0	670.5	68
15	60.6	62.2	105.1	107.8	121.3	124.4	121.2	124.4	140.0	143.6	139.9	143.5	242.4	248.7	279.9	287.2	96.8	99.2	167.7	171.9	193.7	198.5	193.5	198.3	223.5	229.0	223.4	228.9	387.1	396.7	447.0	458
16	56.8	58.3	98.5	101.0	113.7	116.7	113.6	116.6	131.2	134.6	131.2	134.6	227.3	233.2	262.4	269.2	90.7	93.0	157.3	161.2	181.6	186.1	181.5	186.0	209.5	214.7	209.4	214.6	362.9	371.9	419.0	429
17	53.5	54.9	92.7	95.1	107.0	109.8	107.0	109.7	123.5	126.7	123.4	126.6	213.9	219.4	247.0	253.4	85.4	87.5	148.0	151.7	170.9	175.1	170.8	175.0	197.2	202.1	197.1	202.0	341.6	350.0	394.4	404
18	50.5	51.8	87.5	89.8	101.1	103.7	101.0	103.6	116.6	119.7	116.6	119.6	202.0	207.3	233.3	239.3	80.6	82.6	139.8	143.3	161.4	165.4	161.3	165.3	186.2	190.9	186.2	190.8	322.6	330.6	372.5	381
19	47.8	49.1	82.9	85.1	95.8	98.2	95.7	98.2	110.5	113.4	110.4	113.3	191.4	196.3	221.0	226.7	76.4	78.3	132.4	135.7	152.9	156.7	152.8	156.6	176.4	180.8	176.4	180.7	305.6	313.2	352.9	361
20	45.5	46.6	78.8	80.8	91.0	93.3	90.9	93.3	105.0	107.7	104.9	107.6	181.8	186.5	209.9	215.4	72.6	74.4	125.8	128.9	145.3	148.9	145.2	148.8	167.6	171.8	167.5	171.7	290.3	297.5	335.2	343
25	36.4	37.3	63.0	64.7	72.8	74.7	72.7	74.6	84.0	86.2	83.9	86.1	145.5	149.2	168.0	172.3	58.1	59.5	100.6	103.1	116.2	119.1	116.1	119.0	134.1	137.4	134.0	137.4	232.3	238.0	268.2	274
30																	48.4	49.6	83.9	86.0	96.8	99.2	96.8	99.2	111.7	114.5	111.7	114.5	193.5	198.3	223.5	229
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VD	=	<u>2 X L X R X I</u>	
		1000	

BRANCH CIRCUIT VOLTAGE DROP CALCULATION

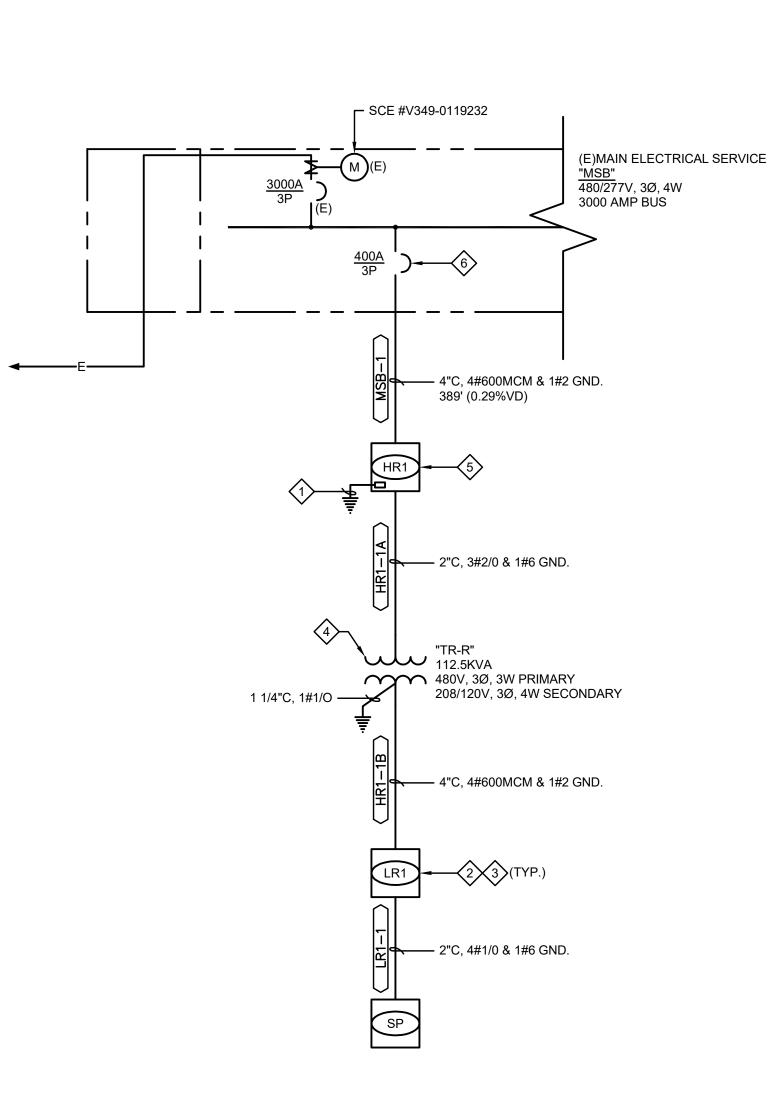
VD = VOLTAGE DROP V = VOLTAGE L = ONE WAY LENGTH OF CONDUCTOR R = CONDUCTOR RESISTANCE IN OHMS PER THOUSAND FEET I = LOAD CURRENT (AMPERES)

NOTICE TO CONTRACTOR:

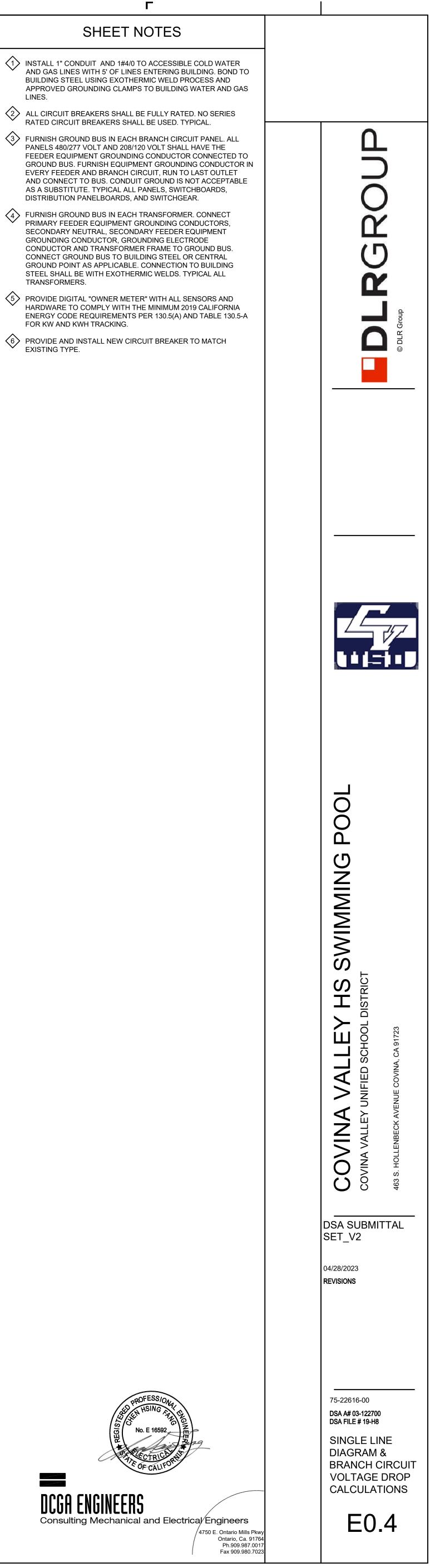
LOAD SUMMARY "MSB"			
EXISTING LOAD PER BILLING INFORMATION @.85PF	= =	236 KW 277.65 KVA	
NO NEW LOAD ADDED "HR1"	=	83.8 KVA	
TOTAL LOAD	=	361.45 KVA	
361.45 KVA @ 480V, 3Ø 434.96 AMPS @ 125%	= =	434.96 AMPS 543.70 AMPS	
3000 AMP SERVICE IS ADEQUATE			

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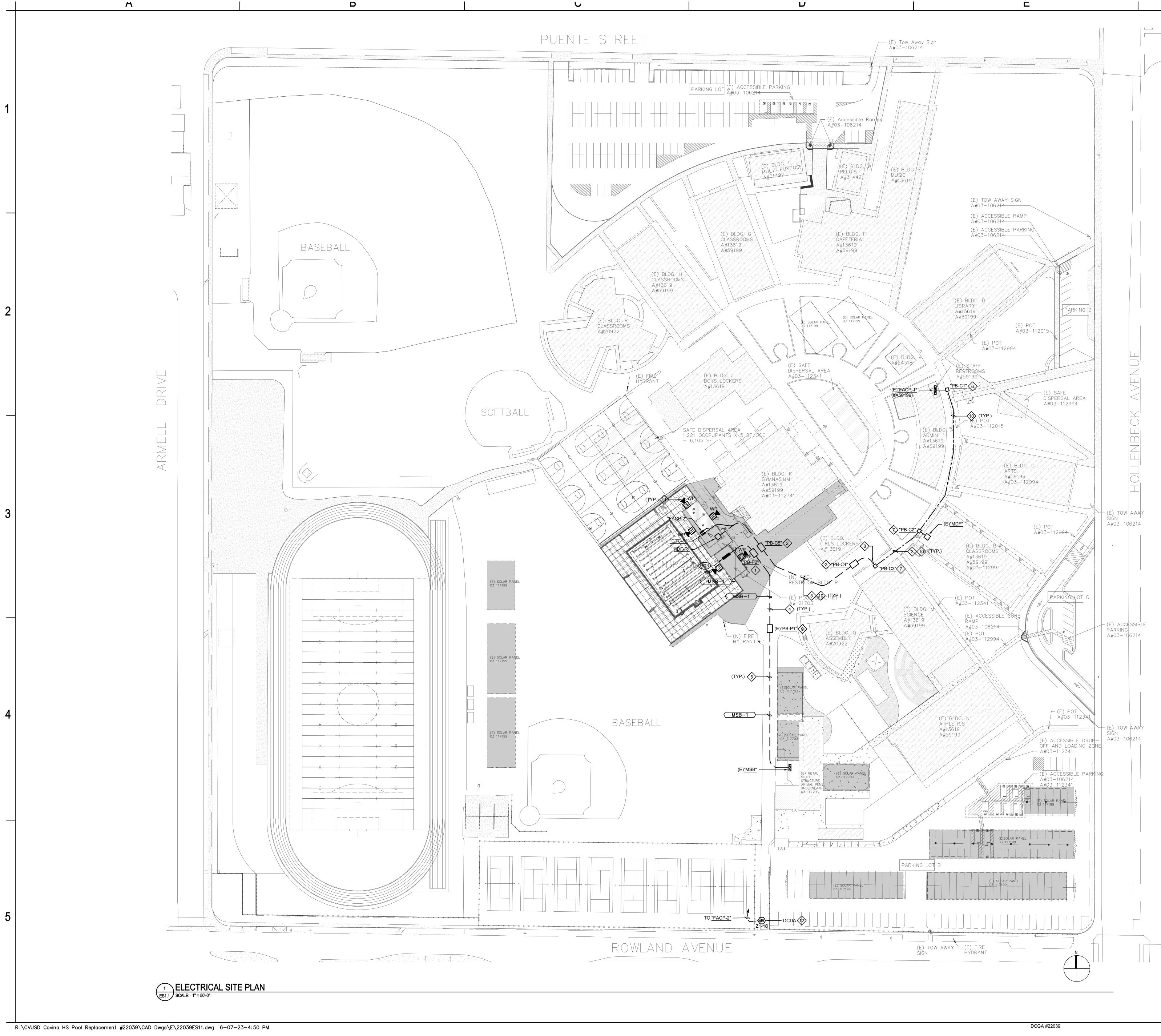
SINGLE LINE DIAGRAM SCALE = N.T.S

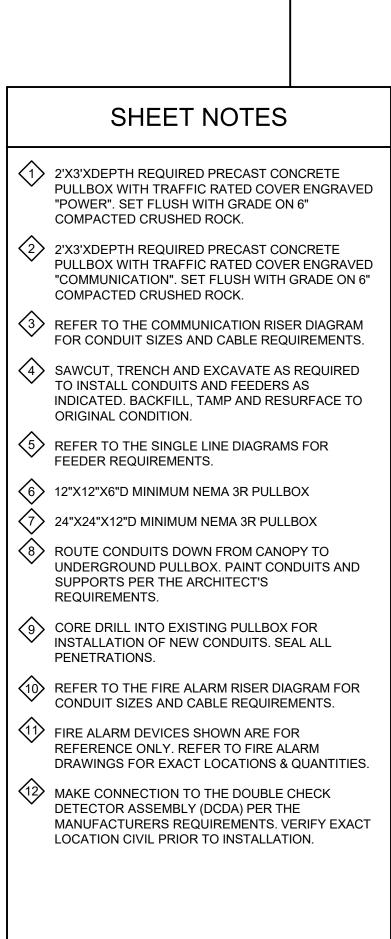




THIS BRANCH CIRCUIT VOLTAGE DROP SCHEDULE IS TO BE USED WHEN SIZING CONDUCTORS FOR ACTUAL INSTALLED FIELD CONDITION CIRCUIT LENGTHS. SPECIFIC CONDUCTOR SIZING ON PLANS SHALL BE THE MINIMUM SIZE CONDUCTOR USED FOR INSTALLATION UNLESS INSTALLED CONDITION EXCEEDS CIRCUIT LENGTH ALLOWED ON TABLE AND SHALL BE INCREASED TO THE NEXT SIZE CONDUCTOR SCHEDULED. ALL CONDUCTORS AS DESIGNED OR AS REQUIRED PER INSTALLED CONDITION IS PART OF THE CONTRACTORS BASE BID.

DCGA #22039







4750 E. Ontario Mills Pkwy Ontario, Ca. 91764 Ph.909.987.0017 Fax 909.980.7023

### DCGA ENGINEERS Consulting Mechanical and Electrical Engineers

## SHEET NOTES

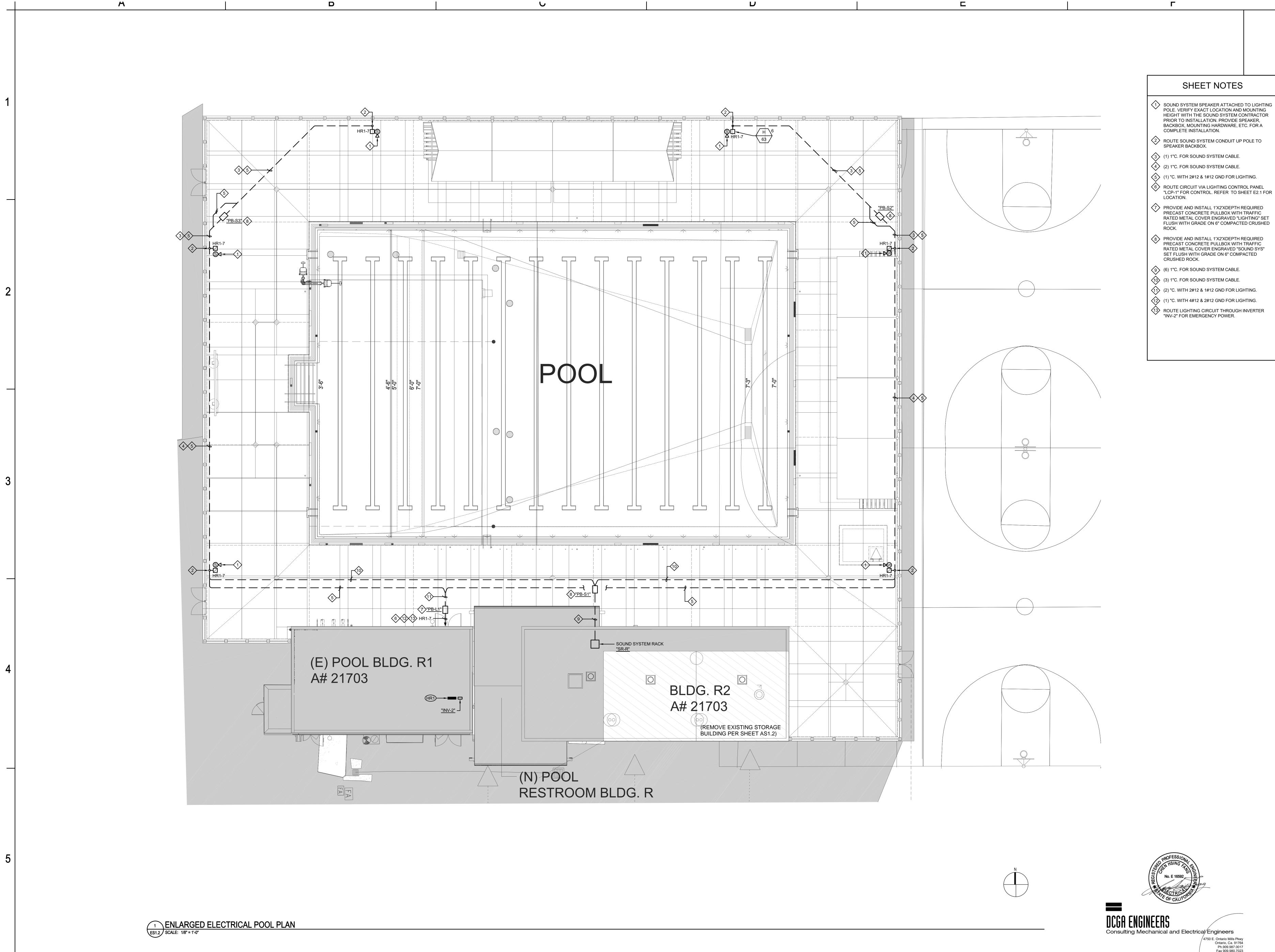
- A SAWCUT, TRENCH AND EXCAVATE AS REQUIRED TO INSTALL CONDUITS AND FEEDERS AS INDICATED. BACKFILL, TAMP AND RESURFACE TO
- $\langle 8 \rangle$  ROUTE CONDUITS DOWN FROM CANOPY TO UNDERGROUND PULLBOX. PAINT CONDUITS AND
- REFER TO THE FIRE ALARM RISER DIAGRAM FOR CONDUIT SIZES AND CABLE REQUIREMENTS.
- REFERENCE ONLY. REFER TO FIRE ALARM DRAWINGS FOR EXACT LOCATIONS & QUANTITIES.
- MANUFACTURERS REQUIREMENTS. VERIFY EXACT LOCATION CIVIL PRIOR TO INSTALLATION.







ES1.1



## SHEET NOTES

BACKBOX, MOUNTING HARDWARE, ETC. FOR A COMPLETE INSTALLATION.

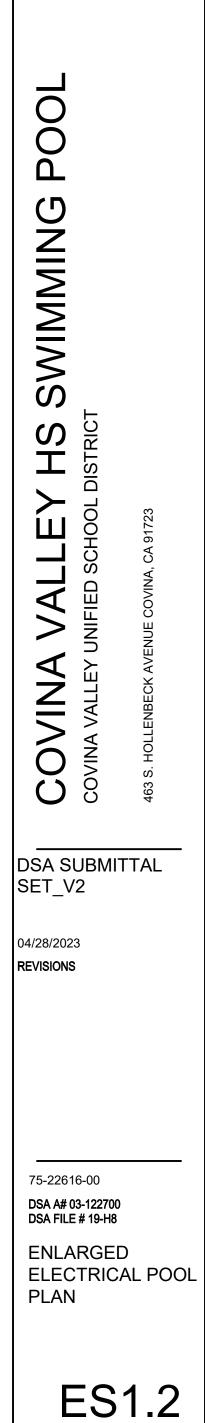
ROUTE CIRCUIT VIA LIGHTING CONTROL PANEL "LCP-1" FOR CONTROL. REFER TO SHEET E2.1 FOR

RATED METAL COVER ENGRAVED "LIGHTING" SET FLUSH WITH GRADE ON 6" COMPACTED CRUSHED

RATED METAL COVER ENGRAVED "SOUND SYS" SET FLUSH WITH GRADE ON 6" COMPACTED

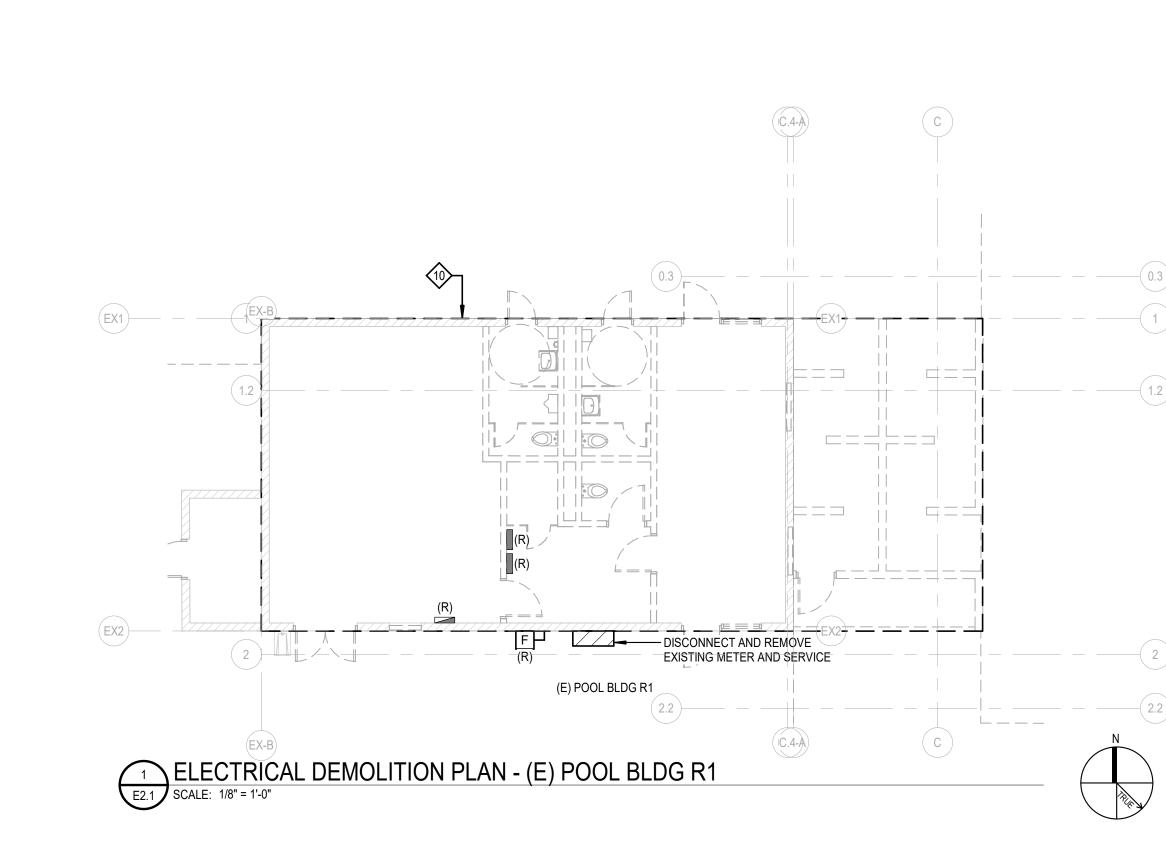


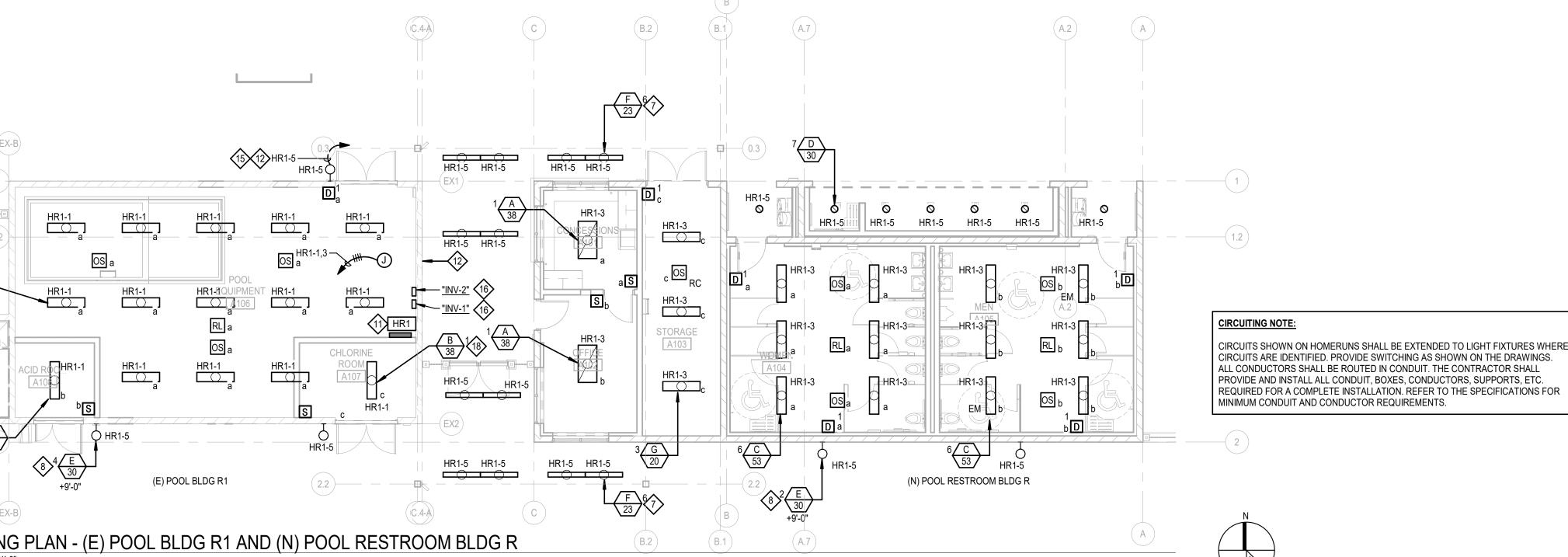


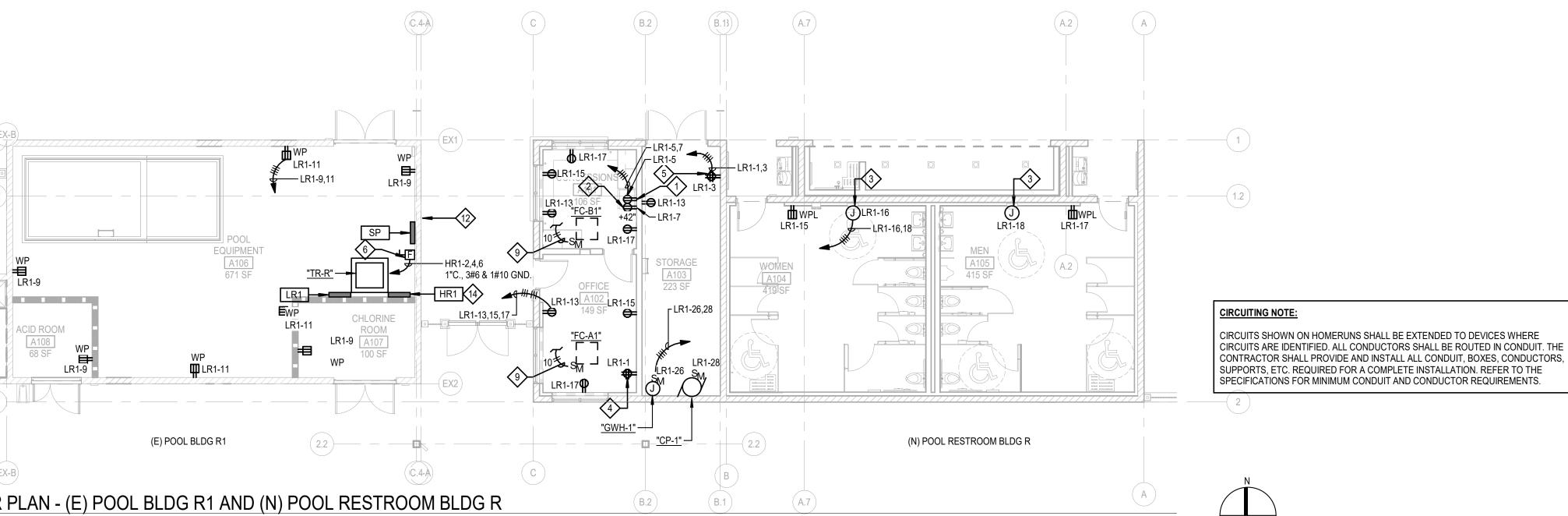


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	Α	В
1		
2		
		EX-B
3		
		HR1-5 HR1-5 HR1-5
		1 G d
		EX2
		E2.1 SCALE: 1/8" = 1'-0"
4		
		EX1 EX-B
al.rvt		1.2
IEP_2020_Cent		TO <u>"EWH-1"</u> LR1-20,22,24
00_CovinaHS_N		EX2
Pool/75-22616-(		EX2 2
BIM 360://75-22616-00_CVUSD-CovinaHSSwimmingPool/75-22616-00_CovinaHS_MEP_2020_Central.rvt 4/27/2023 1:28:34 PM <b>G</b>		3 E2.1 SCALE: 1/8" = 1'-0"
0_CVUSD-Covi		E2.1 SCALE: 1/8" = 1'-0"
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CONDUIT NOTE:

















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	011
	FOR REFRIGERATOR ARCHITECT PRIOR T
	FOR MICROWAVE. V ARCHITECT PRIOR T
3	FOR HAND DRYER. \ ARCHITECT PRIOR T
	FOR "IDF" RACK.
	FOR SOUND SYSTEM

LOCATION.

BACK TO SOURCE.

BEING REMOVED.

LD.

PCOUT-000

## HEET NOTES

OR. VERIFY EXACT LOCATION WITH THE R TO INSTALLATION. VERIFY EXACT LOCATION WITH THE R TO INSTALLATION. VERIFY EXACT LOCATION WITH THE R TO INSTALLATION.

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04/28/2023 REVISIONS

DSA SUBMITTAL

FEM RACK. MAKE CONNECTION TO SWIMMING POOL CIRCULATING PUMP CONTROLLER PER THE MANUFACTURES REQUIREMENTS. PROVIDE A 60AMP WEATHERPROOF DISCONNECT SWITCH WITH FUSES SIZED PER THE MANUFACTURES NAMEPLATE RATING.

MOUNT LIGHT FIXTURES TO SIDE OF STEEL BEAM. REFER TO ARCHITECTURAL DETAIL 4F/A2.4 FOR MOUNTING. CONDUIT FOR LIGHT FIXTURES SHALL NOT BE ROUTED EXPOSED ON BUILDING EXTERIOR. ROUTE CONDUIT INSIDE BUILDING AND CORE DRILL THROUGH CMU AT FIXTURE

ROUTE HOMERUN TO ROOF TOP UNIT FOR POWER AND CONTROL. REFER TO THE MECHANICAL DRAWINGS FOR ADDITION REQUIREMENTS.

DISCONNECT AND REMOVE ALL EXISTING ELECTRICAL DEVICES LOCATED INSIDE AND OUTSIDE OF BUILDING INCLUDING BUT NOT LIMITED TO PANELS, RECEPTACLES, RACEWAYS, CONDUCTORS, LIGHT FIXTURES, SWITCHES, ETC. RACEWAYS AND CONDUCTORS SHALL BE REMOVED

LOCATE LIGHTING CONTROL PANEL "LCP-1" ABOVE PANEL HR1. "LCP-1" SHALL BE EQUAL TO LEVITON #RE4BD-104-

CONDUITS ROUTED BETWEEN BUILDINGS SHALL BE ROUTED THROUGH VENT OPENING AT THIS LOCATION ABOVE CANOPY. COORDINATE LOCATION WITH THE ARCHITECT PRIOR TO INSTALLATION.

ROUTE CIRCUIT VIA LIGHTING CONTROL PANEL "LCP-1" FOR CONTROL. REFER TO SHEET E2.1 FOR LOCATION. UNDERGROUND FEEDER FOR PANEL SHALL BE ROUTED THROUGH CHLORINE STORAGE ROOM WHERE FLOOR IS

ROUTE LIGHTING CIRCUIT THROUGH INVERTER "INV-1" FOR EMERGENCY POWER.

PROVIDE AND INSTALL WALL MOUNTED EMERGENCY

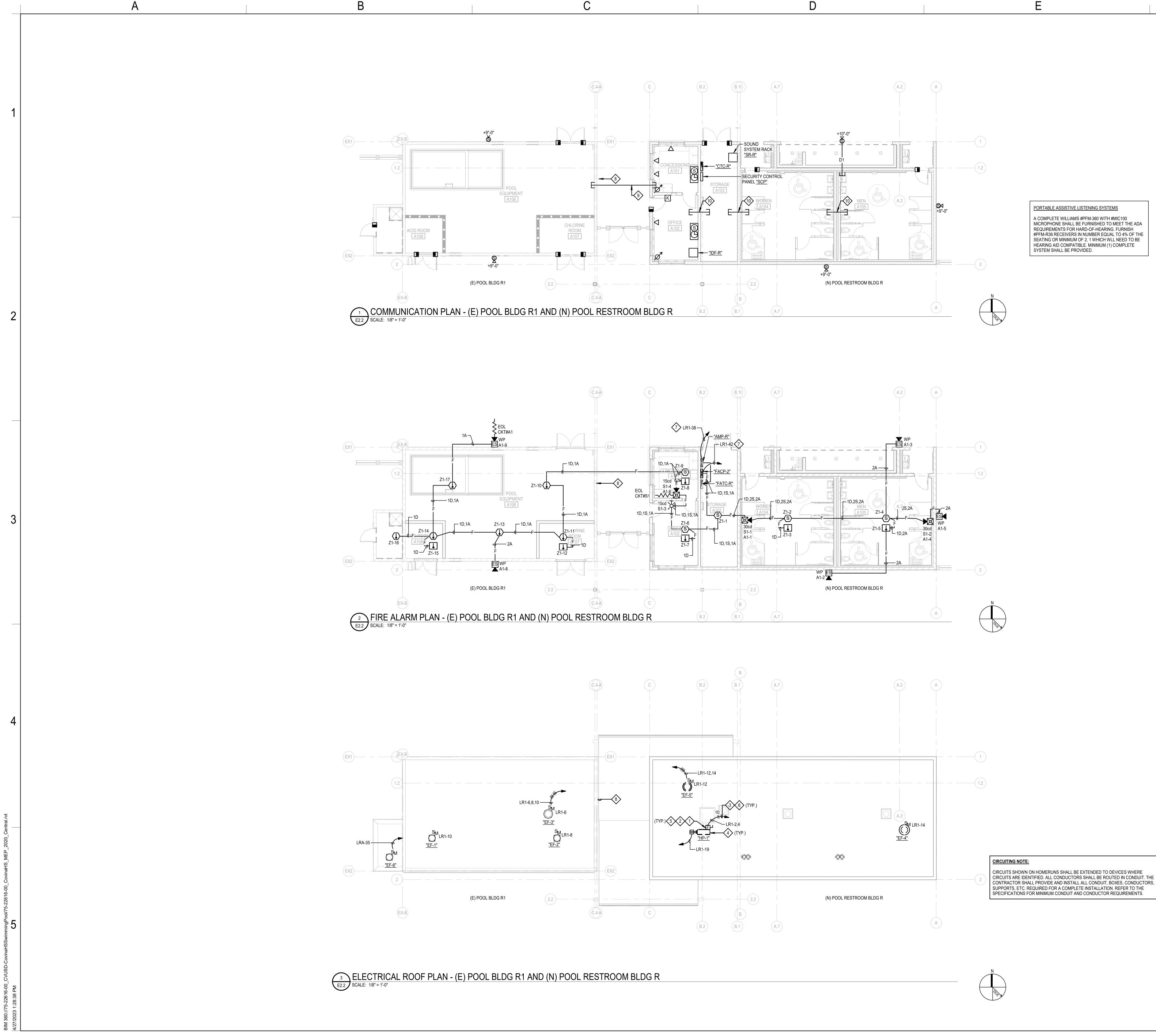
MAKE CONNECTION TO ELECTRIC WATER HEATER PER THE MANUFACTURES REQUIREMENTS. PROVIDE A 30 AMP WEATHERPROOF DISCONNECT SWITCH WITH FUSES SIZED PER THE EQUIPMENT NAMEPLATE RATING. LIGHT FIXTURE SHALL BE SURFACE MOUNTED. PROVIDE CORRECT MOUNTING HARDWARE FOR SURFACE APPLICATION.

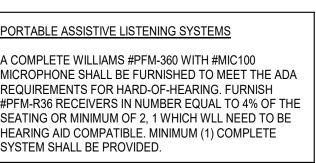
> CONDUITS INSTALLED IN POOL EQUIPMENT ROOM, CHLORINE ROOM AND ACID ROOM SHALL BE GALVANIZED RIGID STEEL WITH LIQUID TIGHT CONNECTORS. ALL BOXES SHALL BE NEMA 3R. REFER TO THE AQUATIC DRAWINGS FOR ADDITIONAL REQUIRMENTS.

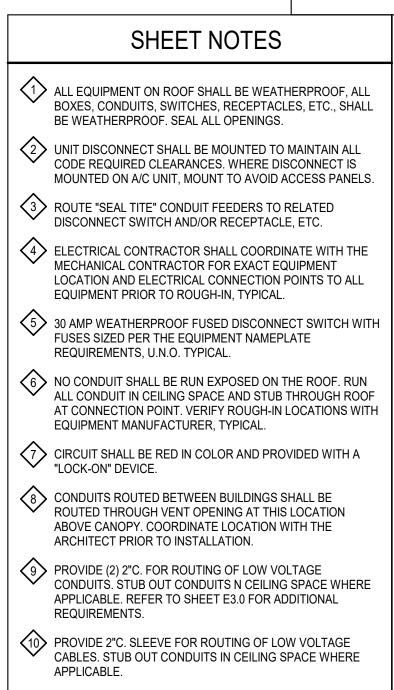


75-22616-00 DSA A# 03-122700 DSA FILE # 19-H8

E2.1







CONDUIT NOTE: CONDUITS INSTALLED IN POOL EQUIPMENT ROOM, CHLORINE ROOM AND ACID ROOM SHALL BE GALVANIZED RIGID STEEL WITH LIQUID TIGHT CONNECTORS. ALL BOXES SHALL BE NEMA 3R. REFER TO THE AQUATIC DRAWINGS FOR ADDITIONAL REQUIRMENTS.



### SHEET NOTES

MOUNTED ON A/C UNIT, MOUNT TO AVOID ACCESS PANELS.

LOCATION AND ELECTRICAL CONNECTION POINTS TO ALL EQUIPMENT PRIOR TO ROUGH-IN, TYPICAL.



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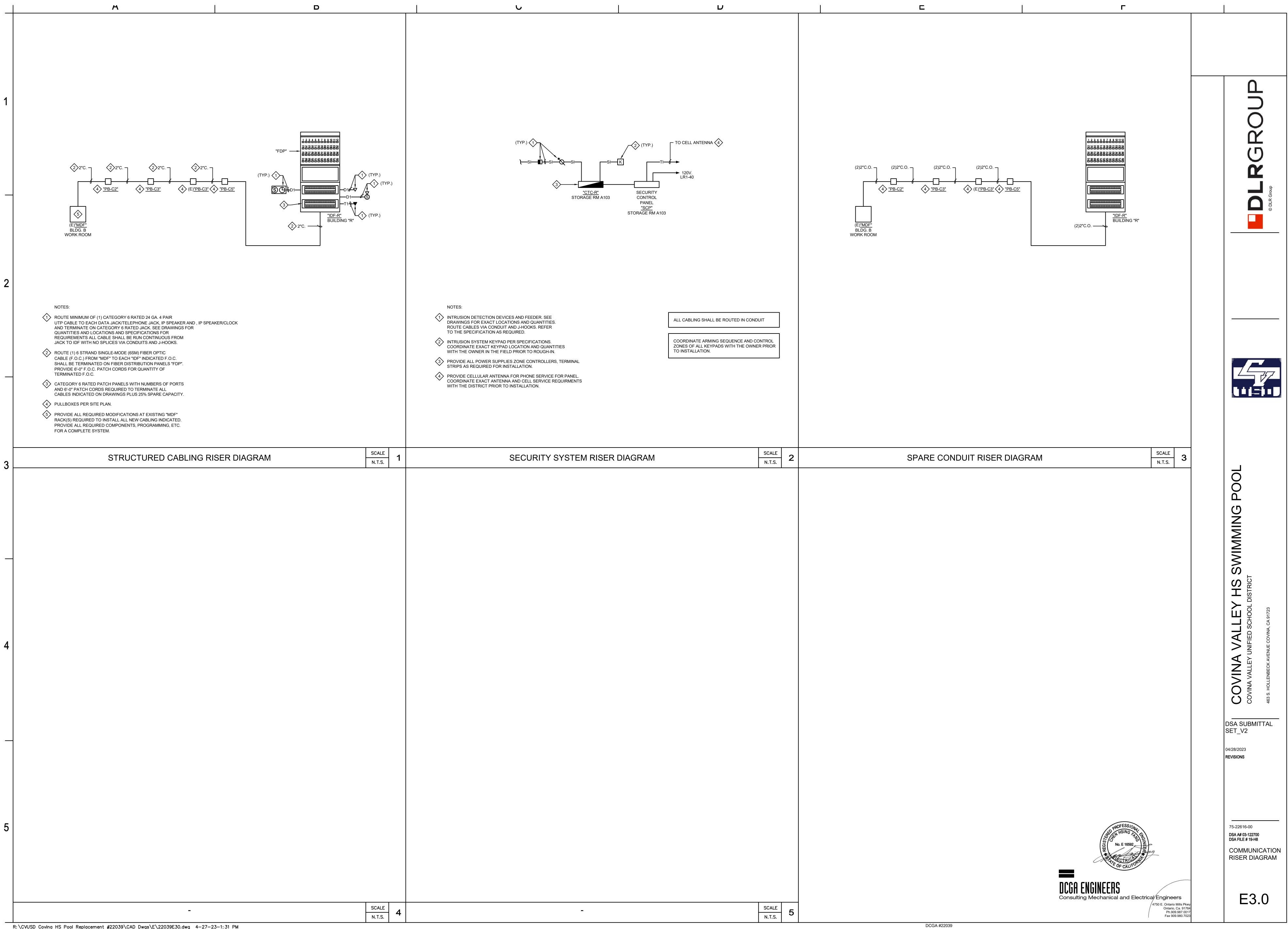


75-22616-00 DSA A# 03-122700 DSA FILE # 19-H8

COMMUNICATION, FIRE ALARM & ELECTRICAL ROOF PLANS

E2.2

DCGA ENGINEERS Consulting Mechanical and Electrical Engineers 4750 E. Ontario Mills Pkwy Ontario, Ca. 91764 Ph.909.987.0017 Fax 909.980.7023



r								
SEQUENCE OF OPERATION								
DEVICE	SMOKE DETECTOR	HEAT DETECTOR	120VAC POWER FAILURE	DOUBLE DETECTOR CHECK ASSEMBLY				
SOUND CONTROL PANEL TROUBLE BUZZER - -	ON WIRING FAULT	YES	YES	YES				
ANNUNCIATE AT ADMINISTRATION BUILDING -	YES	YES	YES	YES				
ANNUNCIATE AT FIRE CONTROL PANEL (ALARM OR TROUBLE) -	YES	YES	YES	YES				
ACTIVATE AUDIBLE/ VISUAL ALARM SIGNAL THROUGH - OUT BUILDINGS	YES	YES	NO	NO				
ALERT OFF-SITE MONITORING COMPANY - -	YES	YES	NO	NO				

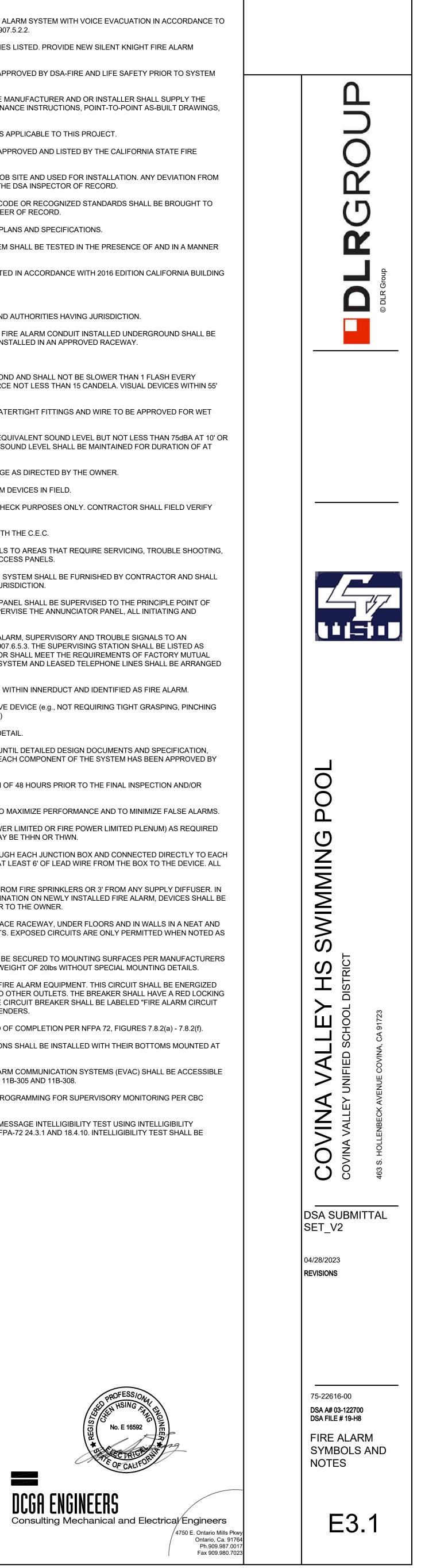
	FIRE ALARM WIRE LEGEND							
SYMBOL	DESCRIPTION	TYPE						
D	DATA LINE - INITIATING DEVICE	16/2 UNSHIELDED TWISTED PR (UTSP) DATA LOOP						
Р	POWER CIRCUIT	2#12 THWN						
S	SIGNAL (STROBE) CIRCUIT	2#12 THWN						
A	AUDIBLE (SPEAKER) CIRCUIT	2#16 THWN SHIELDED						
SB	S-BUS COMMUNICATION CIRCUIT	16/4 UNSHIELDED TWISTED PR (UTSP)						
VB	V-BUS COMMUNICATION CIRCUIT (VOICE)	16/2 UNSHIELDED TWISTED PR (UTSP)						
FO	NETWORK CONNECTION	INDOOR/OUTDOOR FIBER OPTIC CABLE, 6-STRAND, MULTIMODE, OM1, 62.5/125						

\* ALL WIRING USED IN CONDUIT ON THE EXTERIOR OF THE BUILDING SHALL BE U.L. LISTED FOR WET LOCATION.

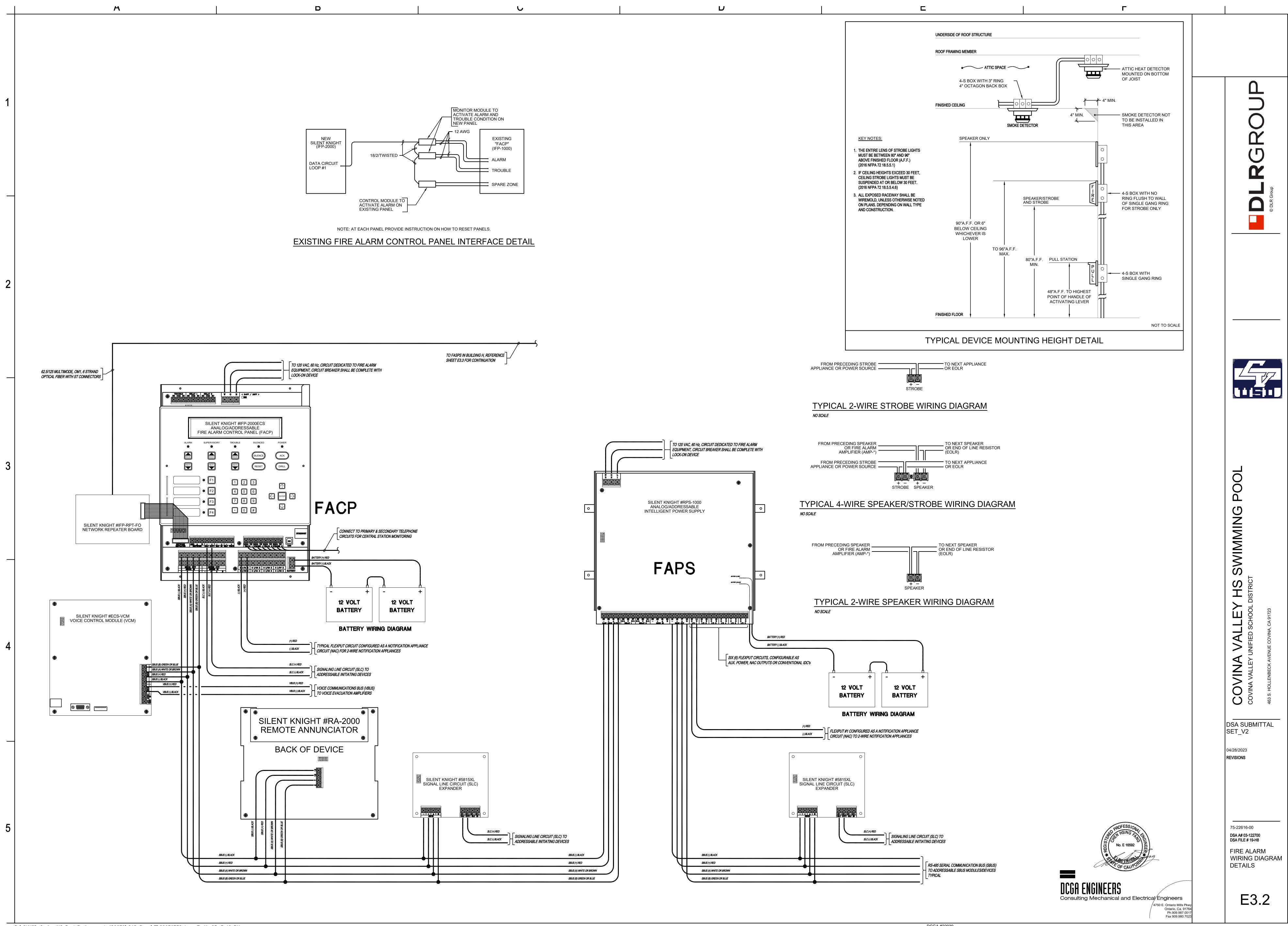
D

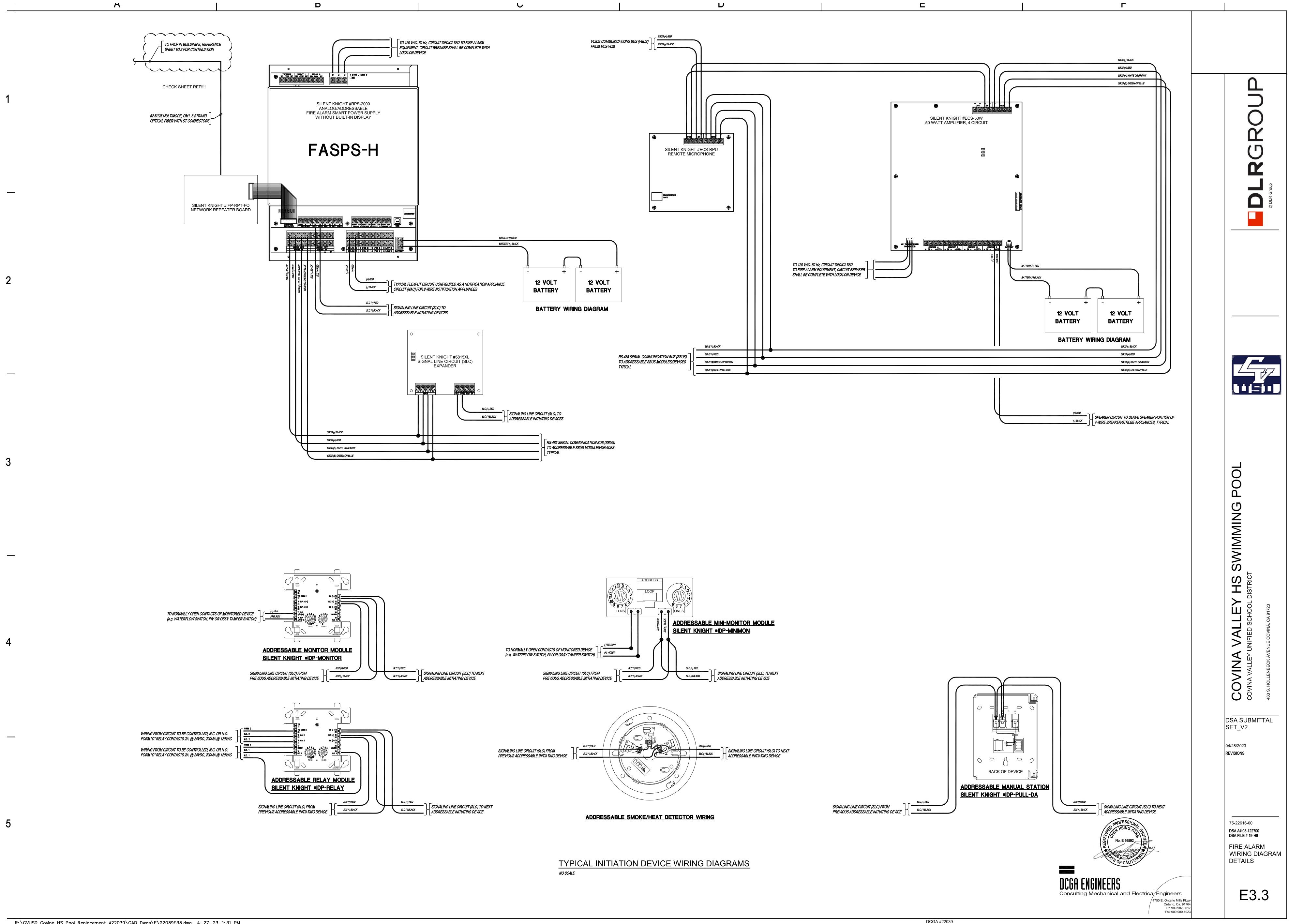
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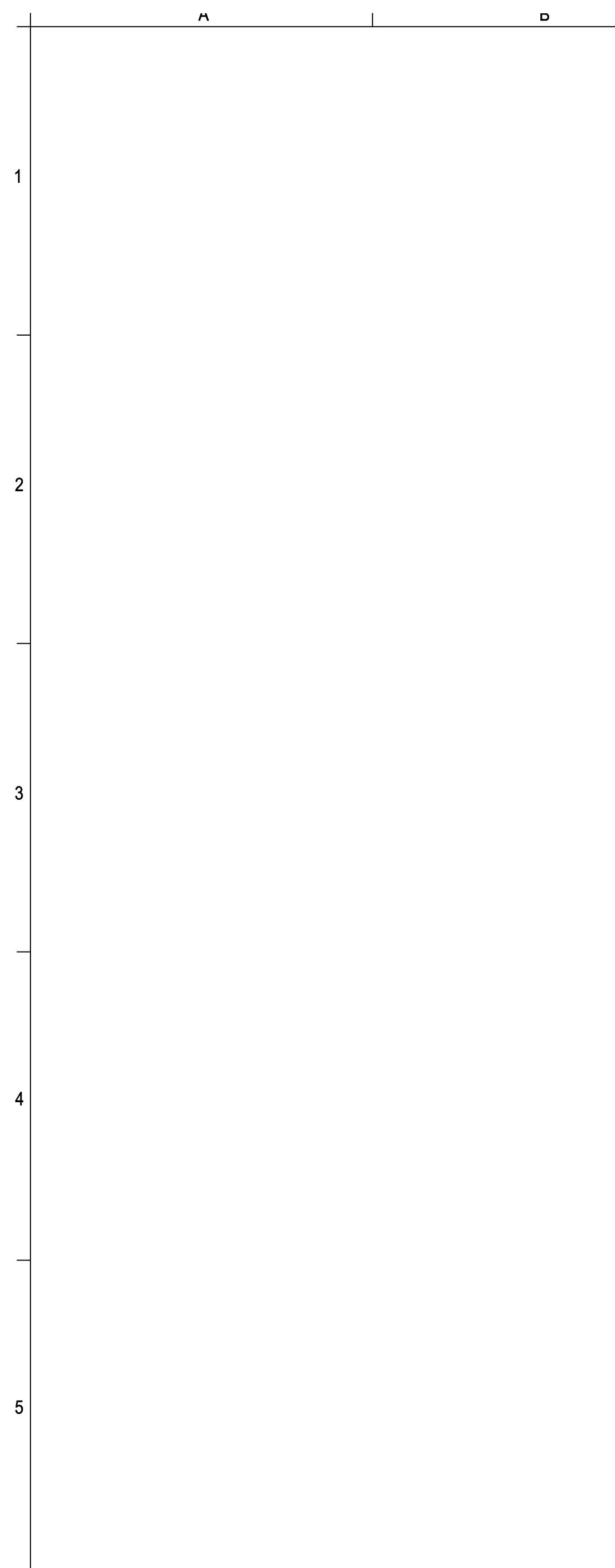
<ul> <li>FIRE ALARM REQUIREMENTS</li> <li>THE CONTRACTOR SHALL PROVIDE AND SUBMIT THE FIRE ALARM SHOP DRAWINGS TO THE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION OF THE FIRE ALARM SYSTEM. THE SUBMITTAL SHALL CONTAIN THE FOLLOWING:</li> <li>A. SHOP DRAWINGS: COMPLETE 1/8" SCALE FLOOR PLANS SHOWING ALL DEVICES, COMPONENTS, CONDUIT AND WIRING INDICATING A COMPLETE AND OPERABLE SYSTEM AS DESIGNED AND SPECIFIED. REPRODUCED COPIES OF BID SET FIRE ALARM PLANS ARE NOT ACCEPTABLE AS SHOP DRAWINGS. SHOP DRAWINGS MUST ALSO INDICATE DEVICE MOUNTING HEIGHTS, ROOM NAMES AND NUMBERS AND THE LOCATION OF ALL FIRE RATED WALLS.</li> <li>B. ELECTRICAL CONTRACTOR'S AND FIRE ALARM SYSTEM INSTALLER'S NAME, ADDRESS, PHONE NUMBER AND C-10 LICENSE NUMBER.</li> <li>C. LIST OF SYSTEM COMPONENTS, EQUIPMENT AND DEVICES, INCLUDING MANUFACTURERS' MODEL NUMBER(S) AND CALIFORNIA STATE FIRE MARSHALL LISTING NUMBERS.</li> <li>D. ORIGINAL COPIES OF MANUFACTURERS' SPECIFICATION SHEETS FOR ALL EQUIPMENT AND DEVICES INDICATED.</li> </ul>	<ol> <li>SCOPE OF WORK: PROVIDE A COMPLETE AUTOMATIC FIRE ALARM SYSTEM WITH VOICE EVACUATION IN ACCOR 2016 NFPA-72 AND CCR TITLE 24, PART 2, SECTION 907.2.3; 907.5.2.2.</li> <li>A FIRE ALARM SYSTEM IS BEING INSTALLED IN OCCUPANCIES LISTED. PROVIDE NEW SILENT KNIGHT FIRE ALAR CONTROL PANEL AS INDICATED.</li> <li>PLANS AND SPECIFICATIONS FOR THE SYSTEM SHALL BE APPROVED BY DSA-FIRE AND LIFE SAFETY PRIOR TO INSTALLATION.</li> <li>UPON RECEIPT OF THE CERTIFICATE OF COMPLIANCE, THE MANUFACTURER AND OR INSTALLER SHALL SUPPL OWNER WITH WRITTEN OPERATING, TESTING AND MAINTENANCE INSTRUCTIONS, POINT-TO-POINT AS-BUILT D AND EQUIPMENT SPECIFICATIONS.</li> <li>THE SYSTEM SHALL CONFORM TO TITLE 19 AND TITLE 24 AS APPLICABLE TO THIS PROJECT.</li> <li>ALL THE DEVICES OF THE FIRE ALARM SYSTEM SHALL BE APPROVED AND LISTED BY THE CALIFORNIA STATE F MARSHAL.</li> <li>A STAMPED SET OF APPROVED PLANS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION. ANY DEVIATI APPROVED PLANS, SHALL BE APPROVED AND SIGNED BY THE DSA INSPECTOR OF RECORD.</li> <li>ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE CODE OR RECOGNIZED STANDARDS SHALL BE BROL THE ATTENTION OF THE INSPECTOR OR ARCHITECT/ENGINEER OF RECORD.</li> </ol>
<ul> <li>SHOP DRAWINGS TO THE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION OF THE FIRE ALARM SYSTEM. THE SUBMITTAL SHALL CONTAIN THE FOLLOWING:</li> <li>A. SHOP DRAWINGS: COMPLETE 1/8" SCALE FLOOR PLANS SHOWING ALL DEVICES, COMPONENTS, CONDUIT AND WIRING INDICATING A COMPLETE AND OPERABLE SYSTEM AS DESIGNED AND SPECIFIED. REPRODUCED COPIES OF BID SET FIRE ALARM PLANS ARE NOT ACCEPTABLE AS SHOP DRAWINGS. SHOP DRAWINGS MUST ALSO INDICATE DEVICE MOUNTING HEIGHTS, ROOM NAMES AND NUMBERS AND THE LOCATION OF ALL FIRE RATED WALLS.</li> <li>B. ELECTRICAL CONTRACTOR'S AND FIRE ALARM SYSTEM INSTALLER'S NAME, ADDRESS, PHONE NUMBER AND C-10 LICENSE NUMBER.</li> <li>C. LIST OF SYSTEM COMPONENTS, EQUIPMENT AND DEVICES, INCLUDING MANUFACTURERS' MODEL NUMBER(S) AND CALIFORNIA STATE FIRE MARSHALL LISTING NUMBERS.</li> <li>D. ORIGINAL COPIES OF MANUFACTURERS' SPECIFICATION SHEETS FOR ALL EQUIPMENT AND DEVICES INDICATED.</li> </ul>	<ol> <li>2016 NFPA-72 AND CCR TITLE 24, PART 2, SECTION 907.2.3; 907.5.2.2.</li> <li>A FIRE ALARM SYSTEM IS BEING INSTALLED IN OCCUPANCIES LISTED. PROVIDE NEW SILENT KNIGHT FIRE ALAF CONTROL PANEL AS INDICATED.</li> <li>PLANS AND SPECIFICATIONS FOR THE SYSTEM SHALL BE APPROVED BY DSA-FIRE AND LIFE SAFETY PRIOR TO INSTALLATION.</li> <li>UPON RECEIPT OF THE CERTIFICATE OF COMPLIANCE, THE MANUFACTURER AND OR INSTALLER SHALL SUPPL OWNER WITH WRITTEN OPERATING, TESTING AND MAINTENANCE INSTRUCTIONS, POINT-TO-POINT AS-BUILT D AND EQUIPMENT SPECIFICATIONS.</li> <li>THE SYSTEM SHALL CONFORM TO TITLE 19 AND TITLE 24 AS APPLICABLE TO THIS PROJECT.</li> <li>ALL THE DEVICES OF THE FIRE ALARM SYSTEM SHALL BE APPROVED AND LISTED BY THE CALIFORNIA STATE F MARSHAL.</li> <li>A STAMPED SET OF APPROVED PLANS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION. ANY DEVIATI APPROVED PLANS, SHALL BE APPROVED AND SIGNED BY THE DSA INSPECTOR OF RECORD.</li> <li>ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE CODE OR RECOGNIZED STANDARDS SHALL BE BROU</li> </ol>
<ul> <li>E. VOLTAGE DROP CALCULATIONS INCLUDE THE FOLLOWING INFORMATION FOR THE WORST CASE:</li> <li>I. POINT-TO-POINT OR OHMS LAW CALCULATIONS.</li> <li>I. IDENTIFICATION OF ZONE USED IN CALCULATIONS.</li> <li>I. VOLTAGE DROP EXCEEDS 10% INDICATE MANUFACTURERS' IEGUIREMENTS):</li> <li>NOTE: IF VOLTAGE DROP EXCEEDS 10% INDICATE MANUFACTURERS' IEGUIREMENTS).</li> <li>I. NOTE: IF VOLTAGE DROP EXCEEDS 10% INDICATE MANUFACTURERS' IEGUIREMENTS).</li> <li>I. NOTE: CIRCUIT NUMBER FOR WORST CASE CALCULATION.</li> <li>I. BATTERY TYPE(S), ANP HOURS AND LOAD CALCULATIONS  INCLUDE THE FOLLOWING INFORMATION.</li> <li>I. NORMAL OPERATION: 10% OF APPLICABLE DEVICES FOR 24 HOURS - CONTROL PANEL AWN POWER FORM THE PANEL DURING STANDBY POWER CONDITION - I.E: A. ZONE MODULES</li> <li>B. DETECTORS</li> <li>C. OTHER DEVICES (DENTIFY)</li> <li>ALARM CONDITION: 10% OF APPLICABLE DEVICES FOR 1100 IN: 10% OF APPLICABLE DEVICES IDENTIFY)</li> <li>I. NORMAL DEVICES (DENTIFY)</li> <li>I. NORMAL OPERATION + ALARM OPERATION A. TOTAL AMP HOURS PROVIDED.</li> <li>B. TOTAL AMP HOURS PROVIDED.</li> </ul>	<ol> <li>CONDUT SYSTEM TO REFUND MEND NET ALL DEPENDENT SHALL BE TRAFFIC ALL ON THE PRESENCE OF AND MEA ACCEPTIBALE TO THE EVANDEM ACCEPT.</li> <li>PENETTATION OF THE ARTER MALLS SINUL BE PROTECTED IN ACCORDANCE WITH 10% EDITION CALLORM CONC. GAMPIER 7.</li> <li>ALL PENERTATION OF THE ARTER MALLS SINUL BE PROTECTED IN ACCORDANCE WITH 10% EDITION CALLORM CONC. GAMPIER 7.</li> <li>ALL PRICE SHALL BE IN ACCORDANCE WITH THE CELL AND AUTHORITIES HAVING JURISDICTION.</li> <li>ALL PRICE SHALL BE IN ACCORDANCE WITH THE CELL AND AUTHORITIES HAVING JURISDICTION.</li> <li>ALL PRICE SHALL BE IN ACCORDANCE WITH THE CELL AND AUTHORITIES HAVING JURISDICTION.</li> <li>ALL PRICE ALAMIN CONDUCTIONS BALL DE IN PRIVILED IN MILEPRIVED RECENT.</li> <li>ALL DRICE LEVICED SHALL BE IN PRIVILED IN MILEPRIVED RECENT.</li> <li>ALL DRICE LEVICED SHALL BOT EXCERNING.</li> <li>VIDAUL DEVICED SHALL DRIT EXCERNING.</li> <li>ALDRIEL EDVICED SHALL DRIT EXCERNING.</li> <li>ALDRIEL EDVICED SHALL DRIT EXCERNING.</li> <li>ALDRIEL EDVICED SHALL DRIT MILER AND MILER THAN THE MANNANE DO COLUMN TO LLOST THE EXCERNING DRIVEN THEORY CONTRACT.</li> <li>ALDRIEL EDVICED SHALL DRIT EXCERNING.</li> <li>ALDRIEL EDVICED SHALL DRIT EXCERNING DRIT EXCERNING.</li> <li>ALDRIEL EDVICED SHALL DRIT MILER AND CONTRACTOR AND MILE TO ARCENT.</li> <li>ALDRIEL EDVICED SHALL DRUCK A REPRESENCE TO AND ARCENT.</li> <li>ALDRIEL EDVICED SHALL DRUCK A REPRESENCE DRIT MILE THE ACCORDING THE DRUCK AND THE ARAMARED FOR UNDER AND THE AUTHORITIES AND HAVE AND THE AND ARCENT.</li> <li>ALDRIEL EDVICED SHALL DRUCK AND ARCENT AND THE AUTHORITIES AND HAVE AND THE AND ARCENT.</li> <li>ALDRIEL EDVICED SHALL DRUCK AND ARCENT AND THE AUTHORITIES AND HAVE AND THE AND ARCENT.</li> <li>ALDRIEL EDVICED SHALL BRUCK AND ARCENT AND THE AUTHORITIES AND HAVE AND ARCENT AND</li></ol>
	<ul> <li>40. FIRE ALARM CONTROL PANELS AND REMOTE ANNUNCIATIONS SHALL BE INSTALLED WITH THEIR BOTTOMS M 48" ABOVE THE FINISHED FLOOR.</li> <li>41. MICROPHONES ASSOCIATED WITH EMERGENCY VOICE ALARM COMMUNICATION SYSTEMS (EVAC) SHALL BE FOR USE, INSTALLED IN COMPLIANCE WITH CBC SECTIONS 11B-305 AND 11B-308.</li> <li>42. THE INSTALLING CONTRACTOR SHALL PROVIDE SYSTEM PROGRAMMING FOR SUPERVISORY MONITORING PI SECTION 901.6.2.</li> <li>43. THE INSTALLING CONTRACTOR SHALL PERFORM A VOICE MESSAGE INTELLIGIBILITY TEST USING INTELLIGIBILITY TEST USING INTELLIGIBILITY TEST SHOULD BE AND THE PROGRAMMING TOR SUPERVISORY MONITORING FOR SUPERVISORY FOR SUPERVISORY MONITORING FOR SUPERVISORY MET MONITORING FOR SUPERVISORY MONITORING FOR SUPERVISORY MONITO</li></ul>



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	IFP-20	00E	CS Battery C	Calc	ulations		
	COVINA	A HS	S POOL REP	LAC	CEMENT		
	FACP Da	ta L	oops Z1, Sigi	nal (	Circuits S1		
Description	Quantity		Standby		Total	Alarm	Total
			(Amps)		Standby	(Amps)	Alarm
					(Amps)		(Amps)
CONTROL PANEL	1	х	0.290000		0.290000	0.570000	0.570000
ECS-RVM	1	х	0.070000		0.070000	0.100000	0.100000
ECS-VCM	1	х	0.070000		0.070000	0.100000	0.100000
ECS-RPU	1	х	0.070000		0.070000	0.100000	0.100000
ECS-50W	1	х	0.010000		0.010000	0.010000	0.010000
IFP-RPT-FO	1	х	0.013000		0.013000	0.013000	0.013000
RA-2000	1	x	0.025000		0.025000	0.050000	0.050000
5815XL SLC EXPANDER	1	х	0.055000		0.055000	0.055000	0.055000
IDP-PULL-DA	0	x	0.000300		0.000000	0.000300	0.000000
IDP-PHOTO	5	х	0.000300		0.001500	0.006500	0.032500
IDP-FIRE-CO	0	х	0.000300		0.000000	0.000300	0.000000
B200S	0	x	0.000300		0.000000	0.000300	0.000000
B200S (AUX POWER)	0	x	0.000500		0.000000	0.035000	0.000000
IDP-HEAT	6	x	0.000300		0.001800	0.006500	0.039000
IDP-HEAT-HT	6	x	0.000200		0.001200	0.006500	0.039000
IDP-RELAY	0	x	0.000300		0.000000	0.005500	0.000000
IDP-MONITOR	3	x	0.000400		0.001200	0.005500	0.016500
IDP-CONTROL	1	x	0.000400		0.000400	0.006500	0.006500
SR/SCW 15cd Strobe	1	x	0.000000		0.000000	0.066000	0.066000
SR/SCW 30cd Strobe	0	x	0.000000		0.000000	0.094000	0.000000
SR/SCW 75cd Strobe	0	x	0.000000		0.000000	0.158000	0.000000
SR/SCW 110cd Strobe	0	x	0.000000		0.000000	0.202000	0.000000
SPSR/SPSCW 15cd Spkr St.	1	х	0.000000		0.000000	0.066000	0.066000
SPSR/SPSCW 30cd Spkr St.	2	x	0.000000		0.000000	0.094000	0.188000
SPSR/SPSCW 75cd Spkr St.	0	x	0.000000		0.000000	0.158000	0.000000
SPSR/SPSCW 110cd Spkr St.	0	x	0.000000		0.000000	0.202000	0.000000
Total:					0.609100		1.451500
Battery Calculation	Time	Mul	tiplier		Amp Hours		
Supervisory Hours	24	х	0.609100	=	14.618400		
Alarm Hours	0.250	x	1.451500	=	0.362875		
Total Amp Hours				=	14.981275		
Battery Used (AH)				=	36.000000		

Battery Spare (AH)

= 21.018725

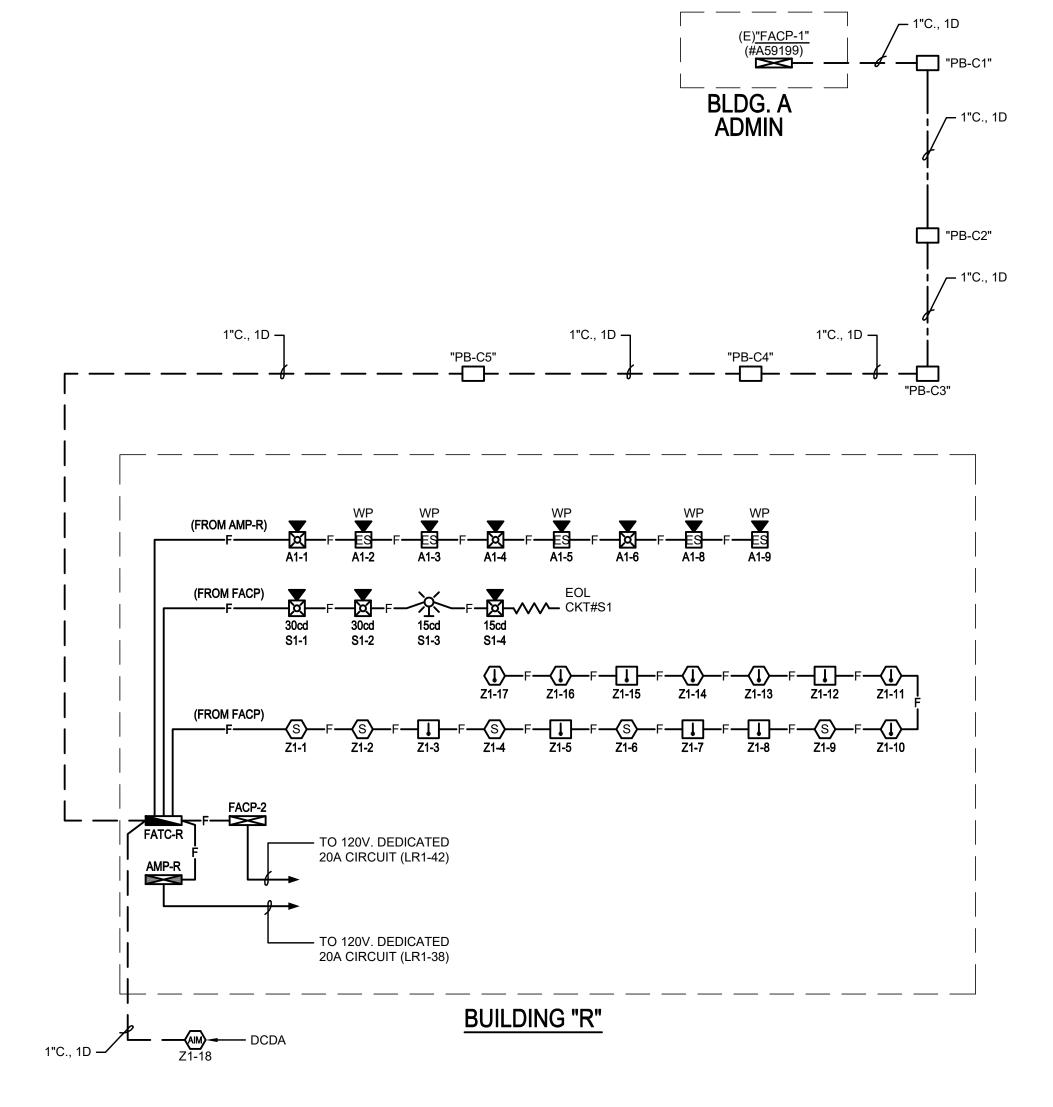
Volt	age Drop Calc	ulat	tions						
COVINA HS POOL REPLACEMENT									
FACP Signal Circuit S1									
Description	Quantity		Alarm		Total				
			(Amps)		Alarm				
					(Amps)				
SR/SCW 15cd Strobe	1	x	0.066000		0.066000				
SR/SCW 30cd Strobe	0	x	0.094000		0.000000				
SR/SCW 75cd Strobe	0	x	0.158000		0.000000				
SR/SCW 110cd Strobe	0	x	0.202000		0.000000				
SPSR/SPSCW 15cd Spkr St.	1	x	0.066000		0.066000				
SPSR/SPSCW 30cd Spkr St.	2	x	0.094000		0.188000				
SPSR/SPSCW 75cd Spkr St.	0	x	0.158000		0.000000				
SPSR/SPSCW 110cd Spkr St.	0	x	0.202000		0.000000				
Total Current Draw:				=	0.320000				
Wire Size 14	0	x	4110	=	0				
Wire Size 12	1	x	6530	=	6530				
Wire Used Circular Mills				=	6530				
Distance to End of Circuit:				=	139				
Multiplier				=	21.6				
Voltage				=	24				
Multiplier				=	4.166				
Percentage Voltage Drop				=	0.613				

U

## SPEAKER CIRCUIT

Pool Building Speakers (AMP-R)

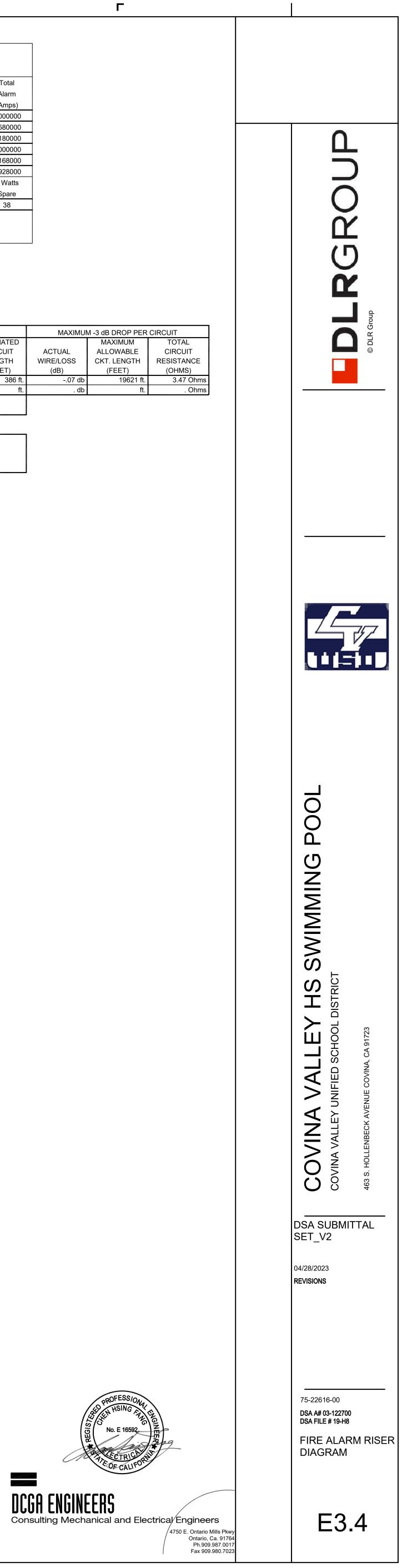
LUMP SUM METHOD WAS USED TO CALCULATE MAXIMUM ALLOWABLE CIRCUIT LENGTH. THIS METHOD ALLOWS FOR A SMALL MARGIN OF SAFETY, TAKING INTO CONSIDERATION THE ACTUAL INSTALLED CIRCUIT ROUTING MAY DIFFER FROM WHAT IS SHOWN ON THE SHOP DRAWINGS.

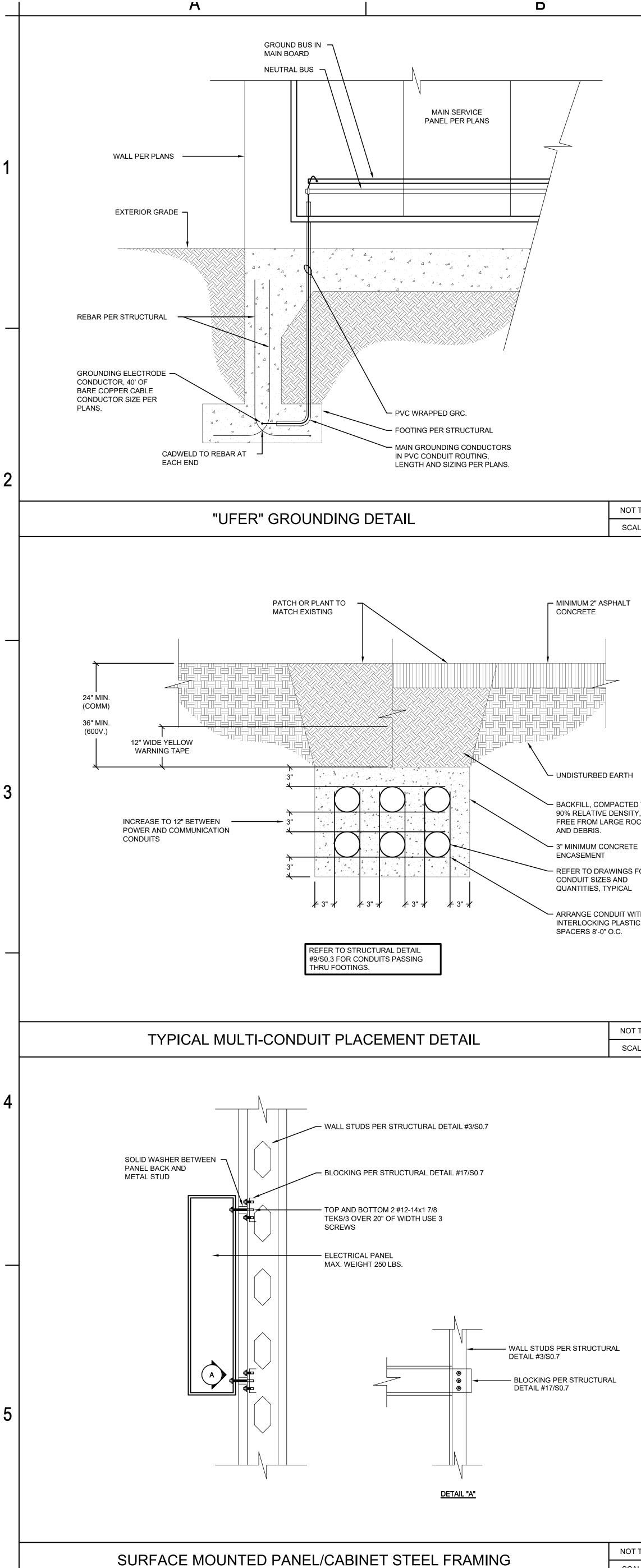


C

ECS-50W Amplifier Calculation									
COVINA HS POOL REPLACEMENT									
			AMP-R			t	•		
Description	Quantity		Standby		Total	Alarm	Total		
			(Amps)		Standby	(Amps)	Alarm		
					(Amps)		(Amps)		
ECS-50W-25	0	х	0.085000		0.000000	0.525000	0.000000		
ECS-50W-70.7	1	х	0.100000		0.100000	0.580000	0.580000		
ECS-CE4	1	х	0.020000		0.020000	0.180000	0.180000		
WATTS @ 25Vrms	0	х	0.000000		0.000000	0.040000	0.000000		
WATTS @ 70.7Vrms	12	х	0.000000		0.000000	0.014000	0.168000		
Total:					0.120000		0.928000		
Battery Calculation	Time	Mul	tiplier		Amp Hours	Total Watts	Total Watts		
Supervisory Hours	24	х	0.120000	=	2.880000	Used	Spare		
Alarm Hours	0.250	х	0.928000	=	0.232	12	38		
Total Amp Hours				=	3.112000				
Battery Used (AH)				=	7.000000				
Battery Spare (AH)				=	3.888000				

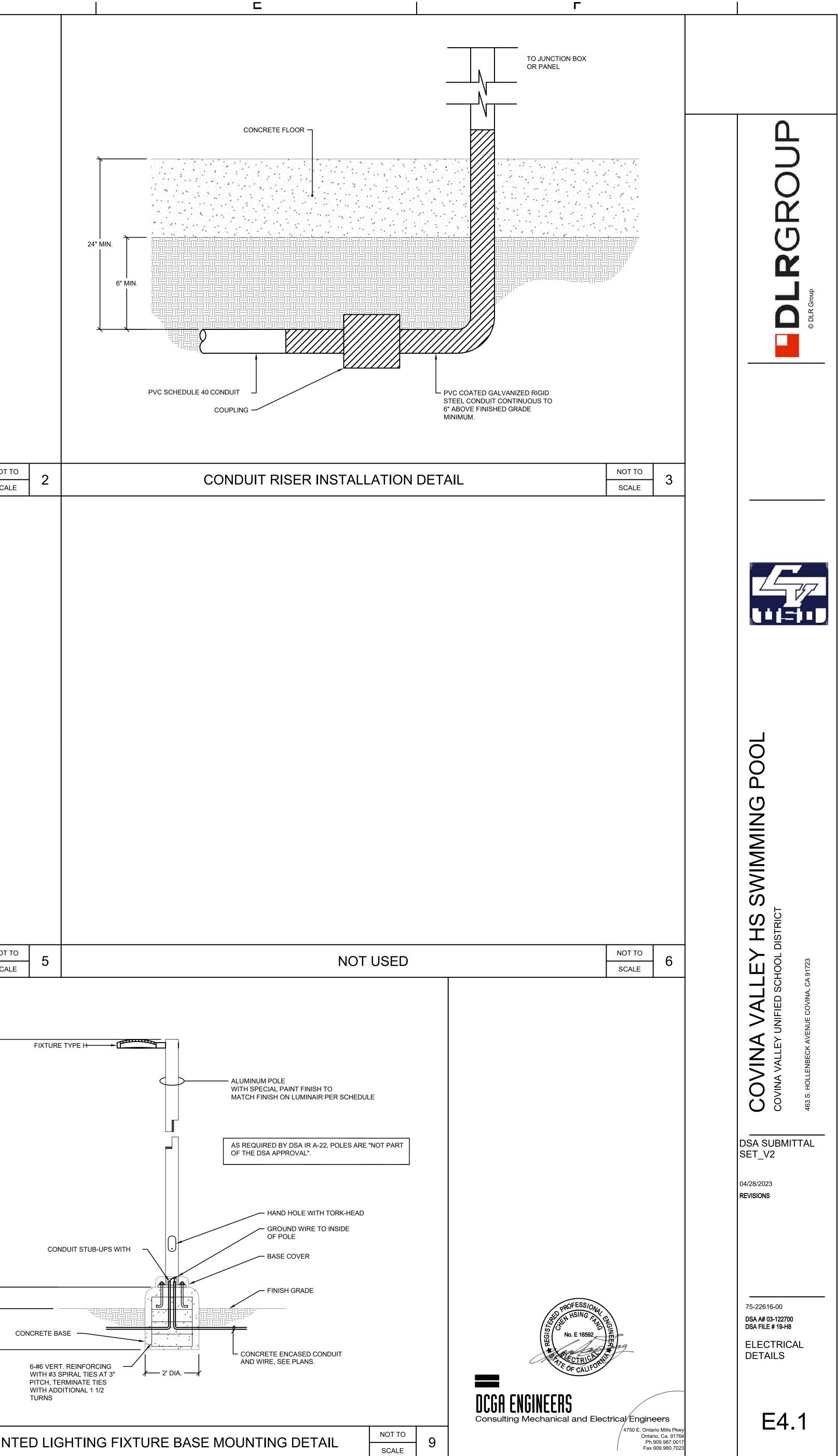
COVINA HS POOL REPLACEMENT - SPEAKER CIRCUIT LOAD CALCULATION										MAXIMUM -3 dB DROP PER CIRCUIT			
		WIRE	CIRCUIT		APPLIANCES QUANTITIES / TAP VALUES					ESTIMATED		MAXIMUM	TO
	PANEL	GAUGE	VOLTAGE	SPSR / CW	SPSR / CW	SPSR / CW	SPSR / CW	SPRK	CIRCUIT	CIRCUIT	ACTUAL	ALLOWABLE	CIR
	CIRCUIT	(18, 16,	(25 OR	TAP	TAP	TAP	TAP	TAP	LOAD	LENGTH	WIRE/LOSS	CKT. LENGTH	RESIS
	NUMBER	14, 12)	70 VRMS)	.25 Watt	.5 Watt	1. Watt	2. Watt	2. Watt	(WATTS)	(FEET)	(dB)	(FEET)	(OF
	A1	16	70 vrms	0	3	0	0	5	11.5 Watts	386 ft.	07 db	19621 ft.	3
		16	70 vrms	0	0	0	0	0	. Watts	ft.	. db	ft.	
Appliance Summary						Total Load (Watts)							
				0	3	0	0	5	11.50				

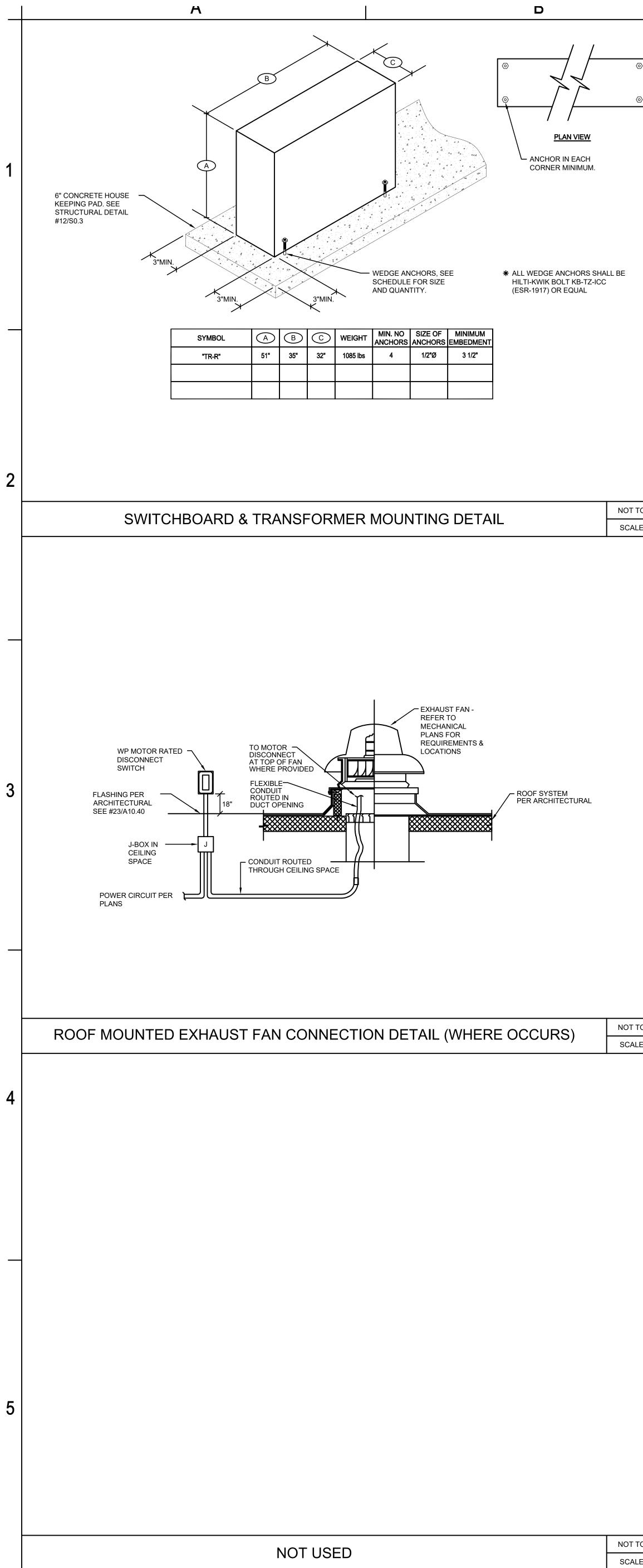




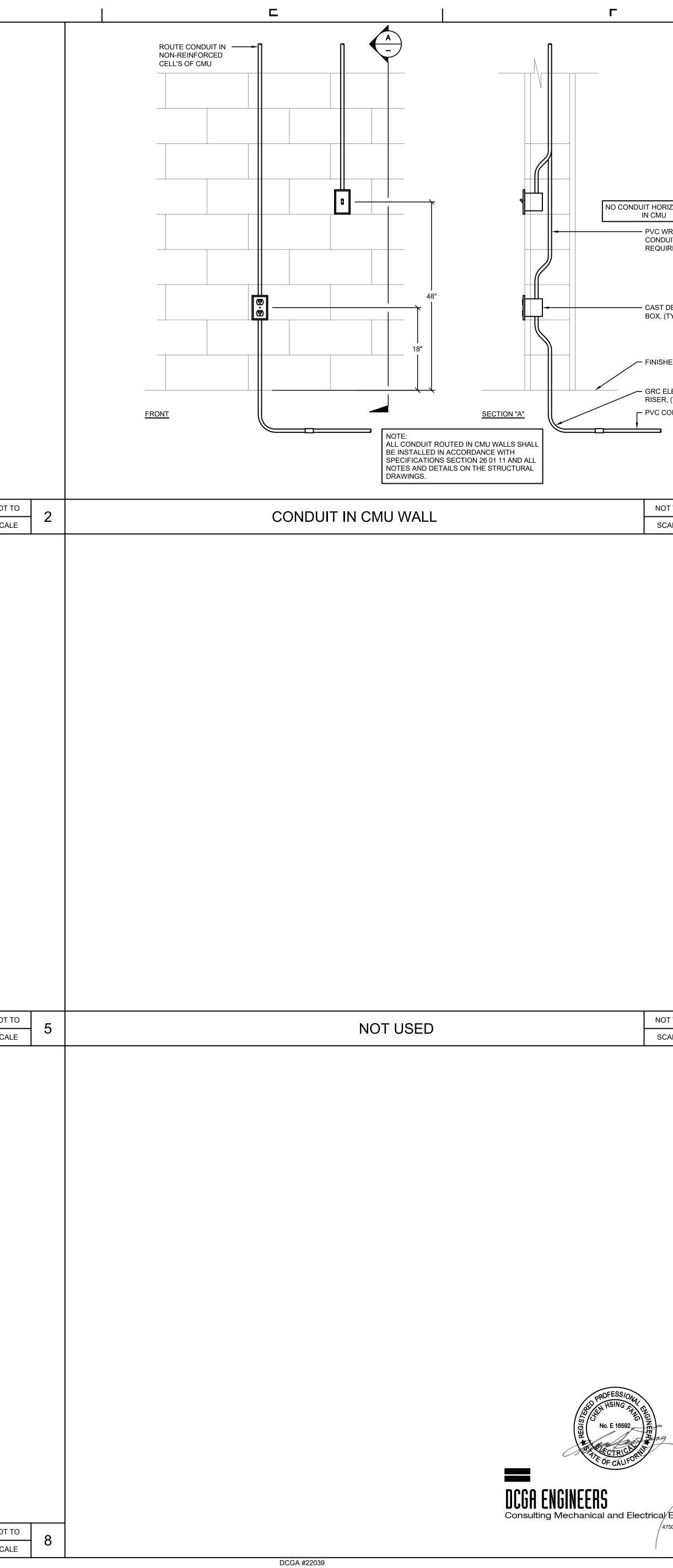
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			U	
		CONCRETE COVERPLATE	CONDUIT TO EQUIPMENT	
		GRADE	FINISHED GRADE	
		CONCRETE PIPE		
			3/4"Øx10' COPPER CLAD STEEL GROUND ROD	
		GROUND CONNECTOR	BARE COPPER GROUND CONDUCTOR SIZE PER PLANS	
то	1			NOT
LE		GROUND ROD DETAIL		SC/
) TO Y, CKS				
E FOR				
TH C				
U				
TO	4			NOT
LE				SC
			×	
			20'-0"	
			6"	
			5'-0"	
TO	7	NOT USED	NOT TO 8 POLE MO	 UN
			<u> </u>	

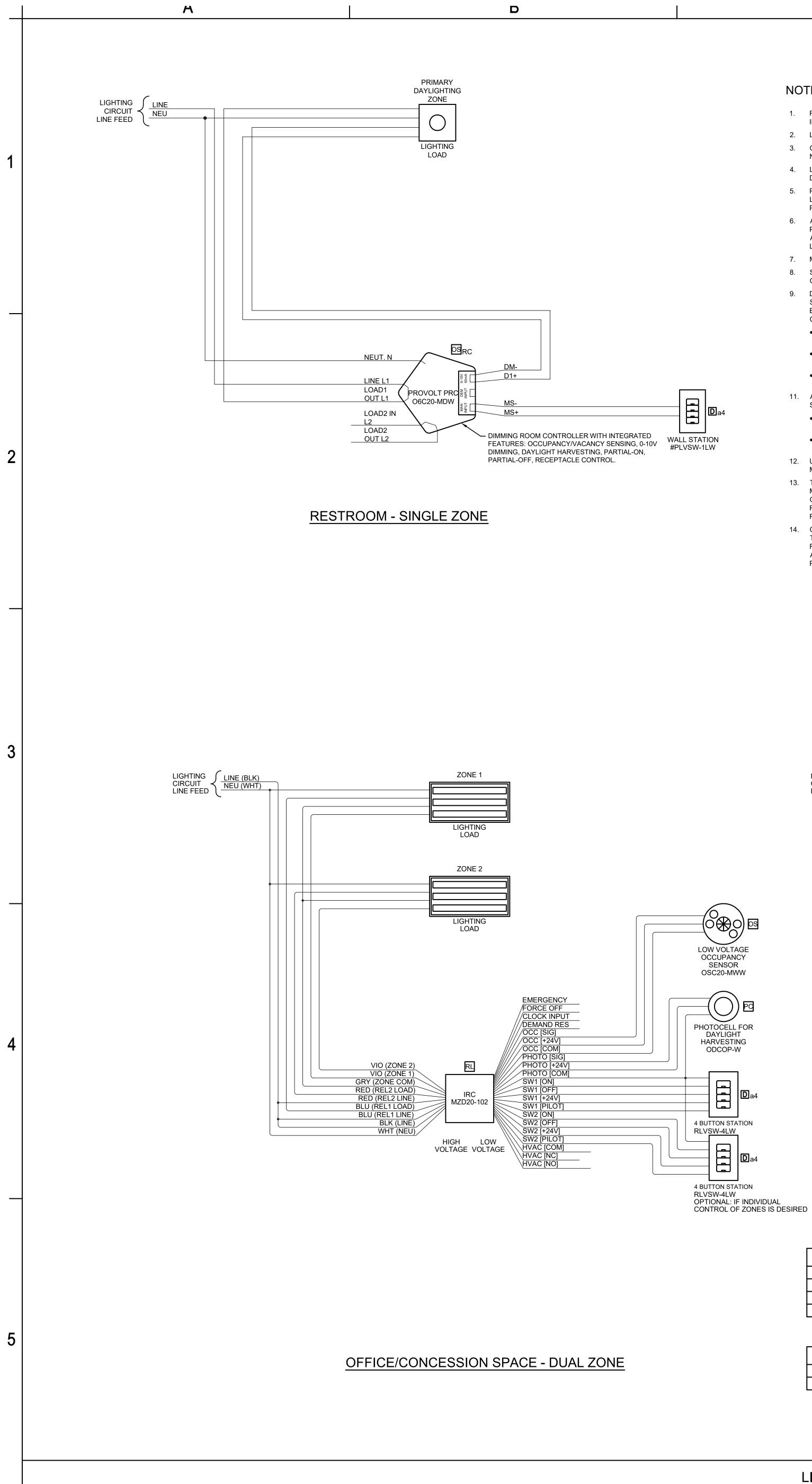




©		ELECTRICAL PANEL	
TO LE	1	SURFACE MOUNTED PANEL @ MASONRY WALL	NOT SCA
TO LE	4	NOT USED	NOT SCA
TO LE	7	NOT USED	NOT



RIZONTALLY WRAPPED GRC DUIT OFFSET AS JIRED DEEP MASONRY (TYP.) HED FLOOR ELBOW AND R, (TYP.) CONDUIT	<b>DLRGROUP</b> © LR Grup
CALE 3	
CALE 6	COVINA VALLEY HS SWIMMING POOL COVINA VALLEY HS SWIMMING POOL COVINA VALLEY UNIFIED SCHOOL DISTRICT 463 S. HOLLENBECK AVENUE COVINA, CA 91723
	REVISIONS
9	75-22616-00 DSA A# 03-122700 DSA FILE # 19-H8 ELECTRICAL DETAILS
4750 E. Ontario Mills Pkwy Ontario, Ca. 91764 Ph.909.987.0017 Fax 909.980.7023	E4.2



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NOTES: (UNLESS OTHERWISE SPECIFIED)

- 1. REFER TO MANUFACTURER'S DATA SHEETS AND INSTALLATION 15. INSTRUCTIONS PRIOR TO INSTALLATION.
- 2. LINE FEED 120/230/277 VAC, 60Hz.

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- 3. GROUND NOT SHOWN. GROUND DEVICES PER APPLICABLE NATIONAL AND LOCAL CODES AND BEST PRACTICES.
- 4. LINE VOLTAGE LOAD NOT TO EXCEED CONTACT RATING PER DEVICE SPECIFICATIONS.
- 5. POWER PACKS RECEIVING SEPARATE FEEDS FOR SWITCHED LOADS AND SELF POWER MUST HAVE BOTH FEEDS ON THE SAME PHASE.
- 6. ALL LOW-VOLTAGE DEVICES CONSUME CURRENT. DEVICE POWER BUDGET IS ESTIMATED FOR THESE DETAILS -ADDITIONAL POWER SOURCES MAY BE REQUIRED. SEE PRODUCT LITERATURE FOR POWER SPECIFICATIONS.
- 7. MAXIMUM RUN LENGTH FOR ANALOG WIRING IS 1000' @ #18 AWG. SENSORS WIRED IN PARALLEL WILL CAUSE LINE VOLTAGE RELAY CLOSURE WHEN OCCUPANCY IS DETECTED BY ANY UNIT.
- 9. DEVICES IN SERIES REQUIRING CONTACT CLOSURE FROM A SINGLE DEVICE, (CLOCK INPUT, DEMAND RESPONSE,
- EMERGENCY, ETC.), MUST FOLLOW THESE WIRING CONVENTIONS: • FIRST DEVICE IN SEQUENCE PROVIDES THE +V TO THE
- TRIGGERING RELAY; SIGNAL FROM CLOSURE ATTACHED TO ALL DEVICES IN SEQUENCE INPUT;
- COM FROM FIRST DEVICE IN SEQUENCE ATTACHED TO COM ON ALL DEVICES IN SEQUENCE.
- 11. APPLICATIONS REQUIRING MULTIPLE POWER PACKS/POWER SUPPLIES AT THE SAME VDC: • +V MUST NEVER BE TIED TOGETHER BETWEEN POWER
- PACKS/ POWER SUPPLIES; COM / DCC MUST BE TIED TOGETHER TO ALL POWER PACKS/ POWER SUPPLIES AND ALL POWERED DEVICES.
- 12. ULTRASONIC CEILING MOUNT SENSORS SHOULD BE LOCATED A MINIMUM OF SIX (6) FEET FROM HVAC SUPPLY/RETURN VENTS.
- 13. TROUGH MOUNTED, PENDANT MOUNTED, AND PENDANT MOUNTED INDIRECT LIGHTING SOURCES AFFECT THE OPERATION OF LOCALLY MOUNTED SENSORS. CONTRACTOR IS RESPONSIBLE FOR ADJUSTING SENSOR LOCATIONS TO ALLOW FOR PROPER OPERATION.
- 14. CONTRACTOR IS RESPONSIBLE FOR PROPER SENSITIVITY AND TIME DELAY SETTINGS FOR NON-ADAPTIVE PRODUCTS, FOLLOWING THE MANUFACTURER'S RECOMMENDED PLACEMENT, AND FIELD VERIFICATION OF CIRCUITS WITH RESPECT TO POWER PACK PLACEMENT.

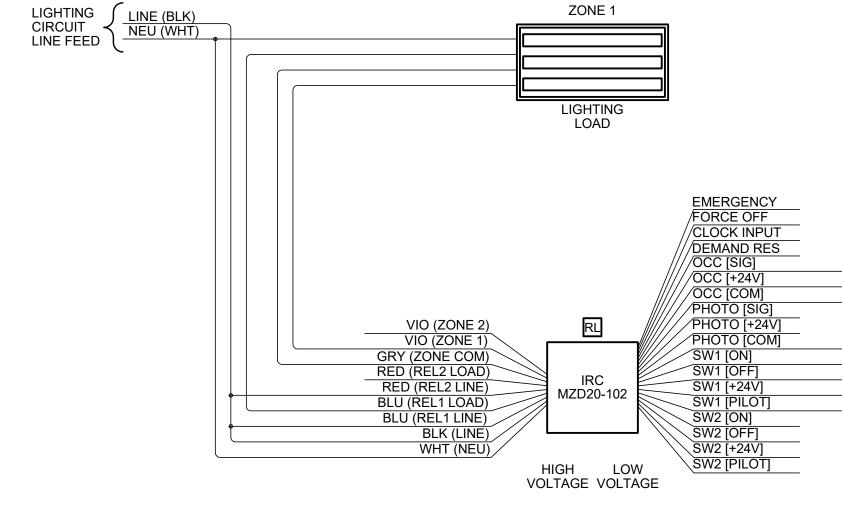
- CONTRACTOR IS RESPONSIBLE FOR COORDIN OPERATIONAL OPTIONS OF SENSORS AND POV THE SPECIFIC WORK REQUIREMENTS. WORK RELEVANT ENERGY CODE REQUIF
- CIRCUITS TO BE CONTROLLED AND THEI CHARACTERISTICS. ONE POWER PACK IS REQUIRED FOR EAG

11

- CIRCUIT. REFER TO POWER PACK DATA SHEET FO AND INSTALLATION GUIDE FOR MAXIMUN
- SENSORS CONNECTED TO A POWER PAC IF MULTIPLE CIRCUITS ARE TO BE CONTF
- SENSOR, AUXILIARY RELAYS MAY BE USE CONJUNCTION WITH A POWER PACK. CEILING SENSORS MOUNTED OVER DOORWAY
- PLACED ONE (1) FOOT INSIDE THE THRESHOLD UP TO 100 MARK VII STYLE BALLASTS MAY BE ( 17 DAYLIGHTING ZONE BY MINI-Z.
- 18. ALL RELAYS SHOWN IN DE-ENERGIZED STATE. 19. INDIVIDUALLY CAP OFF UNUSED LEADS.
- 20. ONE-LINE PARENTHESIS USE: (X) - FUNCTION [#] - TERMINAL

16.

- 21. PLUG LOAD CONTROL COMMERCIAL RECEPT STANDARD DUPLEX:
- SPLIT CONTROL (1 OUTLET) CR015-1PX, FULL CONTROL (2 OUTLETS) CR015-2PX, DECORA:
- SPLIT CONTROL (1 OUTLET) 16252-1PX, FULL CONTROL (2 OUTLETS) 16252-2PX, 1 22. CONTROL RECEPTACLE:
- QUANTITY PER APPLICABLE CODES.
- RECEPTACLE MARKINGS PER APPLICABL





W	ALL SWITCH BUT	TON ASSIGNMENTS (4 BUTTON SWITCH)
BUTTON	ENGRAVING	ASSIGNMENT
1	ON/OFF	ALL LIGHTS "ON" OR "OFF"
2	DIM UP	RAISE LIGHT LEVELS INCREMENTALLY
3	DIM DOWN	LOWER LIGHT LEVELS INCREMENTALLY

WALL SWITCH BUTTON ASSIGNMENTS (1 BUTTON SWITCH) BUTTON ENGRAVING ASSIGNMENT ALL LIGHTS "ON" OR "OFF" ON/OFF

ALL LIGHTING CONTROL COMPONENTS SHA OR EQUAL BY WATTSTOPPER OR STEINEL.

ALL LINE VOLTAGE AND 0-10 VOLT CONDUC BE ROUTED IN 3/4" CONDUIT, MINIMUM

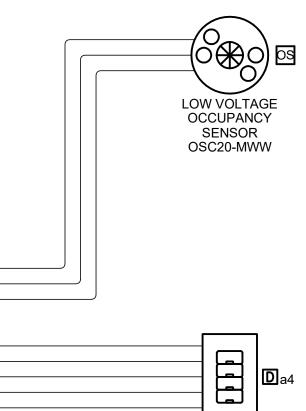
REFER TO THE LIGHTING PLANS FOR QUANT LOCATIONS OF ALL LIGHTING CONTROL DEV NOTED OTHERWISE.

# LIGHTING CONTROL WIRING DIAGRAMS

	ABBRE	EVIATIONS:
DINATING THE	LC	LUMA-CAN
POWER PACKS WITH	LV	LOW VOLTAGE
UIREMENTS AFFECT	HV	HIGH VOLTAGE SWITCH (MAINTAINED)
IEIR CONTROL	LVM	LOW VOLTAGE SWITCH (MOMENTARY) EQUAL TO LEVITON:
EACH CONTROLLED		1081 (TOGGLE) OR 56081 (DECORA)
FOR POWER OUTPUT IUM NUMBER OF PACK.	LVT	LOW VOLTAGE SWITCH (MAINTAINED) EQUAL TO LEVITON: 12021-2 (TOGGLE) OR 56021-2 (DECORA)
NTROLLED BY A JSED IN	LV2	IRC LOW VOLTAGE SWITCH EQUAL TO LEVITON:
AYS SHOULD BE DLD.		RLVSW-1LW (1 BUTTON) OR RLVSW-2LW (2 BUTTON) OR RLVSW-4LW (4 BUTTON)
E CONTROLLED PER		
	UON	UNLESS OTHERWISE NOTED
TE.	BLK	BLACK
	WHT	WHITE
	BLU	BLUE
	YEL	YELLOW
PTACLE P/N'S:	ORG	ORANGE
X, CR020-1PX.	VIO	VIOLET
X, CR020-1FX. PX, CR020-2PX.	BRN	BROWN
K, 16352-1PX. K, 16352-2PX.		
	SYMBO	DLS:
ABLE ENERGY CODES.	+	NO CONNECTION

CONNECTION

DEVICES WIRED IN PARALLEL

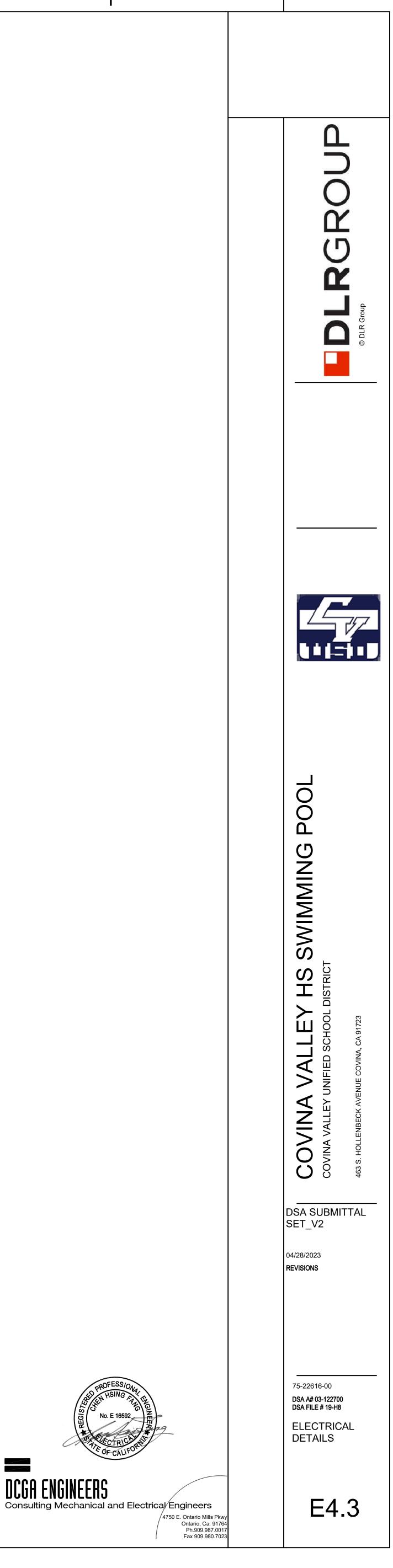


**4 BUTTON STATION** 

RLVSW-4LW

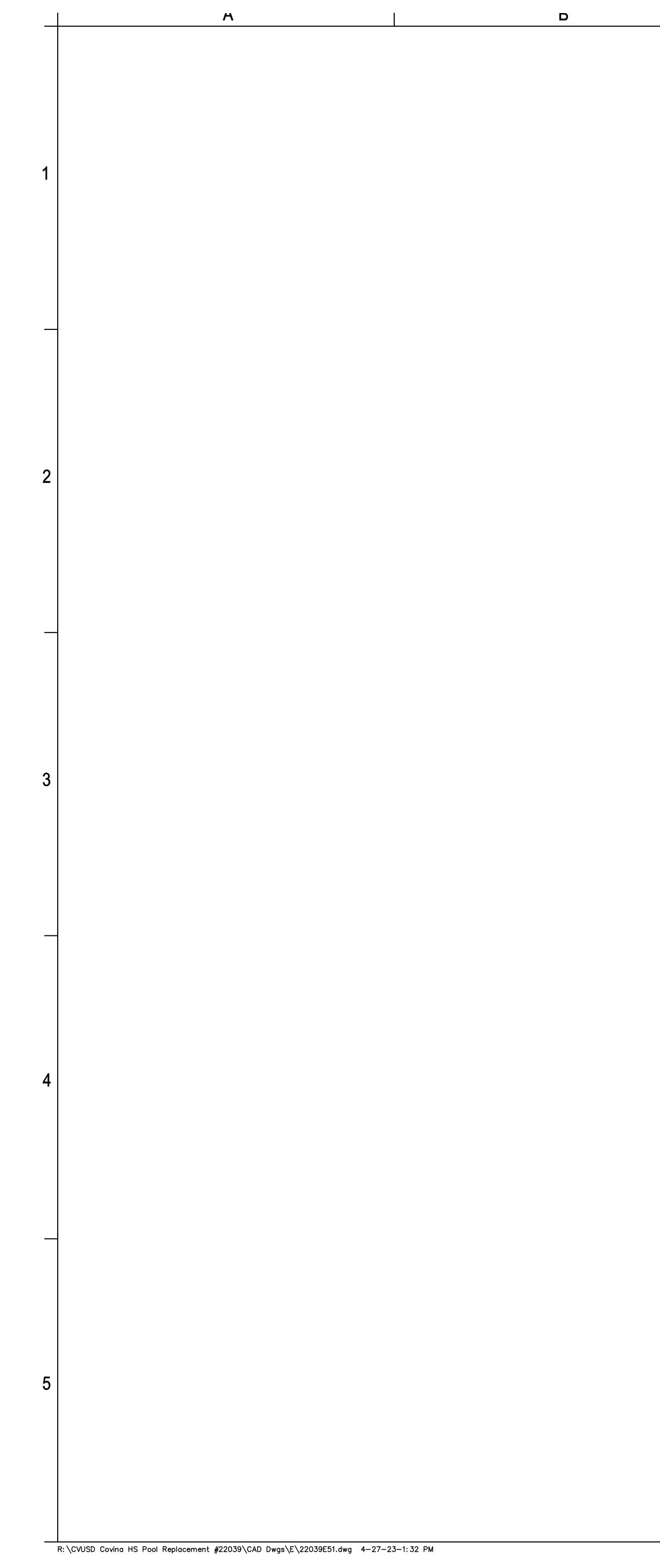
LL BE LEVITON		
TORS SHALL		
TITES AND VICES UNLESS		
	NOT TO	
	SCALE	

DCGA #22039



DCGA ENGINEERS

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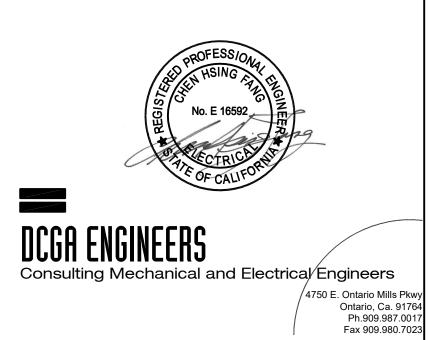


ANEL:	"HR1"	BRANCH:	NORMAL					PANEL:			"LR1"		BRANCH:			NORMAL						
OCATION:	POOL EQUIPMENT A106	VOLTAGE:	480/277V CKT CODE					LOCATION			POOL EQUIPMENT A106		VOLTAGE:			208/120V	CKT C		NTINUOUS LOAD)			
ED FROM:	"MSB"	PHASE & WIRE:	3PH,4W	2=(NON-CONTINUOUS)				FED FROM			"HR1"		PHASE & W			3PH,4W			N-CONTINUOUS)			
OUNTING:	SURFACE NEMA-1	MIN. BUS:	400 AMPS	3=(RECEPTACLES)				MOUNTIN			SURFACE NEMA-1		MIN. BUS:			400 AMPS			CEPTACLES)			
	42000	MCB:	400 AMPS	4=(KITCHEN)		. OF EQUIP=		AIC RATIN	-		18000		MCB:			400 AMPS		4=(KIT0	CHEN)		IO. OF EQU	-
IRCUIT CKT BKR	LOAD TYPE & DESIGNATION		PHASES LOAD LOAD TYPE & DES			KR CIRC		CIRCUIT	CKT B	1	D TYPE & DESIGNATION		LOAD		PHASES		LOAD TYPE &	1 1				CIRCUIT
NO CODE TRIP POI		MISC REC LTG VA A	B C VA LTG REC M			TRIP COD			DDE TRIP		DESCRIPTION	MISC REC					LTG REC		DESCRIPTION		LE TRIP	
	LTG. POOL EQUP. BLDG.	16 590 11670		1 POOL CIR. PUMP		60 2				1 IDF-F		2		2487		1987		1 HP-1, F0	C-1A, FC-1B		30	
	LTG. RM A101-A105	17 772	11852 11080	-	-			-	3 20		ND RACK SR-R	2	500		2487			-		-		2
	LTG. EXT. BLDG.	23 670	11750 11080	-	-		-		3 20		RIGERATOR A101	1	800		24			1 EF-3			20	
	LTG. POOL DECK	6 378 378		SPARE		20	8		3 20		ROWAVE A101	1	1000	1321		321		1 EF-2			20	
9 20 1			0	SPARE		20	10				EPT. POOL EQUP. A106	3	540			312		1 EF-1			20	
<u>11</u> <u>20</u> <u>1</u>			0	SPARE		20	12				EPT. POOL EQUP. A106	3	540			312		1 EF-5			20	
13 20 1		0		SPARE		20	14				EPT. RM A101-A105	3				1176		1 EF-4			20	
15 20 1			0	SPARE		20	16				EPT. RM A101-A105	3	540		1070				DRYER RM A104		20	
17 20 1			0	SPARE		20	18				EPT. RM A101-A105	3	540		10				DRYER RM A105		20	
19 20 1		0		SPARE		20	20			1 RECE		1	180	1180				1 EWH-1			20	
21 20 1			0	SPARE		20	22	21	20						1000			-		-		2
23 20 1			0	SPARE	1	20	24	23		1 SPAF					10			-		-		2
25 20 1		0		SPACE			26	25		1 SPAF				100		100		1 GWH-1			20	
27 20 1			0	SPACE			28	27		1 SPAF					-	52		CP-1				
29 20 1			0	SPACE			30	29		1 SPAF					(			SPARE			20	
31 20 1		0		SPACE			32	31		1 SPAF				0				SPARE			20	
33 20 1			0	SPACE			34	33		1 SPAF					-			SPARE		1		<u> </u>
35 2 20 1		1 500	500	SPACE			36		2 20	-	-	1	312		31			SPARE		1	20	+
37 2 175 3		15504 15504		SPACE			38			3 PANE	EL "SP"		8700	9200				1 AMP-R		1		
39 2		14787	14787	SPACE			40		2 -				8826			500		1 SCP			20	
1 2	-	14476	14476	SPACE			42		2 -				8286		87			1 FACP-2		1	20	2
DTES:		TOTAL 27552						NOTES:					TOTAL	16004	14787 144							
			CONN.KVA (CODE 1)	2.4													A (CODE 1)		0.0			
			CONN.KVA (CODE 2)	78.5												CONN.KV	A (CODE 2)		39.6			
			CONN.KVA (CODE 3)	0.0													A (CODE 3)		5.7			
			CONN.KVA (CODE 4)	0.0												CONN.KV	A (CODE 4)		0.0			
			CONNECTED KVA	80.9												CONNEC			45.3			
			CONNECTED AMPS	97.3													TED AMPS		125.6			
			FEEDER DEMAND KVA	81.5													DEMAND KVA		45.3			
			FEEDER DEMAND AMPS	98.1													DEMAND AMPS		125.6			
			MCB = MAIN CIRCUIT BREA	ER MLO = MAIN LUGS ONLY												MCB = MA	AIN CIRCUIT BR	EAKER M	LO = MAIN LUGS ONLY			

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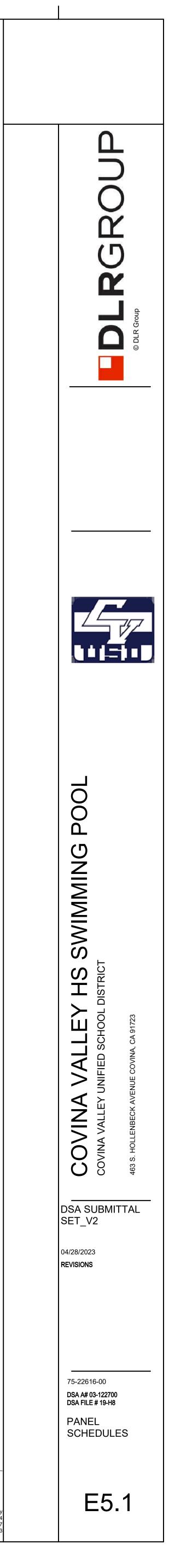
FUTURE METERING:

PROVIDE PROVISIONS FOR FUTURE METERING OF THE ELECTRICAL ENERGY OF EACH BRANCH CIRCUIT BY MEASURING AND REPORTING THE USAGE OF LOAD TYPES UNDER 2016 CALIFORNIA ENERGY CODE 130.5(b) AND TABLE 130.5-B. PROVIDE PROVISIONS FOR FUTURE INTEGRATION OF EATON #PX-BCM (OR APPROVED EQUAL), CT'S, ETC. INTO THE PANELBOARD CONSTRUCTION.



DCGA #22039

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			STATE OF CALIFORNIA		
			Electrical Power Distribution NRCC-ELC-E CERTIFICATE OF COMPLIANCE		CALIFORNIA ENERGY COMMISSION NRCC-ELC-E
			This document is used to demonstrate compliance with man hotel/motel occupancies. Additions and alterations to electr	ndatory requirements in <u>§130.5</u> , for electrical systems in newly con rical service systems in these occupancies will also use this docume	nstructed nonresidential, high-rise residential and
			<u>§141.0(b)2P</u> for alterations Project Name: Project Address:	Covina HS Pool Replacement Report Page: 463 South Hollenbeck Ave Date Prepared:	(Page 1 of 5) 12/8/2022
			A. GENERAL INFORMATION	465 South Hollenbeck Ave Date Prepared:	12/0/2022
4			01         Project Location (city)         Covina           ☑         Office         □         Retail		School 🛛 Support Areas
1			Parking Garage     High-Rise Residential	Relocatable     Healthcare Facilities	Other (write in)     See Table I
			B. PROJECT SCOPE This table includes electrical systems that are within the sco		04 05
			01 Electrical Service Designation/Description		vided Metering System System System Subject to CA Elec Code
			HR1	New electrical service equipment and 3324	tion to §130.5(a) <sup>2</sup> §130.5(a)and (b)
			06 Demand Personse Controls	meter           Where required, demand response controls must be specified v           responding to at least one standards based messaging protocol	
			06 Demand Response Controls	response signal. Sections <u>§120.2</u> , <u>§130.1</u> and <u>§130.3</u> and comp indicate when demand response controls are required. rs Voltage Drop 130.5(c), no other requirements from 130.5 are required.	pliance documents NRCC-MCH, NRCC-LTI and NRCC-LTS will
			<sup>2</sup> Applicable if the utility company is providing a metering system to	s voluge orop 150.5(c), no other requirements from 150.5 are required. that indicates instantaneous kW demand and ¢Wh for a utility-defined per	riod.
			C. COMPLIANCE RESULTS Results in this table are automatically calculated from data to Table D Exceptional Conditions for guidance or see applie	input and calculations in Tables F through I. Note: If any cell on the	is table says "COMPLIES with Exceptional Conditions" refer
			01 02	03 04	05
			Metering §130.5(a)     AND     Monitoring §130.5(b)       (See Table F)     (See Table G)	(See Table H) (See Table I)	
			Yes AND Yes	AND Yes AND Yes	COMPLIES
			Registraton Number: CA Building Energy Efficiency Standards - 2019 Nonresider	Registration Date/Time: ential Compliance Report Version: 2019.1.003	Registration Provider: Energysoft Report Generated: 2022-12-08 16:26:15
				Schema Version: rev 20190401	
			STATE OF CALIFORNIA Electrical Power Distribution		CALIFORNIA ENERGY COMMISSION
2			NRCC-ELC E CERTIFICATE OF COMPLIANCE Project Name:	Covina HS Pool Replacement Report Page:	CALIFORNIA ENERGY COMMISSION NRCC-ELC-E (Page 4 of 5)
2			Project Address:	463 South Hollenbeck Ave Date Prepared:	12/8/2022
			H. VOLTAGE DROP	han Permitted by CA Elec	
			HR1 Voltage drop less th	Code (Exception to Attached 130.5(c))*	E0.4
				Compliance Method above, please indicate where the exception a to the permit application outside the construction documents if allo installing contractor, select "Contractor Responsible".	
			I.CIRCUIT CONTROLS FOR 120-VOLT RECEPTACLES AN		
			must be provided in office areas, lobbies, conference rooms,	lectrical power distribution systems to demonstrate compliance wi s, kitchen areas in office spaces, copy rooms and hotel/motel guest	rooms.
			01 02 Room name or Location/ Type of Controled Description Receptacles	03 04 Shut-Off Controls Permanent Durable Marking Will be Used	05 06 Location of Requirements in Construction Documents Pass Fail
			* NOTES: if "Other*" is selected under Shut-Off Control: abo	ove, please indicate how compliance has seen achieved in the space	
				in this document. If any selection have been changed by permit ap	
			https://www.energy.ca.gov/title24/2019standards/2019_cd		Field Inspector
			Yes No NRCI-ELC-01-E - Must be submitted	Form/Title ted for all buildings	Pass Fail
			K. DECLARATION OF REQUIRED CERTIFICATES OF ACC		
			There are no Certificates of Acceptance applicable to electri	ical power distribution requirements.	
3			Registraton Number:	Registration Date/Time:	Registration Provider: Energysoft
U			CA Building Energy Efficiency Standards - 2019 Nonresider	ntial Compliance Report Version: 2019.1.003 Schema Versior: rev 20190401	Report Generated: 2022-12-08 16:26:15
			STATE OF CAUFORNIA		
			Indoor Lighting NRCC-LTI-E CERTIFICATE OF COMPLIANCE		CALIFORNIA ENERGY COMMISSION NRCC-LTI-E
			Project Name: Project Address:	Covina HS Pool Replacement Report Page: 463 South Hollenbeck Ave Date Prepared:	(Page 2 of 8) 12/8/2022
			C. COMPLIANCE RESULTS		
			Allowed Lighting Power		wer per §140.6(a) (Watts) Compliance Results
			Lighting in conditioned and unconditioned complete Area Catego	a Adjustr	ments
			combined for compliance per <u>\$140.6(c)1</u> <u>\$140.6(c)2</u> <u>\$140.6(c)2</u>	$\frac{\underline{\$140.6(c)3}}{(c)2G} = \begin{array}{c} 10tal \\ Allowed \\ (Watts) \end{array} = \begin{array}{c} 2 \\ Control \\ \underline{\$140.6} \\ Watts \end{array}$	Credits         =         (Watts)         05 must be >= 08           6(a)2         *Includes         \$140.6
			§140.6(b)1         (+)           (See Table I)         (See Table I)	ble J) (See Table K) (See Table F) (See Table F)	ble P)
			Conditioned 78 Unconditioned 1,640	= 1,640 ≥ 1,266 0	=         76         COMPLIES           =         1266         COMPLIES           ce (See Table H for Details)         COMPLIES
				Rated Power Reduction Complian	
			D. EXCEPTIONAL CONDITIONS This table is auto-filled with uneditable comments because of	of selections made or data entered in tables throughout the form.	
			E. ADDIT ONAL REMARKS This table includes remarks made by the permit applicant to	o the Authority Having Jurisdiction.	
-			F. INDOOR LIGHTING FIXTURE SCHEDULE		
4			This table includes all permanent designed lighting and all p Designed Wattage: Conditioned Spaces		00 10
			01 02 03 Name or Item Complete Luminaire Modular	04         05         06         07           Small Aperture &         Watts per Lucicicicical         How is Wattage         Total Number	08 09 10 Excluded per Design Watts Field Inspector
			Tag         Description         (Track) Fixture           A         2x4 LED Troffer         No	Aperture & Color Change <sup>1</sup> Item per luminaire <sup>2</sup> Item per determined         Item per determined         Item per of Luminaires           No         38         CEC Default         2	§140.6(a)3         Pesign Watts         Pass         Fail           No         76
			Registration Number:	Total Designed Watts: COND Registration Date <sup>/</sup> Time:	Registration Provider: Energysoft
			CA Building Energy Efficiency Standards - 2019 Nonresidential Co	mpliance Report Version: 2019.1.003 Schema Version: rev 20200601	Report Generated: 2022-12-08 16:26:15
Б					
5					
	R:\CVUSD Covina HS Pool Replacement #22039\CAD Dwgs\E\22039E61.dwg 4-27-	-23-1:32 PM			

Electrical Service

Designation/Description

HR

STATE OF CALIFORNIA

							NRCC-ELC
latory requirements in <u>§130.5</u> , f al service systems in these occu							
Covina HS Pool Replacement	Repor	t Page:					(Page 1 of
463 South Hollenbeck Ave	Date	repared:					12/8/202
		2		ee Mithin D			
⊠ Warehouse		Jccupanc Hotel/Mo		es Within P			Support Areas
Relocatable		Healthcar		lities	Other (write in)	-	See Table I
		Teartifican	eraci	linties			Jee lable l
e of the permit application.							
02		0	3		04		05
		-		Litility Pro	ovided Metering System		em subject to CA Elec Code
Scope of Work <sup>1</sup>		10.000	ting VA)	and the second second second	otion to <u>§130.5(a)</u> <sup>2</sup>	·	Article 517 Exception to <u>§130.5(a)and</u> (b)
New electrical service equipm meter Where required, demand respo	onse	nd 33	VA) 24 nust b	Excer e specified	which are capable of rec	eiving	§130.5(a)and (b)
New electrical service equipm meter	onse o dards .2, §1 se cor	(k) nd 33 ontrols m based me 30.1 and ttrols are n mis from 1	/A) 224 nust b essag <u>§130</u> requir	Except e specified ing protoco 3 and com- red. are required.	which are capable of recolumination of the second s	respo	§130.5(a)and (b)
New electrical service equipm meter Where required, demand responding to at least one star response signal. Sections <u>§120</u> indicate when demand respon foltage Drop 130.5(c), no other req at indicates instantaneous kW demand put and calculations in Tables F	onse o ndards .2, §1 se con uiremo and ar	(kv nd 33 ontrols m based me 30.1 and trols are n ints from 1 d cWh for	/A) 224 aust b essag <u>§130</u> requir 30.5 a a utilit	Except e specified ing protoco <u>.3</u> and com- red. <i>are required.</i> <i>ty-defined pe</i>	otion to §130.5(a) <sup>2</sup>	eiving Irespoi	§130.5(a)and (b)
New electrical service equipm meter Where required, demand respiresponding to at least one star response signal. Sections <u>§120</u> indicate when demand respon- <i>foltage Drop 130.5(c), no other req</i> at indicates instantaneous kW dema	onse o ndards .2, §1 se con uiremo and ar	(kv nd 33 ontrols m based me 30.1 and trols are n ints from 1 d cWh for	/A) 224 nust b essag <u>§130</u> requir 30.5 a a utilit e: If an	Except e specified ing protoco <u>.3</u> and com- red. <i>are required.</i> <i>ty-defined pe</i>	otion to §130.5(a) <sup>2</sup>	eiving respoi C-MCH	§130.5(a)and (b)
New electrical service equipm meter Where required, demand respiresponding to at least one star response signal. Sections <u>§120</u> indicate when demand respon foltage Drop 130.5(c), no other req in indicates instantaneous kW dema to indicates instantaneous kW dema put and calculations in Tables F ble Table referenced below.	onse o ndards .2, §1 se con uiremo and ar	(KV nd 33 controls m based me <u>30.1</u> and trols are n mis from 1 d cWh for gn 1. Note	/A) 24 nust b essag §130. requir 330.5 c a a utilità e: If au 00 00 00 00 00 00 00 00 00 0	Excep e specified ing protoco .3 and com red. are required. ty-defined pe	ption to §130.5(a) <sup>2</sup>	eiving respoi C-MCH	§130.5(a)and (b)
New electrical service equipmeter         Where required, demand responses signal. Sections \$120         indicate when demand response         /oltage Drop 130.5(c), no other required         put and calculations in Tables F         ble Table referenced below.         03         ND	onse o ndards .2, §1 se con uiremo and ar	(kv nd 33 ontrols m based me 30.1 and ttrols are n ints from 1 d cWh for gn 1. Note	/A) 24 124 125 130.5 c a utiliti 224 130.5 c a utiliti 215 24 215 24 215 24 215 24 24 24 24 24 24 24 24 24 24	Except e specified ing protoco a and com- red. are required. ty-defined per ny cell on the protocology ny cell on the protocology	ption to §130.5(a) <sup>2</sup>	eiving respoi C-MCH	§130.5(a)and (b)

Electrical Power Distribution
NRCC-ELC-E
CERTIFICATE OF COMPLIANCE

roject Name:		Covina HS Pool Replacement	Report Page:
roject Address:		463 South Hollenbeck Ave	Date Prepared:
. EXCEPTIONAL CONDITION	NS		
his table is auto-filled with un	editable comments be	cause of selections made or data entere	d in tables through
. ADDITIONAL REMARKS			
his table is includes remarks n	ade by the permit app	plicant to the Authority Having Jurisdict	ion.
SERVICE ELECTRICAL MET	ERING		ŝ.
his table includes new or replo	rcement electrical serv	ice systems OR equipment to demonstru	ate compliance with
01	02	03	
		Required Metering Capabilitie	s per Table 130.5-A

Demand (kW) Demand (kW)

Rating

(kVA)

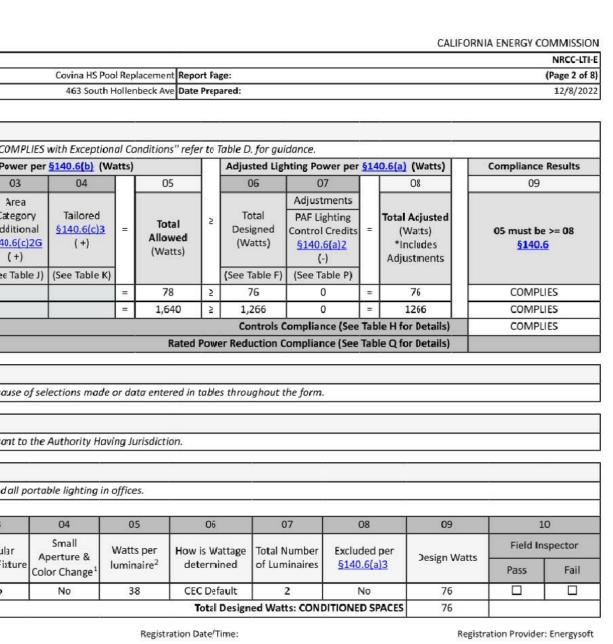
3324

L

user-defined period

Registr	aton Number:	Regist	tration Date/Time:
CA Bui	Iding Energy Efficiency Standards - 2019 Nonresidential C		t Version:2019.1.00 na Versior: rev 2019
	F CALIFORNIA rical Power Distribution		
CERTIF	ICATE OF COMPLIANCE		
Project	Name: Co	wina HS Pool Replacemer	
Project	Address:	463 South Hollenbeck Av	e Date Prepared:
	y that this Certificate of Compliance documentation	is accurate and compl	-
Documen	taton Author Name: Bryan Martinez		Documentation Author
Company DCGA E	: ngneers		Signature Date: 2022-12-08
Address: 4750 Ea	stOntario Mills Parkway		CEA/ HERS Certificatio
City/State Ontario	/Ζο: Cλ 91764		Phone: (909)987-0017
	NSIBLE PERSON'S DECLARATION STATEMENT the billowing under penalty of perjury, under the laws of the State of Calir "he information provided on this Certificate of Compliance is true and lam eligible under Division 3 of the Business and Professions Code to The energy features and performance specifications, materials, completed of Title 24, Part 1 and Part 6 of the California Code of Regulations. "The building design features or system design features identified on the plans and specifications submitted to the enforcement agency for app livvill ensure that a completed signed copy of this Certificate of Completed inspections. I understand that a completed signed copy of this Certificate of Sections.	d correct. accept responsibility for the bu onents, and manufactured devic his Certificate of Compliance are proval with this building permit a liance shall be made available w	ces for the building desig e consistent with the info application. ith the building permit(s;
	oleDesigner Name: sing Fang		Responsible Designer
Company DCGA E	: ngineers		Date Signed: 2022-12-08
Address: 4750 E.	Ontario Mills Parkway		License: E16592

	Data (Times)
Registration	Date/Time:
Depart Vara	ion: 2010 1 00



Registraton Number: Registration Date/Time: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance Report Version: 2019.1.003 Schema Versior: rev 20190401 STATE OF CALIFORNIA

Indoor Lighting NRCC-LTI-E

Project Nane:

CERTIFICATE OF COMPLIANCE

City/State/Zp: Ontario CA 92324

HTING FIXTURE SCHEDUI	.E								
ge: Unconditioned Spaces									
02	03	04	05	06	07	08	09	1	.0
Complete Luminaire	Modular	Small Aperture &	Watts per	How is Wattage	Total Number	Excluded per	Design Watts	Field In	spector
Description	(Track) Fixture	Color Change <sup>1</sup>	luminaire <sup>2</sup>	determined	of Luminaires	<u>§140.6(a)3</u>		Pass	Fai
1x4 Surface Fiber Glass Housing	No	No	38	CEC Default	15	No	570		
1x4 Surface LED Vandal	No	No	53	CEC Default	12	No	636		
	No	No	20	CEC Default	3	No	60		
	ge: Unconditioned Spaces 02 Complete Luminaire Description 1x4 Surface Fiber Glass Housing	O2     O3       Complete Luminaire Description     Modular (Track) Fixture       1x4 Surface Fiber Glass Housing     No	ge: Unconditioned Spaces       02     03     04       Complete Luminaire Description     Modular (Track) Fixture     Small Aperture & Color Change <sup>1</sup> 1x4 Surface Fiber Glass Housing     No     No	ge: Unconditioned Spaces02030405Complete Luminaire DescriptionModular (Track) FixtureSmall Aperture & Color Change1Watts per luminaire21x4 Surface Fiber Glass HousingNoNo38	ge: Unconditioned Spaces       02     03     04     05     06       Complete Luminaire Description     Modular (Track) Fixture Housing     Small Aperture & Color Change <sup>1</sup> Watts per luminaire <sup>2</sup> How is Wattage determined       1x4 Surface Fiber Glass Housing     No     No     38     CEC Default	ge: Unconditioned Spaces020304050607Complete Luminaire DescriptionModular (Track) Fixture NoSmall Aperture & color Change1Watts per luminaire2How is Wattage determinedTotal Number of Luminaires1x4 Surface Fiber Glass HousingNoNo38CEC Default15	ge: Unconditioned Spaces02030405060708Complete Luminaire DescriptionModular (Track) Fixture color Change1Small Aperture & color Change1Watts per luminaire2How is Wattage determinedTotal Number fixume S140.6(a)3Excluded per S140.6(a)31x4 Surface Fiber Glass HousingNoNo38CEC Default15No	ge: Unconditioned Spaces0203040506070809Complete Luminaire DescriptionModular (Track) Fixture (Track) Fixture NoSmall Aperture & color Change1Watts per luminaire2How is Wattage determinedTotal Number of LuminairesExcluded per §140.6(a)3Design Watts1x4 Surface Fiber Glass HousingNoNo38CEC Default15No570	ge: Unconditioned Spaces       O2       O3       O4       O5       O6       O7       O8       O9       1         Complete Luminaire Description       Modular (Track) Fixture & Color Change1       Small Aperture & Color Change1       Watts per luminaire2       How is Wattage determined determined       Total Number of Luminaires       Excluded per §140.6(a)3       Design Watts       Pass         1x4 Surface Fiber Glass Housing       No       No       38       CEC Default       15       No       570       Image: Calce Color Change1

Covina HS Pool Replacement Report Page:

Phone: (909)987-0017

this adjustment, the permit applicant should enter full rated wattage in column 05. <sup>2</sup>Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per <u>§130.0(c)</u> Wattage used must be the maximum rated for the luminaire, not the lamp.

This section does not apply to this project.			
H. INDOOR LIGHTING CONTROLS (Not including FAFs)			
This tableincludes lighting controls for conditioned and unconditioned spaces. Wh	en a control having a * is shown, the notes section of this table prov	vides more detail on ho	w
compliance is achieved. The lighting controls section of the Compliance Summary 1			
compliance is achieved. The lighting controls section of the Compliance Summary 1			
compliance is achieved. The lighting controls section of the Compliance Summary 1 Building Level Controls 01 01	Table on the first page will show "DOES NOT COMPLY" if the notes an 02	re left blank.	3
compliance is achieved. The lighting controls section of the Compliance Summary 1 Building Level Controls	Table on the first page will show "DOES NOT COMPLY" if the notes a	re left blank.	3

Registration Number:

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

Registration Date/Time: Report Version: 2019.1.003 Schema Version: rev 20200601

### CALIFORNIA ENERGY COMMISSION NRCC-ELC-E (Page 2 of 5) 12/8/2022 roughout the form. \_\_\_\_\_ ce with <u>§130.5(a)</u> 04 05 Field Inspector Instantaneous Historical Peak Tracking kWh for user-defined kWh per rate Construction Documents Pass Fail period E0.4

## STATE OF CALIFORNIA Electrical Power Distribution

Project Name:

Project Address:

Electrical Power Distribution
NRCC-ELC-E
CERTIFICATE OF COMPLIANCE

01	02	03	04	(	)5	
	Minimum Required Separation of		Location of Requirements in Construction	Field Inspector		
Load Type per <u>Table 130.5-B</u> <sup>1</sup>	Load per Table 130.5-B	Compliance Method <sup>2</sup>	Documents	Pass		
HR1		•				
Lighting including exit, egress and exterior	All lighting disaggregated by floor, type or area	Method 3	E5.1			
Lighting including exit, egress and exterior	All lighting disaggregated by floor, type or area	Method 3	E5.1			
Plug Loads and appliances less than 25kVA	All plug oads separated by floor, type or area Groups of plug loads exceeding 25 kVA connected load in an area less than 5000 sf	Method 3	E5.1			
Other non-HVAC loads and appliances greater than or equal to 25kVA	All loads in aggregate	Method 3	E5.1			
* NOTES: if "Other*" is selected under Compl	iance Method above, please indicat	e how compliance has b	een achieved in the space provided below.			

Method 3: Branch circuits serve load types individually and provisions for adding future branch circuit monitoring. Method 4: Complete metering system measures and reports loads by type.

Total Area of Work (ft<sup>2</sup>)

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

See Chapter 8 of the Nonresidential Compliance Manual for more detail on Compliance Methods H. VOLTAGE DROP This table includes entirely new or complete replacement electrical power distribution systems, or alterations that add, modify or replace both feeders and branch circuits to demonstrate compliance with <u>§130.5(c)</u>. For alterations, only the altered circuits must demonstrate compliance per <u>§141.0(b)2Piii</u>

01	02		03	04	(
Electrical Service	Combined Voltage Drop on Installed Feede	r/Branch Location of Voltage Drop		Sheet Number for Voltage Drop	Field Ir
Designation/Description	<b>v</b> ,		Calculations <sup>1</sup>	Calculations in Construction Documents	Pass
Registraton Number:		Registra	tion Date/Time:	Registration	n Provider:
CA Building Energy Efficiency St	andards - 2019 Nonresidential Compliance		/ersion:2019.1.003 Versior: rev 20190401	Report Generated:	2022-12-0

### Registration Provider: Energysoft Report Generated: 2022-12-08 16:26:15

NRCC-ELC-E
(Page 5 of 5)
12/8/2022
ature: Baper to
tification (if applicable):
identified on this Certificate of Complance (responsible designer)
stem design identified on this Certificate of Compliance conform to the requirements
on provided on other applicable compliance documents, worksheets, calculations,
d for the building, and made available to the enforcement agency for all applicable ntation the builder provides to the building owner at occupancy.
ure:
044

### STATE OF CALIFORNIA Indoor Lighting

Registration Number:

STATE OF CALIFORNIA

NRCC-LTI-E

Project Nane: Project Address:

Indoor Lighting

CERTIFICATE OF COMPLIANCE

NR	CC-LTI-E									CALIFORNIA ENER	RGY CON
CE	RTIFICATE OF COMPLIANCE										
Th	is document is used to demonstrate co	mpl	iance with requirement	s in s	§110.9, §110.12(c), §	130.0	, <u>§130.1</u> , <u>§140.6</u> (	and <u>§141.0(b)2</u> for in	ndoor	lighting scopes using the	e prescri
pa	nth.										
Project Nane: Covina HS Pool Replacement P						Repor	t Page:				(F
Pro	ect Adiress: 463 South Hollenbeck Ave				Date P	repared:					
A.	GENERAL INFORMATION										
01	Project Location (city)	-	Covina	lovina			04 Total Condition	ned Floor Area (ft <sup>2</sup> )		120	
02	2 Climate Zone		9			(	5 Total Unconditioned Floor Area (ft <sup>2</sup> )			2,523	
03	Occupancy Types Within Project (sele	select all that apply):			v	(	06 # of Stories (Ha	abitable Above Grade	e)	1	
	] Office		Retail	Retail 🗌 Warehouse 🗌 Hotel/Motel			Ø	School	Support		
	Parking Garage		High-Rise Residential		Relocatable		Healthcare			Other (Write in)	
B.	PROJECT SCOPE			-				0	~~		
	is tableincludes any lighting systems th 41.0(b)? for alterations.	hat i	are within the scope of	the p	permit application an	nd are	demonstrating co	mpliance using the p	orescr	iptive path outlined in §1	1 <u>40.6</u> oi
	Scope of	Wo	rk			Conditioned Spaces				Unconditioned Space	
	01					02	2	03		04	
	My Project Consists of (	cheo	ck all that apply):		Calcu	ulatior	n Method	Area (ft <sup>2</sup> )		Calculation Method	Ar
D	Nev Lighting System				Complet	e Buil	ding Method	120	Co	omplete Building Method	I I
[	Nev Lighting System - Parking Gara	ge									
		_					11.2 IN 12 IN 12		1		

Registration Date/Time:

Covina HS Pool Replacement Report Page: 463 South Hollenbeck Ave Date Prepared:

Report Version: 2019.1.003

Schema Version: rev 20200601

## Registration Provider: Energysoft

### Report Generated: 2022-12-08 16:26:15

				NRCC-LTI-E
				(Page 3 of 8)
				12/8/2022
07	08	09	1	0
tal Number	Excluded per	Design Watts	Field In	spector
Luminaires	<u>§140.6(a)3</u>	Jesign watts	Pass	Fail
15	No	570		

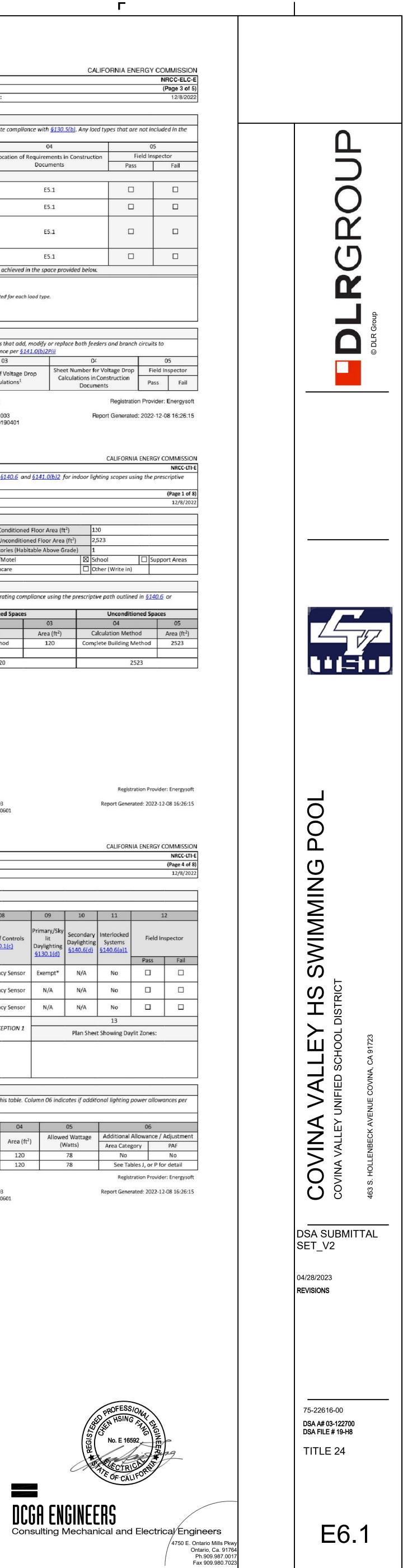
rea Level Controls								
04	05	06	07	08	09	10	11	2
Area Description	Complete Building or Area Category Primary Function Area	Area Controls <u>§130.1(a)</u>	Multi-Level Controls <u>§130.1(b)</u>	Shut-Off Controls §130.1(c)	Primary/Sky lit Daylighting <u>§130.1(d)</u>	Secondary Daylighting §140.6(d)	Interlocked Systems <u>§140.6(a)1</u>	Field Ir
								Pass
Office<250	All Others Buildings	Manual ON/OFF	Dimmer	Occupancy Sensor	Exempt*	N/A	No	
Restrooms	All Others Buildings	Manual ON/OFF	Exempt*	Occupancy Sensor	N/A	N/A	No	
Storage	All Others Buildings	Manual ON/OFF	Dimmer	Occupancy Sensor	N/A	N/A	No	
NOTES: Controls with a * rea	quire a note in the space below exp	plaining how com	pliance is achiev	ved.			13	
X: Confeience 1: Primary/Sk o <u>§130.1id)2</u>	ylight Daylighting: Exempt because	e less than 120 wo	itts of general li	ghting; EXCEPTION 1		Plan Shee	t Showing Day	lit Zones:
	ylight Daylighting: Exempt because Exception 1 (130.1(b))	e less than 120 wc	itts of general li	ghting; EXCEPTION 1		Plan Shee	t Showing Day	lit Zones:
o <u>§130.1µd)2</u>		e less than 120 wo	itts of general li	ghting; EXCEPTION 1		Plan Shee	t Showing Day	lit Zones:
o <u>§130.1d)2</u> Office<250 Restrooms	Exception 1 (130.1(b)) Exception 2 (130.1(b))					Plan Shee	t Showing Day	lit Zones:
o <u>§130.1d)2</u> Office<250 Restrooms	Exception 1 (130.1(b))					Plan Shee	t Showing Day	lit Zones:
o <u>§130.1(d)2</u> Office<250 Restrooms LIGHTING POWER ALLOV	Exception 1 (130.1(b)) Exception 2 (130.1(b))	OR AREA CATEG	ORY METHOD	S	olumn 06 india			
o <u>§130.1(d)2</u> Office<250 Restrooms LIGHTING POWER ALLOV	Exception 1 (130.1(b)) Exception 2 (130.1(b)) WANCE: COMPLETE BUILDING ( the Complete Building or Area Categ	OR AREA CATEG	ORY METHOD	S	olumn 06 india			
o <u>§130.1/d)2</u> Office<250 Restrooms LIGHTING POWER ALLOV fach areacomplying using th <u>140.6(c)</u> or adjustments per	Exception 1 (130.1(b)) Exception 2 (130.1(b)) WANCE: COMPLETE BUILDING ( the Complete Building or Area Categ	OR AREA CATEG	ORY METHOD §140.6(b) are ir	S	olumn 06 india			
o <u>§130.1(d)2</u> Office<250 Restrooms LIGHTING POWER ALLOV ach areacomplying using the 140.6(c) or adjustments per conditioned Spaces 01	Exception 1 (130.1(b)) Exception 2 (130.1(b)) WANCE: COMPLETE BUILDING ( the Complete Building or Area Category <u>§140.6(a)</u> are being used.	OR AREA CATEG ory Methods per 2	ORY METHOD §140.6(b) are ir	S ncluded in this table. C	Allowe	cates if additi		oower allow 06
o <u>§130.1(d)2</u> Office<250 Restrooms LIGHTING POWER ALLON ach areacomplying using the 140.6(c) or adjustments per conditioned Spaces	Exception 1 (130.1(b)) Exception 2 (130.1(b)) WANCE: COMPLETE BUILDING ( the Complete Building or Area Categ tr §140.6(a) are being used .	OR AREA CATEG ory Methods per 2 Area Category Prir	ORY METHOD §140.6(b) are in nary Allowe	S ncluded in this table. C	2) Allowe	cates if additi 05	onal lighting p	oower allow 06 Allowance /
o <u>§130.1(d)2</u> Office<250 Restrooms LIGHTING POWER ALLOV ach areacomplying using the 140.6(c) or adjustments per conditioned Spaces 01	Exception 1 (130.1(b)) Exception 2 (130.1(b)) WANCE: COMPLETE BUILDING ( the Complete Building or Area Categ tr §140.6(a) are being used .	DR AREA CATEG ory Methods per 2 Area Category Prin on Area	ORY METHOD §140.6(b) are in nary Allowe (W	S ncluded in this table. C 03 04 d Density Area (ff	2) Allowe	cotes if odditi 05 ed Wattage	onal lighting p Additional A	oower allow 06 Allowance /

Registration Provider: Energysoft Registration Number: Report Generated: 2022-12-08 16:26:15 CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

Report Version: 2019.1.003 Schema Version: rev 20200601

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Registration Date/Time:



	Α		
		STATE OF CALIFORNIA	STATE OF CALIFORNIA
		Indoor Lighting NRCC-LTI-E CALIFORNIA ENERGY COMMISSION	Indoor Lighting NRCC-LTI-E CALIFORNIA ENERGY COMMISSION
		CERTIFICATE OF COMPLIANCE     NRCC-LTI-E       Project Nane:     Covina HS Pool Replacement Report Fage:     (Page 5 of 8)	CERTIFICATE OF COMPLIANCE     NRCC-LTI-E       Project Nane:     Covina HS Pool Replacement     Report Page:     (Page 6 of 8)
		Project Address:       463 South Hollenbeck Ave       Date Prepared:       12/8/2022	Project Address:       463 South Hollenbeck Ave       Date Prepared:       12/8/2022
		I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS	Q. RATED POWER REDUCTION COMPLIANCE FOR ALTERATIONS
		Unconditioned Spaces         01         02         03         04         05         06	This section does not apply to this project.  R. 80% LIGHTING POWER FOR ALL ALTERATIONS · CONTROLS EXCEPTIONS
4		Area Description     Complete Building or Area Category Primary Function Area     Allowed Density (W/ft <sup>2</sup> )     Area (ft <sup>2</sup> )     Allowed Wattage (Watts)     Additional Allowance / Adjustment	This section does not apply to this project.
1		Whole Building     School Building     0.65     2,523     1,640     No     No       TOTALS: 2,523     1,640     See Tables J, or P for detail	S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)
		J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM	This section does not apply to this project. T. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION
		This section does not apply to this project.	Selectionshave been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E.
		K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE This section does not apply to this project.	Additiona Remarks. These documents must be provided to the building inspector during construction and can be found online at         https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCl/         Very       No         Field Inspector
		L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY	Yes     No     Form/Title       •     •     NRCI-LTI-01-E - Must be submitted for all buildings
		This section does not apply to this project.	NRCI-LTI-02-E- Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be     recognized for compliance.
		M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING This section does not apply to this project.	NRCI-LTI-04-E - Must be submitted for two interlocked systems serving an auditorium, a convention center, a conference room, a multipurpose room or a theater to be recognized for compliance.
		N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED ORNAMENTAL/SPECIAL EFFECTS	Image: Second state       Image: Second state<
		This section does not apply to this project. O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE	
		This section does not apply to this project.	
		P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))	
		This section does not apply to this project.	
		Registration Number: Registration Date/Time: Registration Provider: Energysoft	Registration Date/Time: Registration Provider: Energysoft
		CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance Report Version: 2019.1.003 Report Generated: 2022-12-08 16:26:15 Schema Version: rev 20200601	CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance Report Version: 2019.1.003 Report Generated: 2022-12-08 16:26:15 Schema Version: rev 20200601
		STATE OF CALIFORNIA Indoor Lighting NRCC-LTI-E CALIFORNIA ENERGY COMMISSION	STATE OF CALIFORNIA Outdoor Lighting NRCC-LTO-E CALIFORNIA ENERGY COMMISSION
<b>n</b>		CERTIFICATE OF COMPLIANCE       NRCC-LTI-E         Project Nane:       Covina HS Pool Replacement Report Page:       (Page 8 of 8)	CERTIFICATE OF COMPLIANCE     NRCC-LTO-E       Project Nane:     Covina HS Pool Replacement Report Page:     (Page 1 of 7)
2		Project Address:     463 South Hollenbeck Ave     Date Prepared:     12/8/2022	Project Name:     Covina HS Pool Replacement Report Fage:     (Page 1 of 7)       Project Address:     463 South Hollenbeck Ave     Date Prepared:     12/8/2022
		DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	A. GENERAL INFORMATION           01         Project Location (city)         Covina
		I certify that this Certificate of Compliance documentation is accurate and complete.         Documentation Author Name:       Bryan Martinez         Documentation Author Signature:       Bryan Martinez	OI     Prefet Location (dty)     Covina       01     Prefet Location (dty)     Covina       02     Clinate Zone     9       03     Outdoor Lighting Zone per Title 24 Part 1 \$10.114     or as designated by Authority Having Jurisdiction (AHJ):
		Company:     SignatureDate:       DCGA Engineers     2022-12-08       Address:     CEA/ HERS Certification (if applicable):	Uzb       U
		4750 East Ontario Mills Parkway       City/State/Zip:   Phone:	L2-1: Low - Developed Parkland     L2-3: Moderately High - Orban Areas  B. PROJECT SCOPE
		Ontario CA 91764 (909)987-0017 RESPONSIBLE PERSON'S DECLARATION STATEMENT I certify the billowing under penalty of perjury, under the laws of the State of California:	This table includes outdoor lighting systems that are within the scope of the permit application and cre demonstrating compliance using the prescriptive path outlined in <u>\$140.7</u> or <u>\$141.0(b)?L</u> for alterations.
		<ol> <li>The information provided on this Certificate of Compliance is true and correct.</li> <li>Iam eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)</li> </ol>	My Project Consists of: 01 02
		<ol> <li>The energy features and performance specifications, malerials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.</li> <li>The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, least of compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, least of compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, least of compliance are consistent.</li> </ol>	Image: New Lighting System       Must Comply with Allowances from §140.7         Image: Altered Lighting System       Is your alteration increasing the connected lighting load (Watts)?
		plans and specifications submitted to the enforcement agency for approval with this building permit application. 5. Iwill ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.	03     04     05       % of Existing Luminaires Being Altered <sup>1</sup> Sum Total of Luminaires Being Added or Altered     Calculation Method
		Responsible Designer Name: Chen Hsing Fang	Image: status of the status
		Company:     Date Signed:       DCGA Engineers     2022-12-08       Address:     License:	<sup>1</sup> FOOTNCTES: % of Existing Luminaires Being Altered = (Sum Total of Luminaires Being Added or Altered / Existing Luminaires within the Scope of the Permit Application) x 100.
		4750 E. Ontario Mills Parkway         E16592           City/State/Zip:         Phone:           Ontario CA 92324         (909)987-0017	
		(503)567-0017	
3		Registration Number:       Registration Date/Time:       Registration Provider: Energysoft         CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance       Report Version: 2019.1.003 Schema Version: rev 20200601       Report Generated: 2022-12-08 16:26:15         STATE OF CALIFORNIA       State OF CALIFORNIA       Report Version: rev 20200601       Report Generated: 2022-12-08 16:26:15         STATE OF CALIFORNIA       Outdoor Lighting       Report Version: rev 20200601       Report Generated: 2022-12-08 16:26:15         NRCC-LTO-E       CALIFORNIA ENERGY COMMISSION       CALIFORNIA ENERGY COMMISSION         Ceremite OF COMPLIANCE       NRCC-LTO-E       NRCC-LTO-E         Ceremite OF COMPLIANCE       NRCC-LTO-E       NRCC-LTO-E	Registration Number;       Registration Date/Time;       Registration Provider: Energysoft         CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance       Report Version: 2019.1.003 Schema Version: rev 20200601       Report Generated: 2022-12-08 16:26:15         STATE OF CALIFORNIA       State OF CALIFORNIA       CALIFORNIA         Outdoor Lighting NRCC-LTO-E       CALIFORNIA ENERGY COMMISSION         CERTIFICATE OF COMPLIANCE       NRCC-LTO-E         Project Name:       Coving MS Report People Replacement Report Face:
		Project Name:Covina HS Pool ReplacementReport Fage:(Page 3 of 7)Project Address:463 South Hollenbeck AveDate Prepared:12/8/2022	Project Nane:Covina HS Pool ReplacementReport Fage:(Page 4 of 7)Project Address:463 South Hollenbeck AveDate Prepared:12/8/2022
		F. OUTDOOR LIGHTING FIXTURE SCHEDULE	H. OUTDOOR LIGHTING CONTROLS
		For new or altered lighting systems demonstrating compliance with <u>§140.7</u> all new luminaires being installed and any existing luminaires remaining or being moved within the spaces covered by the permit application are included in the Tcble below. For altered lighting systems using the Existing Power method per <u>§141.0(b)21</u> only new luminaires being installed and replacement luminaires being installed as part of the project scope are included (ie, existing luminaires remaining or existing luminaires being moved are not included).	This tabledemonstrates compliance with controls requirements for all new or altered luminaires installed as part of the permit application. For alteration projects, luminaires which are existing to remain (ie untouched) and luminaires which are removed and reinstalled (wiring only) do not need to be included in this table even if they are within the spaces covered by the permit application.
		Designed Wattage:         01         02         03         04         05         06         07         38         09         10	When an option having a * is selected, the notes section of this table must be completed. The lighting controls section of the Compliance Summar/ Table on the first page will show "DOES NCT COMPLY" if the notes are left blank.
		Name or item Watts per How is Total number Luminaire Excluded per Field	Mandatory Controls         01         02         03         04         05
_			02 03 04 03
		Tag     Complete Luminaire Description     Wattage     Wattage     Internet     Catholic     Catholic <th>Area Description Shut-Off Auto-Schedule Motion Sensor Field Inspector</th>	Area Description Shut-Off Auto-Schedule Motion Sensor Field Inspector
		F     4' LED Exterior Surface     Linear     28     Mfr. Spec     12     New     Image: Status     NA: < 6200 lumens     Image: Status     NA: < 6200 lumens     Image: Status	Shut-Off Auto-Schedule Motion Sensor Field Inspector
		F     4' LED Exterior Surface     Linear     28     Mfr. Spec     12     New     Image: Status     Status <t< th=""><th>Area Description     Shut-Off     Auto-Schedule     Motion Sensor     Field Inspector       §130.2(c)1     §130.2(c)2     §130.2(c)3     Pass     Fail</th></t<>	Area Description     Shut-Off     Auto-Schedule     Motion Sensor     Field Inspector       §130.2(c)1     §130.2(c)2     §130.2(c)3     Pass     Fail
		F     4' LED Exterior Surface     Linear     28     Mfr. Spec     12     New     336     NA: < 6200 lumens     0       G     6" Round LED Downlight     Linear     30     CEC Default     7     New     210     NA: < 6200     0     0	Area Description     Shut-Off     Auto-Schedule     Motion Sensor     Field Inspector       §130.2(c)1     §130.2(c)2     §130.2(c)3     Pass     Fail       Pool Deck     Astronomical Timer     Yes     NA: Facade, etc. >=24 ft     □     □       * NOTES: Controls with a * require a note in the space below explaining how compliance is achieved.     Here is achieved.     Here is achieved.     Here is achieved.
		Instruction	Area Description     Shut-Off     Auto-Schedule     Motion Sensor     Field Inspector       §130.2(c)1     §130.2(c)2     §130.2(c)3     Pass     Fail       Pool Deck     Astronomical Timer     Yes     NA: Facade, etc. >=24 ft     □     □       * NOTES: Controls with a * require a note in the space below explaining how compliance is achieved.     Here is achieved.     Here is achieved.     Here is achieved.
		Instruction	Area Description     Shut-Off     Auto-Schedule     Motion Sensor     Field Inspector       §130.2(c)1     §130.2(c)2     §130.2(c)3     Pass     Fail       Pool Deck     Astronomical Timer     Yes     NA: Facade, etc. >=24 ft     □     □       * NOTES: Controls with a * require a note in the space below explaining how compliance is achieved.     Here is achieved.     Here is achieved.     Here is achieved.
		Internation	Area Description     Shut-Off     Auto-Schedule     Motion Sensor     Field Inspector       §130.2(c)1     §130.2(c)2     §130.2(c)3     Pass     Fail       Pool Deck     Astronomical Timer     Yes     NA: Facade, etc. >=24 ft     □     □       * NOTES: Controls with a * require a note in the space below explaining how compliance is achieved.     Here is achieved.     Here is achieved.     Here is achieved.
		Instruction	Area Description     Shut-Off     Auto-Schedule     Motion Sensor     Field Inspector       §130.2(c)1     §130.2(c)2     §130.2(c)3     Pass     Fail       Pool Deck     Astronomical Timer     Yes     NA: Facade, etc. >=24 ft     □     □       * NOTES: Controls with a * require a note in the space below explaining how compliance is achieved.     Here is achieved.     Here is achieved.     Here is achieved.
4		Internation	Area Description     Shut-Off     Auto-Schedule     Motion Sensor     Field Inspector       §130.2(c)1     §130.2(c)2     §130.2(c)3     Pass     Fail       Pool Deck     Astronomical Timer     Yes     NA: Facade, etc. >=24 ft     □     □       * NOTES: Controls with a * require a note in the space below explaining how compliance is achieved.     Here is achieved.     Here is achieved.     Here is achieved.
4		North       North       Status       Interface       Status       Interface       Status       Status <th>Area Description     Shut-Off     Auto-Schedule     Motion Sensor     Field Inspector       §130.2(c)1     §130.2(c)2     §130.2(c)3     Pass     Fail       Pool Deck     Astronomical Timer     Yes     NA: Facade, etc. &gt;=24 ft     □     □       * NOTES: Controls with a * require a note in the space below explaining how compliance is achieved.     Here is achieved.     Here is achieved.     Here is achieved.</th>	Area Description     Shut-Off     Auto-Schedule     Motion Sensor     Field Inspector       §130.2(c)1     §130.2(c)2     §130.2(c)3     Pass     Fail       Pool Deck     Astronomical Timer     Yes     NA: Facade, etc. >=24 ft     □     □       * NOTES: Controls with a * require a note in the space below explaining how compliance is achieved.     Here is achieved.     Here is achieved.     Here is achieved.
4		Image       Image <th< th=""><th>Area Description     Shut-Off     Auto-Schedule     Motion Sensor     Field Inspector       §130.2(c)1     §130.2(c)2     §130.2(c)3     Pass     Fail       Pool Deck     Astronomical Timer     Yes     NA: Facade, etc. &gt;=24 ft     □     □       * NOTES: Controls with a * require a note in the space below explaining how compliance is achieved.     Here is achieved.     Here is achieved.     Here is achieved.</th></th<>	Area Description     Shut-Off     Auto-Schedule     Motion Sensor     Field Inspector       §130.2(c)1     §130.2(c)2     §130.2(c)3     Pass     Fail       Pool Deck     Astronomical Timer     Yes     NA: Facade, etc. >=24 ft     □     □       * NOTES: Controls with a * require a note in the space below explaining how compliance is achieved.     Here is achieved.     Here is achieved.     Here is achieved.
4		Nota minimus determined formines busines busine	Area Description       Shut-Off       Auto-Schedule       Motion Sensor       Field Inspector         Pol Deck       Astronomical Timer       /es       NA: Facade, etc. >>24 ft
4		Image       Image <th< td=""><td>Area Description         Shut-Off \$130.2(c)1         Auto-Schedule \$130.2(c)2         Motion Sensor \$130.2(c)3         Field Inspector           Pool Deck         Astronomical Timer         Yes         NA: Facade, etc. &gt;=24 ft        </td></th<>	Area Description         Shut-Off \$130.2(c)1         Auto-Schedule \$130.2(c)2         Motion Sensor \$130.2(c)3         Field Inspector           Pool Deck         Astronomical Timer         Yes         NA: Facade, etc. >=24 ft
4		Note:       Status	Area Description       Shut-Off \$130.2(c)1       Auto-Schedule \$130.2(c)2       Motion Sensor \$130.2(c)3       Field Inspector         Pool Deck       Astronomical Timer       res       NA: Facade, etc. >=24 ft
4		Note:       Status	Area Description       Shut-Off \$130.2(c)1       Auto-Schedule \$130.2(c)2       Motion Sensor \$130.2(c)3       Field Inspector         Pool Deck       Astronomical Timer       res       NA: Facade, etc. >=24 ft
4		Note:       Status	Area Description       Shut-Off \$130.2(c)1       Auto-Schedule \$130.2(c)2       Motion Sensor \$130.2(c)3       Field Inspector         Pool Deck       Astronomical Timer       res       NA: Facade, etc. >=24 ft
4		Note:       Status	Area Description       Shut-Off \$130.2(c)1       Auto-Schedule \$130.2(c)2       Motion Sensor \$130.2(c)3       Field Inspector         Pool Deck       Astronomical Timer       res       NA: Facade, etc. >=24 ft
4		Note:       Status	Area Description       Shut-Off \$130.2(c)1       Auto-Schedule \$130.2(c)2       Motion Sensor \$130.2(c)3       Field Inspector         Pool Deck       Astronomical Timer       res       NA: Facade, etc. >=24 ft
4		Note:       Status	Area Description       Shut-Off \$130.2(c)1       Auto-Schedule \$130.2(c)2       Motion Sensor \$130.2(c)3       Field Inspector         Pool Deck       Astronomical Timer       res       NA: Facade, etc. >=24 ft
4		Note:       Status	Area Description       Shut-Off \$130.2(c)1       Auto-Schedule \$130.2(c)2       Motion Sensor \$130.2(c)3       Field Inspector         Pool Deck       Astronomical Timer       res       NA: Facade, etc. >=24 ft
4		Note:       Status	Area Description       Shut-Off \$130.2(c)1       Auto-Schedule \$130.2(c)2       Motion Sensor \$130.2(c)3       Field Inspector         Pool Deck       Astronomical Timer       res       NA: Facade, etc. >=24 ft
4		Note:       Status	Area Description       Shut-Off \$130.2(c)1       Auto-Schedule \$130.2(c)2       Motion Sensor \$130.2(c)3       Field Inspector         Pool Deck       Astronomical Timer       res       NA: Facade, etc. >=24 ft
4		Note:       Status	Area Description       Shut-Off \$130.2(c)1       Auto-Schedule \$130.2(c)2       Motion Sensor \$130.2(c)3       Field Inspector         Pool Deck       Astronomical Timer       res       NA: Facade, etc. >=24 ft
4		Note:       Status	Area Description       Shut-Off \$130.2(c)1       Auto-Schedule \$130.2(c)2       Motion Sensor \$130.2(c)3       Field Inspector         Pool Deck       Astronomical Timer       res       NA: Facade, etc. >=24 ft
4		Note:       Status	Area Description       Shut-Off \$130.2(c)1       Auto-Schedule \$130.2(c)2       Motion Sensor \$130.2(c)3       Field Inspector         Pool Deck       Astronomical Timer       res       NA: Facade, etc. >=24 ft
4		Note:       Status	Area Description       Shut-Off \$130.2(c)1       Auto-Schedule \$130.2(c)2       Motion Sensor \$130.2(c)3       Field Inspector         Pool Deck       Astronomical Timer       res       NA: Facade, etc. >=24 ft
4		Note:       Status	Area Description       Shut-Off \$130.2(c)1       Auto-Schedule \$130.2(c)2       Motion Sensor \$130.2(c)3       Field Inspector         Pool Deck       Astronomical Timer       res       NA: Facade, etc. >=24 ft
4		Note:       Status	Area Description       Shut-Off \$130.2(c)1       Auto-Schedule \$130.2(c)2       Motion Sensor \$130.2(c)3       Field Inspector         Pool Deck       Astronomical Timer       res       NA: Facade, etc. >=24 ft
4		Note:       Status	Area Description       Shut-Off \$130.2(c)1       Auto-Schedule \$130.2(c)2       Motion Sensor \$130.2(c)3       Field Inspector         Pool Deck       Astronomical Timer       res       NA: Facade, etc. >=24 ft
4		Note:       Status	Area Description       Shut-Off \$130.2(c)1       Auto-Schedule \$130.2(c)2       Motion Sensor \$130.2(c)3       Field Inspector         Pool Deck       Astronomical Timer       res       NA: Facade, etc. >=24 ft
4		Note:       Status	Area Description       Shut-Off \$130.2(c)1       Auto-Schedule \$130.2(c)2       Motion Sensor \$130.2(c)3       Field Inspector         Pool Deck       Astronomical Timer       res       NA: Facade, etc. >=24 ft

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Covina HS Pool Replacem					NRCC-LTI-
covina no roomepiacen	nent Report Page:				(Page 5 of 8
463 South Hollenbeck	Ave Date Prepared:				12/8/202
	•				
BUILDING OR AREA CATEGORY M	IFTHODS				
02	03	04	05	06	
e Building or Area Category Primary	Allowed Density		Allowed Wattage	Additional Allowance / Adjustmer	
Function Area	(W/ft²)	Area (ft <sup>2</sup> )	(Watts)	Area Category	PAF
School Building	0.65	2,523	1,640	No	No
	TOTALS:	2,523	1,640	See Tables J, or	P for detail
DRED WALL DISPLAY					
ORED WALL DISPLAY	1				
ORED FLOOR AND TASK LIGHTING					

Q. RATEL P	OWER RE	DUCTION COMPLIANCE FOR ALTERATIONS
This section o	does not ap	oply to this project.
R. 80% LIGH	ITING PO	WER FOR ALL ALTERATIONS · CONTROLS EXCEPTIONS
This section of	does not ap	oply to this project.
S. DAYLIGH	T DESIGN	POWER ADJUSTMENT FACTOR (PAF)
This section of	does not ap	oply to this project.
T. DECLARA	TION OF F	REQUIRED CERTIFICATES OF INSTALLATION
Additiona Re	marks. The	ade based on information provided in this document. If any selection have b ese documents must be provided to the building inspector during constructi gov/title24/2019standards/2019_compliance_documents/Nonresidential_
Yes	No	Form/Title
٠	0	NRCI-LTI-01-E - Must be submitted for all buildings
0	•	NRCI-LTI-02-E- Must be submitted for a lighting control system, or for an recognized for compliance.
0	•	NRCI-LTI-04-E - Must be submitted for two interlocked systems serving a multipurpose room or a theater to be recognized for compliance.
0	•	NRCI-LTI-05-E- Must be submitted for a Power Adjustment Factor (PAF) to
	-	

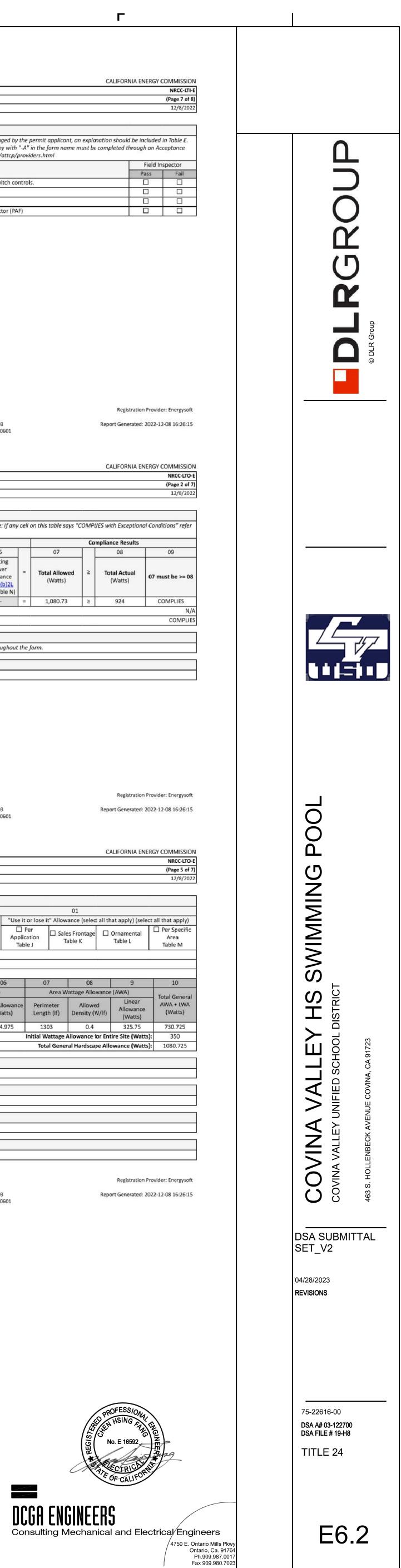
### STATE OF CALIFORNIA or Lighting

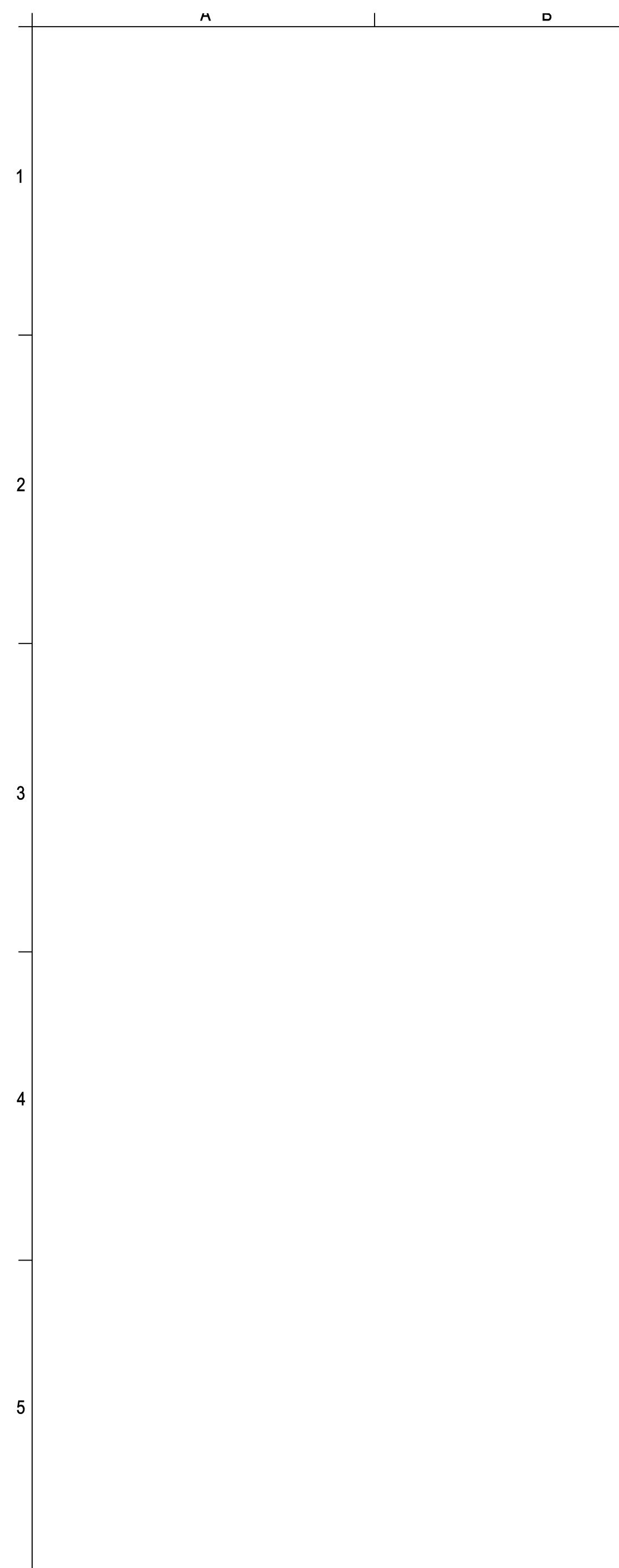
CALIFORNIA ENERGY COMMISSION	Indoor Lig	ghting	
NRCC-LTI-E	CERTIFICATE O	F COMPLIA	NCE
(Page 6 of 8)	Project Nane:		
12/8/2022	Project Addres	ss:	
	U. DECLARA Selectionsha Additiona Re	ve been m marks. The	ade b ese do
	Test Techricio Yes	No	
	•	0	NR
		٠	NR
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licant, an explanation should be included in Table E.			

Project Nane	:	Covina HS Pool Replacement	Report Fage:	
Project Addre	ess:	463 South Hollenbeck Ave	Date Prepared:	
U. DECLARA	ATION OF R	EQUIRED CERTIFICATES OF ACCEPTANCE		
Additiona Re	emarks. Thes		have been changed by the permit applicant, an explanation should struction and any with "-A" in the form name must be completed th y.ca.gov/title24/attcp/providers.html	
Yes	No	Form	/Title	Field
165			,	Pass
•	$\bigcirc$	NRCA-LTI-02-A - Must be submitted for occupancy sensors and au	tomatic time switch controls.	
0	٠	NRCA-LTI-03-A - Must be submitted for automatic daylight control	s.	
0	٠	NRCA-LTI-04-A - Must be submitted for demand responsive lightin	g controls.	
0	٠	NRCA-LTI-05-A Must be submitted for institutional tuning powe	r adjustment factor (PAF)	

### Registration Number: Registration Date/Time: Report Version: 2019.1.003 CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance Schema Version: rev 20200601 STATE OF CALIFORNIA Outdoor Lighting NRCC-LTO-E CERTIFICATE OF COMPLIANCE Covina HS Pool Replacement Report Page: 463 South Hollenbeck Ave Date Prepared: Project Nane: Project Address: C. COMPLIANCE RESULTS Results in this table are automatically calculated from data input and calculations in Tables F through I. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D Exceptional Conditions for guidance or see applicable Table referenced below. **Compliance Results** Calculations of Total Allowed Lighting Power (Watts) §140.7 or §141.0(b)2 02 03 04 05 08 01 06 General Hardscape Allowance <u>§140.7(c)1</u> (See Table I) R Existing Power Allowance §141.0(b)2L (See Table N) Per Specific Area OR <u>\$140.7(d)2</u> (See Table M) Per Sales Ornamental Frontage §140.7(d)2 (See Table K) Application Total Allowed Total Actual \$<u>140.7(d)2</u> (See Table L) §140.7(d)2 (See Table J) (Watts) (Watts) 1,080.73 + --- + --- + OR Cutoff Compliance (See Table G for Details) Controls Compliance (See Table H for Details) D. EXCEPTIONAL CONDITIONS This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form. E. ADDITONAL REMARKS This tableincludes remarks made by the permit applicant to the Authority Having Jurisdiction.

Registration Number:			Regis	stration Date	Time:						Registration F
CA Building Energy Efficiency Standards - 2019 Nonres	idential Compliance	e		ort Version: 2 ma Version: 1						Report	Generated: 2
STATE OF CALIFORNIA											
Outdoor Lighting											
NRCC-LTO-E										CAL	FORNIA ENE
CERTIFICATE OF COMPLIANCE											
Project Nane:	(	Covina HS Pool Rep	lacem	ent <b>Report P</b>	age:						
Project Adlress:		463 South Holler	beck /	Ave Date Pre	pared:						
I. LIGHTING POWER ALLOWANCE (per §140.)	- 6										
This table includes areas using allowance calculat Allowance is per <u>Table 140.7-A</u> while "Use it or los									01		
Indicate which allowances are being used to expan						2.000360000		t" Allow	ance (selec	t all that	apply) (sele
that quality for one of the "Use it or lose it" allowe it or lose it" allowance.			140.7-B.          General Hardscape Allowance Table I (telow)        "Use it or lose it" Allowance (select all that apply) (select Ornamental Table K          0       Per Application Table J          Sales Frontage Table K           Ornamental Table L          0, 1 & 4)             On the select all that apply (select all that apply) (select all t								
Caladata Canadata da Caladata Da Caladata	Table	14074/170 11	0 41	Table I (c	elow)	Tab	le J				
Calculatec General Hardscape Lighting Power Allo	wance per lable	140.7-A (LZ U, 1 a	& 4)								
This section does not apply to this project.										-	
Calculatec General Hardscape Lighting Power Allo			3)								
02	03	04		05		06	0		08		9
		Area W	/attag	e Allowance	(AWA)			Area W	attage Allo	wance (A	AWA)
Area Description	Surface Type	Illuminated Area (ft <sup>2</sup> )	1.00	Allowed sity (W/ft²)		llowance atts)	Perimeter Length (If)		Allowed Density (W/If)		Linear Allowance (Watts)
Pool Deck	Asphalt	16199		0.03	404	1.975	130	03	0.4		325.75
							Initial W	attage /	Allowance	or Entire	e Site (Watts
								-			ance (Watts
J. LIGHTING ALLOWANCE: PER APPLICATION											
This section does not apply to this project.											
K. LIGHTING ALLOWANCE: SALES FRONTAGE											
This section does not apply to this project.											
L. LIGHTING ALLOWANCE: ORNAMENTAL											
This section does not apply to this project.											
The sector deep not apply to this project.											
M. LIGHTING ALLOWANCE: PER SPECIFIC ARI	EA										
This section does not apply to this project.											
Registration Number:			Regis	stration Date	Time:						Registration F
CA Building Energy Efficiency Standards - 2019 Nonres	idential Compliance	e		ort Version: 2 ma Version: 1						Report	Generated: 2





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### STATE OF CALIFORNIA Outdoor Lighting NRCC-LTO-E

CENTIFICATE	F CONPLIA	NCE	
Project Name	:	Covina HS Pool Replacement Repor	t Page:
Project Addre	ss:	463 South Hollenbeck Ave Date P	repared:
N. EXISTING	CONDITI	ONS POWER ALLOWANCE (alterations only)	
This section (	does not ap	pply to this project.	
		REQUIRED CERTIFICATES OF INSTALLATION	
Additional Re	emarks. The	ade based on information provided in this document. If any selection have l ese documents must be provided to the building inspector during constructi gov/title24/2019standards/2019_compliance_documents/Nonresidential_	on and car
Yes	No	Form/Title	
٠	0	NRCI-LTO-01-E - Must be submitted for all buildings	
•	0	NRCI-LTO-02-E- Must be submitted for a lighting control system, or for a recognized for compliance.	n Energy N
P. DECLARA	TION OF F	REQUIRED CERTIFICATES OF ACCEPTANCE	
Additiona Re	emarks. Th	ade based on information provided in this document. If any selection have l ese documents must be provided to the building inspector during constructi ore information visit: http://www.energy.ca.gov/title24/attcp/providers.ht	on and mu
	Ne	Form/Title	
Yes	No	l l l l l l l l l l l l l l l l l l l	

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance Registration Date/Time: Report Version: 2019.1.003 Schema Version: rev 20200601

## STATE OF CALIFORNIA Outdoor Lighting

### NRCC-LTO-E

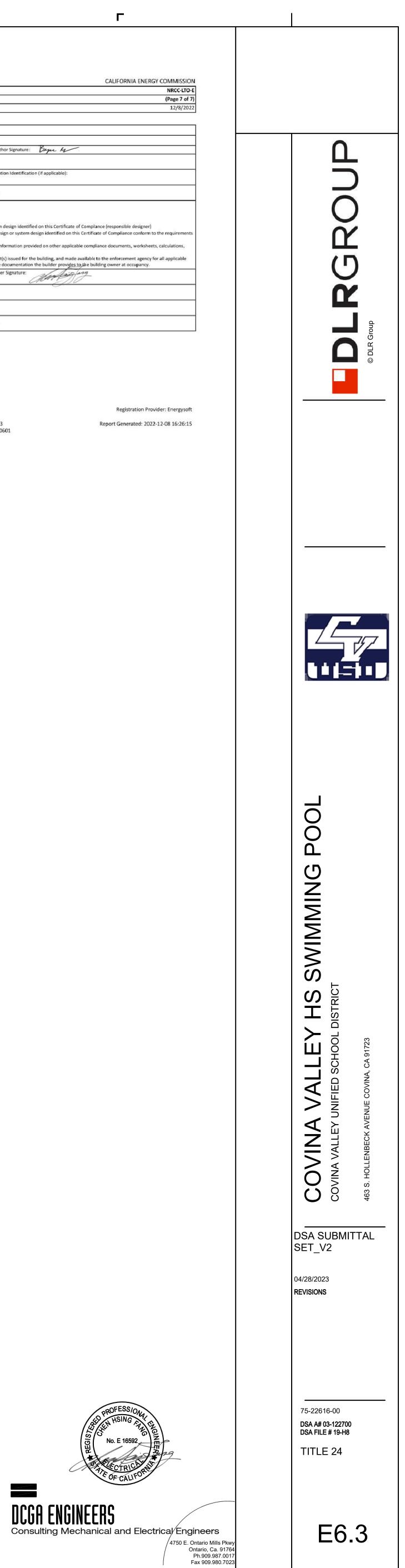
CERTIFICATE OF COMPLIAN	CE		
Project Nane:	Covina HS Pool Replacement	t Report Page:	(1
Project Address:	463 South Hollenbeck Ave	e Date Prepared:	
DOCUMENTATION AU	THOR'S DECLARATION STATEMENT		
I certify that this Certi	ficate of Compliance documentation is accurate and comple	ete.	
Documentaton Author Name:	Bryan Martinez	Documentation Author Signature: Bype By	
Company: DCGA Engineers		SignatureDate: 2022-12-08	
Address: 4750 East Ontario Mills P	?arkway	CEA/ HERS Certification Identification (if applicable):	
City/State/Zip: Ontario CA 91764		Phone: (909)987-0017	
I certify the bollowing under pe 1. The information pr 2. Iam eligible under 3. The energy feature of Title 24, Part 1 a 4. The building design plans and specifica 5. I will ensure that a inspections. I under	s and performance specifications, materials, components, and manufactured device nd Part 6 of the California Code of Regulations. Infeatures or system design features identified on this Certificate of Compliance are of tions submitted to the enforcement agency for approval with this building permit ap completed signed copy of this Certificate of Compliance shall be made available with	th the building permit(s) issued for the building, and made available to the enforcement agency for be included with the documentation the builder provides to the building owner at occupancy.	ts, calcu
Responsible Designer Name: Chen Hsing Fang		Responsible Designer Signature:	
Company: DCGA Engineers		Date Signed: 2022-12-08	
Address: 4750 E. Ontario Mills Par	kway	License: E16592	
City/State/Zip: Ontario CA 92324		Phone: (909)987-0017	

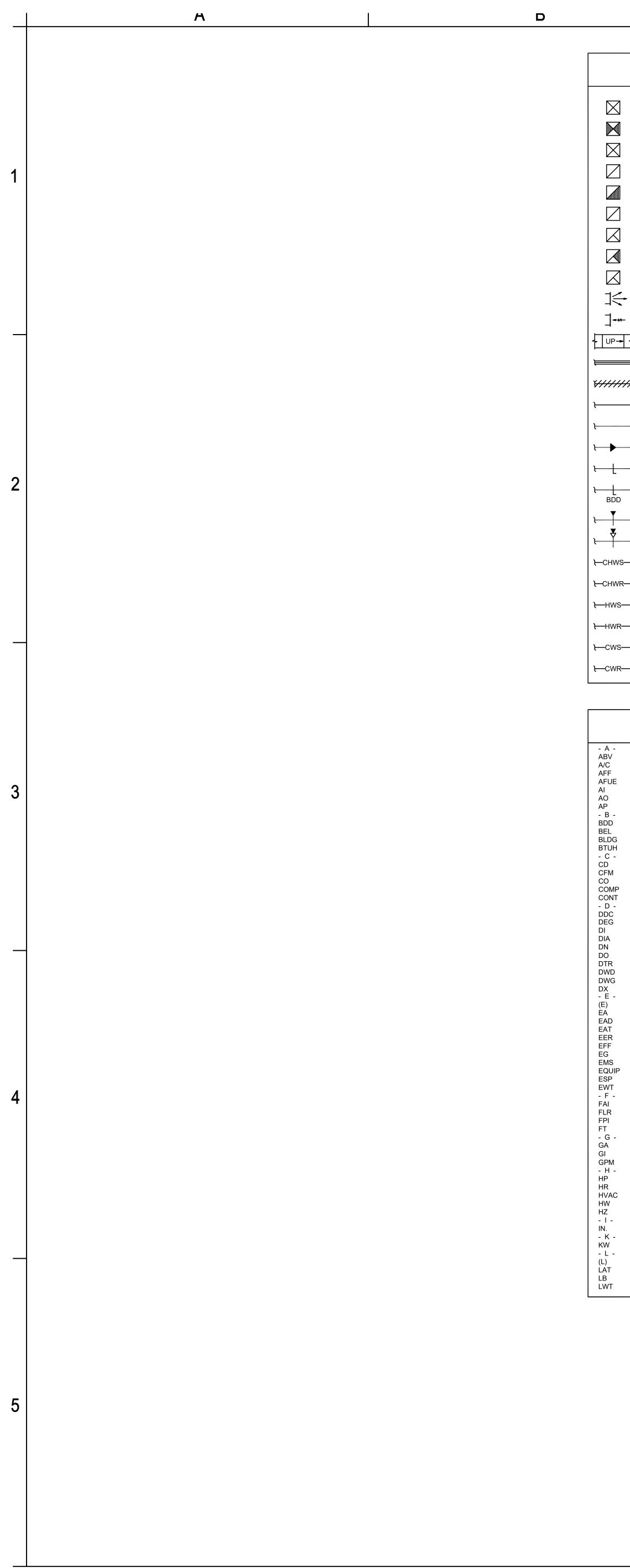
Registration Provider: Energysoft Report Generated: 2022-12-08 16:26:15 Registration Number:

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

DCGA #22039

Registration Date/Time: Report Version: 2019.1.003 Schema Version: rev 20200601





R:\CVUSD Covina HS Pool Replacement #22039\CAD Dwgs\M\22039M01.dwg 7-11-23-3:09 PM

		MECHANICAL	SYMB	OLS	
	CD	CEILING DIFFUSER - SUPPLY	$\mathbb{X}_{\mathbf{Y}}$		PRESSURE REDUCING VALVE
	SAD	SUPPLY AIR DUCT - RISER	D		ISOLATION VALVE (BALL)
	SAD	SUPPLY AIR DUCT - DROP			ISOLATION VALVE (BUTTERFLY)
	RAG	RETURN AIR GRILLE			MOTORIZED CONTROL VALVE
	RAD	RETURN AIR DUCT - RISER	N		CHECK VALVE
	RAD	RETURN AIR DUCT - DROP	• • • •		THERMOMETER
	EAG	EXHAUST AIR GRILLE	P		PRESSURE GAUGE
	EAD	EXHAUST AIR DUCT - RISER	2">	SMACI	NA DUCT STATIC PRESSURE CLASS
	EAD	EXHAUST AIR DUCT - DROP	$\bigcirc$	POD	POINT OF DEMOLITION
Þ	SWS	SIDE WALL SUPPLY GRILLE	$\bullet$	POC	POINT OF CONNECTION
-	SWR	SIDE WALL RETURN/EXHAUST GRILLE	Μ	мотс	RIZED DAMPER
		DUCT OFFSET UP			
<b>⊒</b>		DOUBLE WALL DUCT			THERMOSTAT / SENSOR. MOUNT @ +48" AFF (IF MOUNTED OVER CASEWORK OR OTHER OBSTRUCTION 46" TO TOP OF DEVICE).
<i>₩</i>		DUCT OR EQUIPMENT TO BE REMOVED	TC		TIME CLOCK
-1 -1		EXISTING DUCT TO REMAIN			DUCT SMOKE DETECTOR (MOUNT BELOW ROOF)
- <b>1</b>		DUCT TRANSITION			CARBON DIOXIDE SENSOR FOR OUTSIDE AIR MODULATION
<u> </u>	MVD	MANUAL VOLUME DAMPER			FOR OUTSIDE AIR MODULATION
-1	BDD	BACKDRAFT DAMPER	U/ 1.0 C	DL	DOOR LOUVER W/ MINIMUM FREE AREA (SQ. FT.)
–1	AFD	AUTOMATIC FIRE DAMPER		UC	UNDER CUT DOOR
–1	CSFD	COMBINATION SMOKE/FIRE DAMPER	X	- DETAIL NUMBE	
–1		CHILLED WATER SUPPLY PIPE	M-X		DETAIL DESIGNATION
–1		CHILLED WATER RETURN PIPE		- DRAW NUMBI	
–1		HOT WATER SUPPLY PIPE	<b></b>		MENT RIPTION
–1		HOT WATER RETURN PIPE		DESCR	EQUIPMENT DESIGNATION
–1		CONDENSER WATER SUPPLY PIPE		- EQUIP NUMBI	
-1		CONDENSER WATER RETURN PIPE			

### MECHANICAL ABBREVIATIONS

	- M -	
ABOVE	MA	MIXED AIR
AIR CONDITIONER	MAX	MAXIMUM
ABOVE FINISH FLOOR	MB	MACHINE BOLT
ANNUAL FUEL UTILIZATION EFFICIENCY	MBH	1000 BRITISH THERMAL UNITS PER HOUR
ANALOG INPUT	MCA	MINIMUM CIRCUIT AMPACITY
ANALOG OUTPUT	MECH	MECHANICAL
ACCESS PANEL	MFR	MANUFACTURER
	MIN	MINIMUM
BACKDRAFT DAMPER	MOCP	MAXIMUM OVERCURRENT PROTECTION
BELOW	MS	MOTOR STARTER
BUILDING	MTD	MOUNTED
BRITISH THERMAL UNITS PER HOUR	- N -	MOUNTED
BRITISH THERMAE UNITS FERTIOUR	NC	NOISE CRITERIA
CEILING DIFFUSER	NC	NORMALLY CLOSED
CUBIC FEET PER MINUTE	NG	NATURAL GAS
CARBON MONOXIDE	NIC	NOT IN CONTRACT
COMPRESSOR	NO	NORMALLY OPEN
	NPS	NORMALLY OPEN NOMINAL PIPE SIZE
CONTINUATION		
	NTS	NOT TO SCALE
DIRECT DIGITAL CONTROL	- 0 -	
DEGREE	OA	OUTSIDE AIR
	OC	ON CENTER
DIAMETER	ODP	OUTDOOR DRIP PROOF
DOWN	OPER	OPERATING
DIGITAL OUTPUT	OSA	OUTSIDE AIR
DOWN THRU ROOF	- P -	
DOUBLE WALL DUCT	P.D.	PRESSURE DROP
DRAWING	PH	PHASE
DIRECT EXPANSION	PSI	POUNDS PER SQUARE INCH
	- Q -	
EXISTING	QTY	QUANTITY
EXHAUST AIR	- R -	
EXHAUST AIR DUCT	RA	RETURN AIR
ENTERING AIR TEMPERATURE	RAD	RETURN AIR DUCT
ENERGY EFFICIENCY RATIO	RG	RETURN GRILLE
EFFICIENCY	RL	REFRIGERATION LIQUID
EXHAUST GRILLE	RPM	REVOLUTIONS PER MINUTE
ENERGY MANAGEMENT SYSTEM	RS	REFRIGERATION SUCTION
EQUIPMENT	- S -	
EXTERNAL STATIC PRESSURE	SA	SUPPLY AIR
ENTERING WATER TEMPERATURE	SAD	SUPPLY AIR DUCT
	SENS	SENSIBLE
FRESH AIR INTAKE	SF	SUPPLY FAN
FLOOR	SMS	SHEET METAL SCREW
FINS PER INCH	SOV	SHUT OFF VALVE
FOOT, FEET	S.P.	STATIC PRESSURE
	SQ	SQUARE
GAUGE	S/S	STAINLESS STEEL
GALVANIZED IRON	SWR	SIDEWALL RETURN GRILLE
GALLONS PER MINUTE	SWS	SIDEWALL SUPPLY GRILLE
	SYMS	SYMBOL
HORSEPOWER	- T -	STMDOL
HOUR	- , - TDH	TOTAL DYNAMIC HEAD
HEATING VENTILATING AND AIR CONDITIONING	TG	TRANSFER GRILLE
HOT WATER	TSTAT	THERMOSTAT
HERTZ		
TERTZ	TYP	TYPICAL
INCHES	- U -	
INCHES	UNO	UNLESS NOTED OTHERWISE
KILOWATT	UTR	UP THRU ROOF
	- V -	
	VAC	
	VFD	VARIABLE FREQUENCY DRIVE
	- W -	
	WT	WEIGHT
LEAVING WATER TEMPERATURE	W/	WITH

## EQUIPMENT 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
- 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 TRAVERSE AND LONGITUDINAL DIRECTIONS.

- A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
- B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5

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 AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 13.6.7, 13.6.8, AND 2019 CBC, SECTIONS 1617A.1.24, 1617A.1.25,
THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO T

THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PRE-APPROVED 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.

- 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.

MANDATORY ACCEPTANCE TESTING PER TITLE 24, PART 6 SHALL BE AS FOLLOWS: AN AABC AGENCY SHALL ACT AS THE ACCEPTANCE AGENT AND PERFORM WORK REQUIRED IN THE FOLLOWING ACCEPTANCE TESTS AS DESCRIBED IN CHAPTER 13 OF THE 2019 NONRESIDENTIAL COMPLIANCE MANUAL. THIS SHALL INCLUDE FILLING OUT, SIGNING, AND SUBMITTING APPLICABLE FORMS LISTED HEREIN.

NRCA-MCH-02-A - OUTDOOR AIR ACCEPTANCE
NRCA-MCH-03-A - CONSTANT VOLUME, SINGLE ZONE, UNITARY AIR CONDITION
NRCA-MCH-04-A - AIR DISTRIBUTION SYSTEMS ACCEPTANCE
NRCA-MCH-05-A - AIR ECONOMIZER CONTROLS ACCEPTANCE
NRCA-MCH-06-A - DEMAND CONTROL VENTILATION SYSTEMS ACCEPTANCE
NRCA-MCH-07-A - SUPPLY FAN VFD ACCEPTANCE
NRCA-MCH-08-A - VALVE LEAKAGE TEST
NRCA-MCH-09-A - SUPPLY WATER TEMPERATURE RESET CONTROLS ACCEP
NRCA-MCH-10-A - HYDRONIC SYSTEM VARIABLE FLOW CONTROL ACCEPTAN
NRCA-MCH-11-A - AUTOMATIC DEMAND SHED CONTROL ACCEPTANCE
NRCA-MCH-12-A - FAULT DETECTION & DIAGNOSTICS (FDD) FOR PACKAGED
NRCA-MCH-13-A - AUTOMATIC FAULT DETECTION & DIAGNOSTICS (FDD) FOR
TERMINAL UNITS ACCEPTANCE
NRCA-MCH-14-A - DISTRIBUTED ENERGY STORAGE DX AC SYSTEMS ACCEPT
NRCA-MCH-15-A - THERMAL ENERGY STORAGE (TES) SYSTEM ACCEPTANCE
NRCA-MCH-16-A - SUPPLY AIR TEMPERATURE RESET CONTROLS ACCEPTAN
NRCA-MCH-17-A - CONDENSER WATER SUPPLY TEMPERATURE RESET CONT
NRCA-MCH-18-A - ENERGY MANAGEMENT CONTROL SYSTEM ACCEPTANCE

SPECIFIC REQUIREMENTS AND ACCEPTANCE TESTING FORMS ARE AVAILABLE IN THE 2019 NONRESIDENTIAL COMPLIANCE MANUAL WHICH CAN BE DOWNLOADED FROM www.energy.ca.gov/title24/2019standards/.

### MEP COMPONENT ANCHORAGE NOTE

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 THAT 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE

POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

MS SHALL BE BRACED TO COMPLY WITH THE FORCES 3.3 AS DEFINED IN ASCE 7-16 SECTION 13.6.5., 13.6.6, , AND 1617A.1.26.

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

### ACCEPTANCE TESTING

, UNITARY AIR CONDITIONER AND HEAT PUMP SYSTEMS. PTANCE PTANCE

SET CONTROLS ACCEPTANCE V CONTROL ACCEPTANCE ROL ACCEPTANCE

(FDD) FOR PACKAGED DIRECT EXPANSION UNITS DIAGNOSTICS (FDD) FOR AIR HANDLING UNITS & ZONE

AC SYSTEMS ACCEPTANCE SYSTEM ACCEPTANCE CONTROLS ACCEPTANCE ERATURE RESET CONTROLS ACCEPTANCE MECHANICAL GENERAL NOTES

ALL DUCT INSULATION TO HAVE MINIMUM 8.0 INSTALLED R-VALUE. DUCT INSULATION SHALL HAVE FLAME SPREAD RATING NOT EXCEEDING 25, AND A SMOKE DEVELOPED RATING NOT EXCEEDING 50 WHEN TESTED IN ACCORDANCE WITH ASTM E84, NFPA 255 AND U.L. 723.

DUCT CONSTRUCTION SHALL BE GALVANIZED STEEL IN ACCORDANCE W/ CHAPTER 6 OF THE C.M.C., SUSPENSION SHALL CONFORM TO 006-2006 SMACNA STANDARDS. SEAL ALL SEAMS AND JOINTS AIR AND WATERTIGHT. FLEXIBLE ALUMINUM DUCT WORK IS NOT ALLOWED, DUCT TAPE IS NOT ALLOWED.

FLEXIBLE DUCTWORK AND DUCTLINER SHALL HAVE FLAME SPREAD RATING NOT EXCEEDING 25, AND A SMOKE DEVELOPED RATING NOT EXCEEDING 50 WHEN TESTED IN ACCORDANCE WITH ASTM E84, NFPA 255 AND U.L. 723.

FLEXIBLE DUCTS SHALL CONSIST OF AN EXTERIOR REINFORCED LAMINATED VAPOR BARRIER, 3" FIBERGLASS INSULATION (R-8.0), ENCAPSULATED SPRING STEEL WIRE HELIX AND IMPERVIOUS, SMOOTH, NON-PERFORATED INTERIOR VINYL LINER. INDIVIDUAL LENGTHS OF FLEXIBLE DUCTS SHALL CONTAIN FACTORY FABRICATED STEEL CONNECTION COLLARS.

FLEXIBLE DUCTS SHALL BE SUPPORTED AT OR NEAR MID-LENGTH WITH 2" WIDE 28 GA. STEEL HANGER COLLAR ATTACHED TO THE STRUCTURE WITH AN APPROVED DUCT HANGER. INSTALLATION SHALL MINIMIZE SHARP RADIUS TURNS OR OFFSETS. 5' MAXIMUM LENGTH CONNECTING TO TERMINAL OUTLETS. PROVIDE BACKDRAFT DAMPERS AT ALL EXHAUST AND FRESH AIR INTAKES.

THERMOSTATS SHALL BE AUTOMATIC CHANGEOVER TYPE TO SEQUENCE HEATING AND COOLING. SET POINT RANGE SHALL BE 10 DEG. F BETWEEN FULL HEATING AND FULL COOLING. ADJUSTABLE TEMPERATURE DIFFERENTIAL SHALL BE 1-1/2 DEG. F. THERMOSTAT CONTROL RANGE SHALL BE 55 DEG. F TO 85 DEG. F. CONTROLS SHALL HAVE CAPABILITY OF TERMINATING HEATING AT NO HIGHER THAN 78 DEG. F. AND COOLING AT NO LOWER THAN 70 DEG. F. FANS SHALL RUN CONTINUOUSLY DURING OCCUPIED HOURS.

LINE VOLTAGE WIRING, LINE VOLTAGE CONDUIT, UNDERGROUND LOW VOLTAGE CONDUIT, DISCONNECT SWITCHES AND FINAL CONNECTION BY ELECTRICAL CONTRACTOR. LOW VOLTAGE WIRING, ABOVE GROUND LOW VOLTAGE CONDUIT AND FINAL CONNECTION BY CONTROLS CONTRACTOR.

PROVIDE PERMANENT LABEL ON EACH A/C UNIT IDENTIFYING AREA/SPACE SERVED PER CMC 303.6. COORDINATE ROOM NUMBERS WITH OWNER. SEE 230553 FOR ADDITIONAL REQUIREMENTS. 10.

SHALL CONFORM TO CURRENT AABC SPECIFICATIONS AND STANDARDS. 11.

A PERIOD OF ONE YEAR FROM DATE OF OWNER ACCEPTANCE. PROVIDE 5 YEAR COMPRESSOR WARRANTY AND 10 YEAR HEAT EXCHANGER WARRANTY FOR ALL A/C EQUIPMENT. 12. FOR THE PURPOSE OF CLEARNESS AND LEGIBILITY, THE DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND

ALTHOUGH SIZES AND LOCATION OF EQUIPMENT IS DRAWN TO SCALE WHEREVER POSSIBLE, THE CONTRACTOR SHALL MAKE USE OF ALL DATA IN ALL OF THE CONTRACTOR DOCUMENTS AND VERIFY THIS INFORMATION BEFORE ORDERING, FABRICATING OR INSTALLING OF ANY MATERIALS. 13. CUTTING, BORING, SAWCUTTING OR BORING THROUGH NEW OR EXISTING STRUCTURAL ELEMENTS TO BE

DONE WHEN SO DETAILED IN THE DRAWINGS OR ACCEPTED BY THE ARCHITECT AND STRUCTURAL ENGINEER WITH THE APPROVAL OF DSA REPRESENTATIVE.

ALL DUCT SIZES SHOWN ARE NET INSIDE DIMENSIONS AND DO NOT ACCOUNT FOR DUCT LINER THICKNESS WHERE 14. APPLICABLE. ALL PIPE DIMENSIONS SHOWN ARE NOMINAL SIZES.

ALL BRANCH DUCTS SHALL BE PROVIDED WITH ACCESSIBLE MANUAL VOLUME DAMPERS. 15.

16. PROVIDE FLEXIBLE CONNECTIONS TO ALL HVAC EQUIPMENT (A/C UNIT, FANS, ETC.)

ALL WORK SHALL BE IN CONFORMANCE WITH TITLE 24, 2019 CALIFORNIA CODE OF REGULATIONS (CCR), 2019 17 CALIFORNIA BUILDING CODE, PART 2, TITLE 24 CCR, 2019 CALIFORNIA MECHANICAL CODE, PART 4, TITLE 24 CCR. 18. CONTRACTOR SHALL PROVIDE AS-BUILTS, CAD GENERATED AND DRAWN TO 1/8" = 1'-0" SCALE. SUBMIT 6 SETS OF HARD COPIES AND 1 ELECTRONIC COPY ON CD-ROM. CAD DRAWINGS SHALL BE AUTOCAD, LATEST VERSION.

COORDINATE REQUIREMENTS WITH OWNER. 19. VERIFY EXACT LOCATION OF THERMOSTATS AND SENSORS WITH FURNITURE PLANS AND OWNERS REPRESENTATIVE PRIOR TO INSTALLATION.

### MECHANICAL MANDATORY MEASURES

EQUIPMENT AND SYSTEMS EFFICIENCY

ANY APPLIANCE FOR WHICH THERE IS A CALIFORNIA STANDARD ESTABLISHED IN THE APPLIANCE EFFICIENCY STANDARDS SHALL COMPLY WITH THAT STANDARD.

PIPING, EXCEPT THOSE CONVEYING FLUIDS WITH A DESIGN OPERATING TEMPERATURE BETWEEN 60° F AND 105°F, OR WITHIN SPACE-CONDITIONING EQUIPMENT CERTIFIED UNDER, §110.1 OR §110.2, SHALL BE INSULATED IN ACCORDANCE WITH §120.3

ALL AIR DISTRIBUTION SYSTEM DUCTS AND PLENUMS ARE REQUIRED TO BE INSTALLED, SEALED, AND INSULATED IN ACCORDANCE WITH THE CALIFORNIA MECHANICAL CODE (CMC) SECTIONS 601, 602, 603, 604, 605 AND ANSI/SMACNA-006-2006 HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE 3RD EDITION.

VENTILATION

CONTROLS SHALL BE PROVIDED TO ALLOW OUTSIDE AIR DAMPERS OR DEVICES TO BE OPERATED AT THE VENTILATION RATES AS SPECIFIED IN THESE PLANS.

ALL GRAVITY VENTILATING SYSTEMS SHALL BE PROVIDED WITH AUTOMATIC OR READILY ACCESSIBLE MANUALLY OPERATED DAMPERS

IN ALL OPENINGS TO THE OUTSIDE. AIR BALANCING: ALL SPACE CONDITIONING AND VENTILATION SYSTEMS SHALL BE BALANCED TO THE QUANTITIES SPECIFIED IN THESE PLANS, IN ACCORDANCE WITH

THE ASSOCIATED AIR BALANCE COUNCIL (AABC) NATIONAL STANDARDS. GRAVITY OR AUTOMATIC DAMPERS INTERLOCKED

AND CLOSED ON FAN SHUTDOWN SHALL BE PROVIDED ON THE OUTSIDE AIR INTAKES AND DISCHARGES OF ALL SPACE CONDITIONING AND EXHAUST SYSTEMS.

FANS USED FOR VENTILATION SHALL OPERATE CONTINUOUSLY DURING OCCUPIED HOURS. THE MINIMUM OUTDOOR AIR LISTED OR THREE COMPLETE AIR CHANGES SHALL BE SUPPLIED TO THE ENTIRE BLDG. DURING THE ONE HOUR

PERIOD IMMEDIATELY BEFORE THE BLDG. IS NORMALLY OCCUPIED.

CONTROLLED BY AN INDIVIDUAL THERMOSTATIC CONTROL THAT RESPONDS TO THE SUPPLY OF HEATING AND COOLING ENERGY WITHIN THAT ZONE §120.2(a). WHEN USED TO CONTROL HEATING, THE THERMOSTATIC CONTROL MUST BE ADJUSTABLE DOWN TO 55°F OR LOWER. FOR COOLING, THE THERMOSTATIC CONTROL MUST BE ADJUSTABLE UP TO 85°F OR HIGHER. WHEN USED TO CONTROL BOTH HEATING AND COOLING, THE THERMOSTATIC THE CONTROL MUST BE ADJUSTABLE FROM 55°F TO 85°F AND ALSO PROVIDE A DEAD BAND OF AT LEAST 5° F WITHIN WHICH THE SUPPLY OF HEATING AND COOLING IS SHUT OFF OR REDUCED TO A MINIMUM.

EACH SPACE CONDITIONING SYSTEM SERVING BUILDING TYPES SUCH AS OFFICES AND MANUFACTURING FACILITIES (AND ALL OTHERS NOT EXPLICITLY EXEMPT FROM THE REQUIREMENTS OF SECTION 112 (D)) SHALL BE INSTALLED WITH AN AUTOMATIC TIME SWITCH WITH AN ACCESSIBLE MANUAL OVERRIDE THAT ALLOWS **OPERATION OF THE SYSTEM DURING OFF-HOURS** FOR UP TO 4 HOURS. THE TIME SWITCH SHALL BE CAPABLE OF PROGRAMMING DIFFERENT SCHEDULES FOR WEEKDAYS OR WEEKENDS; INCORPORATE AN AUTOMATIC HOLIDAY "SHUTOFF" FEATURE THAT TURNS OFF ALL LOADS FOR AT LEAST 24 HOURS, THEN RESUMES THE NORMALLY SCHEDULED OPERATION; AND HAS PROGRAM BACKUP CAPABILITIES THAT PREVENT THE LOSS OF THE DEVICES PROGRAM AND TIME SETTING FOR AT LEAST 10 HOURS IF POWER IS INTERRUPTED.

SYSTEM WITH DDC TO THE S110.2(c) ARE ALSO REQUIRED TO HAVE AUTOMATIC DEMAND SHED CONTROLS.

PROVIDED WITH CONTROLS THAT CAN AUTOMATICALLY SHUT OFF THE EQUIPMENT DURING UNOCCUPIED HOURS. WHEN SHUT DOWN, THE CONTROLS SHALL AUTOMATICALLY RESTART THE SYSTEM TO MAINTAIN A SETBACK HEATING THERMOSTAT SETPOINT, IF THE SYSTEM PROVIDES MECHANICAL HEATING AND SETUP COOLING THERMOSTAT SETPOINT, IF THE SYSTEM PROVIDES MECHANICAL COOLING.

IN DEGREES FAHRENHEIT (F) AND ADJUSTABLE

### MECHANICAL SHEET INDEX

<u>SHEET NO.</u> DESCRIPTION

M0.1 M0.2 M0.3 MECHANICAL GENERAL NOTES, SYMBOLS & ABBREVIATIONS

M0.4

M2.1

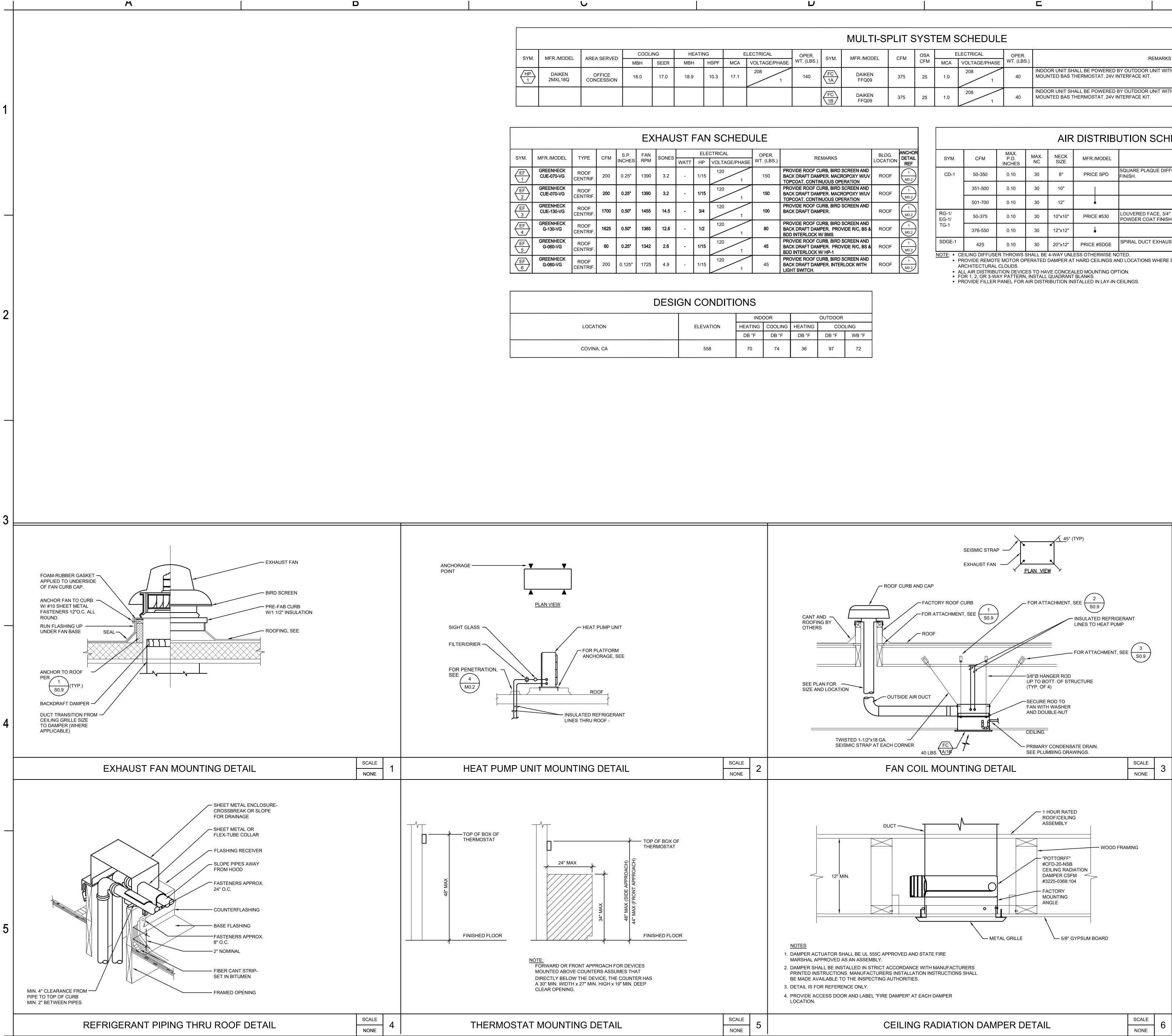
**MECHANICAL SCHEDULES & DETAIL** TITLE 24 TITLE 24

MECHANICAL DEMOLITION, REMODEL & MECHANICAL ROOF PLANS

TOTAL SHEETS:



DCGA ENGINEERS

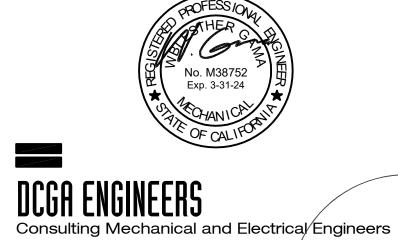


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											MULTI-S	PLIT S	SYST	EM S	SCHEDULI	Ξ			
SYM.	MFR./MODEL	AREA SERVED	COOL	ING	HEATI	ING	6	ELECTRICAL	OPER.	SYM.	MFR./MODEL	CFM	OSA	E	ELECTRICAL	OPER.	REMARKS	BLDG.	Ā
	WFR./MODEL	AREA SERVED	MBH	SEER	MBH	HSPF	MCA	VOLTAGE/PHASE	WT. (LBS.)	5 Y IVI.	WFR./WODEL	Сгім	CFM	MCA	VOLTAGE/PHASE	WT. (LBS.)			OCATION D
HP 1	DAIKEN 2MXL18Q	OFFICE CONCESSION	18.0	17.0	18.9	10.3	17.1	208 1	140	FC 1A	DAIKEN FFQ09	375	25	1.0	208 1	40	INDOOR UNIT SHALL BE POWERED BY OUTDOOR UNIT WITH UNIT POWERED CONDENSATE PUMP, WALL MOUNTED BAS THERMOSTAT. 24V INTERFACE KIT.	ROOF/ ROOM	
										FC 1B	DAIKEN FFQ09	375	25	1.0	208 1	40	INDOOR UNIT SHALL BE POWERED BY OUTDOOR UNIT WITH UNIT POWERED CONDENSATE PUMP, WALL MOUNTED BAS THERMOSTAT. 24V INTERFACE KIT.	ROOF/ ROOM	T

	EXHAUST FAN SCHEDULE													AIR DISTRIBUTION SCHEDULE							UTION SCHEDULE
SYM.	MFR./MODEL	TYPE	CFM	S.P. INCHES	FAN RPM	SONES	WATT		CTRICAL VOLTAGE/PHASE	OPER. WT. (LBS.)	REMARKS	BLDG. LOCATIO	ANCHOR DETAIL REF	-	SYM.	CFM	MAX. P.D. INCHES	MAX. NC	NECK SIZE	MFR./MODEL	REMARKS
EF 1	GREENHECK CUE-070-VG	ROOF CENTRIF.	200	0.25"	1390	3.2	-	1/15	120 1	150	PROVIDE ROOF CURB, BIRD SCREEN AND BACK DRAFT DAMPER. MACROPOXY W/UV TOPCOAT. CONTINUOUS OPERATION		1 M0.2		CD-1	50-350	0.10	30	8"	PRICE SPD	SQUARE PLAQUE DIFFUSER, STEEL CONSTRUCTION, WHITE POWDER COAT FINISH.
EF 2	GREENHECK CUE-070-VG	ROOF CENTRIF.	200	0.25"	1390	3.2	-	1/15	120 1	150	PROVIDE ROOF CURB, BIRD SCREEN AND BACK DRAFT DAMPER. MACROPOXY W/UV TOPCOAT. CONTINUOUS OPERATION		1 M0.2			351-500	0.10	30	10"		
EF 3	GREENHECK CUE-130-VG	ROOF CENTRIF.	1700	0.50"	1455	14.5	-	3/4	120 1	100	PROVIDE ROOF CURB, BIRD SCREEN AND BACK DRAFT DAMPER.	ROOF	1 M0.2		RG-1/ EG-1/	501-700 50-375	0.10	30 30	12" 10"x10"	PRICE #530	LOUVERED FACE, 3/4" BLADE SPACING, STEEL CONSTRUCTION, WHITE     POWDER COAT FINISH.
$\left( \begin{array}{c} EF \\ 4 \end{array} \right)$	GREENHECK G-130-VG	ROOF CENTRIF.	1625	0.50"	1365	12.6	-	1/2	120 1	80	PROVIDE ROOF CURB, BIRD SCREEN AND BACK DRAFT DAMPER. PROVIDE R/C, BS & BDD INTERLOCK W/ BMS		1 M0.2		TG-1	376-550	0.10	30	12"x12"	•	
EF 5	GREENHECK G-060-VG	ROOF CENTRIF.	60	0.25"	1342	2.6	-	1/15	120 1	45	PROVIDE ROOF CURB, BIRD SCREEN AND BACK DRAFT DAMPER. PROVIDE R/C, BS 8 BDD INTERLOCK W/ HP-1		1 M0.2		SDGE-1	425	0.10	30	20"x12"	PRICE #SDGE	SPIRAL DUCT EXHAUST GRILLE, ALUMINUM FINISH
$\left( \begin{array}{c} EF \\ 6 \end{array} \right)$	GREENHECK G-060-VG	ROOF CENTRIF.	200	0.125"	1725	4.9	-	1/15	120 1	45	PROVIDE ROOF CURB, BIRD SCREEN AND BACK DRAFT DAMPER. INTERLOCK WITH LIGHT SWITCH.	ROOF	1 M0.2	<u> </u>	• PR AR • ALI	OVIDE REMOT CHITECTURAL	E MOTOR OI CLOUDS. JTION DEVIC	PERATED ES TO HA	DAMPER AT	ALED MOUNTING OF	ND LOCATIONS WHERE DAMPER IS LOCATED ABOVE

DESI		ONS					
		IND	OOR	OUTDOOR			
LOCATION	ELEVATION	HEATING	COOLING	HEATING	C00	ling	
			DB °F	DB °F	DB °F	WB °	
COVINA, CA	558	70	74	36	97	97 72	



4750 E. Ontario Mills Pkwy Ontario, Ca. 91764 Ph.909.987.0017

Fax 909.980.7023

DCGA #22039

N	ANCHOR DETAIL REF
	2/3 M0.2
	2/3 M0.2
	2/3

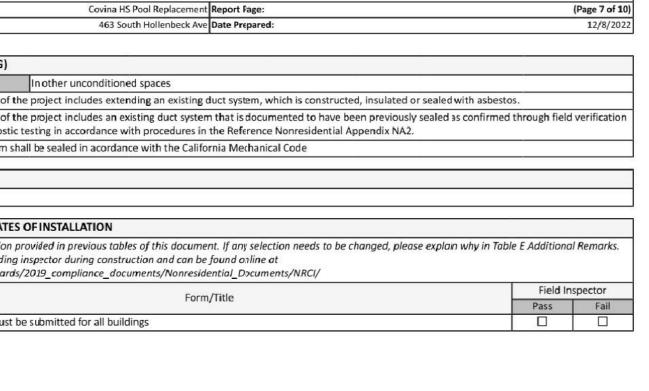


75-22616-00 DSA A# 03-122700 DSA FILE # 19-H8 MECHANICAL SCHEDULES AND DETAILS

M0.2

	<u>н</u>	D			U		U	
		STATE OF CALIFORNIA				STATE OF CALIFORNIA		
		Mechanical Systems NRCC-MCH-E CERTIFICATE OF COMPLIANCE			CALIFORNIA ENERGY COMMISSION NRCC-MCH-E	Mechanical Systems NRCC-MCH-E CERTIFICATE OF COMPLIANCE		CALIFORNIA
		path outlined in <u>§140.4</u> , or <u>§141.0(b)2</u>	for alterations.	95 x739 ix 2295	are demonstrating compliance using the prescriptive		ovina HS Pool Replacement <b>Report Page:</b> 463 South Hollenbeck Ave <b>Date Prepared:</b>	
		Project Name: Project Address:		acement Report Fage: beck Ave Date Prepared:	(Page 1 of 10) 12/8/2022	C. COMPLIANCE RESULTS		
		A. GENERAL INFORMATION         01       Project Location (city)	Covina	04 Total Conditioned Floor Area	120	Table C will indicate if the project data input into the compliance do         NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to T         01       02       03	able D., or the table indicated as not compliant for guidanc	Ible is not editable by the user. If this ce.
1		02Climate Zone03Occupancy Types Within Project:		05     Total Unconditioned Floor Are       06     ‡ of Stories (Habitable Above	Grade) 1	System Fans/ Sy	04 05 06 stem ntrols AND Ventilation AND Terminal Box Controls	Distribution AND C I' T
I		<ul> <li>☑ Office (B)</li> <li>□ Hotel/ Motel Guest Rooms (R-1)</li> </ul>	Retail (M)     School (E)	Non-refrigerated Warehouse		§110.1, §110.2,         §140.4(k)         §140.4(c), §140.4(c),         §1	10.2, \$120.1 Controls	<u>§120.3</u> , <u>§140.4(I)</u> <u>§110.2(e)2</u>
		High-Rise Residential (R-2/R-3)      B. PROJECT SCOPE	Relocatable Class Bldg (E)	Other (write in)	See Table J	(See Table F)         (See Table G)         (See Table H)         (See		See Table L)         (See Table M)           Yes         AND
				he permit application and are demonstrating	compliance using the prescriptive path outlined in		ompliance (See Table Q for Details)	COMFLIES
		01 Air System(s)	Wet	02 System Comporents	03 Dry System Components	D. EXCEPTIONAL CONDITIONS This table is auto-filled with uneditable comments because of select	ions made or data entered in tables throughout the form.	
		Heating Air System       Cooling Air System	Water Ecc     Pumps		Air Economizer     Electric Resistance Heat	E. ADDITONAL REMARKS		
		Mechanical Controls (exis or new)			<ul> <li>Fan Systems</li> <li>Ductwork (existing to remain, altered or new)</li> </ul>	This table includes remarks made by the permit applicant to the Aut	hority Having Jurisdiction.	
		or new)	Chillers Boilers		Ventilation Zonal Systems/Terminal Boxes			
				I				
		Registration Number:		Registration Date/Time:	Registration Provider: Energysoft	Registration Number:	Registration Date/Time:	Registrat
		CA Building Energy Efficiency Standards -	2019 Nonresidential Compliance	Report Version: 2019.1.003 Schema Version: rev 20200601	Report Generated: 2022-12-08 16:26:15	CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance	Report Version: 2019.1.003 Schema Version: rev 20200601	Report Generate
		STATE OF CAUFORNIA				STATE OF CALIFORNIA		
		Mechanical Systems			CALIFORNIA ENERGY COMMISSION	Mechanical Systems		CALIFORNIA
2		CERTIFICATE OF COMPLIANCE Project Name: Project Address:		acement Report Page: beck Ave Date Prepared:	NRCC-MCH-E (Page 4 of 10) 12/8/2022		ovina HS Pool Replacement Report Page: 463 South Hollenbeck Ave Date Prepared:	
			30utri Hollen		12/0/2022		Pare riepareu.	
		G. PUMPS This section does not apply to this pro	ject.			I. SYSTEN CONTROLS *Notes: Controls with a * require a note in the space below explaini EXCEPTION 1 to <u>§140.4(f)</u>	ng how compliance is achieved. EX: system 1: SA Temp Re	set: Exempt because zones complian
		H. FAN SYSTEMS & AIR ECONOMIZ		n \$140.4/c] \$140.4/a) and \$140.4/-) to t	systems. Fan systems serving only process land-	J. VENTILATION AND INDOOR AIR QUALITY		
		exempt from these requirements and System Concessions A 101	do not need to be included in Table H.	conomizer Designed per <u>§140.4(e)</u> and	systems. Fan systems serving only process loads are	This tableis used to demonstrate compliance with mandatory ventil occupancies. For alterations, only ventialtion systems being altered	within the scope of the permit application need to be docu	
		Name:Concessions A 1010102		Controls:         O5         O6           05         06	07 08		ventilation calculations on the plans, or attaching the calc	culations instead of completing this t
		Fan Name or Item Tag	Qty Maximum Design Supply Air (CFM)	flow HP Unit <sup>2</sup> Design HP	Fan Power Pressure Drop Adjustment - Table 140.4-B Device Design Airflow through Device (CEM)		Nonresidential or Hotel/Motel spaces new or altered high-rise residential dwelling units. Itural ventilation in any nonresidential or hotel/motel space	ces to meet required ventilation rate
		SF Supply	1 750	BHP 0.06	NA NA	Nonresidential and Hotel/ Motel Ventilation Systems		
		Total System Design Supply Airflo	730 The second s	Total System Design (B)HP: 0.06	Maximum System Fan Power (B)HP: 0.7	System Name Concessions A 101 System Desig	gn OA CFM 18 System Design 0	0 Air Filtration per <u>§120</u> . Provided per <u>§12</u>
		<sup>2</sup> The unit used for HP must be consistent	nizers must meet requirements of <u>§140.9(a)</u> a ent for all fans within a system.	na will be accumented on the NKCC-PKC-E ac	icument.	Operation         Airflo           08         09         10		Hotel/N 15
		I. SYSTEM CONTROLS This table is used to demonstrate com	pliance with mandatory controls in $\frac{§110.2}{9}$ and	d <u>§120.2</u> and prescriptive controls in <u>§140.4(</u>	<u>f)</u> and (n) or requirements in <u>§141.0(b)2E</u> for altered	Mechanical Ventilation Required           Space Name         Conditioned		DCV or Sensor Conti
		space conditioning systems.		05 06 07		ot item Tag Occupancy Type <sup>4</sup> Floor Area (ft <sup>2</sup> )	heads/     Min O/   '	FM <u>§120.1(d)5</u> , an
		System Name System Zonin		Shut-Off         Isolation           Controls         Zone         Demand R           5120.2(a)         Controls         §110.12         and	15120 2(b) [Temp. Reset ] 5140 4(p)	Concessions A 101 Kitchen (cooking) 105	15.8 73.5 0	0
			(ft <sup>2</sup> ) §120.2(a)or §141.0(b)2E	§120.2(e)         Controls         §110.12           NA: 7 day	<u>5140,4(1)</u>			Occ Sensor
			one <= 25,000 ft <sup>2</sup> EMCS	per 4 Hour Timer EM §120.2(e)1	Alteration	Office A :02 Office space 15	2.2 0 0	0 DCV 0cc Sensor
•		<sup>1</sup> FOOTNOTES: Gravity gas wall heaters have setbock thermostats.	s, gravity floor heaters, gravity room heaters, r	non-central electric heaters, fireplaces or deco	prative gas appliances, wood stoves are not required to	17 Total System Required Min OA CFM	18 18 Ventilat	ation for this System Complies?
3		Registration Number: CA Building Energy Efficiency Standards -		Registration Date/Time: Report Version: 2019.1.003	Registration Provider: Energysoft Report Generated: 2022-12-08 16:26:15	Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance	Registration Date/Time: Report Version: 2019.1.003	Registrat Report Generate
				Schema Version: rev 20200601			Schema Version: rev 20200601	
		state of california Mechanical Systems				state of california Mechanical Systems		CALIFORNIA
		NRCC-MCH-E CERTIFICATE OF COMPLIANCE Project Name:	Covina HS Pool Rep	acement Report Fage:	CALIFORNIA ENERGY COMMISSION NRCC-MCH-E (Page 7 of 10)	NRCC-MCH-F CERTIFICATE OF COMPLIANCE Project Nane: Co	ovina HS Pool Replacement Report Page:	CALIFORNIA
		Project Address:		beck Ave Date Prepared:	12/8/2022		463 South Hollenbeck Ave Date Prepared:	
		L. DISTRIBUTION (DUCTWORK and			3	O. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTAN		anaad plaase evoluin why in Table 5
			In other unconditioned spaces the scope of the project includes extending an existing due to scope of the project includes an existing due	existing duct system, which is constructed, in	sulated or sealed with asbestos. reviously sealed as confirmed through field verification	Selectionshave been made based on information provided in previo These documents must be provided to the building inspector during https://www.energy.ca.gov/title24/2019standards/2019_compliand	construction and can be found online at	ingea, please explain why in Table E
		10 ar	ad diagnostic testing in accordance with proce uct system shall be sealed in acordance with th	dures in the Reference Nonresidential Appen		Yes No Form		Systems To Be Field Verified
		M. COOLING TOWERS				<ul> <li>NRCA-MCH-02-A - Outdoor Air must be submitted MCH-02-A can be performed in conjunction with applicable) since testing activities overlap.</li> </ul>		
		This section does not apply to this pro	210/030			NRCA-MCH-03-A - Constant Volume Single Zone move to "Yes'. If Constant Volume Single Zone H		
		N. DECLARATION OF REQUIRED CO Selections have been made based on i These documents must be provided to	nformation provided in previous tables of this	document. If any selection needs to be chang	ed, please explain why in Table E Additional Remarks.	applicant should move this form to 'Yes".           NRCA-MCH-04-A - Air Distribution Euct Leakage		
		https://www.energy.ca.gov/title24/20	the building inspector during construction and D19standards/2019_compliance_documents/N	lonresidential_Documents/NRCI/	Field Inspector	NRCA-MCH-05-A - Air Economizer Controls      NRCA-MCH-06-A Demand Control Ventilation Sy     required to employ demand controled ventilation	stems must be submitted for all systems	
		Yes No NRCI-MCH-	01-E - Must be submitted for all buildings	Form/Title	Pass Fail	setpoints.	rior carbon dioxide (CO2) concentration	
						NRCA-MCH-07-A Supply Fan Variable Flow Contr     NRCA-MCH-08-A Valve Leakage Test		
						NRCA-MCH-09-A Supply Water Temperature Res     NRCA-MCH-10-A Hydronic System Variable Flow	Controls	
4						NRCA-MCH-11-A Automatic Demand Shed Contr      NRCA-MCH-12-A FDD for Packaged Direct Expan      NRCA-MCH-12-A Automatic EDD for Air Handling	ision Units	
•						NRCA-MCH-13-A Automatic FDD for Air Handling     NRCA-MCH-14-A Distributed Energy Storage DX     not automatically move to "Yes". If Distributed E	AC Systems Acceptance NOTE: This form does	
						scope permit applicant should move this form to		
		Registration Number:		Registration Date/Time:	Registration Provider: Energysoft	Registration Number:	Registration Date/Time:	Registrat
		CA Building Energy Efficiency Standards -		Report Version: 2019.1.003 Schema Version: rev 20200601	Report Generated: 2022-12-08 16:26:15	CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance	Report Version: 2019.1.003 Schema Version: rev 20200601	Report Generate
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v								

. COMPLIA	NCE R	ESULTS													
										l requirements compliant for			itable b	y the user. If this to	able says "DOES
01		02		03		04		05		06	i i	07		08	09
System Summary §110.1, §110.2, §140.4	AND	Pumps <u>§140.4(k)</u>	AND	Fans/ Economizers <u>§140.4(c)</u> , <u>§140.4(e)</u>	AND	System Controls §110.2, §120.2, §140.4(f)	AND	Ventilation §120.1	AND	Terminal Box Controls <u>§140.4(d)</u>	AND	Distribution <u>§120.3</u> , <u>§140.4(I)</u>	AND	Cooling Towers §110.2(e)2	Compliance Resu
See Table F)		(See Table G)		(See Table H)		(See Table I)		(See Table J)		(See Table K)		(See Table L)		(See Table M)	
Yes	AND		AND	Yes	AND	Yes	AND	Yes	AND		AND	Yes	AND		COMPLIES
		97 (F.		Mandatory	Measu	res Complian	ce (See	Table Q for D	etails)				COMF	LIES	•
EVCEDEIC		ONDITIONS													



N
CALIFORNIA ENERGY CO

### STATE OF CALIFORNIA Mechanical Systems

	wiechanical Systems	
CALIFORNIA ENERGY COMMISSION	NRCC-MCH-E	CAL
NRCC-MCH-E	CERTIFICATE OF COMPLIANCE	
(Page 2 of 10)	Project Name:	Covina HS Pool Replacement Report Page:
12/8/2022	Project Address:	463 South Hollenbeck Ave Date Prepared:
	F. HVAC SYSTEM SUMMARY (DRY 8	WET SYSTEMS)
the user. If this table says "DOES	This table is used to demonstrate comp <u>§140.4(b)</u> and <u>§140.4(k)</u> or <u>§141.0(b)2</u>	iance for mechanical equipment with mandatory requirements found in <u>§110.1</u> and <u>§110.2(a)</u> and prescriptive re for alterations.

ory system Equi	siment sizing (includes air co	onditioners, condensers, heat pumps, VR	F, furnaces and	unit neaters)		-				
01	02	03	04	05	06	07	08	09	10	11
					Equipme	01	er Mechanic <mark>§140.4</mark> (a&b		(kBtu/h)	
		Smallest Size	Smallest Size	Hea	ting Outpu	t <sup>2,3</sup>	Cooling (	Dutput <sup>2,3</sup>	Load Calculations <sup>3,4</sup>	
Name or Item Tag	Equipment Category per Tables 110.2	Equipment Type per Tables 110.2 / Title 20	Available <sup>1</sup> §140.4(a)	Per Design (kBtu/h)	Rated (kBtu/h)	Supp. Heating Output (kBtu/h)	Sensible Per Design (kBtı/h)	Rated (kBtu/h)	Total Heating Load (kBtu/h)	Tota Sensib Coolir Load (kBtu/
Concessions A 101	Unitary Heat Pumps	Air-cooled, split (1phase)	NA: Load Controls	12.78	18.9	0	16.44	16	22.43	18.4

§140.4(a). Healthcare facilities are excepted. <sup>2</sup>It is common practice to show rated output capacity on the equipment schedule. Sensible cooling output comes from specification sheet tables. <sup>3</sup> If equipment is heating only, leave cooling output and load blank. If equipment is cooling only, leave heating output and load blank.

<sup>4</sup> Authority Having Jurisdiction may ask for load calculations used for compliance per <u>§140.4(b)</u>. Dry System Equipment Efficiency (other than Package Terminal Air Conditioners (PTAC) and Package Terminal Heat

01	02	03	04	05	06	07	08	09	
			Heati	ng Mcde		Cooling Mode			
Name or Item Tag	Size Category (Btu/h)	Rating Condition (°F)	Efficiency Unit	Minimum Efficiency Recuired per Tables 110.2 / Title 20	Design Efficiency	Efficiency Unit	Minimum Efficiency Required per Tables 110.2 / Title 20	Design Effi	
Concessions A 101	<65,000		HSPF	8.2	10.3	SEER	14.0	17	

Registration Provider: Energysoft

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NRCC-MCH-E (Page 5 of 10) 12/8/2022 system 1: SA Temp Reset: Exempt because zones compliant with §140.4(d); 120.2(e)3B for all nonresidential, high-rise residential and hotel/motel

cation need to be documented in this table. In lieu of this table, the required in a spreadsheet. s, or attaching the calculations instead of completing this table. welling units. al or hotel/motel spaces to meet required ventilation rates per §120.1(c)2.

	06	07					
		Air Filtration per §120.1(c) and §141.0(b)2					
n M	0		120.1(c) (NR and I/Motel))				
	15	16					
xh. ۱	Vent per <u>§120.1(c)4</u>						
red FM	Provided per Design CFM	DCV or Sensor Controls per <u>§120.1</u> <u>§120.1(d)5</u> , and <u>§120.1(e)3</u> <sup>6</sup>					
5	0	DCV	NA: Not required per §120.1(d)3				
5	U	0cc Sensor	NA: Not required space type				
	0	DCV	NA: Not required per §120.1(d)3				
	0	Occ Sensor	NA: Not required space type				

Registration Provider: Energysoft

Report Generated: 2022-12-08 16:26:15

Yes

CALIFORNIA ENERGY COMMISSION NRCC-MCH-E (Page 8 of 10) 12/8/2022

on needs to be ts/NRCA/	e changed, please explain why in Table E .	Additional Re	emarks.
	Systems To Be Field Verified	Field In	spector
		Pass	Fail
e: (if			
tically ermit			
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does d in teh			

Registration Provider: Energysoft

Report Generated: 2022-12-08 16:26:15

Report Version: 2019.1.003 Schema Version: rev 20200601

STATE OF CALIFORNIA

Mechanical Systems

CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE Covina HS Pool Replacement Report Fage: 463 South Hollenbeck Ave Date Prepared: Project Nane: Project Address:

J. VENTILATION AND INDOOR AIR QUALITY

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

<sup>1</sup> FOOTNOFES: System CFM should include both mechanical and natural ventilation for the zone/system <sup>2</sup> Air filtration requirements apply to the following three system types per <u>\$120.1(c)1A</u> : space conditioning systems utilizing ducts to supply air to occupiable space; supply-only ventilatior systems providing outside air to occupiable space; supply side of balanced ventilation systems including heat recovery and energy recovery ventilation systems providing outside ail to occupiable space. <sup>3</sup> Uniform Mechanical Code may have more stringent ventilation requirements; the most stringent code requirement takes precedence.

<sup>4</sup> See Standards Tables 120.1-A and 120.1-B. <sup>5</sup> For lecture halls with fixed seating, the expected number of occupants shall be shall be determined in accordance with the California Building Code.

<sup>6</sup> <u>§120.2(e3</u> requires systems serving rooms that are required by <u>§130.1(c)</u> to have lighting occuparcy sensing controls to also have occupancy sensing zone controls for ventilation. Examples of spaces which require lighting occupancy sensors include offices 250ft<sup>2</sup> or smaller, multipurpose rooms less than 1,000 ft<sup>2</sup>, classrooms, conference rooms, restrooms, aisles and open areas in warehouses, library book stack aisles, corridors, stairwells, parking garages, and loading and unloading zones, unless excepted by \$130.1(c).

K. TERMINAL BOX CONTROLS This section does not apply to this project. L. DISTRIBUTION (DUCTWORK and PIPING) This table is used to show compliance with mandatory pipe insulation requirements found in <u>§120.3</u> and prescriptive requirements found in <u>§140.4(I)</u> for duct leakage testing. Duct Leakage Sealing The answers to the questions below apply to the following duct systems: Concessions A 101 Duct leakage testing triggered for these systems? No 1. No The scope of the project includes only duct systems serving healthcare facilities

12 Yes Duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system. 13 Yes The space conditioning system serves less than 5,000 ft<sup>2</sup> of conditioned floor area. 14 No The <u>combined</u> surface area of the ducts in the following locations is more than 25% of the total surface area of the entire duct system: Outdoors In a space directly under a roof that has a U-factor greater than the u-factor of the ceiling, or if the roof does not meet the requirements of §140.3(a)1B or if the roof has fixed vents or openings to the outside/ unconditioned spaces In an unconditioned crawl space

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

STATE OF CALIFORNIA

NRCC-MCH-E

Project Nane:

Project Address:

Yes

No

Registration Date/Time: Report Version: 2019.1.003 Schema Version: rev 20200601

Registration Provider: Energysoft Report Generated: 2022-12-08 16:26:15

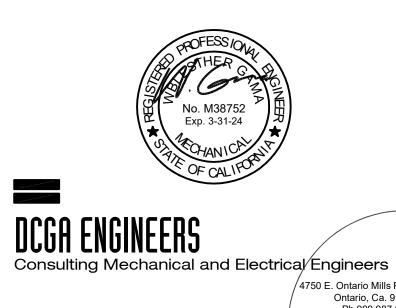
Mechanical Systems CALIFORNIA ENERGY COMM CERTIFICATE OF COMPLIANCE Covina HS Pool Replacement Report Page: 463 South Hollenbeck Ave Date Prepared: O. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE NRCA-MCH-15-A Thermal Energy Storage (TES) System Acceptance NOTE: This form does not automatically move to "Yes". If Chilled water Storage, Ice-on-Coil Internal Melt, Ice-on-Coil External melt, Ice Harvester, Brine, Ice-Slurry, Eutecti Salt, Clathrate Hydrate Slurry (CHS), Cryogenic or Encapsulated (Ice Ball) Systems are included in the scope, permit applicant should move this form to "Yes". NRCA-MCH-16-A Supply Air Temperature Reset Controls NRCA-MCH-17-A Condenser Water Temperature Reset Controls NRCA-MCH-18-A Energy Management Control Systems NRCA-MCH-19-A Occupancy Sensor Controls NRCA-MCH-20 Multi-Family Ventilation NRCA-MCH-21 Multi-Family Envelope Leakage P. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION Selectionshave been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E Additional Remarks. These documents must be completed by a HERS Rater and provided to the building inspector during construction. The final documents must be created by a HERS Provider's registry, but drafts canbe found online at https://www.energy.ca.gov/title24/2019standards/2019\_compliance\_documents/Nonresidential\_Documents/NRCV/ Field Inspector Form/Title Pass Fail NRCV-MCH-04-H Duct Leakaage Test NOTE: Must be completed by a HERS Rater NRCV-MCH-24 Enclosure Air Leakaage Worksheet NOTE: Must be completed by a HERS Rater 

NRCV-MCH-27 High-rise Resdential NOTE: Must be completed by a HERS fater NRCV-MCH-32 Local Mechanical Exhaust NOTE: Must be completed by a HERS Rater Q. MANDATORY MEASURES DOCUMENTATION LOCATION This table is used to indicate where mandatory measures are documented in the plan set or construction documentation. Plan sheet or construction document location Compliance with Mandatory Measures documented through MCH Yes Mandatory Measures Note Block M-Sheets

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

Registration Date/Time: Report Version: 2019.1.003 Schema Version: rev 20200601

Registration Provider: Energysoft Report Generated: 2022-12-08 16:26:15



### OMMISSION NRCC-MCH-E (Page 3 of 10) 12/8/2022

## equirements found in §140.4(a), 09 10 11

Efficient 17

Registration Provider: Energysoft Report Generated: 2022-12-08 16:26:15

> NRCC-MCH-E (Page 6 of 10) 12/8/2022

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DSA SUBMITTAL SET V2

04/28/2023 REVISIONS

75-22616-00 DSA A# 03-122700 DSA FILE # 19-H8 TITLE 24

M0.3

### STATE OF CALIFORNIA Mechanical Systems NRCC-MCH-E

Project I	Vane:
Project A	Address:
DOCU	MENTATION AUTHOR'S DECLA
I certif	y that this Certificate of Comp
Documen	taton Author Name: Bryan Mar
Company DCGA E	: ngineers
Address: 4750 Ea	stOntario Mills Parkway
City/State Ontario	e/Zip: CA 91764
	NSIBLE PERSON'S DECLARATION ne following under penalty of perjury, und
1.	"he information provided on this Certif
2.	lam eligible under Division 3 of the Bu
3.	The energy features and performance of Title 24, Part 1 and Part 6 of the Cali
4.	The building design features or system plans and specifications submitted to t
5.	I will ensure that a completed signed constructions. I understand that a complete
	ole Designer Name: ner Gama
Company DCGA E	: NGINEERS
Address: 4750E (	ONTARIO MILLS PKWY
City/State ONTARI	/Zip: O CA 91764

NRCC-PLB-E		1000			
CERTIFICATE	OF COMPLIAN	ICE			
Project Nam					
Project Addr	ess:				
F. DOMEST	IC HOT WA	TER EQUIPMENT			
This table is	used to dem	onstrate compliance	wit		
prescriptive	requirement	s in <u>§150.1(c)8</u> mus	t als		
Equipment	Schedule: In	dividual Systems			
01		02			
Name or Item Tag		Equipment Type			
DEL105	Electric Storage				
		.energy.ca.gov/Page nt All Occupancies	s/Se		
		Yes			
18					
19					
20					
	1 6. X	ATER DISTRIBUTION			
		onstrate compliance ited with requiremen	-		
Mandatory	Pipe Insulat	ion All Occupancies			
12		For systems serving Recirculating The first 8 ft	sys		

STATE OF CAUFORNIA Domestic Water Heating	g Syste
NRCC-PLB-E	
CERTIFICATE OF COMPLIANCE	
Project Name:	
Project Address:	

l certif	y that this Certificate of Compliance documentati
Documer	ntation Author Name: Bryan Martinez
Company DCGA E	r: Engineers
Address: 4750 Ea	ast Ontario Mills Parkway
City/Stat Ontario	e/Zip: 0 CA 91764
	NSIBLE PERSON'S DECLARATION STATEMENT he billowing under penalty of perjury, under the laws of the State of "he information provided on this Certificate of Compliance is true lam eligible under Division 3 of the Business and Professions Code "he energy features and performance specifications, materials, co of Title 24, Part 1 and Part 6 of the California Code of Regulations. "he building design features or system design features identified of plans and specifications submitted to the enforcement agency for liwill ensure that a completed signed copy of this Certificate of Co inspections. I understand that a completed signed copy of this Certificate of the California Code of the Cal
o	ble Designer Name:

Address: 4750E ONTARIO MILLS PKWY City/State/Zip: ONTARIO CA 91764

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

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	CALIFORNIA ENERGY COMMISSIO
	NRCC-MCH-
Covina HS Pool Replacement	Report Page: (Page 10 of 10
463 South Hollenbeck Ave	Date Prepared: 12/8/202
ION STATEMENT	
ce documentation is accurate and comple	te.
Z	Documentation Author Signature: Benne My
	Signature Date: 2022-12-08
	CEA/ HERS Certification Identification (if applicable):
	Phone: (909)987-0017
fications, materials, components, and manufactured device a Code of Regulations. In features identified on this Certificate of Compliance are of forcement agency for approval with this building permit ap f this Certificate of Compliance shall be made available with	h the building permit(s) issued for the building, and made available to the enforcement agency for all applicable be included with the documentation the builder provides to the building owner at occupancy.
	Responsible Designer Signature: W.G.
	Date Signed: 2022-12-08
	License: M 38752
	Phone: 909-987-0017

### STATE OF CALIFORNIA Domestic Water Heating System NRCC-PLB-E

CERTIFICATE OF COMPLIANCE

Project Nane:		Covina HS Pool Replacement Report Page:						
Project Address:		46	53 South Hollenbeck Ave Date Prepared:					
A. GENERAL INFORMATIO	N							
01 Project Location (city)	(	ovina	02 Climate					
03 Occupancy Types With	in Project (select all that apply):							
Nonresidential	High-Rise Residential		Hotel/Motel					
State Building	Healthcare Facility		Other (Write In)					
B. PROJECT SCOPE		1-						
<b>B. PROJECT SCOPE</b> This table includes domestic §150.1(c)8, and §141.0(a), or	water heating systems tha: are wi	hin the	scope of the permit application and are de Solar water heating systems are docume					
<b>B. PROJECT SCOPE</b> This table includes domestic §150.1(c)8, and §141.0(a), or	water heating systems tha: are wind the systems that the systems or alter	hin the	scope of the permit application and are de Solar water heating systems are docume					
<b>B. PROJECT SCOPE</b> This table includes domestic <u>§150.1(c)8</u> , and <u>§141.0(a)</u> , or heating systems are docume	water heating systems tha: are wi <u>\$141.0(b)2N</u> for additions or altented on the NRCC-MCH compliance	hin the	scope of the permit application and are de Solar water heating systems are docume ment.					
B. PROJECT SCOPE This table includes domestic §150.1(c)8, and §141.0(a), on heating systems are docume My project	water heating systems tha: are wi <u>§141.0(b)2N</u> for additions or altent nted on the NRCC-MCH compliance 01	hin the rations. e docum	e scope of the permit application and are de 5. Solar water heating systems are document. 02 System Type					

Registration	Number:				Registration	Date/Time:		Registration Provider: Energysoft	Registration	Number:				Registration Date/Ti	ime:
CA Building	Energy Efficie	ency Standards - 2019 I	Nonresidential (	Compliance		on: 2019.1.003 ion: rev 20200601	Rep	ort Generated: 2022-12-08 16:26:15	CA Building	Energy Efficien	cy Standards - 20	019 Nonresidential	Compliance	Report Version: 201 Schema Version: rev	
STATE OF CAU Domesti NRCC-PLB-E		Heating Syster	m				с	ALIFORNIA ENERGY COMMISSION	STATE OF CAUF Domesti NRCC-PLB-E		leating Sys	tem			
CERTIFICATE	OF COMPLIA	NCE						NRCC-PLB-E	CERTIFICATE	OF COMPLIAN	CE				
Project Nam					ol Replacement Rep			(Page 3 of 6)	Project Nan					Replacement Report Pag	
Project Addr	ess:			463 South	Hollenbeck Ave Dat	e Prepared:		12/8/2022	Project Addr	ess:			463 South Ho	ollenbeck Ave Date Prepa	ared:
	IC HOT W	ATER EQUIPMENT			<u>7</u>				G DOMIS	TIC HOT WA		TION SYSTEM			
			e with manda	tory equipment requ	lirements in <u>§110.</u>	<u>1</u> and <u>§110.3</u> . For h	igh-rise residential and hotel/notel	occupancies, compliance with					TABLE 120.	3-A PIPE INSULATIO	N THICKNESS
		nts in <u>§150.1(c)8</u> mu Individual Systems	st also be dem	nonstrated and with	<u>§150.2</u> for additio	n and alteration sc	opes.					Conductivity Ra			
01	Scheuule. I	02		03	04	05	06	5	FluidT	emperature I	Range (°F)	(Btu-in per ho per ft <sup>2</sup> per 'f		n Rating Temp ( °F)	< 1
Name or		f			Max GPM/ First	Rated Uniform		(urr)]		105-140		0.22 - 0.28		100	1.0 in or R-7.7
Item Tag		Equipment Type		Volume (gal)	Hour Rating (FHR)	Energy Factor (UEF)	Minimum Required Unifo	rm Energy Factor (UEF)*							
DEL105		Electric Storage		<=30	0 <= FHR <18	0.95	0.9	93	and the set of the set	N746532501 5658	TER CONTRO	ec.ii			
					Efficiency Databa	se System (MAEDB:	S) on the Energy Commission websit	е:			onstrate compl rements in <u>§15</u>		l requirements in <u>§110.</u>	<u>3</u> for all occupancies.	For high-rise resid
		s.energy.ca.gov/Page ent All Occupancies	es/Search/Adv	anceasearch.aspx	<i>b</i>					Yes	No	Not			Require
	• • •	Yes	No	Not Applicable			Requirement					Applicable	onstruction documents	require manufacturer	
18					Unfired storage t per <u>§110.3(c)3</u>	ank insulation shall	have Internal + External >=R-16 OR	External >=R-12. Label required	01				emperature controls ca ystems with capacity >	pable of adjusting tem	perature settings
19					New state buildir per <u>§110.3(c)5</u>	gs 60% of energy fe	or service water heating from site sc	olar energy or recovered energy	02			P	lumbing Code 613.0.		
20					Isolation valves for per §110.3(c)6	or instantaneous wa	ater heater with input rating <6.8 kB	TUH or 2 kW has been specified	03			S S	ontrols for circulating p <u>110.3(c)2</u> unless syster	ns serves healthcare fa	icility.
									04				or recirculation systems or additions or alteratio		ling units, design i
This table is	used to der		e for nonresid			quirements in <u>§120</u>	.3 and §140.5. For high-rise residen	tial and hotel/motel occupancies,	05				or recirculation systems ppendix RA4.4.9 per §1		elling units, desigr
		rated with requirement tion All Occupancies		<u>§120.3, §150.0, §15</u>	<u>50.1</u>				06				or replacement single h ommunication interface		
				ial spaces, pipe insul ng, including supply a			specified to comply with Table 120.	<u>3-A</u> (see below) per <u>§120.3</u> :							
12		The first 8 ft		old outlet piping, inc			t trap, for a nonrecirculating storage	system							
13		Insulation shall be	protected from				ment maintenance, and wind. Insul	ation exposed to weather shall							
		1													
Registration	Number:				Registration	Date/Time:		Registration Provider: Energysoft	Registration	Number:				Registration Date/Ti	ime:
CA Building	Energy Efficie	ency Standards - 2019 I	Nonresidential (	Compliance		on: 2019.1.003 ion: rev 20190401	Rep	ort Generated: 2022-12-08 16:26:15	CA Building	Energy Efficien	cy Standards - 20	019 Nonresidential	Compliance	Report Version: 201 Schema Version: rev	
STATE OF CAU	ORNIA														
Domesti NRCC-PLB-E	c Water	Heating Syster	n				с	ALIFORNIA ENERGY COMMISSION							
	OF COMPLIA	NCE						NRCC-PLB-E							
Project Nam	e:			Covina HS Po	ol Replacement Rep	ort Page:		(Page 6 of 6)							
	ess:			AC2 Couth	Hollenbeck Ave Dat	o Dreporedu		12/8/2022							

ATION STATEMENT	
ance documentation is accurate and compl	ete.
nez	Documentation Author Signature: Buyur M
	Signature Date: 2022-12-08
	CEA/ HERS Certification Identification (if applicable):
	Phone: (909)987-0017
ecifications, materials, components, and manufactured devi rnia Code of Regulations. esign features identified on this Certificate of Compliance are e enforcement agency for approval with this building permit by of this Certificate of Compliance shall be made available w	ilding design or system design identified on this Certificate of Complance (responsible designer) ces for the building design or system design identified on this Certificate of Compliance conform to the requirements e consistent with the information provided on other applicable compliance documents, worksheets, calculations, application. ith the building permit(s) issued for the building, and made available to the enforcement agency for all applicable o be included with the documentation the builder provides to the building owner at occupancy.
	Responsible Designer Signature: W.G.
	Date Signed: 2022-12-08
	License: M 38752
	Phone: 909-987-0017

Registration Date/Time: Report Version: 2019.1.003 Schema Version: rev 20190401

Registration Provider: Energysoft Report Generated: 2022-12-08 16:26:15

	C.	ALIFORNIA ENERGY	NRCC-PLB-
10.1, §110.3, §120.3, and §.	1105 and with re	auirements in \$1/1	
dential and hotel/motel occ			
ons.			(Page 1 of 6
l:			12/8/2023
Climate Zone		9	
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		and he was seen and the second second second	CO POLICIA DE LA CARACTERIA DE LA CARACT
ocumented on the NRCC-SR		and he was seen and the second second second	CO POLICIA DE LA COMPACIA DE LA COMP
ocumented on the NRCC-SR	A compliance docu	ument. Combined h	ydronic water
l are demonstrating complie ocumented on the NRCC-SR 02 n Type <sup>1,2</sup>	A compliance docu	03 vstem Components	ydronic water
ocumented on the NRCC-SR	A compliance docu	03 vstem Components	ydronic water

## STATE OF CALIFORNIA

CERTIFICATE OF COMPLIANCE			NRCC-PLB
Project Name:	Covina HS Pool Replac	ement Report Page:	(Page 2 of
Project Address:	463 South Hollenbe	eck Ave Date Prepared:	12/8/202
C. COMPLIANCE RESULTS			
Table C will indicate if the project data input i Exceptional Conditions" refer to Table D. or th			this table says "DOESNOT COMPLY" or "COMPLIES with
01	02	03	04
Domestic Hot Water Equipment	Distribution Systems	Controls	Compliance Results
Table F	Table G	Table H	compliance Results
Yes	Yes	Yes	COMPLIES
D. EXCEPTIONAL CONDITIONS		entered in tables throughout the form	1.
D. EXCEPTIONAL CONDITIONS This table is auto-filled with uneditable comm	ients because of selections made or data		
	nents because of selections made or data		
	nents because of selections made or data		

Registration Date/Time:

Report Version: 2019.1.003

Schema Version: rev 20190401

### Registration Provider: Energysoft Registration Number: Report Generated: 2022-12-08 16:26:15 CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance STATE OF CALIFORNIA Domestic Water Heating System CALIFORNIA ENERGY COMMISSION NRCC-PLB-E NRCC-PLB-E CERTIFICATE OF COMPLIANCE (Page 4 of 6) 12/8/2022 Nominal Pipe Ciameter (in) <1 1 to < 1.5 1.5 to < 4 Minimum Insulation Required 1.5 in or R-11 1.0 in or R-7.7 1.5 in or R-12.5

high-rise residential and hotel/motel occupancies, compliance is also Requirement rtification that service water-heating systems are equipped with automatic ature settings per §110.3(a). ith outlet temperature controls per §110.3(c)1 unless covered by California ce systems are capable of automatically turning off the system per units, design includes automatic pump controls per §150.1(c)8Bii, or §150.2 g units, design includes manual on/off controls as specified in <u>Reference</u> erving individual dwelling units in climate zone 1-15, design includes consive control requirements of <u>§110.12(a)</u> per <u>§150.2(b)1Hiii</u>.

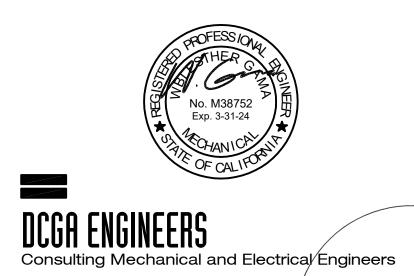
CERTIFICATE O	F COMPLIA	NCE			NRCC-PLB-
Project Nane:		Covina HS Pool Replacement	Report Page:		(Page 5 of 6
Project Addres	ss:	463 South Hollenbeck Ave	Date Prepared:		12/8/202
I. DECLARAT	TION OF R	EQUIRED CERTIFICATES OF INSTALLATION			
Additiona Re	marks. The	nde based on information provided in this document. If any selection ase documents must be provided to the building inspector during con gov/title24/2019standards/2019_compliance_documents/Nonreside	struction and can be found online at	included in To	able E.
Yes	No	Form	/Title	Field In	nspector
			Pass	Fail	
•	$\bigcirc$	NRCI-PLB-01-E - Must be submitted for all buildings			
0	•	NRCI-PLB-02-E - Must be submitted for high-rise residential and h recognized for compliance.	otel/motel central hot water distribution systems to be		
0	٠	NRCI-PLB-03-E - Must be submitted for high-rise residential and h be recognized for compliance.	otel/mo:el single dwelling unit hot water distribution systems to		
J.DECLAFAT	ION OF R	QUIRED CERTIFICATES OF ACCEPTANCE			
There are no	Certificates	of Acceptance applicable to service water heating requirements.			
K. DECLARA	TION OF F	REQUIRED CERTIFICATES OF VERIFICATION			
Additiona Re	marks. The	nde based on information provided in this document. If any selection ase documents must be completed by a HERS Rater and provided to t rafts can be found online at https://www.energy.ca.gov/title24/2019	he building inspector during construction. The final documents mus	st be created	
Yes	No	Form	/Title		spector
	-	NPCV DIR 24 U Ulab vice Decidential Control Liet Mater Distribution		Pass	Fail
	-	NRCV-PLB-21-H High-rise Residential Central Hot Water Distribution	on HERS Vernication		
0		NRCV-PLB-22-H High-rise Residential Individual Dwelling Unit Hot	Water Distribution UEDC Verification		

Registration Provider: Energysoft Report Generated: 2022-12-08 16:26:15

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

Report Version: 2019.1.003 Schema Version: rev 20190401

Registration Date/Time:



4750 E. Ontario Mills Pkwy Ontario, Ca. 91764 Ph.909.987.0017 Fax 909.980.7023

Registration Provider: Energysoft Report Generated: 2022-12-08 16:26:15

ALIFORNIA ENERGY COMMISSION
NRCC-PLB-E
(Page 5 of 6)
12/8/2022

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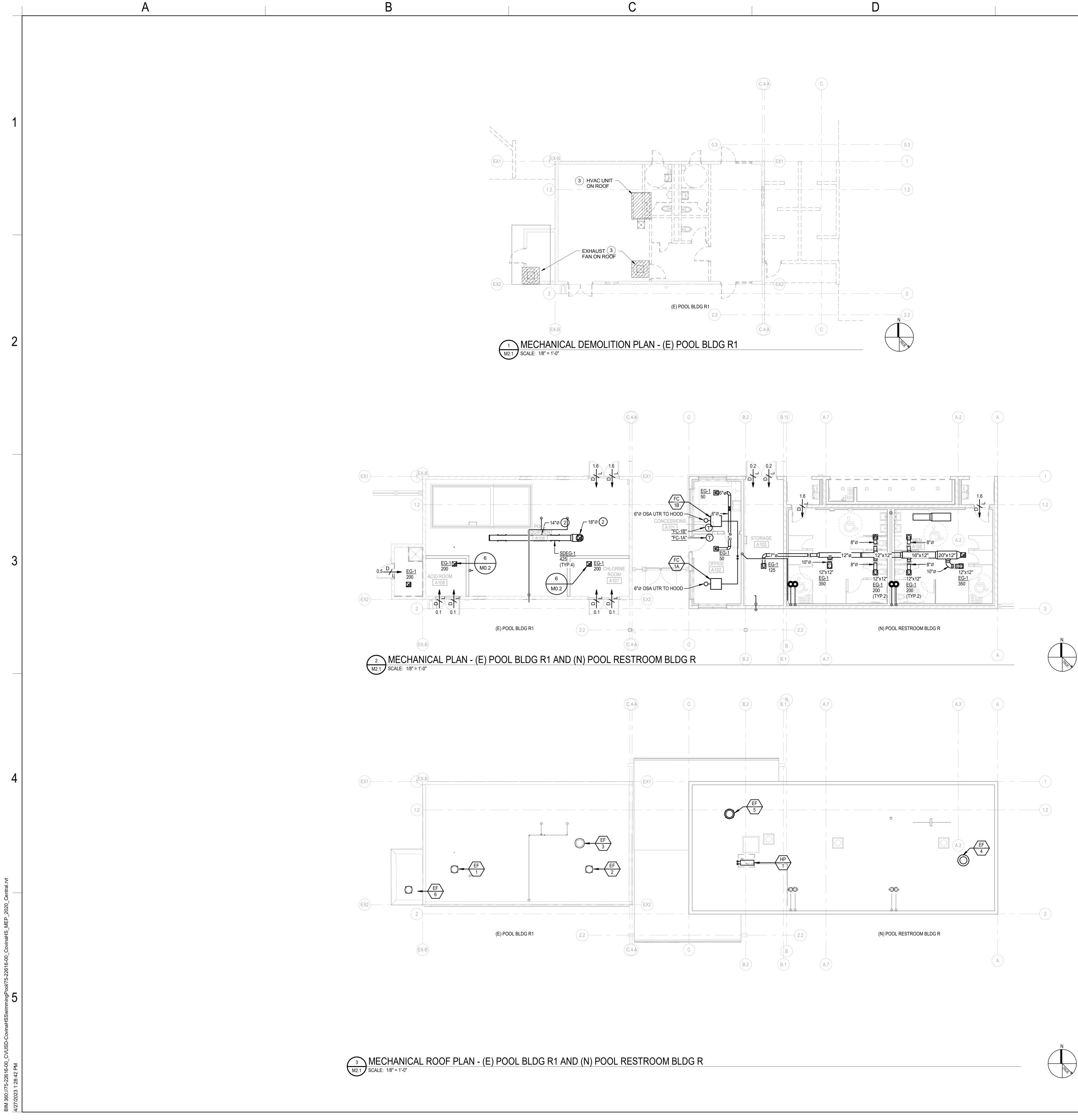


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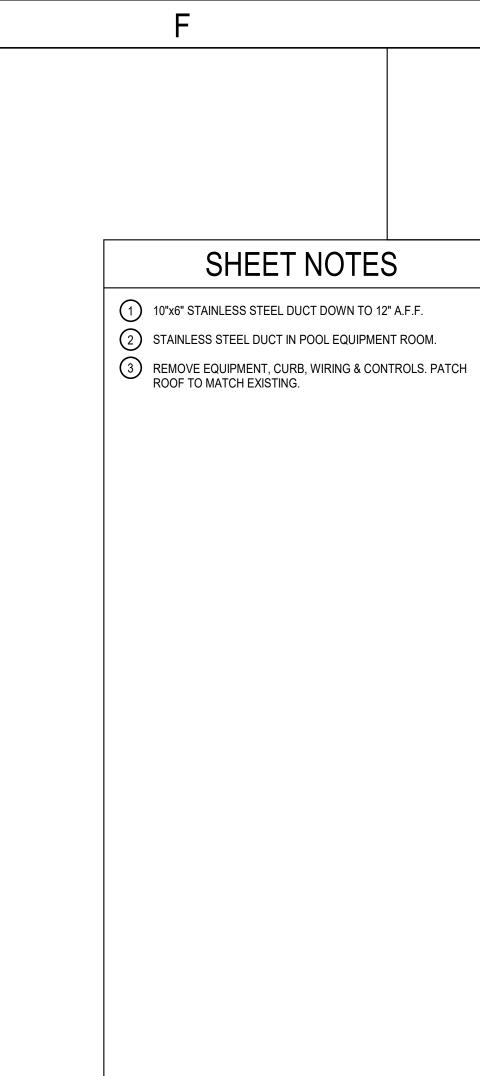
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75-22616-00 DSA A# 03-122700 DSA FILE # 19-H8

04/28/2023 REVISIONS

DSA SUBMITTAL SET\_V2

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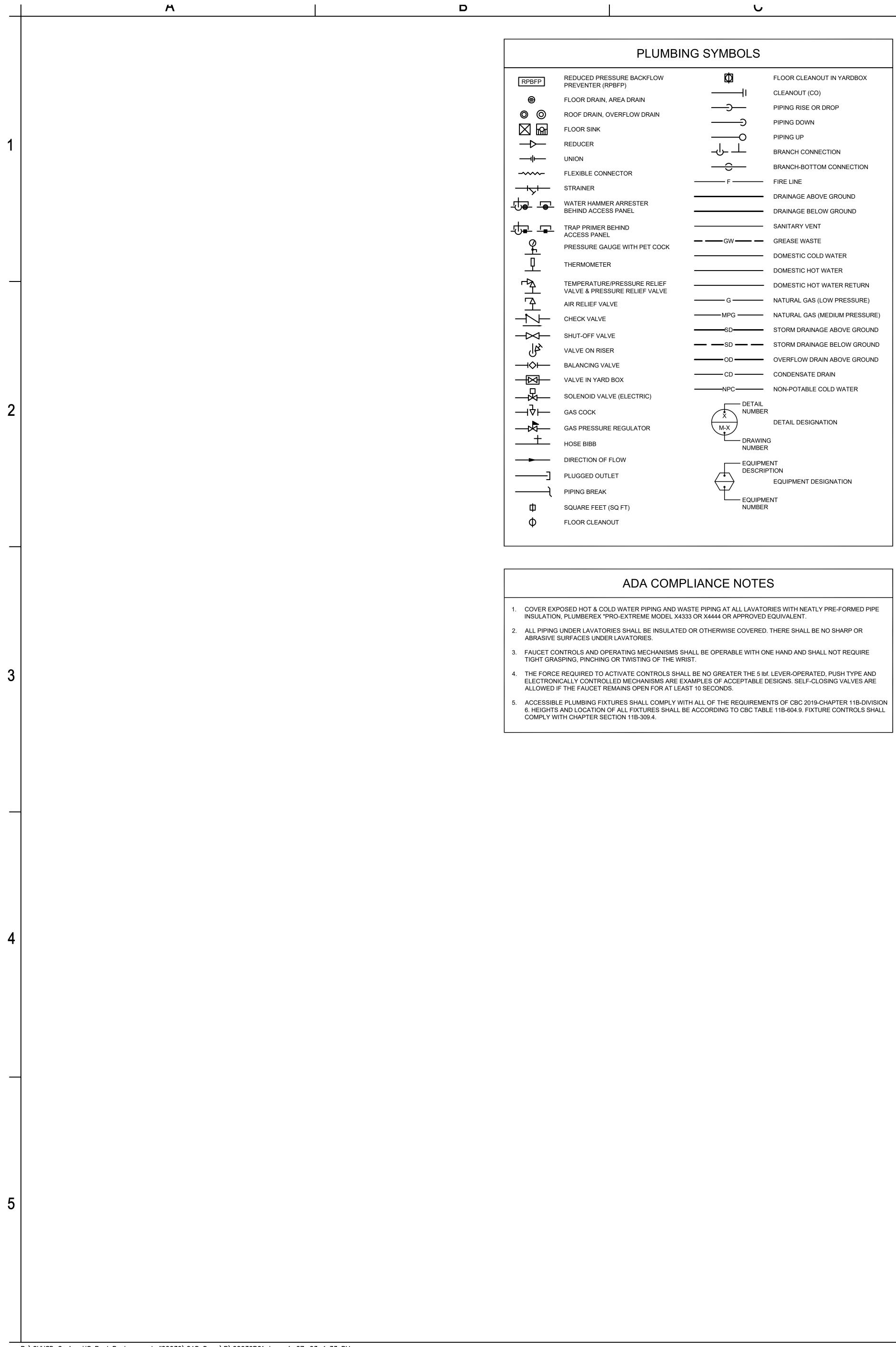


 $\checkmark$ 

REPL



SHEET NOTES



### AIR CONDITIONING (HVAC) AC ACC ACCESSIBLE AFF ABOVE FINISH FLOOR AFSR AUTOMATIC FIRE SPRINKLER RISER ACCESS PANEL AP ACID VENT AV ACID WASTE AW - B -BEH BEHIND BEL BELOW BTUH BRITISH THERMAL UNITS PER HOUR - C -CONDENSATE DRAIN CD CFH CUBIC FEET PER HOUR CFM CUBIC FEET PER MINUTE CLG CEILING CO CLEANOUT CONT CONTINUATION COTG CLEANOUT TO GRADE CU FT CUBIC FEET CW COLD WATER (DOMESTIC) - D -DN DOWN DRINKING FOUNTAIN DF DR DROP DS DOWN SPOUT DWG DRAWING - E -EXISTING (E) ELEVATION EL EQUIP EQUIPMENT ESEW EMERGENCY SHOWER EYE WASH EWC ELECTRIC WATER COOLER - F -FIRE LINE FCO FLOOR CLEANOUT FLOOR DRAIN FD FINISHED FLOOR ELEVATION FFE FLR FLOOR FLOOR SINK FS FOOT, FEET FT FIXTURE UNIT FU FLUSH VALVE FV - G -G GAS (LOW PRESSURE) GAL GALLON GC GAS COCK GALLONS PER FLUSH GPF GALLONS PER HOUR GPH GPM GALLONS PER MINUTE GPR GAS PRESSURE REGULATOR GWH GAS WATER HEATER GW GREASE WASTE - H -

- A -

ABV

ABOVE

IJ

HOSE BIBB

HORSEPOWER

HOT WATER (DOMESTIC)

HOT WATER RETURN (DOMESTIC)

HB

HP

HW

HWR

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
- 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 TRAVERSE AND LONGITUDINAL DIRECTIONS.

- A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS

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 PRE-APPROVED 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), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

MP MD PP E OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS. MP MD PP E OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM#) #0043-13.

PLUMBING	-   -	
IVAC)	ICW IW IE	INDUSTRIAL COLD WATER INDIRECT WASTE INVERT ELEVATION
RINKLER RISER	INT - K -	INTEGRAL
	KW	KILOWATT
	- L - LAV - M -	LAVATORY
	MPG	MEDIUM PRESSURE GAS
ITS PER HOUR	MTD - N -	MOUNTED
	- N - NTS	NOT TO SCALE
IR	NC	NORMALLY CLOSED
JTE	NO	NORMALLY OPEN
	- 0 - OC	ON CENTER
_	OD	OVERFLOW DRAIN
<u> </u>	- P -	
STIC)	PH PO	PHASE PLUGGED OUTLET
	POC	POINT OF CONNECTION
	PSI	POUNDS PER SQUARE INCH
	- Q - QTY	QUANTITY
	- R - RD	ROOF DRAIN
	RPM	REVOLUTIONS PER MINUTE
	- S -	
	SAN SD	SANITARY SEWER STORM DRAIN
R EYE WASH DLER	SK	SINK
	SOV	SHUT-OFF VALVE
	SQ SS	SQUARE SERVICE SINK
	- T -	
ATION	TMV	THERMOSTATIC MIXING VALVE
	TP TPL	TRAP PRIMER TRAP PRIMER LINE
	TYP	TYPICAL
	TW	
	TWR - U -	TEMPERED WATER RETURN
	UR	URINAL
	- V - V	VENT
	v VERT	
	VTR	VENT THROUGH ROOF
4700	VB - W -	VACUUM BREAKER
_ATOR	- vv - W	WASTE
	W/	
	WC WCO	
	WH	WALL HYDRANT
2)	WHA	WATER HAMMER ARRESTOR
ÓMESTIC)	- Y - YB	
	YB	YARD BOX

## EQUIPMENT ANCHORAGE NOTE

### 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 THAT 400 POUNDS OR HAS A CENTER OF MASS

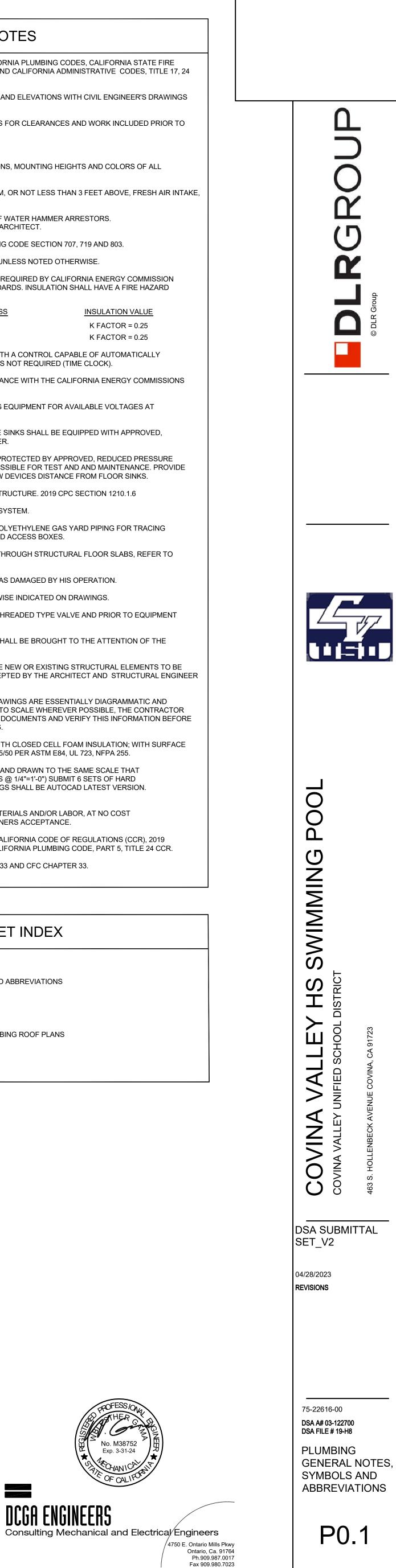
ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.

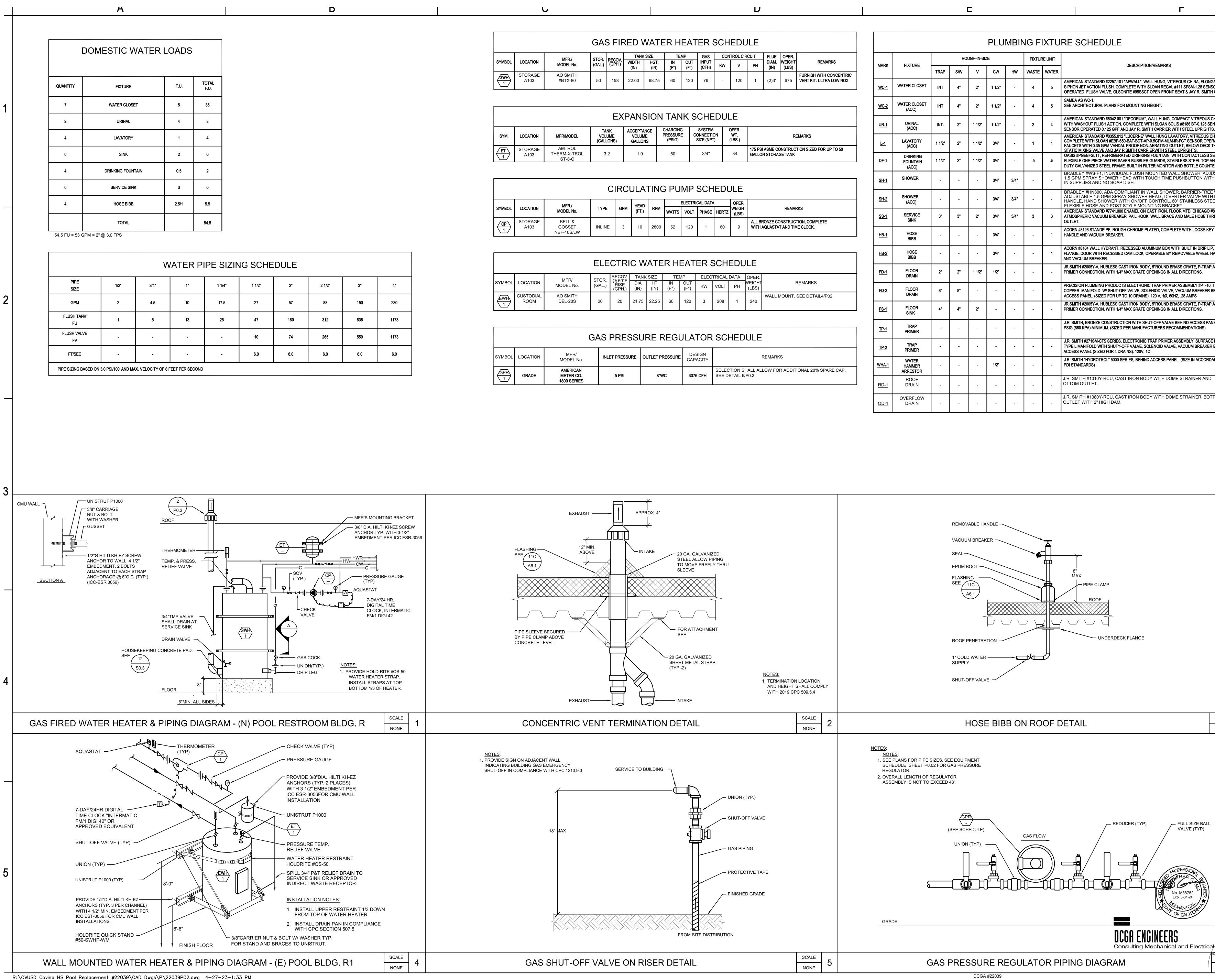
B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

		GENERAL NOTES	
1.		CORDANCE WITH THE 2019 CALIFORNIA PLUMI FICE OF THE STATE ARCHITECT, AND CALIFOR JURISDICTIONS.	
2.	CONTRACTOR SHALL VERIF PRIOR TO START OF WORK.	TY ALL UTILITIES LOCATION, SIZE AND ELEVAT	TIONS WITH CIVIL ENGINEER'S DRAWIN
3.	CONTRACTOR SHALL COOF START OF WORK.	RDINATE WITH ALL OTHER TRADES FOR CLEAF	RANCES AND WORK INCLUDED PRIOR
4.	KEEP ALL PIPING CLEAR FR	COM LOAD BEARING FOOTINGS.	
5.	REFER TO ARCHITECTURAL PLUMBING FIXTURES.	DRAWINGS FOR EXACT LOCATIONS, MOUNTI	NG HEIGHTS AND COLORS OF ALL
6.	ALL VENTS SHALL TERMINA WINDOWS, DOORS OR OTH	TE NOT LESS THAN 10 FEET FROM, OR NOT LI ER OPENINGS.	ESS THAN 3 FEET ABOVE, FRESH AIR II
7.		ESS PANELS AT ALL LOCATION OF WATER HA	
8.	CLEANOUTS SHALL BE INST	TALLED PER CALIFORNIA PLUMBING CODE SEC	CTION 707, 719 AND 803.
9.	SLOPE OF BUILDING SEWER	RS SHALL NOT BE LESS THAN 2% UNLESS NOT	ED OTHERWISE.
10.		R PIPING SHALL BE INSULATED AS REQUIRED E DING ENERGY EFFICIENCY STANDARDS. INSU IPOSITE RATING.	
	PIPE SIZE	INSULATION THICKNESS	INSULATION VALUE
	< 1" 1" <	1" 1-1/2"	K FACTOR = 0.25 K FACTOR = 0.25
11.		SYSTEMS SHALL BE EQUIPPED WITH A CONTR ATING PUMPS WHEN HOT WATER IS NOT REQU	
12.	ALL SERVICE WATER HEATI (CEC) REQUIREMENTS AND	ING EQUIPMENT TO BE IN COMPLIANCE WITH BE SO LABELED.	THE CALIFORNIA ENERGY COMMISSIO
13.	COORDINATE WITH ELECTR EQUIPMENT LOCATIONS.	RICAL TRADE PRIOR TO ORDERING EQUIPMEN	T FOR AVAILABLE VOLTAGES AT
14.		DRANTS AND JANITORIAL SERVICE SINKS SHAI IOSPHERIC TYPE VACUUM BREAKER.	LL BE EQUIPPED WITH APPROVED,
15.	BACKFLOW PREVENTION D	TO HVAC EQUIPMENT SHALL BE PROTECTED EVICES. DEVICES SHALL BE ACCESSIBLE FOR CT WASTE PIPING FOR BACKFLOW DEVICES D	TEST AND AND MAINTENANCE. PROVI
16.	NATURAL GAS LINES SHALL	NOT BE LOCATED UNDER ANY STRUCTURE. 2	2019 CPC SECTION 1210.1.6
17.	DO NOT USE METALLIC GAS	S LINES TO GROUND ELECTRICAL SYSTEM.	
18.		E COPPER WIRE ATTACHED TO POLYETHYLEN S SHALL BE IDENTIFIED IN LABELED ACCESS B	
19.	FOR LOCATION OF PIPING S DETAILS INDICATED IN STR	SLEEVES AND FLOOR OPENINGS THROUGH ST UCTURAL DRAWINGS.	RUCTURAL FLOOR SLABS, REFER TO
20.	CONTRACTOR SHALL PATC	H AND REPAIR ALL SURFACE AREAS DAMAGE	D BY HIS OPERATION.
21.	ALL VALVES, UNIONS, ETC.	TO BE LINE SIZE UNLESS OTHERWISE INDICAT	FED ON DRAWINGS.
22.	UNIONS SHALL BE PROVIDE CONNECTIONS.	ED AND INSTALLED AFTER EACH THREADED T	YPE VALVE AND PRIOR TO EQUIPMENT
23.	ANY DEVIATION FROM THE ARCHITECT AND ENGINEER	DRAWINGS OR SPECIFICATIONS SHALL BE BRO PRIOR TO INSTALLATION.	OUGHT TO THE ATTENTION OF THE
24.		TTING OR DRILLING THROUGH THE NEW OR EX AILED IN THE DRAWINGS OR ACCEPTED BY TH SA REPRESENTATIVE.	
25.	ALTHOUGH SIZES AND LOC SHALL MAKE USE OF ALL D	ARNESS AND LEGIBILITY, THE DRAWINGS ARE ATION OF EQUIPMENT IS DRAWN TO SCALE W ATA IN ALL OF THE CONTRACTOR DOCUMENT OR INSTALLING OF ANY MATERIALS.	HEREVER POSSIBLE, THE CONTRACTO
26.		E PIPING SHALL BE INSULATED WITH CLOSED FIRE HAZARD CLASSIFICATION 25/50 PER AS	
27.	CONSTRUCTION DRAWINGS	IDE AS-BUILTS, CAD GENERATED AND DRAWN S INDICATE ( I.E. ENLARGED PLANS @ 1/4"=1'-0 C COPY ON CD-ROM. CAD DRAWINGS SHALL BE ITS WITH OWNER.	") SUBMIT 6 SETS OF HARD
28.		NTY TO REPLACE ALL FAULTY MATERIALS AND OF ONE YEAR FROM DATE OF OWNERS ACCEP	
29.		CORDANCE WITH TITLE 24, 2019 CALIFORNIA C E, PART 2, TITLE 24 CCR, 2019 CALIFORNIA PL	
30.	ALL DEMOLITION WORK SH	ALL COMPLY WITH CBC CHAPTER 33 AND CFC	CHAPTER 33.

### 30. ALL DEMOLITION WORK SHALL COMPLY WITH CBC CHAPTER 33 AND CFC CHAPTER 33.

	PLUMBING SHEET INDEX
SHEET NO.	DESCRIPTION
P0.1 P0.2	PLUMBING GENERAL NOTES, SYMBOLS AND ABBREVIATIONS PLUMBING SCHEDULES AND DETAILS
PS1.1	PLUMBING SITE PLAN
P2.1	PLUMBING DEMOLITION, REMODEL & PLUMBING ROOF PLANS
TOTAL SHEETS:	4





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											<b></b>									
			GAS FIRED	WATER H	EATER	SCHE	DULE	Ξ					_			PLU	MBI	NG F	IXTL	JRE SCHEDULE
SYMBOL	LOCATION	MFR./ MODEL No.	STOR. RECOV. WIDTH (GAL.) (GPH.) (IN)		MP GAS OUT INPUT (F°) (CFH)		L CIRCUIT	DIAM. WE	oper. Veight (LBS)	REMARKS	MARK	FIXTURE		R	DUGH-IN-S	ZE		FIXTU	RE UNIT	DESCRIPTION/REMARKS
GWH 1	STORAGE A103	AO SMITH #BTX-80	50 158 22.00		120 76		20 1		F	FURNISH WITH CONCENTRIC /ENT KIT. ULTRA LOW NOX	<u>WC-1</u>	WATER CLOSET	TRAP INT	S/W 4"	V 2"	CW 1 1/2"	HW	WASTE	WATER	AMERICAN STANDARD #2257.101 "AFWALL", WALL HUNG, VITREOUS CHINA, ELC SIPHON JET ACTION FLUSH. COMPLETE WITH SLOAN REGAL #111 SFSM-1.28 SE
L						I I										1 1/2				OPERATED FLUSH VALVE, OLSONITE #95SSCT OPEN FRONT SEAT & JAY R. SM SAMEA AS WC-1.
											<u>WC-2</u>	WATER CLOSET (ACC)	INT	4"	2"	1 1/2"	-	4	5	SEE ARCHITECTURAL PLANS FOR MOUNTING HEIGHT.
				VSION TAN	SYSTE		۶.				<u>UR-1</u>	URINAL (ACC)	INT.	2"	1 1/2"	1 1/2"	-	2	4	AMERICAN STANDARD #6042.001 "DECORUM", WALL HUNG, COMPACT VITREOU WITH WASHOUT FLUSH ACTION. COMPLETE WITH SLOAN SOLIS #8186 BT-0.125 SENSOR OPERATED 0.125 GPF AND JAY R. SMITH CARRIER WITH STEEL UPRIG
SYM.	LOCATION STORAGE	MFR/MODEL	VOLUME VOL	LUME PRESSURE LONS (PSIG)	E CONNECT SIZE (NF		.)	PSI ASME CONS		DN SIZED FOR UP TO 50	<u>L-1</u>	LAVATORY (ACC)	1 1/2"	2"	1 1/2"	3/4"	-	1	1	AMERICAN STANDARD #0355.012 "LUCERNE" WALL HUNG LAVATORY, VITREOUS COMPLETE WITH SLOAN #EBF-650-BAT-BDT-AP-0.5GPM-MLM-IR-FCT SENSOR O FAUCETS WITH 0.35 GPM VANDAL PROOF NON-AERATING OUTLET, BELOW DEC STATIC MIXING VALVE AND JAY R SMITH CARRIERWITH STEEL UPRIGHTS.
$\left\langle \begin{array}{c} EI \\ 1 \end{array} \right\rangle$	A103	THERM-X-TROL ST-8-C	3.2 1	1.9 50	3/4"	34		LION STORAGE 1			<u>DF-1</u>	DRINKING FOUNTAIN (ACC)	1 1/2"	2"	1 1/2"	3/4"	-	.5	.5	OASIS #PGEBFSLTT, REFRIGERATED DRINKING FOUNTAIN, WITH CONTACTLES FLEXIBLE ONE-PIECE WATER SAVER BUBBLER GUARDS, STAINLESS STEEL TO DUTY GALVANIZED STEEL FRAME. BUILT IN FILTER MONITOR AND BOTTLE COU
										]	<u>SH-1</u>	SHOWER	-	-	-	3/4"	3/4"	-	-	BRADLEY #WS-F1, INDIVIDUAL FLUSH MOUNTED WALL SHOWER, AD 1.5 GPM SPRAY SHOWER HEAD WITH TOUCH TIME PUSHBUTTON W IN SUPPLIES AND NO SOAP DISH.
		MFR./			ELECTRICAL DAT		ER.				<u>SH-2</u>	SHOWER (ACC)		-	-	3/4"	3/4"			BRADLEY #HN300, ADA COMPLIANT IN WALL SHOWER, BARRIER-FR ADJUSTABLE 1.5 GPM SPRAY SHOWER HEAD, DIVERTER VALVE WI HANDLE, HAND SHOWER WITH ON/OFF CONTROL, 60" STAINLESS S FLEXIBLE HOSE AND POST STYLE MOUNTING BRACKET.
SYMBOL	LOCATION STORAGE	MODEL No. BELL &		FT.) RPM WATTS	VOLT PHASE		3S)	F	REMARKS		<u>SS-1</u>	SERVICE SINK	3"	3"	2"	3/4"	3/4"	3	3	AMERICAN STANDARD #7741.000 ENAMEL ON CAST IRON, FLOOR MTD, CHICAG ATMOSPHERIC VACUUM BREAKER, PAIL HOOK, WALL BRACE AND MALE HOSE OUTLET.
	A103	GOSSET NBF-10S/LW	INLINE 3	10 2800 52	120 1	60 9	9 <b>WIT</b>	TH AQUASTAT AN	AND TIME (	CLOCK.	<u>HB-1</u>	HOSE BIBB	-	-	.	3/4"	-	-	1	ACORN #8126 STANDPIPE, ROUGH CHROME PLATED, COMPLETE WITH LOOSE- HANDLE AND VACUUM BREAKER.
											<u>HB-2</u>	HOSE BIBB		-	-	3/4"	-	-	1	ACORN #8104 WALL HYDRANT, RECESSED ALUMINUM BOX WITH BUILT IN DRIP FLANGE, DOOR WITH RECESSED CAM LOCK, OPERABLE BY REMOVABLE WHEE AND VACUUM BREAKER.
				VVALER HE							<u>FD-1</u>	Floor Drain	2"	2"	1 1/2"	1/2"	-	-	-	JR SMITH #2005Y-A, HUBLESS CAST IRON BODY, 5"ROUND BRASS GRATE, P-TR PRIMER CONNECTION. WITH 1/4" MAX GRATE OPENINGS IN ALL DIRECTIONS.
SYMBOL	LOCATION CUSTODIAL	MFR/ MODEL No. AO SMITH	STOR. @ 60°F DI (GAL.) RISE (GPH.) (If		OUT (F°) KW	VOLT PH	H (LBS	3)		EE DETAIL4/P02	<u>FD-2</u>	FLOOR DRAIN	8"	8"	-	-	-	·	-	PRECISION PLUMBING PRODUCTS ELECTRONIC TRAP PRIMER ASSEMBLY #PT- COPPER MANIFOLD W/ SHUT-OFF VALVE, SOLENIOD VALVE, VACUUM BREAKE ACCESS PANEL. (SIZED FOR UP TO 10 DRAINS). 120 V, 1Ø, 60HZ, .28 AMPS
	ROOM -	DEL-20S	20 20 21.	.75 22.25 60	120 3	208 1	240	)			<u>FS-1</u>	FLOOR SINK	4"	4"	2"	-	-	-	-	JR SMITH #2005Y-A, HUBLESS CAST IRON BODY, 5"ROUND BRASS GRATE, P-TRA PRIMER CONNECTION. WITH 1/4" MAX GRATE OPENINGS IN ALL DIRECTIONS.
										]	<u>TP-1</u>	TRAP PRIMER	-	-	-	-	-	<u> </u> .		J.R. SMITH, BRONZE CONSTRUCTION WITH SHUT-OFF VALVE BEHIND ACCESS P PSIG (860 KPA) MINIMUM. (SIZED PER MANUFACTURERS RECOMMENDATIONS)
			GAS PRESS	URE REGL	1	R SCHE	DUL	Ē			<u>TP-2</u>	TRAP PRIMER	-	-		-	-	.		J.R. SMITH #271SM-CTS SERIES, ELECTRONIC TRAP PRIMER ASSEMBLY, SURFA TYPE L MANIFOLD WITH SHUTY-OFF VALVE, SOLENOID VALVE, VACUUM BREAK ACCESS PANEL (SIZED FOR 4 DRAINS). 120V, 1Ø
	LOCATION	MFR/ MODEL No. AMERICAN	INLET PRESSURE	OUTLET PRESSURE	DESIGN CAPACITY			REMARKS			<u>WHA-1</u>	WATER HAMMER	-	-	-	1/2"	-	-	-	J.R. SMITH "HYDROTROL" 5000 SERIES, BEHIND ACCESS PANEL. (SIZE IN ACCOMPDI STANDARDS)
GPR 1	GRADE	METER CO. 1800 SERIES	5 PSI	8"WC	3076 CFH		SELECTION SHALL ALLOW FOR ADDITIONAL 20% SPARE CAP. SEE DETAIL 6/P0.2					ARRESTOR ROOF DRAIN	-	-	-	-	-	-	-	J.R. SMITH #1010Y-RCU, CAST IRON BODY WITH DOME STRAINER AN OTTOM OUTLET.
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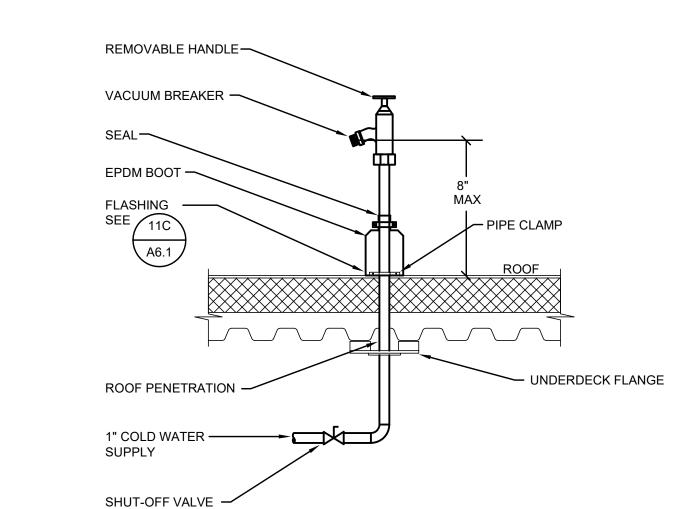
														<u> </u>						
											<b></b>									
	GAS FIRED WATER HEATER SCHEDULE															PLU	MBI	NG F	IXTU	JRE SCHEDULE
SYMBOL LOCATION	MFR./ S MODEL No. (0	GAL.) (GPH.)	REMARKS	MARK	FIXTURE		RC	)UGH-IN-SI	ZE	1	FIXTU	RE UNIT	DESCRIPTION/REMARKS							
GWH STORAGE A103	AO SMITH #BTX-80	50 158	(IN) (IN 22.00 68.7		(F°) (CFH) 120 76		120	рн (IN) 1 (2)3"	(LBS)	FURNISH WITH CONCENTRIC VENT KIT. ULTRA LOW NOX			TRAP	S/W	v	cw	нw	WASTE	WATER	
			22.00 00.1	0 00	120 10		20		010		<u>WC-1</u>	WATER CLOSET	INT	4"	2"	1 1/2"	-	4	5	AMERICAN STANDARD #2257.101 "AFWALL", WALL HUNG, VITREOUS CHINA, ELON SIPHON JET ACTION FLUSH. COMPLETE WITH SLOAN REGAL #111 SFSM-1.28 SEN OPERATED FLUSH VALVE, OLSONITE #95SSCT OPEN FRONT SEAT & JAY R. SMIT
<b>[</b>											<u>WC-2</u>	WATER CLOSET (ACC)	INT	4"	2"	1 1/2"	-	4	5	SAMEA AS WC-1. SEE ARCHITECTURAL PLANS FOR MOUNTING HEIGHT.
			PANSIO	N TAN	K SCHE						<u>UR-1</u>	URINAL (ACC)	INT.	2"	1 1/2"	1 1/2"	-	2	4	AMERICAN STANDARD #6042.001 "DECORUM", WALL HUNG, COMPACT VITREOUS WITH WASHOUT FLUSH ACTION. COMPLETE WITH SLOAN SOLIS #8186 BT-0.125 S SENSOR OPERATED 0.125 GPF AND JAY R. SMITH CARRIER WITH STEEL UPRIGH
SYM. LOCATION		TANK VOLUME (GALLONS)	ACCEPTANCE VOLUME GALLONS	PRESSURE (PSIG)	CONNECT SIZE (NP	ON WT	3.)			EMARKS	<u>L-1</u>	LAVATORY (ACC)	1 1/2"	2"	1 1/2"	3/4"	-	1	1	AMERICAN STANDARD #0355.012 "LUCERNE" WALL HUNG LAVATORY, VITREOUS COMPLETE WITH SLOAN #EBF-650-BAT-BDT-AP-0.5GPM-MLM-IR-FCT SENSOR OP FAUCETS WITH 0.35 GPM VANDAL PROOF NON-AERATING OUTLET, BELOW DECH
ET STORAGE A103	AMTROL THERM-X-TROL ST-8-C	3.2	1.9	50	3/4"	34		5 PSI ASME C ALLON STORA		CTION SIZED FOR UP TO 50	<u>DF-1</u>	DRINKING FOUNTAIN (ACC)	1 1/2"	2"	1 1/2"	3/4"	-	.5	.5	STATIC MIXING VALVE AND JAY R SMITH CARRIERWITH STEEL UPRIGHTS. OASIS #PGEBFSLTT, REFRIGERATED DRINKING FOUNTAIN, WITH CONTACTLESS FLEXIBLE ONE-PIECE WATER SAVER BUBBLER GUARDS, STAINLESS STEEL TOP DUTY GALVANIZED STEEL FRAME. BUILT IN FILTER MONITOR AND BOTTLE COUN
											<u>SH-1</u>	SHOWER		-	-	3/4"	3/4"	-	-	BRADLEY #WS-F1, INDIVIDUAL FLUSH MOUNTED WALL SHOWER, AD 1.5 GPM SPRAY SHOWER HEAD WITH TOUCH TIME PUSHBUTTON WI IN SUPPLIES AND NO SOAP DISH.
SYMBOL LOCATION	MFR./			EL	ECTRICAL DAT	A 0	PER.		REMA	PKS	<u>SH-2</u>	SHOWER (ACC)	-	-	-	3/4"	3/4"	-	-	BRADLEY #HN300, ADA COMPLIANT IN WALL SHOWER, BARRIER-FRE ADJUSTABLE 1.5 GPM SPRAY SHOWER HEAD , DIVERTER VALVE WIT HANDLE, HAND SHOWER WITH ON/OFF CONTROL, 60" STAINLESS ST FLEXIBLE HOSE AND POST STYLE MOUNTING BRACKET.
CP STORAGE	MODEL No. BELL &		(FT.)	WATTS Y	VOLT PHASE	HERTZ (L	.BS)	LL BRONZE C		TION, COMPLETE	<u>SS-1</u>	SERVICE SINK	3"	3"	2"	3/4"	3/4"	3	3	AMERICAN STANDARD #7741.000 ENAMEL ON CAST IRON, FLOOR MTD, CHICAGO ATMOSPHERIC VACUUM BREAKER, PAIL HOOK, WALL BRACE AND MALE HOSE TI OUTLET.
A103	GOSSET NBF-10S/LW	INLINE 3	10 28	00 52	120 1	60	9 W	ITH AQUAST	TAT AND TIN	ME CLOCK.	<u>HB-1</u>	HOSE BIBB	-	-	-	3/4"	-	-	1	ACORN #8126 STANDPIPE, ROUGH CHROME PLATED, COMPLETE WITH LOOSE-K HANDLE AND VACUUM BREAKER.
	r							_			<u>HB-2</u>	HOSE BIBB	-	-	-	3/4"	-	-	1	ACORN #8104 WALL HYDRANT, RECESSED ALUMINUM BOX WITH BUILT IN DRIP L FLANGE, DOOR WITH RECESSED CAM LOCK, OPERABLE BY REMOVABLE WHEEL AND VACUUM BREAKER.
			/ TANK SIZE								<u>FD-1</u>	FLOOR DRAIN	2"	2"	1 1/2"	1/2"	-	-	-	JR SMITH #2005Y-A, HUBLESS CAST IRON BODY, 5"ROUND BRASS GRATE, P-TRA PRIMER CONNECTION. WITH 1/4" MAX GRATE OPENINGS IN ALL DIRECTIONS.
SYMBOL LOCATION	MODEL No. (1 AO SMITH	STOR. @ 60°F (GAL.) RISE (GPH.)	) (IN) (IN	) (F°) (		VOLT P		S) WALL		REMARKS SEE DETAIL4/P02	<u>FD-2</u>	FLOOR DRAIN	8"	8"	-	-	-	-	-	PRECISION PLUMBING PRODUCTS ELECTRONIC TRAP PRIMER ASSEMBLY #PT-10 COPPER MANIFOLD W/ SHUT-OFF VALVE, SOLENIOD VALVE, VACUUM BREAKER ACCESS PANEL. (SIZED FOR UP TO 10 DRAINS). 120 V, 1Ø, 60HZ, .28 AMPS
ROOM	DEL-20S	20 20	21.75 22.2	25 60 <sup>2</sup>	120 3	208	1 24	10			<u>FS-1</u>	FLOOR SINK	4"	4"	2"	-	-	-	-	JR SMITH #2005Y-A, HUBLESS CAST IRON BODY, 5"ROUND BRASS GRATE, P-TRA PRIMER CONNECTION. WITH 1/4" MAX GRATE OPENINGS IN ALL DIRECTIONS.
	6	AS PRE		PECI							<u>TP-1</u>	TRAP PRIMER	-	-	-	-	-	-	-	J.R. SMITH, BRONZE CONSTRUCTION WITH SHUT-OFF VALVE BEHIND ACCESS P/ PSIG (860 KPA) MINIMUM. (SIZED PER MANUFACTURERS RECOMMENDATIONS)
	MFR/										<u>TP-2</u>	TRAP PRIMER	-	-	-	-	-	-	-	J.R. SMITH #271SM-CTS SERIES, ELECTRONIC TRAP PRIMER ASSEMBLY, SURFAC TYPE L MANIFOLD WITH SHUTY-OFF VALVE, SOLENOID VALVE, VACUUM BREAKE ACCESS PANEL (SIZED FOR 4 DRAINS). 120V, 1Ø
SYMBOL LOCATION	MODEL No.				CAPACITY		REMARKS SELECTION SHALL ALLOW FOR ADDITIONAL 20% SPARE CAP.					WATER HAMMER ARRESTOR	-	-	-	1/2"	-	-	-	J.R. SMITH "HYDROTROL" 5000 SERIES, BEHIND ACCESS PANEL. (SIZE IN ACCOR PDI STANDARDS)
GRADE GRADE	METER CO. 1800 SERIES	5 PSI		8"WC	3076 CFH	SEE DETA	IL 6/P0.2				<u>RD-1</u>	ROOF DRAIN	-	-	-	-	-	-	-	J.R. SMITH #1010Y-RCU, CAST IRON BODY WITH DOME STRAINER AND OTTOM OUTLET.
													+	+	+	+	<del> </del>	+	+	

														<u> </u>						
											<b></b>									
	GAS FIRED WATER HEATER SCHEDULE															PLU	MBI	NG F	IXTU	JRE SCHEDULE
SYMBOL LOCATION	MFR./ S MODEL No. (0	GAL.) (GPH.)	REMARKS	MARK	FIXTURE		RC	)UGH-IN-SI	ZE	1	FIXTU	RE UNIT	DESCRIPTION/REMARKS							
GWH STORAGE A103	AO SMITH #BTX-80	50 158	(IN) (IN 22.00 68.7		(F°) (CFH) 120 76		120	рн (IN) 1 (2)3"	(LBS)	FURNISH WITH CONCENTRIC VENT KIT. ULTRA LOW NOX			TRAP	S/W	v	cw	нw	WASTE	WATER	
			22.00 00.1	0 00	120 10		20		010		<u>WC-1</u>	WATER CLOSET	INT	4"	2"	1 1/2"	-	4	5	AMERICAN STANDARD #2257.101 "AFWALL", WALL HUNG, VITREOUS CHINA, ELON SIPHON JET ACTION FLUSH. COMPLETE WITH SLOAN REGAL #111 SFSM-1.28 SEN OPERATED FLUSH VALVE, OLSONITE #95SSCT OPEN FRONT SEAT & JAY R. SMIT
<b>[</b>											<u>WC-2</u>	WATER CLOSET (ACC)	INT	4"	2"	1 1/2"	-	4	5	SAMEA AS WC-1. SEE ARCHITECTURAL PLANS FOR MOUNTING HEIGHT.
			PANSIO	N TAN	K SCHE						<u>UR-1</u>	URINAL (ACC)	INT.	2"	1 1/2"	1 1/2"	-	2	4	AMERICAN STANDARD #6042.001 "DECORUM", WALL HUNG, COMPACT VITREOUS WITH WASHOUT FLUSH ACTION. COMPLETE WITH SLOAN SOLIS #8186 BT-0.125 S SENSOR OPERATED 0.125 GPF AND JAY R. SMITH CARRIER WITH STEEL UPRIGH
SYM. LOCATION		TANK VOLUME (GALLONS)	ACCEPTANCE VOLUME GALLONS	PRESSURE (PSIG)	CONNECT SIZE (NP	ON WT	3.)			EMARKS	<u>L-1</u>	LAVATORY (ACC)	1 1/2"	2"	1 1/2"	3/4"	-	1	1	AMERICAN STANDARD #0355.012 "LUCERNE" WALL HUNG LAVATORY, VITREOUS COMPLETE WITH SLOAN #EBF-650-BAT-BDT-AP-0.5GPM-MLM-IR-FCT SENSOR OP FAUCETS WITH 0.35 GPM VANDAL PROOF NON-AERATING OUTLET, BELOW DECH
ET STORAGE A103	AMTROL THERM-X-TROL ST-8-C	3.2	1.9	50	3/4"	34		5 PSI ASME C ALLON STOR4		CTION SIZED FOR UP TO 50	<u>DF-1</u>	DRINKING FOUNTAIN (ACC)	1 1/2"	2"	1 1/2"	3/4"	-	.5	.5	STATIC MIXING VALVE AND JAY R SMITH CARRIERWITH STEEL UPRIGHTS. OASIS #PGEBFSLTT, REFRIGERATED DRINKING FOUNTAIN, WITH CONTACTLESS FLEXIBLE ONE-PIECE WATER SAVER BUBBLER GUARDS, STAINLESS STEEL TOP DUTY GALVANIZED STEEL FRAME. BUILT IN FILTER MONITOR AND BOTTLE COUN
											<u>SH-1</u>	SHOWER		-	-	3/4"	3/4"	-	-	BRADLEY #WS-F1, INDIVIDUAL FLUSH MOUNTED WALL SHOWER, AD 1.5 GPM SPRAY SHOWER HEAD WITH TOUCH TIME PUSHBUTTON WI IN SUPPLIES AND NO SOAP DISH.
SYMBOL LOCATION	MFR./			EL	ECTRICAL DAT	A 0	PER.		REMA	PKS	<u>SH-2</u>	SHOWER (ACC)	-	-	-	3/4"	3/4"	-	-	BRADLEY #HN300, ADA COMPLIANT IN WALL SHOWER, BARRIER-FRE ADJUSTABLE 1.5 GPM SPRAY SHOWER HEAD , DIVERTER VALVE WIT HANDLE, HAND SHOWER WITH ON/OFF CONTROL, 60" STAINLESS ST FLEXIBLE HOSE AND POST STYLE MOUNTING BRACKET.
CP STORAGE	MODEL No. BELL &		(FT.)	WATTS Y	VOLT PHASE	HERTZ (L	.BS)	LL BRONZE C		TION, COMPLETE	<u>SS-1</u>	SERVICE SINK	3"	3"	2"	3/4"	3/4"	3	3	AMERICAN STANDARD #7741.000 ENAMEL ON CAST IRON, FLOOR MTD, CHICAGO ATMOSPHERIC VACUUM BREAKER, PAIL HOOK, WALL BRACE AND MALE HOSE TI OUTLET.
A103	GOSSET NBF-10S/LW	INLINE 3	10 28	00 52	120 1	60	9 W	ITH AQUAST	TAT AND TIN	ME CLOCK.	<u>HB-1</u>	HOSE BIBB	-	-	-	3/4"	-	-	1	ACORN #8126 STANDPIPE, ROUGH CHROME PLATED, COMPLETE WITH LOOSE-K HANDLE AND VACUUM BREAKER.
	r							_			<u>HB-2</u>	HOSE BIBB	-	-	-	3/4"	-	-	1	ACORN #8104 WALL HYDRANT, RECESSED ALUMINUM BOX WITH BUILT IN DRIP L FLANGE, DOOR WITH RECESSED CAM LOCK, OPERABLE BY REMOVABLE WHEEL AND VACUUM BREAKER.
			/ TANK SIZE								<u>FD-1</u>	FLOOR DRAIN	2"	2"	1 1/2"	1/2"	-	-	-	JR SMITH #2005Y-A, HUBLESS CAST IRON BODY, 5"ROUND BRASS GRATE, P-TRA PRIMER CONNECTION. WITH 1/4" MAX GRATE OPENINGS IN ALL DIRECTIONS.
SYMBOL LOCATION	MODEL No. (1 AO SMITH	STOR. @ 60°F (GAL.) RISE (GPH.)	) (IN) (IN	) (F°) (		VOLT P		S) WALL		REMARKS SEE DETAIL4/P02	<u>FD-2</u>	FLOOR DRAIN	8"	8"	-	-	-	-	-	PRECISION PLUMBING PRODUCTS ELECTRONIC TRAP PRIMER ASSEMBLY #PT-10 COPPER MANIFOLD W/ SHUT-OFF VALVE, SOLENIOD VALVE, VACUUM BREAKER ACCESS PANEL. (SIZED FOR UP TO 10 DRAINS). 120 V, 1Ø, 60HZ, .28 AMPS
ROOM	DEL-20S	20 20	21.75 22.2	25 60 <sup>2</sup>	120 3	208	1 24	10			<u>FS-1</u>	FLOOR SINK	4"	4"	2"	-	-	-	-	JR SMITH #2005Y-A, HUBLESS CAST IRON BODY, 5"ROUND BRASS GRATE, P-TRA PRIMER CONNECTION. WITH 1/4" MAX GRATE OPENINGS IN ALL DIRECTIONS.
	C	AS PRE		PECI							<u>TP-1</u>	TRAP PRIMER	-	-	-	-	-	-	-	J.R. SMITH, BRONZE CONSTRUCTION WITH SHUT-OFF VALVE BEHIND ACCESS P/ PSIG (860 KPA) MINIMUM. (SIZED PER MANUFACTURERS RECOMMENDATIONS)
	MFR/										<u>TP-2</u>	TRAP PRIMER	-	-	-	-	-	-	-	J.R. SMITH #271SM-CTS SERIES, ELECTRONIC TRAP PRIMER ASSEMBLY, SURFAC TYPE L MANIFOLD WITH SHUTY-OFF VALVE, SOLENOID VALVE, VACUUM BREAKE ACCESS PANEL (SIZED FOR 4 DRAINS). 120V, 1Ø
SYMBOL LOCATION	MODEL No.				CAPACITY		REMARKS SELECTION SHALL ALLOW FOR ADDITIONAL 20% SPARE CAP.					WATER HAMMER ARRESTOR	-	-	-	1/2"	-	-	-	J.R. SMITH "HYDROTROL" 5000 SERIES, BEHIND ACCESS PANEL. (SIZE IN ACCOR PDI STANDARDS)
GRADE GRADE	METER CO. 1800 SERIES	5 PSI		8"WC	3076 CFH	SEE DETA	IL 6/P0.2				<u>RD-1</u>	ROOF DRAIN	-	-	-	-	-	-	-	J.R. SMITH #1010Y-RCU, CAST IRON BODY WITH DOME STRAINER AND OTTOM OUTLET.
													+	+	+	+	<del> </del>	+	+	

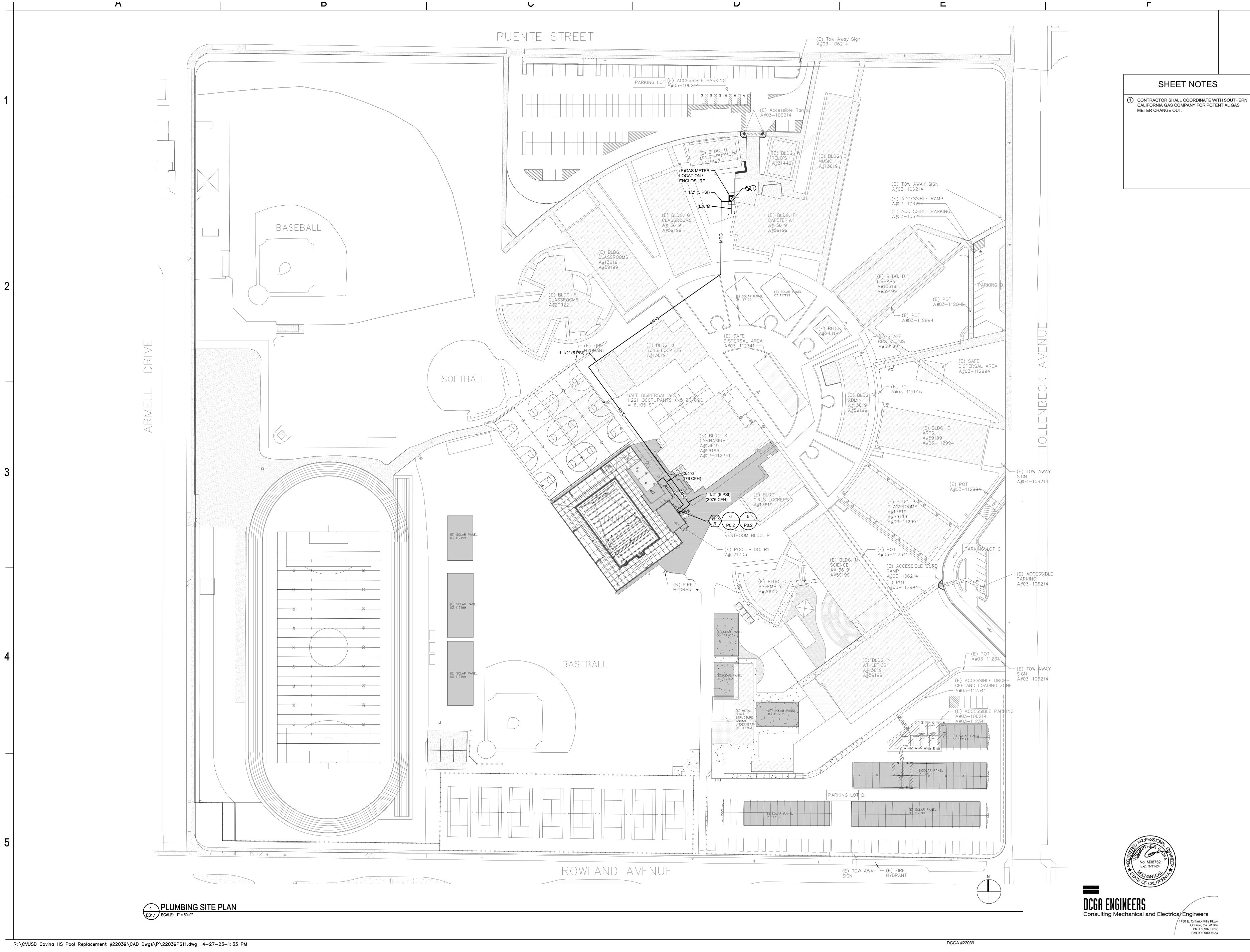
	6					U							<b>Г</b>					
		GAS FIRED		i	- <b>i</b>	i								PLU	MBI	NG F	IXTU	JRE SCHEDULE
SYMBOL LOCATIO	ON MFR./ MODEL No.	STOR. RECOV. WIDTH (GAL.) (GPH.) (IN)		MP GAS OUT INPUT (F°) (CFH)	CONTROL KW V		LUE OPER AM. WEIGH (IN) (LBS)	HT REMARKS	MARK	FIXTURE		<u> </u>	DUGH-IN-S	1	1		IRE UNIT	DESCRIPTION/REMARKS
GWH STORA 1 A103		50 158 22.00		120 76	- 120		2)3" 675	FURNISH WITH CONCENTRIC	<u>WC-1</u>	WATER CLOSET	TRAP INT	S/W 4"	2"	CW 1 1/2"	HW -	WASTE	WATER	AMERICAN STANDARD #2257.101 "AFWALL", WALL HUNG, VITREOUS CHINA, ELO SIPHON JET ACTION FLUSH. COMPLETE WITH SLOAN REGAL #111 SFSM-1.28 SE OPERATED FLUSH VALVE, OLSONITE #95SSCT OPEN FRONT SEAT & JAY R. SMI
r									<u>WC-2</u>	WATER CLOSET (ACC)	INT	4"	2"	1 1/2"	.	4	5	SAMEA AS WC-1. SEE ARCHITECTURAL PLANS FOR MOUNTING HEIGHT.
			NSION TAN						<u>UR-1</u>	URINAL (ACC)	INT.	2"	1 1/2"	1 1/2"	-	2	4	AMERICAN STANDARD #6042.001 "DECORUM", WALL HUNG, COMPACT VITREOU WITH WASHOUT FLUSH ACTION. COMPLETE WITH SLOAN SOLIS #8186 BT-0.125 SENSOR OPERATED 0.125 GPF AND JAY R. SMITH CARRIER WITH STEEL UPRIGH
SYM. LOCATI		VOLUME VOL	PTANCE CHARGING LUME PRESSURE LONS (PSIG)		ION WT.			REMARKS	<u>L-1</u>	LAVATORY (ACC)	1 1/2"	2"	1 1/2"	3/4"	-	1	1	AMERICAN STANDARD #0355.012 "LUCERNE" WALL HUNG LAVATORY, VITREOUS COMPLETE WITH SLOAN #EBF-650-BAT-BDT-AP-0.5GPM-MLM-IR-FCT SENSOR OF FAUCETS WITH 0.35 GPM VANDAL PROOF NON-AERATING OUTLET, BELOW DEC
ET STORA 1 A103		3.2 1	1.9 50	3/4"	34		ME CONSTRU TORAGE TAN	UCTION SIZED FOR UP TO 50 IK	<u>DF-1</u>	DRINKING FOUNTAIN (ACC)	1 1/2"	2"	1 1/2"	3/4"	-	.5	.5	STATIC MIXING VALVE AND JAY R SMITH CARRIERWITH STEEL UPRIGHTS. OASIS #PGEBFSLTT, REFRIGERATED DRINKING FOUNTAIN, WITH CONTACTLESS FLEXIBLE ONE-PIECE WATER SAVER BUBBLER GUARDS, STAINLESS STEEL TOF DUTY GALVANIZED STEEL FRAME. BUILT IN FILTER MONITOR AND BOTTLE COU
									<u>SH-1</u>	SHOWER	-	-	-	3/4"	3/4"	-	-	BRADLEY #WS-F1, INDIVIDUAL FLUSH MOUNTED WALL SHOWER, AD 1.5 GPM SPRAY SHOWER HEAD WITH TOUCH TIME PUSHBUTTON W IN SUPPLIES AND NO SOAP DISH.
	MFR./				A OPE	R.			<u>SH-2</u>	SHOWER (ACC)		-	-	3/4"	3/4"		-	BRADLEY #HN300, ADA COMPLIANT IN WALL SHOWER, BARRIER-FRI ADJUSTABLE 1.5 GPM SPRAY SHOWER HEAD, DIVERTER VALVE WI HANDLE, HAND SHOWER WITH ON/OFF CONTROL, 60" STAINLESS ST FLEXIBLE HOSE AND POST STYLE MOUNTING BRACKET.
SYMBOL LOCATION	MODEL No.		T.) RPM WATTS	VOLT PHASE		S)		IARKS	<u>SS-1</u>	SERVICE SINK	3"	3"	2"	3/4"	3/4"	3	3	AMERICAN STANDARD #7741.000 ENAMEL ON CAST IRON, FLOOR MTD, CHICAGO ATMOSPHERIC VACUUM BREAKER, PAIL HOOK, WALL BRACE AND MALE HOSE 1 OUTLET.
CP 1 STORA A103	GOSSET NBF-10S/LW	INLINE 3	10 2800 52	120 1	60 9	WITH AQU/	IASTAT AND 1	TIME CLOCK.	<u>HB-1</u>	HOSE BIBB	-	-	<u> </u> .	3/4"	-	-	1	ACORN #8126 STANDPIPE, ROUGH CHROME PLATED, COMPLETE WITH LOOSE- HANDLE AND VACUUM BREAKER.
									<u>HB-2</u>	HOSE BIBB		-	-	3/4"	-		1	ACORN #8104 WALL HYDRANT, RECESSED ALUMINUM BOX WITH BUILT IN DRIP FLANGE, DOOR WITH RECESSED CAM LOCK, OPERABLE BY REMOVABLE WHEE AND VACUUM BREAKER.
									<u>FD-1</u>	FLOOR DRAIN	2"	2"	1 1/2"	1/2"	-	-	-	JR SMITH #2005Y-A, HUBLESS CAST IRON BODY, 5"ROUND BRASS GRATE, P-TRA PRIMER CONNECTION. WITH 1/4" MAX GRATE OPENINGS IN ALL DIRECTIONS.
	MODEL NO.	STOR. @60°F DI (GAL.) RISE (GPH.) (II		OUT (F°) KW	VOLT PH		ALL MOUN <sup>.</sup>	REMARKS T. SEE DETAIL4/P02	<u>FD-2</u>	FLOOR DRAIN	8"	8"	-	-	-		-	PRECISION PLUMBING PRODUCTS ELECTRONIC TRAP PRIMER ASSEMBLY #PT-1 COPPER MANIFOLD W/ SHUT-OFF VALVE, SOLENIOD VALVE, VACUUM BREAKE ACCESS PANEL. (SIZED FOR UP TO 10 DRAINS). 120 V, 1Ø, 60HZ, .28 AMPS
	M DEL-20S	20 20 21.	.75 22.25 60	120 3	208 1	240			<u>FS-1</u>	FLOOR SINK	4"	4"	2"	-	-	-	-	JR SMITH #2005Y-A, HUBLESS CAST IRON BODY, 5"ROUND BRASS GRATE, P-TRA PRIMER CONNECTION. WITH 1/4" MAX GRATE OPENINGS IN ALL DIRECTIONS.
									<u>TP-1</u>	TRAP PRIMER	-	-	-	-	-	-	-	J.R. SMITH, BRONZE CONSTRUCTION WITH SHUT-OFF VALVE BEHIND ACCESS P PSIG (860 KPA) MINIMUM. (SIZED PER MANUFACTURERS RECOMMENDATIONS)
	MED/	GAS PRESS							<u>TP-2</u>	TRAP PRIMER		-	-		-	-	-	J.R. SMITH #271SM-CTS SERIES, ELECTRONIC TRAP PRIMER ASSEMBLY, SURFA TYPE L MANIFOLD WITH SHUTY-OFF VALVE, SOLENOID VALVE, VACUUM BREAKI ACCESS PANEL (SIZED FOR 4 DRAINS). 120V, 1Ø
	ON MODEL No. AMERICAN	INLET PRESSURE	OUTLET PRESSURE	CAPACITY	SELECTION		MARKS	DITIONAL 20% SPARE CAP.	WHA-1	WATER HAMMER ARRESTOR	-	-	-	1/2"	.	-	-	J.R. SMITH "HYDROTROL" 5000 SERIES, BEHIND ACCESS PANEL. (SIZE IN ACCOP PDI STANDARDS)
GPR GRAD		5 PSI	8"WC	3076 CFH	SEE DETAIL				<u>RD-1</u>	ROOF	-	-	-	-	-	-	-	J.R. SMITH #1010Y-RCU, CAST IRON BODY WITH DOME STRAINER AN OTTOM OUTLET.
													+			+		

U							U						F						
	(	GAS FIRED	WATER H	EATER	SCHE	DUL	.E								PLU	MBI	NG F	IXTL	JRE SCHEDULE
SYMBOL LOCATION	LOCATION MFR./ STOR. RECOV. TANK SIZE TEMP GAS CONTROL CIRCUIT FLUE OPER. (CAL) (GPH) WIDTH HGT. IN OUT INPUT JULY DIAM. WEIGHT REMARKS												RC	UGH-IN-S	ZE		FIXTU	IRE UNIT	
	AO SMITH	(GAL.) (GPH.) WIDTH (IN)	(IN) (F°)	(F°) (CFH)	кw	V	PH (IN			MARK	FIXTURE	TRAP	s/w	v	cw	нพ	WASTE	WATER	DESCRIPTION/REMARKS
GWH 1 STORAGE A103	#BTX-80	50 158 22.00	0 68.75 60	120 76	-	120	1 (2):	3" 675	VENT KIT. ULTRA LOW NOX	<u>WC-1</u>	WATER CLOSET	INT	4"	2"	1 1/2"	-	4	5	AMERICAN STANDARD #2257.101 "AFWALL", WALL HUNG, VITREOUS CHINA, ELC SIPHON JET ACTION FLUSH. COMPLETE WITH SLOAN REGAL #111 SFSM-1.28 SE OPERATED FLUSH VALVE, OLSONITE #95SSCT OPEN FRONT SEAT & JAY R. SM
<b></b>										<u>WC-2</u>	WATER CLOSET (ACC)	INT	4"	2"	1 1/2"	-	4	5	SAMEA AS WC-1. SEE ARCHITECTURAL PLANS FOR MOUNTING HEIGHT.
			NSION TAN							<u>UR-1</u>	URINAL (ACC)	INT.	2"	1 1/2"	1 1/2"	-	2	4	AMERICAN STANDARD #6042.001 "DECORUM", WALL HUNG, COMPACT VITREOU WITH WASHOUT FLUSH ACTION. COMPLETE WITH SLOAN SOLIS #8186 BT-0.125 SENSOR OPERATED 0.125 GPF AND JAY R. SMITH CARRIER WITH STEEL UPRIGH
SYM. LOCATION	MFR/MODEL	VOLUME VOL	LUME PRESSURE LONS (PSIG)		'ION   W'	/Т. 3S.)			REMARKS CTION SIZED FOR UP TO 50	<u>L-1</u>	LAVATORY (ACC)	1 1/2"	2"	1 1/2"	3/4"	-	1	1	AMERICAN STANDARD #0355.012 "LUCERNE" WALL HUNG LAVATORY, VITREOUS COMPLETE WITH SLOAN #EBF-650-BAT-BDT-AP-0.5GPM-MLM-IR-FCT SENSOR OF FAUCETS WITH 0.35 GPM VANDAL PROOF NON-AERATING OUTLET, BELOW DEC
ET STORAGE A103	THERM-X-TROL ST-8-C	3.2 1	1.9 50	3/4"	34		GALLON STO			<u>DF-1</u>	DRINKING FOUNTAIN (ACC)	1 1/2"	2"	1 1/2"	3/4"	-	.5	.5	STATIC MIXING VALVE AND JAY R SMITH CARRIERWITH STEEL UPRIGHTS. OASIS #PGEBFSLTT, REFRIGERATED DRINKING FOUNTAIN, WITH CONTACTLESS FLEXIBLE ONE-PIECE WATER SAVER BUBBLER GUARDS, STAINLESS STEEL TOF DUTY GALVANIZED STEEL FRAME. BUILT IN FILTER MONITOR AND BOTTLE COU
[										<u>SH-1</u>	SHOWER	-	-	-	3/4"	3/4"	-	-	BRADLEY #WS-F1, INDIVIDUAL FLUSH MOUNTED WALL SHOWER, AD 1.5 GPM SPRAY SHOWER HEAD WITH TOUCH TIME PUSHBUTTON W IN SUPPLIES AND NO SOAP DISH.
	MFR./			ELECTRICAL DAT	-A C	OPER.				<u>SH-2</u>	SHOWER (ACC)	-	-	-	3/4"	3/4"		.	BRADLEY #HN300, ADA COMPLIANT IN WALL SHOWER, BARRIER-FR ADJUSTABLE 1.5 GPM SPRAY SHOWER HEAD, DIVERTER VALVE WI HANDLE, HAND SHOWER WITH ON/OFF CONTROL, 60" STAINLESS S FLEXIBLE HOSE AND POST STYLE MOUNTING BRACKET.
SYMBOL LOCATION	MODEL No.		T.) RPM WATTS	VOLT PHASE					ARKS CTION, COMPLETE	<u>SS-1</u>	SERVICE SINK	3"	3"	2"	3/4"	3/4"	3	3	AMERICAN STANDARD #7741.000 ENAMEL ON CAST IRON, FLOOR MTD, CHICAGO ATMOSPHERIC VACUUM BREAKER, PAIL HOOK, WALL BRACE AND MALE HOSE 1 OUTLET.
CP 1 STORAGE A103		INLINE 3	10 2800 52	120 1	60		WITH AQUAS			<u>HB-1</u>	HOSE BIBB	-	-	-	3/4"	-	-	1	ACORN #8126 STANDPIPE, ROUGH CHROME PLATED, COMPLETE WITH LOOSE-F HANDLE AND VACUUM BREAKER.
							_			<u>HB-2</u>	HOSE BIBB	-	-	-	3/4"	-	.	1	ACORN #8104 WALL HYDRANT, RECESSED ALUMINUM BOX WITH BUILT IN DRIP FLANGE, DOOR WITH RECESSED CAM LOCK, OPERABLE BY REMOVABLE WHEE AND VACUUM BREAKER.
		ELECTRIC STOR. RECOV. T, @ 60°F	ANK SIZE TEM							<u>FD-1</u>	FLOOR DRAIN	2"	2"	1 1/2"	1/2"	-	-	-	JR SMITH #2005Y-A, HUBLESS CAST IRON BODY, 5"ROUND BRASS GRATE, P-TR/ PRIMER CONNECTION. WITH 1/4" MAX GRATE OPENINGS IN ALL DIRECTIONS.
		STOR. (GAL.) (GAL.) (IM GOPF OF CONTROL (GAL.) (IM GPH.) (IM		OUT (F°) KW	VOLT F		IGHT BS) WAL		REMARKS	<u>FD-2</u>	FLOOR DRAIN	8"	8"	-	-	-	-	-	PRECISION PLUMBING PRODUCTS ELECTRONIC TRAP PRIMER ASSEMBLY #PT-1 COPPER MANIFOLD W/ SHUT-OFF VALVE, SOLENIOD VALVE, VACUUM BREAKE ACCESS PANEL. (SIZED FOR UP TO 10 DRAINS). 120 V, 1Ø, 60HZ, .28 AMPS
EWH 1 CUSTODIAL ROOM -	DEL-20S	20 20 21.	.75 22.25 60	120 3	208	1 2	240			<u>FS-1</u>	FLOOR SINK	4"	4"	2"	-	-	-	-	JR SMITH #2005Y-A, HUBLESS CAST IRON BODY, 5"ROUND BRASS GRATE, P-TR/ PRIMER CONNECTION. WITH 1/4" MAX GRATE OPENINGS IN ALL DIRECTIONS.
										<u>TP-1</u>	TRAP PRIMER	-	-	-	-	-	.	-	J.R. SMITH, BRONZE CONSTRUCTION WITH SHUT-OFF VALVE BEHIND ACCESS F PSIG (860 KPA) MINIMUM. (SIZED PER MANUFACTURERS RECOMMENDATIONS)
	 	SAS PRESS				EDU				<u>TP-2</u>	TRAP PRIMER	-	-	-	.	-	<u> </u> .	.	J.R. SMITH #271SM-CTS SERIES, ELECTRONIC TRAP PRIMER ASSEMBLY, SURFA TYPE L MANIFOLD WITH SHUTY-OFF VALVE, SOLENOID VALVE, VACUUM BREAK ACCESS PANEL (SIZED FOR 4 DRAINS). 120V, 1Ø
SYMBOL LOCATION	MER/ MODEL No.	INLET PRESSURE	OUTLET PRESSURE	CAPACITY	SELECTIO	ON SHAL	REMA		TIONAL 20% SPARE CAP.	<u>WHA-1</u>	WATER HAMMER	-	.	-	1/2"	-	-	<u> </u> .	J.R. SMITH "HYDROTROL" 5000 SERIES, BEHIND ACCESS PANEL. (SIZE IN ACCOP PDI STANDARDS)
GPR GRADE	METER CO. 1800 SERIES	5 PSI	8"WC	3076 CFH	SEE DETAIL 6/P0.2						ARRESTOR ROOF DRAIN	-	-	-	-	-	-	-	J.R. SMITH #1010Y-RCU, CAST IRON BODY WITH DOME STRAINER AN OTTOM OUTLET.
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IGATED BOWL SOR H CARRIER. CHINA DESIGN ENSOR 'S. CHINA BOWL, 'SATED THERMO. SENSOR, AND HEAVY TER. USTABLE TH STOPS E WITH H LEVER EEL #897-CP WITH IREADED FY P, WALL HANDLE P AND TRAP 0, TYPE L BEHIND P AND TRAP NEL. 125 E MOUNTED	© Dr grop
R BEHIND DANCE WITH D TTOM	
SCALE 3	COVINA VALLEY HS SWIMMING POOL COVINA VALLEY HS SWIMMING POOL COVINA VALLEY UNIFIED SCHOOL DISTRICT 463 S. HOLLENBECK AVENUE COVINA, CA 91723 464 STORES AVENUE COVINA, CA 91723
Al Engineers 4750 E. Ontario Mills Pkwy SCAbdario, Ca. 91764 Ph.909.98 017 NONE 909.980-7023	75-22616-00 DSA A# 03-122700 DSA FILE # 19-H8 PLUMBING SCHEDULES AND DETAILS

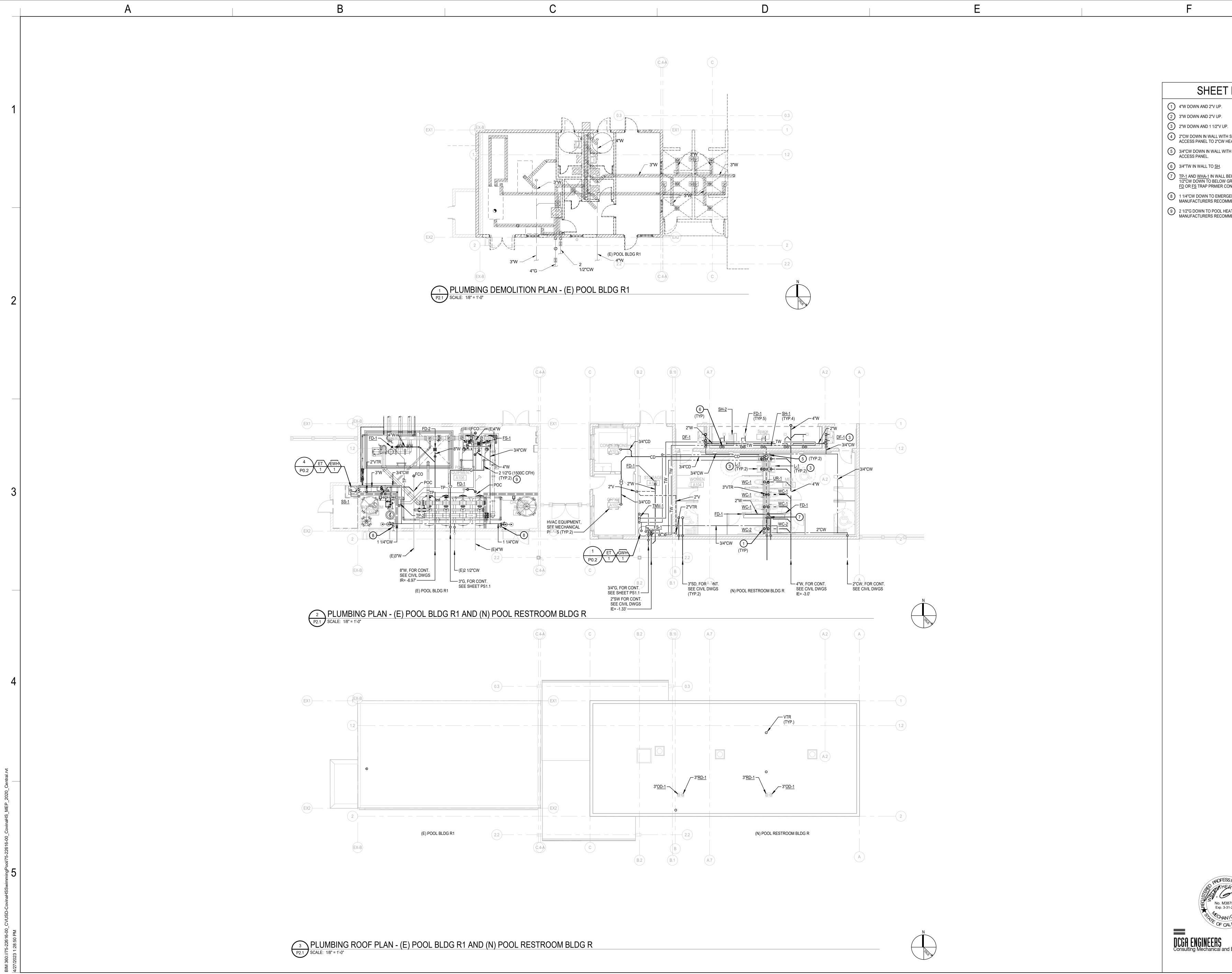










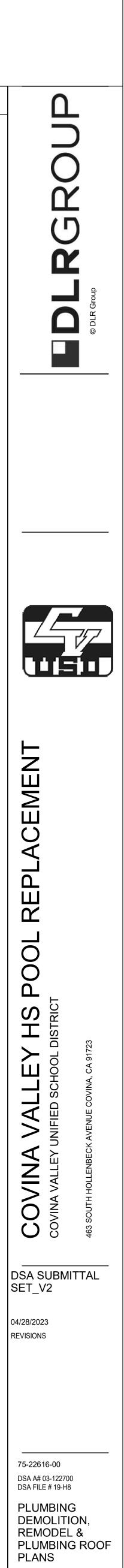




# SHEET NOTES

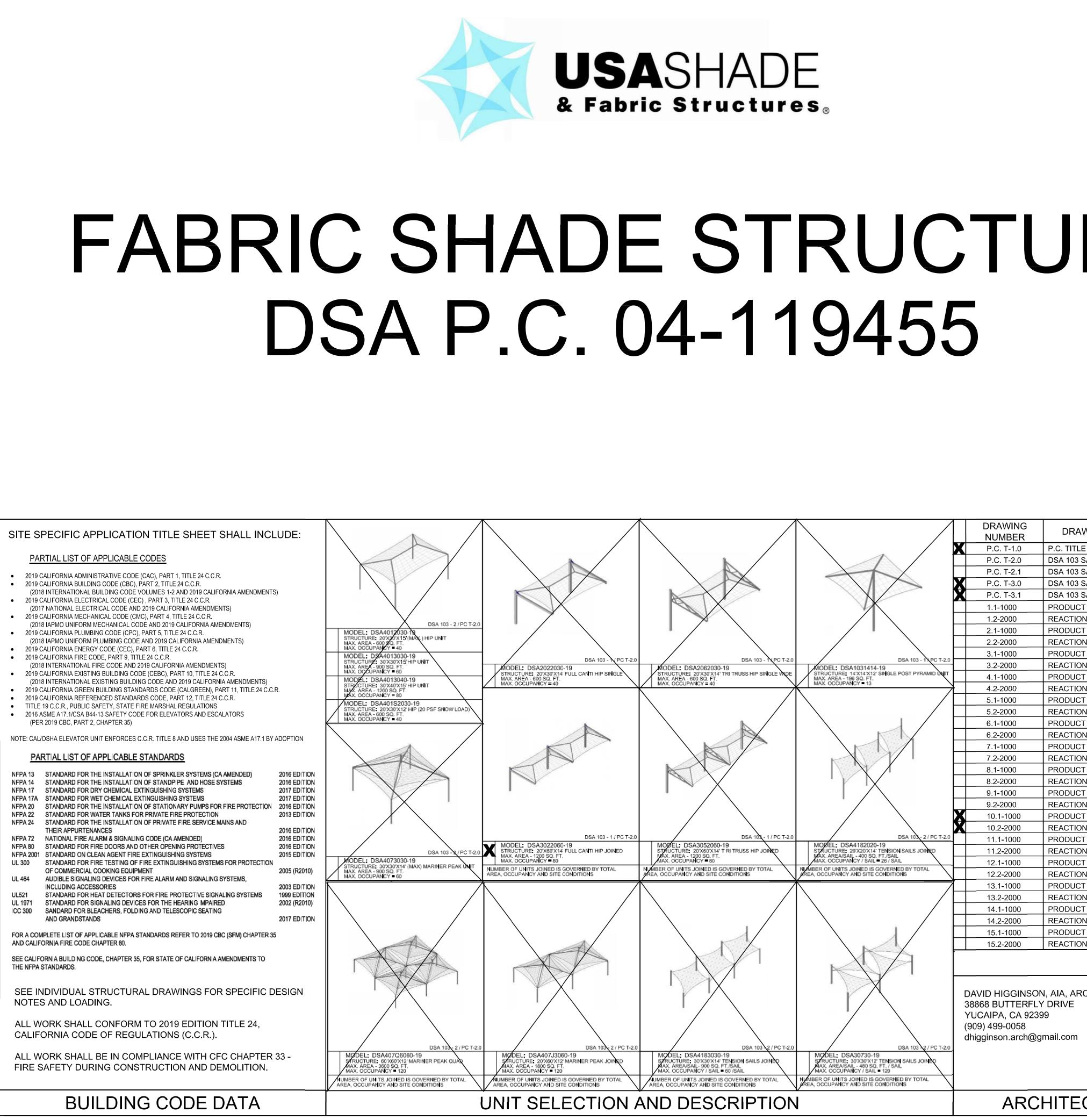
4 2"CW DOWN IN WALL WITH SHUT-OFF VALVE BEHIND ACCESS PANEL TO 2"CW HEAD IN WALL. 5 3/4"CW DOWN IN WALL WITH SHUT-OFF VALVE BEHIND ACCESS PANEL.

TP-1 AND WHA-1 IN WALL BEHIND ACEES PANEL. CONTINUE 1/2"CW DOWN TO BELOW GRADE/FLOOR AND CONNECT TO FD OR FS TRAP PRMIER CONNECTION. 8 1 1/4"CW DOWN TO EMERGENCY FIXTURE, CONNECT PER MANUFACTURERS RECOMMENDATION. 9 2 1/2"G DOWN TO POOL HEATER, CONNECT PER MANUFACTURERS RECOMMENDATIONS.

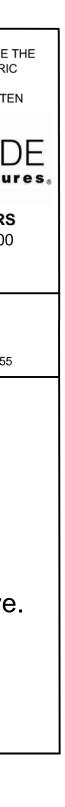


4750 E. Ontario Mills Pkwy Ontario, Ca. 91764 Ph.909.987.0017 Fax 909.980.7023

P2.1



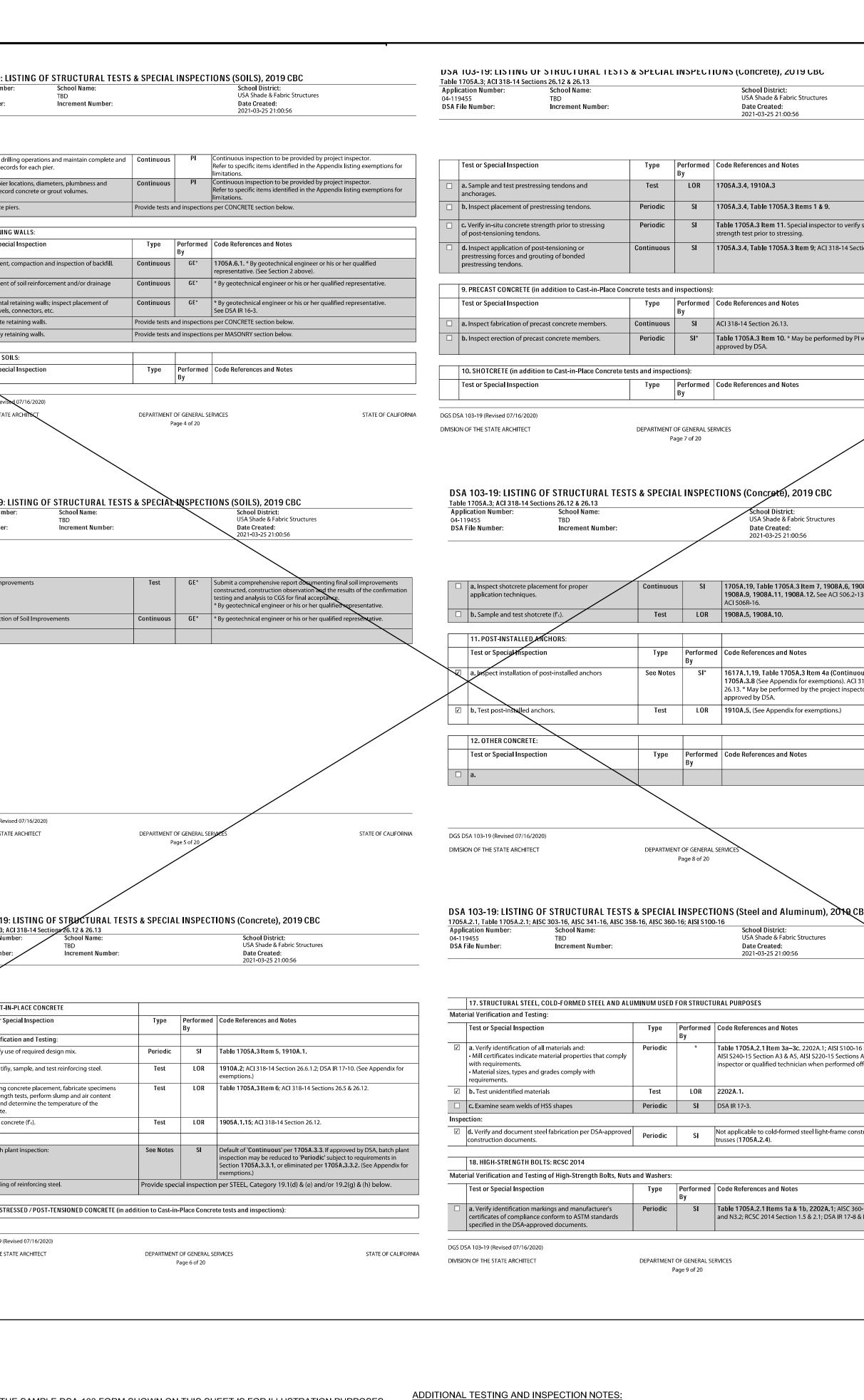
		SITE SPECIFIC APPI	LICATION SITE I	PLAN SHALL INCLUDE:		
		<ol> <li>ACTUAL DIMENSIONS OF</li> <li>DIMENSIONS FROM ADJA</li> </ol>		ND PROXIMITY OF ASSUMED OR		
		ACTUAL PROPERTY LINE	S.	SHADE STRUCTURE AREA (SQ. FT.),		
			AND TYPE OF CONSTR	RUCTION (V-B). INDICATE OCCUPANT		
		<ol> <li>INDICATE LOCATIONS OF</li> <li>SHOW LOCATIONS OF AL</li> </ol>		WITHIN 75 FEET.	THESE PLANS AND SPECIFICATI	
		6. INDICATE DIMENSIONS FI	ROM THE ROOF TO TH	E HIGHER STRUCTURE OR TERRAIN	PROPERTY OF USA SHADE A STRUCTURES AND SHALL REPRODUCED WITHOUT THE	ND FABRIC
		7. ACTUAL SITE ELEVATION	I (FT.) TO DETERMINE \$	OW LOAD MODEL (ASCE 7-16). SITE OCCURS AT OR BELOW THE		
		SNOW LOAD MODEL).		OW LOAD SHOWN IN ASCE 7-16 (FOR	USAS & Fabric St	
		SPECIFY THE LOWEST AN AISC 341-10 SECTION A.3	NTICIPATED SERVICE 1 .4b, A4.1 AND A4.2 PER	RCHITECT/ENGINEER OF RECORD TO EMPERATURE (LAST). AS DEFINED IN NOTE ON EACH INDIVIDUAL MODEL	CORPORATE HEADQU	ARTERS
		"L.A.S.T." TEMPERATURE	(EITHER STRUCTURAL	,	2580 ESTERS BLVD. SU DFW AIRPORT, TX, 7	
		P.C. NUMBER, AND SPEC	IFIC SIZE OF SHADE ST		800-966-5005 CERTIFICATIONS:	
			ES "A, B & C" RESPECT	ONFORM TO THE GUIDELINES AS IVELY IN ASCE 19-16, "STRUCTURAL GS."	IAS CERTIFICATION No: F CLARK COUNTY MANUFAC CERTIFICATION NUMBER (NEV	TURER
		11. ARCHITECTS OF RECORD HAZARD ZONE. GEOHAZA		ECIFIC SITE IS IN MAPPED GEOLOGIC MENTS PER DSA IR A-4.	CUSTOMER:	
		12. ARCHITECTS OF RECORD HAZARD SEVERITY ZONE		ECIFIC SITE IS IN A MAPPED FIRE ACE AREA.	Covina-Valley Un	ified
					PROJECT NAME:	
					Covina High Scho	loc
					Aquatics Center	
					463 S. Hollenbecl	
					Covina, CA 9172	3
				ΟΤΓΟ		ROVED
			NERAL N	MODEL	DIV. OF THE ST APP: 04-119	TATE ARCH
AWING DESCRIPTION	SIRU	CTURE TYPE	SIZE	NUMBER	REVIEV SS 🗹 FLS 🗹	WED FOR
3 SAMPLE FORM 3 SAMPLE FORM						3/26/2021
3 SAMPLE FORM 3 SAMPLE FORM						
ICT INFORMATION	HIP HIP		20 X 30 20 X 30	DSA4012030-19 DSA4012030-19	STRUCTURE TYPE:	
ICT INFORMATION IONS	HIP HIP		30 X 30 30 X 30	DSA4013030-19 DSA4013030-19		
ICT INFORMATION IONS	HIP HIP		30 X 40 30 X 40	DSA4013040-19 DSA4013040-19		
ICT INFORMATION	HIP (20# SNOW HIP (20# SNOW	/	20 X 30 20 X 30	DSA401S2030-19 DSA401S2030-19		
ICT INFORMATION IONS	SINGLE POST F		14 X 14 14 X 14	DSA1031414-19 DSA1031414-19	DRAWING SIZE: D	
ICT INFORMATION	MARINER MARINER		30 X 30 30 X 30	DSA4073030-19 DSA4073030-19		
ICT INFORMATION	JOINED MARINE		30 X 200 30 X 200	DSA407J3060-19 DSA407J3060-19	-	
ICT INFORMATION IONS	QUAD MARINEF		60 X 60 60 X 60	DSA407Q6060-19 DSA407Q6060-19		
ICT INFORMATION IONS	FULL CANTILEV		20 X 30 20 X 30	DSA2022030-19 DSA2022030-19		
ICT INFORMATION	FULL CANTILE		20 X 300 20 X 300	DSA3022060-19 DSA3022060-19		
ICT INFORMATION	TRI TRUSS CAN		20 X 30 20 X 30	DSA2062030-19 DSA2062030-19	_	
ICT INFORMATION IONS		ITILEVER JOINED	20 X 300 20 X 300	DSA3052060-19 DSA3052060-19	PRE-CHECK	
ICT INFORMATION	THREE POINT S		30 X 200 30 X 200	DSA30730-19 DSA30730-19	Code : 2019 CBC A separate project applica	
ICT INFORMATION	FOUR-POINT SA		20 X 300 20 X 300	DSA4182020-19 DSA4182020-19	for construction is requir	
ICT INFORMATION IONS	FOUR POINT SA		30 X 200 30 X 200	DSA4183030-19 DSA4183030-19	Design By : DWH	09/1
SHEET	INDEX -	P.C. DRAWI	NGS	<u>.</u>	Approved By : DWH	09/18
RCHITECT	>	MARK LOWE, S.E.		PROFESSION	DRAWING DESCRIPTION:	
CENSED AF	CHITES SING PECS	STRUCTURAL ENG	INEER	LBERT CHE	P.C. TITLE SH	IEET
n * to ait la	2 ★	19471 MISTY RIDGE TRABUCO CANYON		No. 3693 E THE	DWG.	
O NO.C19 REN. 10-3		92367 PH. 949-400-1265		OF CALIFORN	SHEET P.C. T-1.0	)
S OF CA		malowe@me.com		12/04/2020	REV.	-
ECT OF RECO	RD	ENGI	NEER OF	RECORD		
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	File Number:	Increment Number:			USA Shade & Fabric Structures Date Created:	04-119455 DSA File Nu
i no		$\overline{}$			2021-03-25 21:00:56	
i no			2	019 CBC		🗵 a. Ins
i no	IMPORTANT: This Generally, the structural	form is only a summary list tests and special inspectic	tofstructura	tests and	some of the special inspections required for the project. re those that will be performed by the Geotechnical Engineer	accu
no	of Record, Laboratory of on the DSA approved do	f Record, or Special Inspect ocuments. The appendix at	or. The actua the bottom	complete	e test and inspection program must be performed as detailed n identifies work NOT subject to DSA requirements for special	lengt
KEY	ot limited to, special ins	pections not listed on this <sup>.</sup>	form such as	structural	oviding inspection of all facets of construction, including but wood framing, high-load wood diaphragms, cold-formed steel per Title 24, Part 2, Chapter 17A (2019 CBC).	5. RE
KEY		ned section and table refe	rences found	in this doc	cument are from the CBC, or California Building Code.	Test
	TO COLUMNS 1. TYPE				2. PERFORMED BY	b. Pla
		ontinuous special inspection is		reg	<ul> <li>Indicates that the special inspection shall be performed by a istered geotechnical engineer or his or her authorized resentative.</li> </ul>	devia
requ	med			lab	R – Indicates that the test or special inspection shall be performed by a testir oratory accepted in the DSA Laboratory Evaluation and Acceptance ( $\mathbf{b} \in \mathbf{A}$ )	
Perio	i <b>odic – I</b> ndicates that a perioc	dic special inspection is required	I	PI -	gram. See CAC Section 4-335 Indicates that the special inspection may be performed by a project bector when specifically approved by DSA.	6.0
Test	t – Indicates that a test is requ	Jired		SI -	<ul> <li>Indicates that the special inspection shall be performed by an appropriately alified/approved special inspector.</li> </ul>	Test
DGS DS	05A 103-19 (Revised 07/16/2020)			qu		DGS DSA 103-
DIVISIC	ON OF THE STATE ARCHITECT		DEPARTMENT	OF GENERAL Page 1 of 20	SERVICES STATE OF CALIFOR	
			& SPECIAL	INSPEC	TIONS (SOILS), 2019 CBC	DSA 10
04-11	lication Number: 19455 File Number:	School Name: TBD Increment Number:			School District: USA Shade & Fabric Structures Date Created: 2021-03-25 21:00:56	04-119455 DSA File N
					2021-03-25 21:00:56	
Geot	stechnical Reports - Pr	oject does NOT have and	does NOT re	quire a qe	otechnical report	🗆 a. S
	1. GENERAL: Test or Special Inspection	-	Table 1705A.	• •	· · ·	-
	a. Verify that:	operly prior to placement of	See Notes	By PI	Refer to specific items identified in the Appendix listing exemptions for limitations. Placement of controlled fill exceeding 12" depth under	b. h
	controlled fill and/or excava • Foundation excavations a depth and have reached pr	ations for foundations. re extended to proper			foundations. Placement of controlled fill exceeding 12 depth under foundations is not permitted without a geotechnical report.	
L	2. SOIL COMPACTION ANI Test or Special Inspection		Table 1705A. Type	6 Performed	Code References and Notes	
			Type	Ву		
	a. Verify use of proper mate	erials, densities and inspect lift	Continuous	LOR*	* Under the supervision of a geotechnical engineer or LOR's engineering	_
			Continuous Test	LOR*	* Under the supervision of a geotechnical engineer or LOR's engineering manager. Refer to specific items identified in the Appendix listing exemptions for limitations.     * Under the supervision of a geotechnical engineer or LOR's engineering manager. Refer to specific items identified in the Appendix listing exemptions for limitations.	_
DGS DS	a. Verify use of proper mate thicknesses, placement and placement of fill.	d compaction during	Test Table 1705A.	LOR*	<ul> <li>manager. Refer to specific items identified in the Appendix listing exemptions for limitations.</li> <li>* Under the supervision of a geotechnical engineer or LOR's engineering manager. Refer to specific items identified in the Appendix listing exemptions for limitations.</li> </ul>	DGS DSA 10 DIVISION OF
	a. Verify use of proper mate thicknesses, placement and placement of fill. b. Compaction testing. 3. DRIVEN DEEP FOUNDA	TIONS (PILES):	Test Table 1705A. DEPARTMENT F	OF GENERAL Sage 2 of 20	manager. Refer to specific items identified in the Appendix listing exemptions for limitations.         * Under the supervision of a geotechnical engineer or LOR's engineering manager. Refer to specific items identified in the Appendix listing exemptions for limitations.         services       STATE OF CALIFORN         SERVICES       STATE OF CALIFORN         STIONS (SOILS), 2019 CBC	DIVISION OF IIA DSA 10 Table 17
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	<ul> <li>a. Verify use of proper mate thicknesses, placement and placement of fill.</li> <li>b. Compaction testing.</li> <li>3. DRIVEN DEEP FOUNDAT</li> <li>DSA 103-19 (Revised 07/16/2020)</li> <li>ON OF THE STATE ARCHITECT</li> <li>A 103-19: LISTING OI</li> <li>ication Number: 19455</li> <li>File Number:</li> <li>File Number:</li> <li>D. Determine capacities of ta additional load tests as requirements.</li> <li>b. Determine capacities of ta additional load tests as requirements.</li> <li>b. Determine capacities of a additional load tests as requirements.</li> <li>c. Inspect driving operation and accurate records for ead shows per foot of penetratipenetrations to achieve deta and butt elevations and received end size of the additional sections and received end size of the section of</li></ul>	TIONS (PILES): TIONS (PILES): TIONS (PILES): TIONS (PILES): TBD Increment Number: TBD Increment Number: TBD Increment Number: Table State	Test Table 1705A. DEPARTMENT F & CONTINUOUS CONTINUOUS Provide tests	Correction of the second secon	manager. Refer to specific items identified in the Appendix listing exemptions for limitations.         * Under the supervision of a geotechnical engineer or LOR's engineering manager. Refer to specific items identified in the Appendix listing exemptions for limitations.         SERVICES         STATE OF CALIFORN         SERVICES         STATE OF CALIFORN         SERVICES         STATE OF CALIFORN         State of Coll District:         USA Shade & Fabric Structures         Date Created:         2021-03-25 21:00:56	DIVISION OF
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DGS DS DIVISIO	<ul> <li>a. Verify use of proper mate thicknesses, placement and placement of fill.</li> <li>b. Compaction testing.</li> <li>3. DRIVEN DEEP FOUNDAT</li> <li>DSA 103-19 (Revised 07/16/2020)</li> <li>ON OF THE STATE ARCHITECT</li> <li>DOW OF THE STATE ARCHITECT</li> <li>A 103-19: LISTING OF THE STATE ARCHITECT</li> <li>Test or Special Inspection</li> <li>a. Verify pile materials, size the requirements.</li> <li>b. Determine capacities of a additional load tests as req</li> <li>C. Inspect driving operation and accurate records for ead shows per foot of penetratipenetrations to achieve deta and butt elevations and rec</li> <li>e. Steel piles.</li> <li>f. Concrete piles and concret g. For specialty piles, perfor as determined by the registing the registing operation and state of the statement of th</li></ul>	TIONS (PILES): TIONS (PILES): School Name: TBD Increment Number: Increment Number: I	Test Table 1705A. DEPARTMENT F & CONTINUOUS CONTINUOUS Provide tests	CF GENERAL S age 2 of 20 Performe By GE* CF* CF* CF* CF* CF* CF* CF* CF* CF* CF	manager. Refer to specific items identified in the Appendix listing exemptions for limitations.         * Under the supervision of a geotechnical engineer or LOR's engineering manager. Refer to specific items identified in the Appendix listing exemptions for limitations.         SERVICES       STATE OF CALIFORN         SERVICES       STATE OF CALIFORN         State OF CALIFORN       State OF CALIFORN         Services       State OF CALIFORN         State OF CALIFORN       State OF CALIFORN         State OF CALIFORN       State OF CALIFORN         State OF Californical engineer or his of her qualified representative.       2021-03-25 21:00:56         d       Code References and Notes       * By geotechnical engineer or his or her qualified representative.         * Under the supervision of the geotechnical engineer.       * By geotechnical engineer or his or her qualified representative.         * By geotechnical engineer or his or her qualified representative.       * By geotechnical engineer or his or her qualified representative.         * By geotechnical engineer or his or her qualified representative.       * By geotechnical engineer or his or her qualified representative.         * By geotechnical engineer or his or her qualified representative.       * By deotechnical engineer or his or her qualified representative.         * By deotechnical engineer or his or her qualified representative.       * By deotechnical engineer or his or her qualified representative. <td< td=""><td>DIVISION OF</td></td<>	DIVISION OF
	<ul> <li>a. Verify use of proper mate thicknesses, placement and placement of fill.</li> <li>b. Compaction testing.</li> <li>3. DRIVEN DEEP FOUNDAT</li> <li>DSA 103-19 (Revised 07/16/2020)</li> <li>ON OF THE STATE ARCHITECT</li> <li>A 103-19: LISTING OI</li> <li>ication Number: 19455</li> <li>File Number:</li> <li>File Number:</li> <li>Determine capacities of the requirements.</li> <li>b. Determine capacities of the requirements.</li> <li>b. Determine capacities of the requirements.</li> <li>c. Inspect driving operation and accurate records for ead confirm type and size of hablows per foot of penetrations to achieve detained butt elevations and records for sead obust perform and accurate records for ead confirm type and size of hablows per foot of penetrations to achieve detained butt elevations and records for sead blows per foot of penetrations to achieve detain butt elevations and records for sead obust perform and accurate presensible charge.</li> <li>4. CAST-IN-PLACE DEEP F</li> <li>Test or Special Inspection</li> </ul>	F STRUCTURAL TESTS School Name: TBD Increment Number: s and lengths comply with test piles and conduct uired. and maintain complete ach pile. and maintain complete ach pile. and their plumbness, immer, record number of ion, determine required sign capacity, record tip cord any pile damage. ete filled piles. rm additional inspections tered design professional in OUNDATIONS (PIER#):	Test Table 1705A. DEPARTMENT F S & SPECIA Continuous Test Continuous Provide tests Provide tests * Table 1705A	Corrections of the second seco	manager. Refer to specific items identified in the Appendix listing exemptions for limitations.         * Under the supervision of a geotechnical engineer or LOR's engineering manager. Refer to specific items identified in the Appendix listing exemptions for limitations.         SERVICES       STATE OF CALIFORN         SERVICES       STATE OF CALIFORN         State OF CALIFORN       State OF CALIFORN         Services       State OF CALIFORN         State OF CALIFORN       State OF CALIFORN         State OF CALIFORN       State OF CALIFORN         State OF Californical engineer or his of her qualified representative.       2021-03-25 21:00:56         d       Code References and Notes       * By geotechnical engineer or his or her qualified representative.         * Under the supervision of the geotechnical engineer.       * By geotechnical engineer or his or her qualified representative.         * By geotechnical engineer or his or her qualified representative.       * By geotechnical engineer or his or her qualified representative.         * By geotechnical engineer or his or her qualified representative.       * By geotechnical engineer or his or her qualified representative.         * By geotechnical engineer or his or her qualified representative.       * By deotechnical engineer or his or her qualified representative.         * By deotechnical engineer or his or her qualified representative.       * By deotechnical engineer or his or her qualified representative. <td< td=""><td>DIVISION OF</td></td<>	DIVISION OF
	<ul> <li>a. Verify use of proper mate thicknesses, placement and placement of fill.</li> <li>b. Compaction testing.</li> <li>3. DRIVEN DEEP FOUNDAT</li> <li>DSA 103-19 (Revised 07/16/2020)</li> <li>ON OF THE STATE ARCHITECT</li> <li>A 103-19: LISTING OI</li> <li>incation Number: 19455</li> <li>File Number:</li> <li>File Number:</li> <li>b. Determine capacities of 1 additional load tests as requirements.</li> <li>b. Determine capacities of 1 additional load tests as requirements.</li> <li>b. Determine capacities of 1 additional load tests as requirements.</li> <li>c. Inspect driving operation and accurate records for ead confirm type and size of hablows per foot of penetratipenetrations to achieve determined by the regist responsible charge.</li> <li>4. CAST-IN-PLACE DEEP F</li> </ul>	F STRUCTURAL TESTS School Name: TBD Increment Number: s and lengths comply with test piles and conduct uired. and maintain complete ach pile. and maintain complete ach pile. and their plumbness, immer, record number of ion, determine required sign capacity, record tip cord any pile damage. ete filled piles. rm additional inspections tered design professional in OUNDATIONS (PIER#):	Test Table 1705A. DEPARTMENT F S & SPECIA S & SPECIA Continuous Continuous Provide tests Provide tests Provide tests Table 1705A Type DEPARTMENT	Corrections of the second seco	manager. Refer to specific items identified in the Appendix listing exemptions for limitations.         * Under the supervision of a geotechnical engineer or LOR's engineering manager. Refer to specific items identified in the Appendix listing exemptions for limitations.         SERVICES         STATE OF CALIFORN         State of Limitations.         STATE OF CALIFORN         State of Limitations.         STATE OF CALIFORN         School District:         USA Shade & Fabric Structures         Date Created:         2021-03-25 21:00:56	DIVISION OF



HE SAMPLE DSA-103 FORM SHOWN ON THIS SHEET IS FOR ILLUSTRATION PURPOSES NNLY TO ASSIST IN THE COMPLETION OF FUTURE PROJECTS SPECIFIC FORM DSA-103. CURRENT DSA-103 FORM IS TO BE COMPLETED FOR EACH APPLICATION THAT THIS C IS BEING INCORPORATED INTO AND ALL SAMPLE DSA-103 SHEETS ARE TO BE CROSSED OUT ON THIS DRAWING.

ADDITIONAL TESTING AND INSPECTION NOTES:

1. THE PROJECT INSPECTOR AND TESTING AGENCY SHALL BE SELECTED BY THE SCHOOL DISTRICT AND APPROVED BY DSA AND THE ARCHITECT OF RECORD. THE SITE PROJECT INSPECTOR SHALL BE CLASS 2.
 THE COSTS OF THE PROJECT INSPECTOR AND TESTING AGENCY SHALL BE BORN BY THE SCHOOL DISTRICT.

- 4. COPIES OF VERIFIED REPORTS SHALL BE SENT TO DSA, THE ARCHITECT, THE SCHOOL DISTRICT, THE CONTRACTOR, AND THE PROJECT INSPECTOR. 5. THE IN PLANT INSPECTOR SHALL BE WELDING SPECIAL INSPECTOR FOR MATERIAL VERIFICATION AND WELDING. 6. PER 2019 CBC, SECTION 1705A.3.3, BATCH PLANT INSPECTION MAY BE WAIVED WHEN THE FOLLOWING
- REQUIREMENTS ARE MET: 6.1. A LICENSED WEIGHMASTER SHALL POSITIVELY IDENTIFY QUANTITY OF MATERIALS AND CERTIFY EACH LOAD BY A BATCH TICKET.

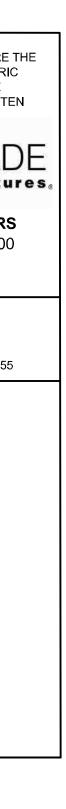
MAINTAIN A COPY OF THE DAILY RECORD AS REQUIRED BY THE ENFORCEMENT AGENCY.

6.2. BATCH TICKETS, INCLUDING MATERIAL QUANTITIES AND WEIGHTS SHALL ACCOMPANY THE LOAD, SHALL BE TRANSMITTED TO THE INSPECTOR OF RECORD BY THE TRUCK DRIVER WITH LOAD IDENTIFIED THEREON. THE LOAD SHALL NOT BE PLACED WITHOUT A BATCH TICKET IDENTIFYING THE MIX. THE INSPECTOR OF

SAMPLE DSA 103 - STATEMENT OF STRUCTURAL TESTS AND INSPECTIONS FORM - FOR CANTILEVER AND SINGLE POST UNITS

RECORD SHALL KEEP A DAILY RECORD OF PLACEMENTS, IDENTIFYING EACH TRUCK IT'S LOAD, AND TIME OF RECEIPT AT THE JOBSITE, AND APPROXIMATE LOCATION OF DEPOSIT IN THE STRUCTURE AND SHALL

	<u>1</u> /	<b>705A</b> Applic 04-119	103-19: LISTING OF STRUCTURAL TESTS         2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 351         ation Number:       School Name:         455       TBD         Ie Number:       Increment Number:			0-16 School District: USA Shade & Fabric Structures Date Created:			
	-		<b>b.</b> Test high-strength bolts, nuts and washers.	Test	LOR	2021-03-25 21:00:56 Table 1705A.2,11tem 1c, 2213A.1; RCSC 2014 Section 7.2; DSA IR 17-8.			
	I		tion of High-Strength Bolt Installation:	Daviadia					
y specified concrete			<ul> <li>c. Bearing-type ("snug tight") connections.</li> <li>d. Pretensioned and slip-critical connections.</li> </ul>	Periodic	SI SI	Table 1705A.2.1 Item 2a, 1705A.2.6, 2204A.2; AISC 360-16 J3.1, J3.2,         M2.5 & N5.6; RCSC 2014 Section 9.1; DSA IR 17-9.         Table 1705A.2.1 Items 2b & 2c, 1705A.2.6, 2204A.2; AISC 360-16 J3.1,         J3.2, M2.5 & N5.6; RCSC 2014 Sections 9.2 & 9.3; DSA IR 17-9. *         "Continuous" or "Periodic" depends on the tightening method used.	THESE PLANS AND SPEC PROPERTY OF USA S STRUCTURES AND REPRODUCED WITHO	HADE AND SHALL NO	O FABRIC OT BE
			19. WELDING:		num; AWS D1	<b>1 Items 4 &amp; 5</b> ; AWS D1.1 and AWS D1.8 for structural steel; AWS .3 for cold-formed steel; AWS D1.4 for reinforcing steel; DSA IR 17- ions.)	US/	ASH	HAD
	-		ation of Materials, Equipment, Welders, etc.: Test or Special Inspection	Туре		Code References and Notes		ric Str	
I when specifically	_		a. Verify weld filler material identification markings per AWS designation listed on the DSA-approved documents and the WPS. b. Verify weld filler material manufacturer's certificate of	Periodic Periodic	By SI SI	DSA IR 17-3.	CORPORATE HEA 2580 ESTERS BL DFW AIRPORT 800-966	VD. SUIT F, TX, 75	TE 100
			compliance. c. Verify WPS, welder qualifications and equipment.	Periodic	SI	DSA IR 17-3.	CERTIFICATIONS: IAS CERTIFICATIO	ON No: FA-	
STATE OF CALIFORNIA			A 103-19 (Revised 07/16/2020) N OF THE STATE ARCHITECT		OF GENERAL SI age 10 of 20	ERVICES STATE OF CALIFORNIA	CLARK COUNTY M/ CERTIFICATION NUMB	ANUFACTL ER (NEVA	JRER DA): 355
		1705	A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 34 ication Number: School Name:			•	-		
		04-11				School District: USA Shade & Fabric Structures Date Created: 2021-03-25 21:00:56	PROJECT NAME:		
08A.7, 1908A.8, 13 Section 3.4,			19.1 SHOP WELDING: Test or Special Inspection	Туре	Performed	Code References and Notes	LOCATION:		
			<ul> <li>a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds &gt; 5/16", plug and slot welds.</li> </ul>		Ву	Table 1705A.2.1 Items 5a.1–4; AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.			
ous) & 4b (Periodic), 318-14 Sections 17.8 &	_		<ul> <li>b. Inspect single-pass fillet welds ≤ 5/16", floor and roof deck welds.</li> <li>c. Inspect welding of stairs and railing systems.</li> </ul>	Periodic Periodic	SI SI	1705A.2.2, Table 1705A.2.1 Items 5a.5 & 5a.6; AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.         1705A.2.1; AISC 360-16 (and AISC 341-16 as applicable); AWS D1.1 & D1.3; DSA IR 17-3.	MODEL NUMBER:		
ctor when specifically			<ul> <li>d. Verification of reinforcing steel weldability other than ASTM A706.</li> <li>e. Inspect welding of reinforcing steel.</li> </ul>	Periodic Continuous	SI SI	1705A.3.1; AWS D1.4; DSA IR 17-3. Verify carbon equivalent reported on mill certificates.         Table 1705A.2.1 Item 5b, 1705A.3.1, Table 1705A.3 Item 2, 1903A.8;			
			19.2 FIELD WELDING: Test or Special Inspection	Туре	Performed	AWS D1.4; DSA IR 17-3.			
			<ul> <li>a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds &gt; 5/16", plug and slot welds.</li> <li>b. Inspect single-pass fillet welds ≤ 5/16".</li> </ul>	Continuous	By SI SI	Table 1705A.2.1 Items 5a.1-4; AISC 360-16 (AISC 341-16 as applicable); DSA IR 17-3.           Table 1705A.2.1 Item 5a.5; AISC 360-16 (AISC 341-16 as applicable); DSA		APPRO F THE STA 04-1194	TE ARCHI
STATE OF CALIFORM			SA 103-19 (Revised 07/16/2020)				SS 🗹 DATE:	REVIEWE	
			ON OF THE STATE ARCHITECT		FOF GENERALS Page 11 of 20				
BC	<b>А</b> բ 04	plica -1194	.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358 tion Number: School Name: 55 TBD • Number: Increment Number:	3-16, AISC 360-	16; AISI S100	D-16 School District: USA Shade & Fabric Structures Date Created: 2021-03-25 21:00:56	STRUCTURE TYPE:		
		(i	Inspect end-welded studs (ASTM A-108) installation including bend test).	Periodic Periodic	SI SI	2213A.2; AISC 360-16 (AISC 341-16 as applicable); AWS D1.1; DSA IR 17-3. 1705A.2.2, Table 1705A.2.1 Item 5a.6; AISC 360-16 (AISC 341-16 as			
6 Section A3.1 & A3.2, A4 & A6. * By special			Inspect welding of structural cold-formed steel.	Periodic	SI*	applicable); AWS D1.3; DSA IR 17-3. <b>1705A.2.5</b> ; <b>AWS D1.3</b> ; DSA IR 17-3. The quality control provisions of AISI S240-15 Chapter D shall also apply. * May be performed by the project	SCALE : VA	.RIES	
off-site.	E	] f.	Inspect welding of stairs and railing systems.	Periodic	SI*	inspector when specifically approved by DSA. <b>1705A.2.1</b> ; AISC 360-16 (AISC 341-16 as applicable); AWS D1.1 & D1.3; DSA IR 17-3. * May be performed by the project inspector when specifically			
	[	g	. Verification of reinforcing steel weldability.	Periodic	SI	approved by DSA. <b>1705A.3.1</b> ; AWS D1.4; DSA IR 17-3. Verify carbon equivalent reported on mill certificates.			
struction, except for		] h	. Inspect welding of reinforcing steel.	Continuous	SI	Table 1705A.2.1 Item 5b, 1705A.3.1, Table 1705A.3 Item 2, 1903A.8; AWS D1.4; DSA IR 17-3.			
			0. NONDESTRUCTIVE TESTING: 705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, A	ISC 358-16, AI	5C 360-16; AI	ISI \$100-16			
0-16 Section A3.3, J3.1, & DSA IR 17-9.	[		est or Special Inspection . Ultrasonic	Type Test	Performed By LOR	Code References and Notes 1705A.2.1, 1705A.2.5; AISC 341-16 J6.2, AISC 360-16 N5.5; ANSI/ ASNT CP-189, SNT-TC-1A; AWS D1 1, AWS D1.8; DSA IR 17-2.			
STATE OF CALIFORNIA			103-19 (Revised 07/16/2020) DF THE STATE ARCHITECT	DEPARTMENT ( Pa	DF GENERAL SE age 12 of 20	RVICES STATE OF CALIFORNIA	PRE-CHE DOCU Code : 201 A separate project for construction	MEN 19 CBC ct applicatio	<b>F</b> on
							Eng. By : D	WH	09/18
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							Approved By : D DRAWING DESCRIP	WH TION:	09/18
						SHSED ARCHITE	DSA 103 SAM		FORM
							DWG.		
						FIL 10-31-21	SHEET P.C.	Г-3.0	
							REV.		

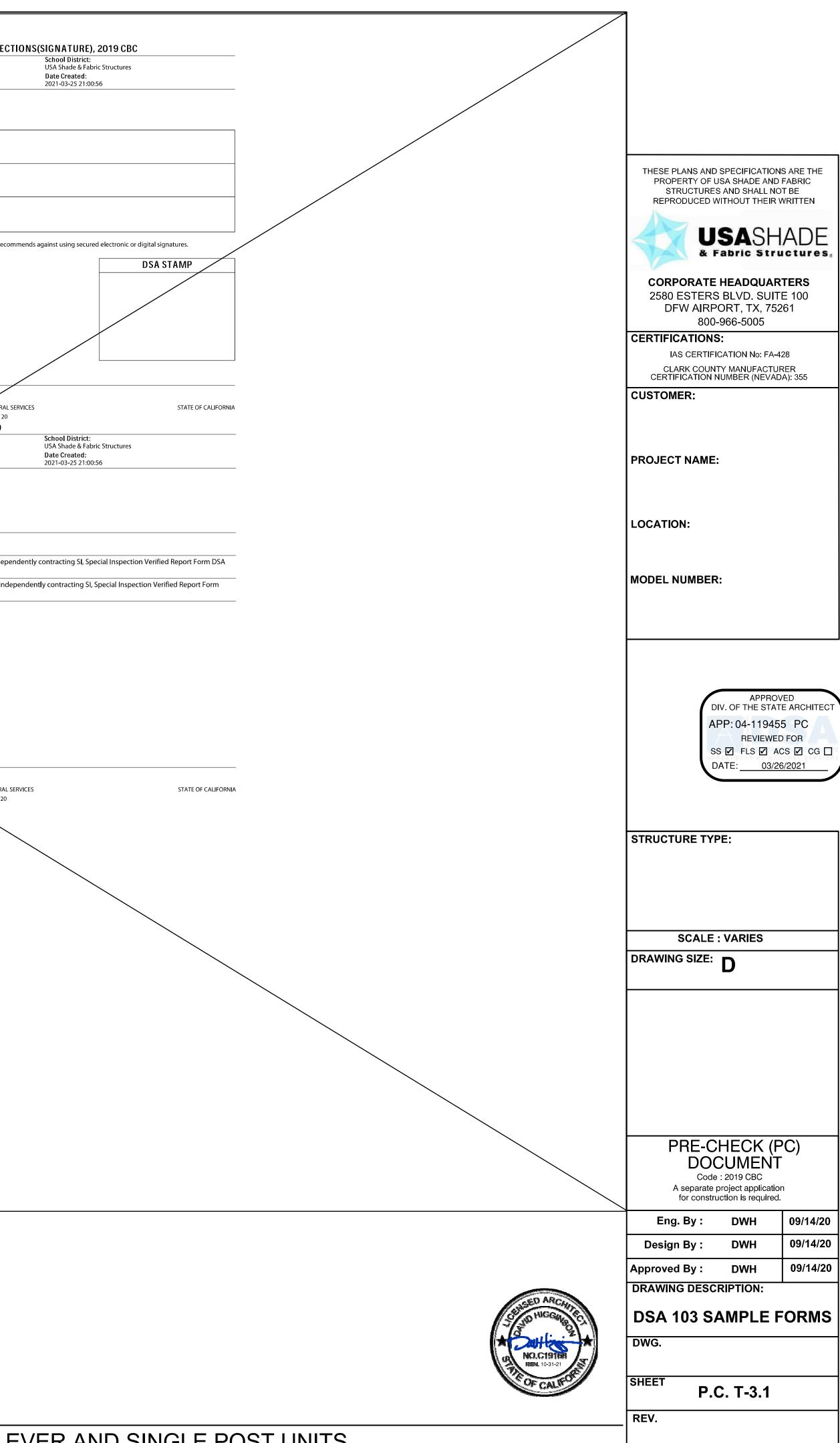






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Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 3	S & SPECIAL INSPECTIONS (Steel and Aluminum), 2019 CBC 58-16, AISC 360-16; AISI S100-16 School District:	Application Number: 04-119455	empt from DSA Requirements for s School Name: TBD	School District: USA Shade & Fabric Structures	Application Number: 04-119455	NG OF STRUCTURAL TESTS & SPECIA School Name: TBD	School District: USA Shade & Fabric Structures
on Number: School Name: TBD Jumber: Increment Number:	USA Shade & Fabric Structures Date Created:	04-119455 DSA File Number:	TBD Increment Number:	USA Shade & Fabric Structures Date Created: 2021-03-25 21:00:56	04-119455 DSA File Number:	TBD Increment Number:	USA Shade & Fabric Structures Date Created: 2021-03-25 21:00:56
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		E como de la como de la como de		A amondmental and these theory through the table of	the Newsoftweis	in noneral reconneible charges	
Aagnetic Particle	Test         LOR         1705A.2.1, 1705A.2.5; AISC 341-16 J6.2, AISC 360-16 N5.5; ASNT CP-189, SNT-TC-1A; AWS D1.1, AWS D1.8; DSA IR 17-2.	design professional are	NOT subject to DSA requirements for the s	A amendments) and those items identified below with a check mark by structural tests / special inspections noted. <u>Items marked as exempt s</u> roject inspector shall verify all construction complies with the approve	hall	m general responsible charge:	
	Test LOR	<u>be identified on the a</u> construction document		roject inspector shall verify all construction complies with the approve		/hen structural design has been delegated):	
		SOILS:	sacting as a continuor footion decision of	d on minimum allowable processor pay CBC Table 100CA 2 and but			
STEEL JOISTS AND TRUSSES: 1705A.2.1, Table 1705	5A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16 Type Performed Code References and Notes	geotechnical repor poles, flag poles, po	for the following cases: A) free standing sign of less supporting open mesh fences, etc.), C) sing	d on minimum allowable pressures per CBC Table 1806A.2 and having no or scoreboard, B) cell or antenna towers and poles less than 35'-0" tall (e.g., lig gle-story structure with dead load less than 5 psf (e.g., open fabric shade stru		cural Engineer: Date:	
erify size, type and grade for all chord and web	By           Continuous         SI         1705A.2.3, Table 1705A.2.3; AWS D1.1; DSA IR 22-3 for steel joist	or D) covered walk	vay structure with an apex height less than 10'	'-0" above adjacent grade. and testing by a Geotechnical Engineer for the following cases: A) buildings w	ithout		
mbers as well as connectors and weld filler material; ify joist profile, dimensions and camber (if applicable); ify all weld locations, lengths and profiles; mark or tag	1705A.2.4; AWS D+ 3 for cold-formed steel trusses.	a geotechnical repo (not exceeding 12"	rt and meeting the exception item #1 criteria i depth per CBC Section 1804A.6), B) soil scarific	in CBC Section 1803A.2 supported by native soil (any excavation depth) or fil cation/recompaction not exceeding 12" depth, C) native or fill soil supporting	soil Note: To facilitate DSA	electronic mark-ups and identification stamp applicat	tion, DSA recommends against using secured electronic or digital signatures.
h joist.		exterior non-struct areas, or E) utility tr	ıral Hatwork (e.g., sidewalks, site concrete ramı ench backfill.	ps, site stairs, parking lots, driveways, etc.), D) unpaved landscaping and play	ground		DSA STAMP
SPRAY APPLIED FIRE-PROOFING: 1705A.2.1, Table tor Special Inspection	1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI \$100-46 Type Performed Code References and Notes	CONCRETE/MAS	DNRY:				
xamine structural steel surface conditions, inspect	Periodic SI 1705A.14.	item 7 for "Welding	") given in CBC Section 1617A.1.18 (which repl	ral components (e.g., mechanical, electrical, plumbing equipment - see laces ASCE 7-16, Section 13.1.4) or B) interior nonstructural wall			
lication, take samples, measure thickness and verify poly pliance of all aspects of application with DSA-		partitions meeting	criteria listed in exempt item 3 for "Welding."	in CBC Section 1705A.3.3.2 subject to the requirements and limitations			
roved documents. est bond strength.	Test         LOR         1705A.14.6.	in that section.					
3-19 (Revised 07/16/2020)							
THE STATE ARCHITECT	DEPARTMENT OF GENERAL SERVICES STATE OF C Page 13 of 20	DGS DSA 103-19 (Revised 07/16 ALIFORNIA DIVISION OF THE STATE ARCHI			DGS DSA 103-19 (Revised 07/1 ALIFORNIA DIVISION OF THE STATE ARCH	· · · · · · · · · · · · · · · · · · ·	IT OF GENERAL SERVICES STATE OF CALIFORNIA
				Page 16 of 20			Page 19 of 20
Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 3		Appendix: Work Exe Application Number: 04-119455	mpt from USA Requirements for S School Name: TBD	Structural Tests / Special Inspections School District: USA Shade & Fabric Structures	Application Number: 04-119455	School Name: TBD	School District: USA Shade & Fabric Structures
n Number: School Name: TBD umber: Increment Number:	School District: USA Shade & Fabric Structures Date Created:	DSA File Number:	Increment Number:	Date Created:           2021-03-25 21:00:56	DSA File Number:	Increment Number:	Date Created: 2021-03-25 21:00:56
	2021-03-25 21:00:56						
					/		
st density.	Test LOR 1705A.14.5.	IR 21-1.16. Refer to a	onstruction documents for specific exemption	tain DSA masonry testing and special inspection items as allowed per DSA ns accordingly for each applicable wall condition.	-1. Soils Testing and I	nspection: Geotechnical Verified Report Form D	<del>5A 293</del>
NCHOR BOLTS AND ANCHOR RODS:			Is in site flatwork and/or other non-structural ing bars is not required for items given in CBC	concrete. 2 Section 1910A.2 subject to the requirements and limitations		and Inspection: Laboratory Verified Report Form	
or Special Inspection	Type Performed Code References and Notes By	in that section.			<sup>3.</sup> 292	· · ·	or, for independently contracting SI, Special Inspection Verified Report Form DSA
nchor Bolts and Anchor Rods	Test         LOR         Sample and test anchor bolts and anchor rods not readily identifia procedures noted in DSA IR 17-11.	weiding.			4. DSA 292	pection: Laboratory Verified Report Form DSA 29	1, or, for independently contracting SI, Special Inspection Verified Report Form
readed rod not used for foundation anchorage.	Test         LOR         Sample and test threaded rods not readily identifiable per procedure noted in DSA IR 17-11.		n located above circulation or occupied space	ling section for rolling gates of 10' and apex height less than 8'-0" above lowe e below, these gates are not located within 1.5x gate/fence height (max 8'-0"			
ar Steel		2. Handrails, guardra	ils, and modular or relocatable ramps associat	ted with walking surfaces less than 30" above adjacent grade (excluding post	base		
er Steel or Special Inspection	Type Performed Code References and Notes	3. Non-structural int	'Exception' language in Section 1705A.2.1); fill erior cold-formed steel framing spanning less	than 15'-0", such as in interior partitions, interior soffits, etc. supporting only	self		
		weight and light-we and not over an exit	ight finishes or adhered tile, masonry, stone, o way. Maximum tributary load to a member sh	or terra cotta veneer no more than 5/8" thickness and apex less than 20'-0" in hall not exceed the equivalent of that occurring from a 10'x10' opening in a 1	height		
			port frames and curbs using hot rolled or cold	d-formed steer (i.e., light gauge) for mechanical, electrical, or plumbing equip			
		weighing less than 2		frames to superstructure elements using welding will require special inspecti			
		components to sup		nechanical, electrical, or plumbing hanger support and bracing (connections e special inspection as noted in selected item(s) for Sections 19, 19.1 and/or			
		listing above).					
3-19 (Revised 07/16/2020) THE STATE ARCHITECT	DEPARTMENT OF GENERAL SERVICES STATE OF C	DGS DSA 103-19 (Revised 07/16/ ALIFORNIA DIVISION OF THE STATE ARCHITE		NT OF GENERAL SERVICES STATE OF C	DGS DSA 103-19 (Revised 07/10		T OF GENERAL SERVICES STATE OF CALIFORNIA
	Page 14 of 20			Page 17 of 20			Page 20 of 20
n Number: School Name:	S & SPECIAL INSPECTIONS (Other), 2019 CBC School District:	Appendix: Work Exer Application Number 04-119455	hpt from DSA Requirements for St School Name: TBD	tructural Tests / Special Inspections School District: USA Shade & Fabric Structures			
TBD Imber: Increment Number:	USA Shade & Fabric Structures Date Created: 2021-03-25 21:00:56	DSA File Number:	Increment Number:	<b>Date Created:</b> 2021-03-25 21:00:56			
THER:	Type Performed Code References and Notes	etc.) (connections of s	or mounts with a valid listing (see DSA IR A-5) uch elements to superstructure elements usir cated in the Steel/Aluminum category).	) and recreational equipment (e.g., playground structures, basketball backst ng welding will require special inspection as noted in selected item(s) for sec	ops, ition		
or Special Inspection ad test for identified product(s):	By           Test         LOR         1709A.2, 1709A.3. Testing is not required for: 1) a product with a	7. Any support for exe	mpt non-structural components given in CBC	C Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) meeting the			
	valid evaluation service report per DSA IR A-5, or 2) a product that can be justified by structural calculation.	following: A) when su supporting floor/roof		composite center of mass (including component's center of mass) $\leq$ 4' above for discrete units or <5 plf for distributed systems.			
tallation torque for non-HS bolts	Continuous SI* Applicable to communication towers identified as Essential Servic Facility Projects (ESPP). Calibrated wrench use required, verified by during installation. DSA Policy PL 18-01: Communication Towers, F	SI					
	and Buildings Utilized by State Agencies for Essential Services Communications.*EXCEPTION: Non-ESFP may use PI without need						
	Potification to DSA.						
/							
/							
19 (Revised 07/16/2020) THE STATE ARCHITECT	DEPARTMENT OF GENERAL SERVICES STATE OF C	DGS DSA 103-19 (Revised 07/16/20 ALIFORNIA DIVISION OF THE STATE ARCHITEC		T OF GENERAL SERVICES STATE OF C/	LIFORNIA		
	Page 15 of 20			Page 18 of 20			
					ND INSPECTION NOTES:		
		ONLY TO ASSIST IN THE	RM SHOWN ON THIS SHEET IS FOF COMPLETION OF FUTURE PROJECT	TS SPECIFIC FORM DSA-103. 1. THE PROJECT INSPECTOR	AND TESTING AGENCY SHALL BE SELECT	ED BY THE SCHOOL DISTRICT AND	
		PC IS BEING INCORPORA	RM IS TO BE COMPLETED FOR EAC TED INTO AND ALL SAMPLE DSA-10 DRAWING	13 Charlen and a structure2.The site project inspect03 SHEETS ARE TO BE3.The costs of the project			
		CROSSED OUT ON THIS I		CONTRACTOR, AND THE PF 5. THE IN PLANT INSPECTOR	OJECT INSPECTOR. SHALL BE WELDING SPECIAL INSPECTOR	FOR MATERIAL VERIFICATION AND WELDING.	
				REQUIREMENTS ARE MET: 6.1. A LICENSED WEIGHMA	05A.3.3, BATCH PLANT INSPECTION MAY E		
				TRANSMITTED TO THE	DING MATERIAL QUANTITIES AND WEIGH		
				THE LOAD SHALL NOT	BE PLACED WITHOUT A BATCH TICKET ID A DAILY RECORD OF PLACEMENTS, IDENT	ENTIFYING THE MIX. THE INSPECTOR OF IFYING EACH TRUCK IT'S LOAD, AND TIME OF	
						POSIT IN THE STRUCTURE AND SHALL	





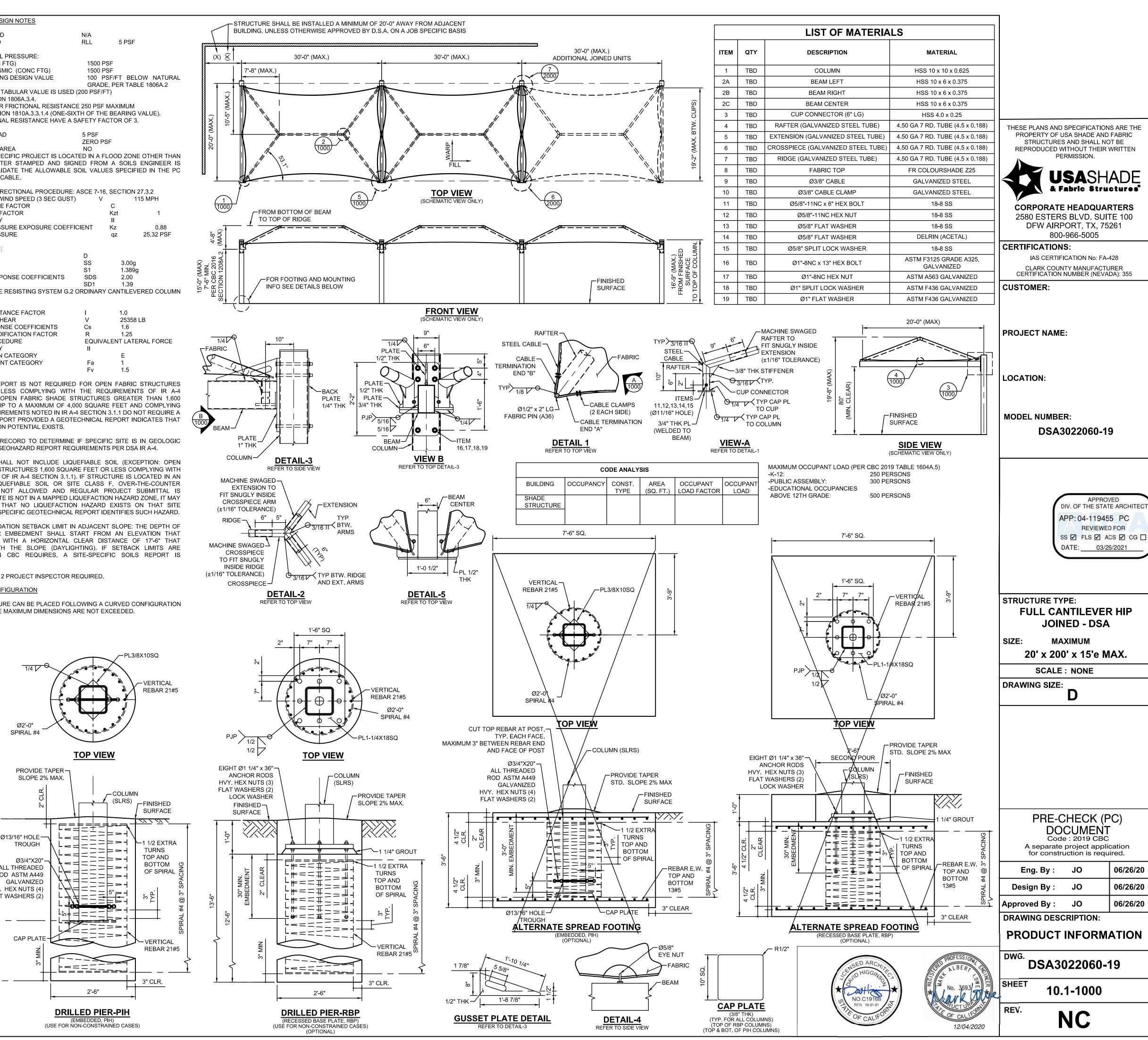


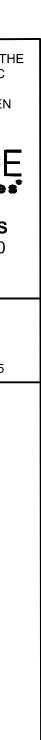


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GENERAL NOTES DESIGN LOADS	2019 CBC PC DESI
BUILDING CODECBC 2019 (BASED ON IBC 2018)LIVE LOADS5 PSF	FLOOR LIVE LOAD ROOF LIVE LOAD
SNOW LOAD       5 PSF         WIND LOADS       115 MPH (3-Sec. Gust); EXPOSURE C; TOPOGRAPHIC FACTOR , Kzt = 1.0         1 SPECIAL INSPECTION REQUIREMENTS SHALL FOLLOW THE ATTACHED SAMPLE TEST AND INSPECTION	ALLOWABLE SOIL DL + LL (CONC F DL + LL + SEISM LATERAL BEARING
LIST (T & I LIST) APPROVED BY DSA. THE SHOP WELDING INSPECTION SHALL INCLUDE WELDING OF ALL STEEL MEMBERS AND IDENTIFICATION OF STEEL THROUGH MILL CERTIFICATE OR MATERIAL TESTING, UNCERTIFIED STEEL SHALL BE TESTED TO THE REQUIREMENTS OF CBC 2019 CHAPTER 17A. THE FIELD SPECIAL INSPECTION SHALL INCLUDE COMPRESSION CYLINDER TESTS FOR THE CONCRETE FOUNDATION. 2 STRUCTURE SHALL BE IN THE LOCATION SHOWN ON THE SITE SPECIFIC DSA APPLICATION DRAWING.	TWO TIMES THE T PER CBC SECTION ALLOWABLE PIER BASED ON SECTIC UPLIFT FRICTIONA
3 FOUNDATION DESIGN BASED ON CBC 2019, TABLE 1806A.2, SOIL CLASS 5 (ALLOWABLE FOUNDATION	ROOF SNOW LOAE
PRESSURE 1500 PSF) 4 DESIGN PER FOLLOWING CODES: CBC 2019, ASCE 7-16, AISC 360-16, AISC 341-16, ACI 318-14, ASCE 55-16 & ASCE 19-16 <u>STRUCTURAL STEEL</u>	ICE LOAD FLOOD HAZARD AF WHEN A SITE SPE ZONE X, A LETTE NEEDED TO VALIE ARE STILL APPLIC.
<ol> <li>1 FABRICATION OF THE STEEL STRUCTURES SHALL BE PERFORMED BY SHADE STRUCTURES OR AN AUTHORIZED LICENSEE. MATERIAL TESTING (OR MILL CERTIFICATES) AND INSPECTION OF WELDING SHALL BE CONDUCTED PER CBC 2019 SECTIONS 1704A, 1705A, 1705A.2, AND TABLE 1705A.2.1.</li> <li>2 ONLY CALIFORNIA LICENSED CONTRACTORS AUTHORIZED BY SHADE STRUCTURES SHALL INSTALL THE</li> </ol>	WIND DESIGN DIRI -BASIC DESIGN WI -WIND EXPOSURE -TOPOGRAPHIC FA -RISK CATEGORY
3 ALL WORK SHALL CONFORM TO CBC 2019 EDITION, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)	-VELOCITY PRESS -VELOCITY PRESS
4 ALL GALVANIZED STEEL TUBE PRODUCTS MANUFACTURED BY ALLIED TUBE & CONDUIT FOR THIS STRUCTURE SHALL BE, AND CONFORM TO ASTM A500-16, IN ITS' ENTIRETY.	SEISMIC DESIGN: -SITE CLASS
TYPICAL MECHANICAL PROPERTIES ARE:ROUND TUBE42,000 PSI YIELD STRESS MINIMUM / 48,000 PSI TENSILE STRESS MINIMUM	-SPECTRAL RESPO
5 ALLSTRUCTURAL SHAPES SHALL BE COLD FORMED HSS ASTM A500 GRADE B, UNLESS OTHERWISE NOTED. TYPICAL MECHANICAL PROPERTIES ACHIEVED FOR HSS PRODUCTS:SQUARE AND RECTANGULAR46,000 PSI YIELD STRESS / 58,000 PSI TENSILE STRESS 42,000 PSI YIELD STRESS / 58,000 PSI TENSILE STRESS	-LATERAL FORCE SYSTEM. -SEISMIC IMPORTA
6 ALL PLATES PRODUCTS SHALL COMPLY WITH ASTM A572 GRADE 50.	-DESIGN BASE SHI -SEISMIC RESPON
7 STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH A.I.S.C. SPECIFICATIONS.	-RESPONSE MODII -ANALYSIS PROCE -RISK CATEGORY
8 ALL WELDING TO CONFORM WITH AMERICAN WELDING SOCIETY STANDARDS AND SHALL BE INSPECTED BY AN AWS/CWI INSPECTOR. AWS D1.1 FOR HOT ROLLED. AWS D1.3 FOR SHEET/COLD FORMED. AWS D1.8 SEISMIC SUPPLEMENT.	-SEISMIC DESIGN
9 ALL FULL PENETRATION WELD SHALL BE CONTINUOUSLY INSPECTED PER AWS D1.1 & D1.8.	GEOHAZARD REP 1,600 SQF OR LI SECTION 3.1.1. O
10 SHOP CONNECTIONS SHALL BE WELDED UNLESS NOTED OTHERWISE. FIELD CONNECTIONS SHALL BE AS INDICATED ON THE DRAWINGS (IF REQUIRED). ALL FILLET WELDS SHALL BE A MINIMUM OF 3/16" ER70SX ELECTRODES UNLESS OTHERWISE NOTED. EITHER SMAW OR GMAW IS ACCEPTABLE.	SQUARE FEET UP WITH THE REQUIR GEOHAZARD REPO NO LIQUEFACTION
11 ALL STAINLESS STEEL BOLTS SHALL COMPLY WITH ASTM F-593, YIELD STRENGTH= 65 KSI, TENSILE STRENGTH=100 KSI MINIMUM, ALLOY GROUP 1, CONDITION CW1. ALL NUTS SHALL COMPLY WITH ASTM F-594 ALLOY GROUP 1, CONDITION CW1. REFERRING TO RCSC, ASTM F-593 IS NOT CONSIDERED AS HIGH STRENGTH BOLTS.	ARCHITECT OF RI HAZARD ZONE. GE
12 ALL HIGH STRENGTH BOLTS SHALL COMPLY WITH ASTM F3125 GRADE A325 N (GALVANIZED). ALL NUTS SHALL COMPLY WITH ASTM A563DH, AND WASHERS SHALL COMPLY WITH ASTM F436. ALL HIGH STRENGTH BOLTS SHALL BE TIGHTENED TO A SNUG TIGHT CONDITION.	FABRIC SHADE ST REQUIREMENTS C AREA WITH LIQU
13 ALL STRUCTURAL STEEL (ITEMS FROM NOTE 5) SHALL BE POWDER COATED WITH ONE SHOP COAT (2.5 MILS MIN.) OF ZINC-RICH PRIMER, UNDERCOAT, AND FINISH COAT, OR EQUIVALENT PAINT SYSTEM. THIS COAT IS A WEATHER RESISTANT POWDER COATING BASED ON POLYESTER TGIC (MANUFACTURED BY SHERWIN WILLIAMS, ASKO NOBEL, PPG OR TIGER DRYLAC). TO ACHIEVE OPTIMUM ADHESION, IT IS RECOMMENDED THAT THE PROPER TREATMENT AND DRYING TAKE PLACE BEFORE COATING. POLYESTER POWDER (TGIC) SPECIFICATIONS SHALL BE AS FOLLOWS: - PENCIL HARDNESS (ASTM D-3363) HUMIDITY (ASTM D-2247). - SOLVENT RESISTANCE (PCI METHOD) - 50 DBL RUBS SL. SOFTNESS.	SUBMITTAL IS N REQUIRED. IF SITE BE PRESUMED T UNLESS A SITE-SP MINIMUM FOUNDA REQUIRED PIER CORRESPONDS V INTERSECT WITH
14 ALL STEEL ROUND TUBING (ITEMS FROM NOTE 4) SHALL BE TRIPLE COATED FOR RUST PROTECTION USING THE IN-LINE ELECTROPLATING COAT PROCESS. TUBING SHALL BE INTERNALLY COATED WITH ZINC AND ORGANIC COATINGS TO PREVENT CORROSION AS MANUFACTURED BY ALLIED TUBE & CONDUIT.	SMALLER THAN REQUIRED. MINIMUM CLASS 2
15 COLD-FORMED STEEL MEMBERS SHALL BE 55% ALUMINUM ZINC ALLOY COATED PER ASTM A792/A792M STANDARD IN ACCORDANCE TO AISI S200 TABLE A4-1, CP 90 COATING DESIGNATION. ALL EXPOSED STEEL FASTENERS SHALL BE STAINLESS STEEL (TYPE 304 MINIMUM), HOT DIP GALVANIZED (ASTM A153, CLASS D MINIMUM OR ASTM F2329), OR PROTECTED WITH CORROSION PREVENTIVE COATING THAT DEMONSTRATED NO MORE THAN 2% OF RED RUST IN MINIMUM 1,000 HOURS OF EXPOSURE IN SALT SPRAY TEST PER ASTM B117. ZINC-PLATED FASTENERS DO NOT COMPLY WITH THIS REQUIREMENT.	FOOTPRINT CONF 1 THE STRUCTUF AS LONG AS THE N
CONCRETE SPECIFICATION 1 CONCRETE SHALL BE SAMPLED AND TESTED PER CBC 2019 SECTION 1903A & SHALL BE INSPECTED PER SECTION 1903A.	
2 CONCRETE TO BE F'C= 4500 PSI, TYPE V CEMENT, WATER/CEMENT RATIO OF 0.45, PER ACI 318-14 CHAPTER 5. REINFORCING STEEL TO BE Fy= 60000 PSI , MIN. GR. 60	
<ul> <li>3 ALL ANCHOR BOLTS SET IN NEW CONCRETE (WHEN APPLICABLE) SHALL COMPLY WITH ASTM F-1554</li> <li>GRADE 55 (GALVANIZED PER ASTM A153, CLASS D MINIMUM OR ASTM F2329).</li> <li>ANCHOR BOLT'S EMBEDMENT NEEDS TO BE AS FOLLOW:</li> <li>A) ANCHOR BOLT Ø1 1/4" 30 IN (MINIMUM EMBEDMENT)</li> </ul>	
4 CERTIFIED MILL TEST REPORTS ARE TO BE PROVIDED FOR EACH SHIPMENT OF REINFORCEMENT.	
5 ALL NON-SHRINK GROUT SHALL HAVE A MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF 5000 PSI, AND SHALL COMPLY THE REQUIREMENTS OF ASTM C109, ASTM C939, ASTM C1090, ASTM C1107, WHEN APPLICABLE.	
FABRIC SPECIFICATION 1 FABRIC SHALL BE MANUFACTURED BY MULTIKNIT LTD. OR OTHER COMPANY WHO CAN MANUFACTURE FABRIC, WHICH MEETS THE SPECIFICATIONS LISTED ON PAGE 2000, AND SHALL BE FABRICATED FROM POLYETHYLENE MATERIALS.	
2 THE FABRIC SHALL RETAIN 80% OF ITS TENSILE AND TEARING STRENGTH AFTER ULTRAVIOLET EXPOSURE PER ASTM G53 USING A 313 NM LIGHT SOURCE FOR 500 HOURS WHILE MOISTENED FOR 1 HOUR EVERY 12 HOURS.	+ + -
3 PROVIDE CERTIFICATION BY MANUFACTURER AND STATE FIRE MARSHAL TO SCHOOL'S DISTRICT INSPECTOR OF RECORD AT SITE SPECIFIC INSTALLATION. COPY OF FIRE CERTIFICATION SHALL BE SENT TO DSA.	Ø
4 FABRIC SHALL REQUIRE ANNUAL INSPECTION AND MAINTENANCE BY THE DISTRICT. FABRICS SAMPLES OF THE SAME MATERIAL WHICH ARE MAINTAINED AT THE PROJECTS SITE SHALL BE TESTED TO BE IN COMPLIANCE WITH ASTM D5034 AND D2261. THE ANNUAL TESTING ON THE APPROVED PLANS SHALL BE COMPARED TO THE FABRIC SPECIFICATIONS INDICATED IN NOTE 1 OF "FABRIC SPECIFICATION" ON THE APPROVED PLANS. THE FABRIC SHALL BE REPLACED WHEN THE TEST RESULTS RETURN LESS THAN 50% OF THE ULTIMATE VALUES IN NOTE 1 OF "FABRIC SPECIFICATION". FIRE TEST ON FABRIC: NFPA 701 TEST 2 AND ASTM E 84 EXTENDED 30 MINUTES TEST. FLAME SPREAD INDEX (FSI): 10. SMOKE DEVELOPED INDEX (SDI): 50. FABRIC IS ACCEPTABLE FOR USE IN WILDLIFE URBAN INTERFACE AREA.	AL AL AL AL AL AL AL AL AL AL AL AL AL A
5 FABRIC TOP NEEDS TO BE REMOVED IF SNOW EXCEEDING 5 PSF ARE ANTICIPATED, FABRIC TOP NEEDS TO BE REMOVED IF WINDS EXCEEDING 115 MPH ARE ANTICIPATED.	
6 A VISUAL INSPECTION LOOKING FOR TEAR AND ABNORMAL WEAR IN FABRIC MATERIAL AND THREAD IS REQUIRED PRIOR TO RE-INSTALLATION. USA SHADE & FABRIC STRUCTURES SHALL BE NOTIFIED IF SIGNIFICANT DAMAGE IS PRESENT BEFORE RE-INSTALLATION.	ł
AIRCRAFT CABLE 1 FOR FABRIC ATTACHMENT USE 3/8" 7x19 GALV. CABLE PER ASTM A1023A, ASTM 1023M-02, WITH A BREAKING STRENGTH VALUE OF 14,400 LBS. CABLE SHALL BE TENSIONED TO 250 LBS MINIMUM. THE	<u> </u>

MAXIMUM CALCULATED CABLE ALLOWABLE CAPACITY IS Sa=4909 LB. 2.- CABLES SHALL BE FED THROUGH THE FABRIC SLEEVES AROUND THE PERIMETER OF THE CANOPY AND TENSIONED UNTIL THE FABRIC PANELS (DESIGNED PURPOSELY UNDERSIZED) REACH A TAUT APPEARANCE. ANY LONG TERM CABLE SAG SHALL BE MINIMIZED DURING THE MAINTENANCE RE-TIGHTING VISITS AS REQUIRED.









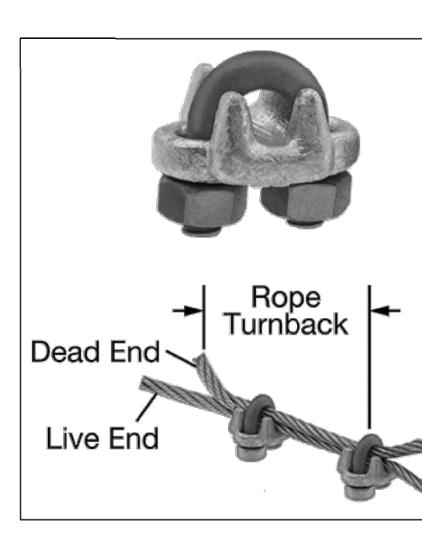
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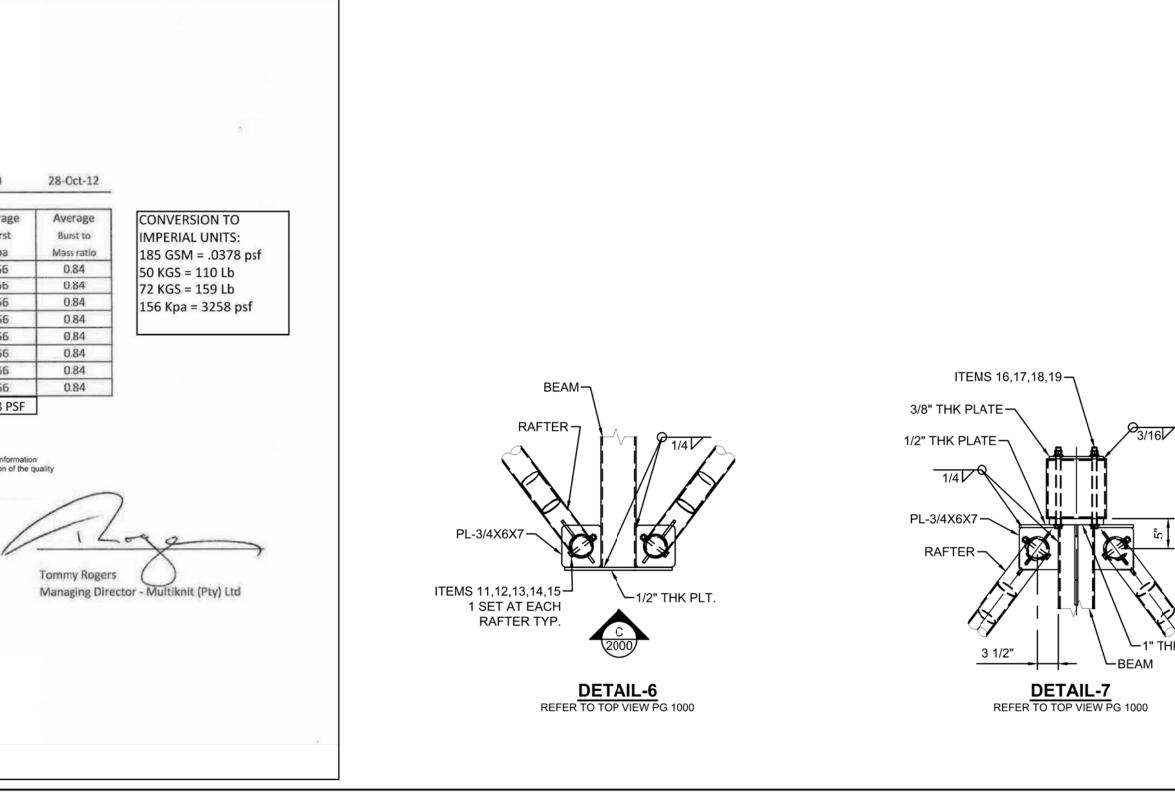
Node No.		Px	Support Forces [kip	P] P <sub>2</sub>	Su M <sub>x</sub>	apport Moments [ki	ipft] Mr		Support Forces [kip SHEAR RESULTANT			
NO.			TY		mg			TIONS	3.718	71.73		
Node			Support Forces [kip	য	Su	upport Moments [ki	ipft]					
No. 86	Мак	P <sub>x</sub> 3.558	P, 3.236	Pz 0.121	M <sub>x</sub> 7.185	M <sub>v</sub> 43.222	Mz 6.365					
	Min Max P <sub>x</sub> Min P <sub>x</sub>	-0.093 3.558 -0.093	-0.714 0.483 -0.399	-4.361 -0.603 -4.334	-54.252 -12.470 -33.350	-0.229 43.222 -0.229	-17.166 -10.993 -6.265	CO 24 CO 16	3.591	44.985		-0.6
	Max P <sub>Y</sub> Min P <sub>Y</sub>	0.453	3.236 -0.714	-0.697 -2.850	-43.348 -19.028	7.140 0.351	-0.896 -10.612	CO 25 CO 39	3.268 0.714	43.932		-0.6
	Max Pz Min Pz	2.028	-0.324	0.121 -4.361	7.185	30.525 13.662	-6.555 6.114	CO 42 CO 15	2.054 0.993	31.359 43.768		-4.3
	Max M <sub>x</sub> Min M <sub>x</sub>	2.028	-0.324 2.454	0.121	7.185	30.525 2.992	-6.565 1.659	CO 42 CO 21	2.054	31.359 54.334	0.12	-3.6
	Max M <sub>Y</sub> Min M <sub>Y</sub>	3.558	0.483	-0.603	-12.470 -33.350	43.222	-10.993	CO 24 CO 16	3.591	44.985		-0.6
88	Max M <sub>2</sub> Min M <sub>2</sub> Max	1.079 1.562 3.596	0.940 0.700 3.492	-2.938 0.074 1.274	-32.870 1.404 32.872	19.131 21.816 43.881	6.365 -17.166 0.000	CO 38 CO 6	1.431	38.032	0.07	-2.9
	Min Max P <sub>x</sub>	0.000	-2.899	-6.813	-69.531	0.000 43.881	-8.405	CO 22	3.598	46.482		-3.1
	Min P <sub>X</sub> Max P <sub>Y</sub>	0.000	-2.899 3.492	-4.470 -3.171	-1.097 -61.758	0.000	0.000	CO 39 CO 23	2.899 3.492	1.097 61.758		-4.4
	Min P <sub>v</sub> Mex P <sub>z</sub>	0.000	-2.899 -1.020	-4.470 1.274	-1.097 24.775	0.000	0.000	CO 39 CO 42	2.899 1.020	1.097 24.775		
	Min P <sub>2</sub> Max M <sub>3</sub> Min M <sub>3</sub>	0.000	1.223 0.063 1.223	-6.813 1.202 -6.813	-69.531 32.872 -69.531	0.000	0.000	CO 15 CO 41 CO 15	1.223 0.063 1.223	69.531 32.872 69.531	1.20	-6.8
	Max M <sub>Y</sub> Min M <sub>Y</sub>	3.596	-0.115	-3.175	-15.331	43.881	-8.405	CO 22 CO 39	3,598	46.482		-3.1
	Max M <sub>2</sub> Min M <sub>2</sub>	0.000	-1.020 -0.115	1.274 -3.175	24.775 -15.331	0.000 43.881	0.000	CO 42 CO 22	1.020	24.775 46.482		-3.1
420	Max Min	3.591 -0.115	3.248 -0.628	0.131 -4.361	5.991 -54.036	43.785 -0.568	6.789 -18.077					
	Max P <sub>X</sub> Min P <sub>X</sub>	3.591	0.499	-0.602	-12.781 -21.186	43.785	-11.119	CO 24 CO 36	3.626 0.126	45.612		-0.6
	Max P <sub>Y</sub> Min P <sub>Y</sub> Max P <sub>Z</sub>	0.476 0.128 1.564	3.248 -0.628 0.714	-0.696 -2.860 <b>0.131</b>	-43.592 -21.071 1.885	7.552 2.596 22.297	-0.971 -10.958 -16.285	CO 25 CO 39 CO 41	3.283 0.541 1.719	44.241 21.230 22.377	0.13	-0.6
	Min P <sub>2</sub> Max M <sub>2</sub>	0.645	0.664	-4.361	-40.791	12.717 32.666	6.582	CO 15 CO 42	0.926	42.727		-4.3
	Min M <sub>x</sub> Max M <sub>y</sub>	0.092	2.442	-3.615	-54.036 -12.781	2.692 43.785	1.850	CO 21 CO 24	2.444 3.626	54.103 45.612		-3.6
	Min My Max Mg	-0.115 1.030	0.051 0.901	-2.560 -2.936	-21.186 -32.050	-0.568 18.284	1.891 6.789	CO 36 CO 38	0.126	21.194 36.899		-2.5
422	Min M <sub>z</sub>	1.782	0.828	0.087	-1.101 30.092	25.672 45.892	-18.077 1.400	CD 6	1.965	25.696	0.08	37
	Min Max P <sub>x</sub> Min P <sub>x</sub>	0.000 3.717 0.000	-2.586 -0.081 0.000	-6.828 -0.798 0.000	-71.734 -2.862 0.000	0.000 45.892 0.000	-8.614 -8.614 0.000	CO 24	3.718	45.981		-0.7
	Min P <sub>X</sub> Max P <sub>Y</sub> Min P <sub>Y</sub>	0.061	3.552	-3.175	-63.142 -9.108	1.128	0.137	CO 23 CO 39	3.553	63.152 11.473		-3.1
	Max Pz Min Pz	0.353	-0.985	1.298	24.500	5.911	-1.725	CO 42 CO 15	1.047	25.203	1.29	
	Max M <sub>x</sub> Min M <sub>x</sub>	0.532 0.001	0.259	1.256 -6.828	30.092 -71.734	8.841 0.324	-2.910 1.400	CO 41 CO 15	0.592	31.364 71.735	1.25	56 -6.8
	Max M <sub>Y</sub> Min M <sub>Y</sub>	3.717 0.000	-0.081 0.000	-0.798 0.000	-2.862 0.000	45.892 0.000	-8.614 0.000	CO 24	3.718	45.981		-0.7
	Max M <sub>2</sub> Min M <sub>2</sub>	0.001 3.717	-0.081	-6.828	-71.734 -2.862	0.324 45.892	1.400	CO 15 CO 24	1.299 3.718	71.735		-6.8
756	Max Min Max P <sub>x*</sub>	2.961 -2.235 <b>2.961</b>	3.236 -0.714 -0.363	0.121 -4.361 -2.876	7.185 -54.252 -7.203	33.848 -33.725 33.848	17.166 -7.981 -7.981	CO 22	2.983	34.606		-2.8
	Min P <sub>X</sub> Max P <sub>Y</sub>	-2.235	-0.317	0.082	7.005	-33.725	7.410	C0 7 C0 25	2.257	34.445	0.08	
	Min P <sub>Y</sub> Max P <sub>Z</sub>	-0.005	-0.324	-2.850 0.121	-19.028 7.185	-0.351 -30.525	10.612 6.565	CO 39 CO 42	0.714 2.054	19.031 31.359		-2.8
	Min P <sub>Z</sub> Max M <sub>X</sub>	-0.701 -2.028	0.703	-4.361 0.121	-41.581 7.185	-13.662 -30.525	-6.114 6.565	CO 15 CO 42	0.993	43.768 31.359		-4.3
	Min M <sub>x</sub> Max M <sub>y</sub>	-0.109 2.961	2.454 -0.353	-3.615 -2.876	-54.252 -7.203	-2.992 33.848	-1.659 -7.981	CO 21 CO 22	2.456 2.983	54.334 34.606		-3.6
	Min M <sub>Y</sub> Max M <sub>Z</sub>	-2.235	-0.317	0.082	7.005	-33,725	7.410	CO 7 CO 6	2.257	34.445	0.07	74
1086	Min M <sub>z</sub> Max Min	2.961 3.538 -0.612	-0.363 3.552 -2.586	-2.876 1.298 -5.828	-7.203 30.092 -71.734	33.848 42.867 -10.280	-7.981 3.105 -8.131	CO 22	2.983	34.606		-2.8
	Max P <sub>X</sub> Min P <sub>X</sub>	3.538	-0.070	-3.176	-16.277 28.357	42.867	-8.131 3.105	CO 22 CO 6	3.539	45.853 30.163		-3.1
	Max P <sub>r</sub> Min P <sub>r</sub>	-0.061 -0.384	3.552 -2.585	-3.175 -4.546	-63.142 -9.108	-1.128 -6.976	-0.137 1.381	CO 23 CO 39	3.553 2.614	63.152 11.473		-3.1
	Max P <sub>Z</sub> Min P <sub>Z</sub>	-0.353 -0.001	-0.985 1.299	1.298 -6.828	24.500 -71.734	-5.911 -0.324	1.725 -1.400	CO 42 CO 15	1.047	25.203 71.735		98 -6.8
	Max M <sub>x</sub> Min M <sub>x</sub>	-0.532 -0.001 3.538	0.259	1.256 -6.828 -3.176	30.092 -71.734 -16.277	-8.841 -0.324 42.857	2.910 -1.400 -8.131	CO 41 CO 15	0.592	31.364 71.735 45.853		-6.8
	Max M <sub>Y</sub> Min M <sub>Y</sub> Max M <sub>Z</sub>	3.538 -0.612 -0.612	-0.070 0.291 0.291	-3.176 1.183 1.183	-16.277 28.357 28.357	42.867 -10.280 -10.280	-8.131 3.105 3.105	CO 22 CO 6 CO 6	3.539 0.678 0.678	45.853 30.163 30.163	1.18	
1420	Max Niz Min M <sub>z</sub>	-0.612 3.538 2.939	-0.070 3.248	-3.176	-16.277 5.991	42.867	-8.131 18.077	CO 22	3.539	45.853		-3.1
	Min Max P <sub>x</sub> ,	-2.372 2.939	-0.628 -0.349	-4.361 -2.876	-54.036 -7.503	-36,129 33,455	-7.897 -7.897	CO 22	2.960	34.286		-2.8
	Min P <sub>X</sub> Max P <sub>Y</sub>	-2.372 -0.476	-0.247 3.248	0.089	5.627 -43.592 -21.071	-36.129 -7.552	8.003 0.971	CO 7 CO 25	2.985	36.565	0.08	-0.6
	Min P <sub>Y</sub> Max P <sub>Z</sub> Min P <sub>Z</sub>	-0.128 -1.564 -0.646	-0.628 0.714 0.664	-2.860 0.131 -4.361	-21.071 1.885 -40.791	-2.596 -22.297 -12,717	10.958 16.285 -6.582	CO 39 CO 41 CO 15	0.641 1.719 0.926	21.230 22.377 42.727	0.13	-2.8
	Max M <sub>X</sub> Min M <sub>X</sub>	-2.151 -0.092	-0.263 2.442	0.128 -3.615	5.991 -54.036	-32.666 -2.692	7.058	CO 42 CO 21	2.167 2.444	33.211 54.103	0.12	-3.6
	Max M <sub>Y</sub> Min M <sub>Y</sub>	2.939	-0.349 -0.247	-2.876 0.089	-7.503 5.627	33.455 -36.129	-7.897 8.003	CO 22 CO 7	2,960 2,385	34.286 36.565	0.08	
	Max M <sub>2</sub> Min M <sub>2</sub>	-1.782 2.939	0.828	0.087 -2.876	-1.101 -7.503	-25.672 33.455	18.077 -7.897	CO 6 CO 22	1.965 2.960	25.696 34.286		87 -2.8
		TER		DINAL.					ated s	pecifi	icatior	
					2	tanda	Avera		Average	Average	Revision	0 Average
	_			1.000	and set	Average	Warp bre	ak E	longation	Weft break	Elongation	Burst
		Colour ert Sand	Shade % 80		lock %	GSM 185	strength 50	Kgs	% s 40	strength kgs 72	% 73	Kpa 156
	-	Blue Brown	80 85	8	35	185 185	50		40 40	72 72	73 73	156 156
	-	Green	80		35	185	50		40	72	73	156
		Red Silver	80 80		36 31	185 185	50 50		40 40	72 72	73 73	156 156
	Te	rracotta	75	8	32	185	50		40	72	73	156
	1	/ellow	80	8	39	185	50 110 L		40	72 1591B	73	156 3258 PSF
	1	Notes:		Tear te This repo provided and chara	ests are do ort has been con is considered to acteristics of the	mpiled using the to be a good refle te fabric tested.	alifornia Sta a 50mm wi e mean results lection of the rel	ate Fire M de strip a from all tests o levant propert	Marshal Title 1 and a cross he conducted on the giv lies of the fabric test	ead speed of ven sample by our ed. These results n	Quality Control Labo	pratory, the informations an indication of the
			Vitu	th								1
		PP .	Deon Joub General M		lultiknit (P	ty) Ltd						12

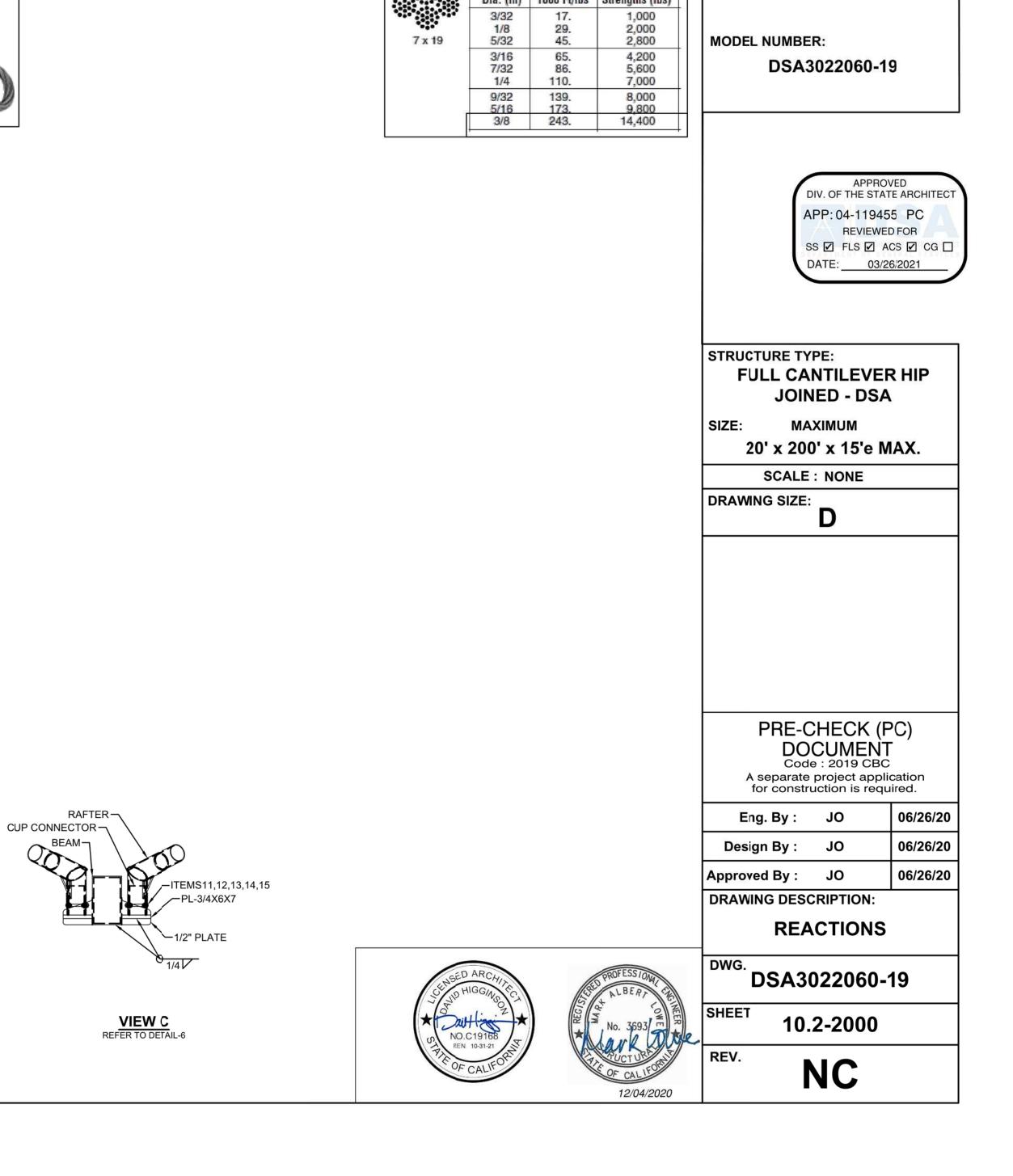
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		BASIC LOAD CASES	
٦.		DASIC LOAD CASES	
t.		DEAD LOAD	0.0378 PSF (FABRIC)
	I	FLOOR LIVE LOAD	N/A
	I	ROOF LIVE LOAD	5 PSF
1	I	ROOF SNOW LOAD	5 PSF
ł.	I		
	I	SUPERIMPOSED LOADS	N/A
-		WIND LOAD	
+	I	ULTIMATE DESIGN WIND SPEED (3 SEC GUST)	
			25.32 PSF
	I	COMPONENT AND CLADDING qz	
-		(CABLE AND CABLE HARDWARE ONLY)	25.32 PSF
+			
		SEISMIC LOAD	
		SEISMIC RESPONSE COEFFICIENTS Cs	1.6
-		DESIGN BASE SHEAR	25358 LB
+			
+			
-			



└─1" THK PLATE





Aircraft Cable

tion rope available.

7 x 19

Preformed, made in accordance with commer-

Carbon Steel (Aircraft Cable) - Galvanized cable has the highest strength and greatest fatigue life of the materials offered. It has good

to fair corrosion resistance in rural to industrial

atmosphere environments. This material is most

widely used for small diameter cables. Tin over

galvanized cable offers greater corrosion resist-

 Approx. Wt
 Breaking

 Dia. (In)
 1000 Ft/lbs

Galvanized

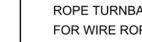
1,000 2,000

2,000 2,800 4,200 5,600 7,000

ance and reduced friction over pulleys.

7 x 19

cial specifications military and federal specifica-



ROPE TURNBACK: 6 1/2"

MATERIAL: GALVANIZED STEEL

FOR WIRE ROPE DIAMETER 3/8"

FORGED WIRE ROPE CLAMP

FITTING TYPE ROPE CLAMP

FABRICATION: FORGED

NUMBER OF CLAMPS REQUIRED: 2

ATTACHMENT TYPE: LOOP

REQUIRED TORQUE 45 FT.-LBS.

CAPACITY 80% OF THE ROPE'S CAPACITY

REQUIRED INSTALLATION TOOL TORQUE WRENCH

SPECIFICATIONS MET ASME B30.26, FED. SPEC. FF-C-450

CLAMP:WIDTH 2", HEIGHT 1 15/16", THICKNESS 1 11/16"

FOR WIRE ROPE CONSTRUCTION 7 × 19



PERMISSION.

DFW AIRPORT, TX, 75261 800-966-5005

IAS CERTIFICATION No: FA-428

DSA3022060-19

**CERTIFICATIONS:** 

CUSTOMER:

LOCATION:

PROJECT NAME:

MODEL NUMBER: