

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

6715 GLORIA DR
SACRAMENTO, CA 95831

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122170 INC.
REVIEWED FOR
SS FLS ACS
DATE: 05/09/2024

LIONAKIS

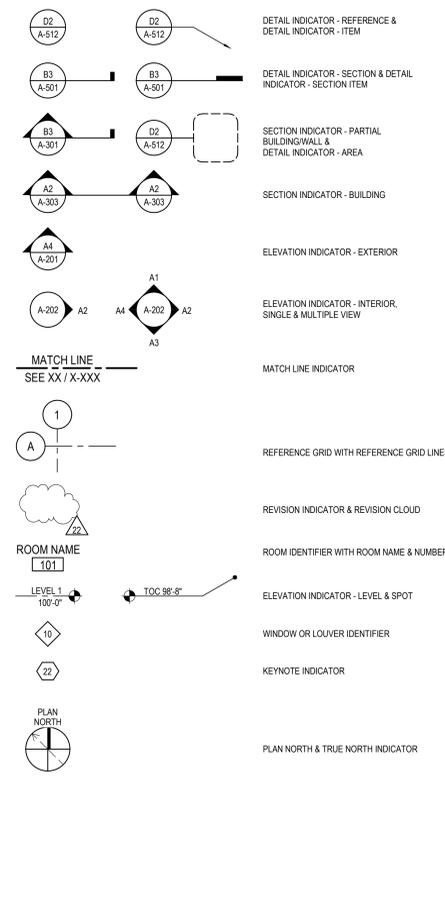
2025 Nineteenth Street
Sacramento CA 95818
P 916.558.1900
www.lionakis.com

CONSULTANT

JOHN F KENNEDY HIGH SCHOOL SWIMMING POOL UPGRADE

DSA APPROVED SET APRIL 30, 2024

ARCHITECTURAL SYMBOLS LEGEND



LIST OF ARCHITECTURAL ABBREVIATIONS

SEE UNITED STATES NATIONAL CAD STANDARD FOR ANY ABBREVIATIONS NOT LISTED BELOW.	DHM DETENTION HOLLOW METAL	MATL MATERIAL	STD STANDARD
& DIA DIAMETER	MAX MAXIMUM	STL STEEL	
AT ARCHITECT / ENGINEER	DIM DIMENSION	STOR STORAGE	
EX EXISTING	DS DOWNSPOUT	STRUC STRUCTURAL	
FOOT, FEET (INCHES) NUMBER	DSP DRY STANDPIPE	SUSP CLG SUSPENDED CEILING	
ALUM ALUMINUM	DWR DRAWER	SHEET VINYL SHEET VINYL	
ARCH ARCHITECTURAL	EA EACH	SYMM SYMMETRICAL	
A/C UNIT AIR CONDITIONING UNIT	EGSB EXTERIOR GYPSUM SHEATHING BOARD	SYS SYSTEM	
ARCH ARCHITECT	EIFS EXTERIOR INSULATION AND FINISH SYSTEM	T TREAD	
AB ANCHOR BOLT	EJ EXPANSION JOINT	T&G TONGUE & GROOVE	
AC ASPHALTIC CONCRETE	EL ELEVATION	TEL TELEPHONE	
ACC ACCESSIBLE	ELEC ELECTRIC / ELECTRICAL	THK THICKNESS	
ACS DR ACCESS DOOR	ELEV ELEVATOR	TMH TOP OF MANHOLE	
ACS PNL ACCESS PANEL	EMER EMERGENCY	TMPD TOP OF	
ACUST ACOUSTIC	ENCL ENCLOSURE	TOF TOP OF CURB	
AD AREA DRAIN	EPB ELECTRICAL PANEL BOARD	TOJ TOP OF JOIST	
ADC AUTOMATIC DOOR CLOSER	EQ EQUIPMENT	TOM TOP OF MASONRY	
ADO AUTOMATIC DOOR OPERATOR	EW EACH WAY	TOP TOP OF PARAPET	
ADDL ADDITIONAL	EWG ELECTRIC WATER COOLER	TOPO TOPOGRAPHY	
ADJ SHV ADJUSTABLE SHELVING	EXST EXISTING	TOS TOP OF STEEL	
AFF ABOVE FINISHED FLOOR	EXP EXPANSION	TOW TOP OF WALL	
AGGR AGGREGATE	EXT EXTERIOR	TV TELEVISION	
AHU AIR HANDLING UNIT	FA FIRE ALARM	TYP TYPICAL	
ASSEMBLY ASSEMBLY	FB FLAT BAR	UC UNDER COUNTER/CABINET	
BD BOARD	FD FLOOR DRAIN	UNO UNLESS NOTED OTHERWISE	
BKG BACKING	FDTN FOUNDATION	UNO UNLESS OTHERWISE NOTED	
BLDG BUILDING	FE FIRE EXTINGUISHER	URNL URINAL	
BM BEAM	FEC FIRE EXTINGUISHER CABINET	VCT VINYL COMPOSITION TILE	
BM BENCHMARK	FIN FINISH	VERT VERTICAL	
BOT BOTTOM	FLG FLOORING	VEST VESTIBULE	
BTWN BETWEEN	FLR FLOOR	VIF VERIFY IN FIELD	
BUR BUILT-UP ROOFING	FLC FACE OF CONCRETE/CURB	VWF VINYL WALL COVERING	
BW BOTH WAYS	FOF FACE OF FINISH	W WITH	
C CHANNEL	FOM FACE OF MASONRY	W/O WITHOUT	
CAB CABINET	FOS FACE OF STUD	WC WATER CLOSET	
CB CATCH BASIN	FW FIREPROOF	WD WOOD	
CBG CALIFORNIA BUILDING CODE	FRP FIBERGLASS REINFORCED PLASTIC	WH WATER HEATER	
CEM CEMENT	FT FEET / FOOT	WO WHERE OCCURS	
CEM PLAS CEM PLASTER	FTG FOOTING	WP WORKING POINT	
CFLG COUNTERFLASHING	FURG FURRING	WPM WATERPROOF MEMBRANE	
CFMF COLD-FORMED METAL FRAMING	FUT FUTURE	WSCOT WAINSCOT	
CG CORNER GUARD	FUT FUTURE	WTR WATER	
CI CAST IRON	GA GAGE	WWR WELDED WIRE REINFORCEMENT	
CJ CONSTRUCTION JOINT / CONTROL JOINT	GALV GALVANIZED		
CL CENTER LINE	GB GRAB BAR		
CLG CEILING	GI GALVANIZED IRON		
CLR CLEAR	GLU LAM GLUED LAMINATED WOOD		
CMU CONCRETE MASONRY UNIT	GYP GYPSUM		
CNTR COUNTER	HB HOSE BIB		
COL CLEANOUT	HC HOLLOW CORE		
CONC CONCRETE	HDBD HARDBOARD		
CONSTR CONSTRUCTION	HDW HARDWARE		
CONT CONTINUE / CONTINUOUS	HDWD HARDWOOD		
COTG CLEANOUT TO GRADE	HM HOLLOW METAL		
CP CONTROL PANEL	HORIZ HORIZONTAL		
CPT CARPET	HR HOUR		
CRS COLD ROLLED STEEL	HT HEIGHT		
CSK COUNTER SUNK	ID INSIDE DIAMETER		
CSWK CASEWORK	INSUL INSULATION		
CT CERAMIC TILE	INT INTERIOR		
CTR CENTER	JAN JANITOR		
DBL DOUBLE	KIT KITCHEN		
DEPT DEPARTMENT	L ANGLE		
DET DETAIL	LAB LABORATORY		
DF DRINKING FOUNTAIN	LAV LAVATORY		

SHEET INDEX

GENERAL	G-001 COVER SHEET
GA101 ACCESSIBILITY SITE PLAN	
GL111 LIFE SAFETY FLOOR PLAN - POOL	
CIVIL	C101 CIVIL TITLE SHEET
VF101 TOPOGRAPHIC SURVEY	
VF102 TOPOGRAPHIC SURVEY	
CD101 SURFACE DEMOLITION PLAN	
CS101 HORIZONTAL CONTROL PLAN	
CG101 GRADING PLAN	
STRUCTURAL	S-001 GENERAL NOTES
S-011 TYPICAL NOTES	
S-012 TYPICAL NOTES	
S-111 PARTIAL FOUNDATION & CEILING FRAMING PLANS	
S-132 PARTIAL PLAN - ROOF FRAMING	
S-531 DETAILS - TYPICAL CONCRETE	
S-532 DETAILS - TYPICAL CONCRETE	
S-551 DETAILS - STRUCTURAL STEEL	
ARCHITECTURAL	AD111 DEMOLITION FLOOR PLAN - LEVEL 1
A-111 FLOOR PLAN - LEVEL 1	
A-511 DECORATIVE METAL FENCE & GATE DETAILS	
A-531 PARTITION TYPES & SCHEDULE	
A-532 DETAILS	
PLUMBING	P-001 PLUMBING NOTES, LEGEND & ABBREVIATIONS
P-002 PLUMBING EQUIPMENT SCHEDULE	
P-101 PLUMBING SITE PLAN	
P-211 PLUMBING DEMO PLAN	
P-211 PLUMBING FLOOR PLAN	
P-411 ENLARGED PLUMBING DEMO & CONSTRUCTION PLAN	
P-501 PLUMBING DETAILS	
P-502 PLUMBING DETAILS	
P-701 TITLE 24 COMPLIANCE	
ELECTRICAL	E001 ELECTRICAL SHEET INDEX, NOTES AND ABBREVIATIONS
E002 ELECTRICAL SYMBOL LEGEND	
E101 ELECTRICAL SITE PLAN	
E201 POWER FLOOR PLAN	
E301 DEMO POWER FLOOR ENLARGED PLAN	
E501 POWER FLOOR ENLARGED PLAN	
E601 ELECTRICAL SCHEDULES AND DETAILS	
POOL	SP-111 SWIMMING POOL / DIVING POOL DEMOLITION PLAN
SP-112 SWIMMING POOL / DIVING POOL DECK PLAN	
SP-113 SWIMMING POOL LAYOUT PLAN	
SP-114 DIVING POOL LAYOUT PLAN	
SP-115 SWIMMING POOL / DIVING POOL PIPING PLAN	
SP-116 SWIMMING POOL / DIVING POOL UNDERWATER LIGHT PLAN	
SP-311 SWIMMING POOL SECTIONS	
SP-312 DIVING POOL SECTIONS	
SP-411 MECHANICAL ROOM DEMOLITION PLAN	
SP-412 MECHANICAL ROOM LAYOUT PLAN	
SP-501 DETAILS	
SP-502 DETAILS	
SP-503 DETAILS	
SP-504 DETAILS	
SP-505 DETAILS	
SP-506 DETAILS	
SP-507 DETAILS	
SP-508 DETAILS	
SP-509 DETAILS	

GENERAL NOTES

- CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES ETC. PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL NOTIFY ARCHITECT WHERE CONFLICT OCCURS ON ANY OF THE CONTRACT DRAWINGS OR DOCUMENTS. CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE BUILDING THAT IS IN CONFLICT UNTIL CONFLICT IS RESOLVED WITH THE AFFECTED PARTIES.
- WHERE REQUIRED, ROOM OCCUPANCY CAPACITIES SHALL BE POSTED WITH THE REQUIREMENTS OF CALIFORNIA STATE FIRE MARSHAL & CBC 1004.9.
- CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE CODES AND REGULATIONS, INCLUDING BUT NOT LIMITED TO:
 - TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS
 - TITLE 24 CCR, PART 1 - 2022 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE
 - TITLE 24 CCR, PART 2 - 2022 CALIFORNIA BUILDING CODE, VOL 1 & 2 (CBC)
 - TITLE 24 CCR, PART 3 - 2022 CALIFORNIA ELECTRICAL CODE (CEC)
 - TITLE 24 CCR, PART 4 - 2022 CALIFORNIA MECHANICAL CODE (CMC)
 - TITLE 24 CCR, PART 5 - 2022 CALIFORNIA PLUMBING CODE (CPC)
 - TITLE 24 CCR, PART 6 - 2022 CALIFORNIA ENERGY CODE
 - TITLE 24 CCR, PART 9 - 2022 CALIFORNIA FIRE CODE (CFC)
 - TITLE 24 CCR, PART 11 - 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
 - TITLE 24 CCR, PART 12 - 2022 CALIFORNIA REFERENCED STANDARDS
 - 2022 NFPA 13, INSTALLATION OF SPRINKLER SYSTEMS (CA AMENDED)
 - 2019 NFPA 14, INSTALLATION OF STANDPIPE AND HOSE SYSTEMS
 - 2021 NFPA 17, DRY CHEMICAL EXTINGUISHING SYSTEMS
 - 2021 NFPA 17A, WET CHEMICAL EXTINGUISHING SYSTEMS
 - 2022 NFPA 20, INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION
 - 2019 NFPA 22, WATER TANKS FOR PRIVATE FIRE PROTECTION
 - 2019 NFPA 24, INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES
 - 2013 NFPA 25, INSPECTION, TESTING, MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS (CA AMENDED)
 - 2022 NFPA 72, NATIONAL FIRE ALARM CODE (CA AMENDED)
 - 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN
- CHANGES TO THE APPROVED DRAWINGS OR SPECIFICATIONS SHALL BE MADE BY APPENDIX OR CONSTRUCTION CHANGE DOCUMENTS (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY THE SECTION 4-338 OF CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 1, (CAC 4-338) SUBSTITUTIONS OF PRODUCTS OR PROCESSES WHICH AFFECT STRUCTURAL SAFETY, FIRE AND LIFE-SAFETY, OR ACCESSIBILITY SHALL BE SUBMITTED AS AN ADDENDUM OR CONSTRUCTION CHANGE DOCUMENT TO DSA FOR REVIEW AND APPROVAL.
- A CLASS 3 PROJECT INSPECTOR EMPLOYED BY THE DISTRICT AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.
- CONSTRUCTION AND DEMOLITION SHALL CONFORM TO 2022 CFC, CHAPTER 33.
- A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.
- THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CONSTRUCTION CHANGE DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK. (SECTION 4-317(c), PART 1, TITLE 24, CCR)
- GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.
- LIONAKIS WILL NOT PROVIDE ANY INFORMATION CONCERNING HAZARDOUS MATERIAL. CONTRACTOR SHALL COORDINATE WITH THE OWNER FOR HAZARDOUS MATERIAL SCOPE AND REQUIREMENTS.

SCOPE OF PROJECT

- SCOPE OF WORK CONSISTS OF THE FOLLOWING:
- ALTERATION TO EXISTING SWIMMING AND DIVING POOLS INCLUDING POOL DECK REPLACEMENT, NEW ADA ACCESS LIFTS, AND PATH OF TRAVEL AS REQUIRED
 - ALTERATION TO BUILDING UNIT H FOR WORK IN MECHANICAL ROOM AND RESTROOM, INCLUDING REPLACEMENT OF POOL EQUIPMENT IN MECHANICAL ROOM.
 - ALTERATION TO BUILDING UNIT J FOR WORK IN EXISTING RESTROOM.

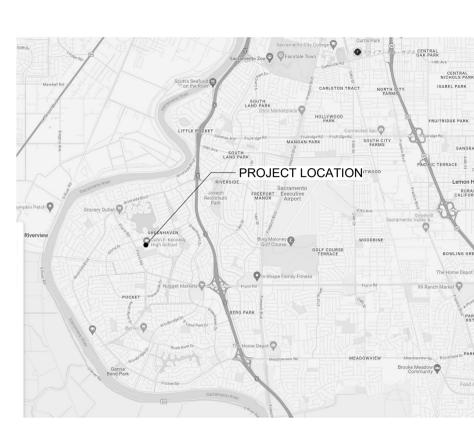
DEFERRED SUBMITTALS

NONE.

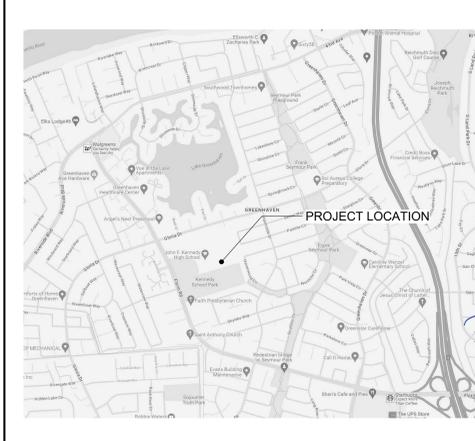
ALTERNATES

NONE.

LOCATION MAP



VICINITY MAP



GENERAL STATEMENT

DSA APPLICATION NO. 02-122170 FILE NO. 34-H7

THE CIVIL, ELECTRICAL, LANDSCAPE, AND OTHER LISTED DRAWINGS IN THE SHEET INDEX AND SPECIFICATIONS HAVE BEEN PREPARED BY OTHER DESIGN PROFESSIONALS OR CONSULTANTS WHO ARE LICENSED AND/OR AUTHORIZED TO PREPARE SUCH DRAWINGS IN THIS STATE. THESE DOCUMENTS HAVE BEEN EXAMINED BY ME FOR THE DESIGN INTENT AND APPEAR TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS AND PROJECT SPECIFICATIONS PREPARED BY ME AND COORDINATION WITH MY PLANS AND SPECIFICATIONS IS ACCEPTABLE FOR INCORPORATION INTO THE CONSTRUCTION OF THIS PROJECT.

THE STATEMENT OF GENERAL PERFORMANCE SHALL NOT BE CONSTRUED AS RELIEVING ME OF MY RIGHTS, DUTIES, AND RESPONSIBILITIES UNDER SECTIONS 17302 AND 81138 OF THE EDUCATION CODE AND SECTIONS 4-336, 4-341, AND 4-344 OF TITLE 24, PART 1, (TITLE 24, PART 1, SECTION 4-317 (b)).

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

IS/ARE IN GENERAL CONFORMANCE WITH PROJECT PLANS AND IS/ARE IN GENERAL CONFORMANCE WITH PROJECT PLANS AND SPECIFICATIONS

HAS/HAVE BEEN COORDINATED WITH THE PROJECT PLANS AND SPECIFICATIONS HAS/HAVE BEEN COORDINATED WITH THE PROJECT PLANS AND SPECIFICATIONS

SIGNATURE: *Brian Bell* DATE: 11/01/2023

ARCHITECT OR ENGINEER DESIGNATED TO BE IN GENERAL RESPONSIBLE CHARGE: BRIAN BELL PRINTED NAME: BRIAN BELL LICENSE NUMBER: C28712 EXPIRATION DATE: 01/31/2025

ARCHITECT OR ENGINEER DELEGATED TO BE RESPONSIBLE FOR THIS PORTION OF THE WORK: SIGNATURE: DATE: PRINTED NAME: EXPIRATION DATE:

PROJECT DIRECTORY

OWNER SACRAMENTO CITY UNIFIED SCHOOL DISTRICT 5735 7TH AVENUE, SACRAMENTO, CA 95824 CONTACT: CHRIS RALSTON PHONE: 916.395.3970 EMAIL: CHRIS.RALSTON@SCUSD.EDU	STRUCTURAL ENGINEER LIONAKIS 2025 19TH STREET SACRAMENTO, CA 95818 CONTACT: LUCAS JOLLY PHONE: 916.558.1900 EMAIL: LUCAS.JOLLY@LIONAKIS.COM
CIVIL ENGINEER WARREN CONSULTING ENGINEERS, INC. 11020 SUN CENTER DR. RANCHO CORDOVA, CA 95670 CONTACT: SETH NISBET PHONE: (916) 985-1970 EMAIL: SETH@WCEINC.COM	POOL ENGINEER AQUATIC DESIGN GROUP 2226 FARADAY AVE CARLSBAD, CA 92008 CONTACT: MICHELLE GABLE PHONE: 760.438.8400 EMAIL: MGABLE@AQUATICDESIGNGROUP.COM
MECHANICAL ENGINEER CAPITAL ENGINEERING 11020 SUN CENTER DR. RANCHO CORDOVA, CA 95670 CONTACT: MATT BROOKS PHONE: 916.851.3500 EMAIL: MBROOKS@CAPITAL-ENGINEERING.COM	ELECTRICAL ENGINEER LP CONSULTING ENGINEERING 1209 PLEASANT GROVE BLVD, ROSEVILLE, CA 95678 CONTACT: TOM SCHLEPP PHONE: (916) 771-0778 EMAIL: TSCHELEPP@PEENGINEERS.COM

SHEET IDENTIFICATION LEGEND

DISCIPLINE DESIGNATORS - LEVEL 1	SHEET TYPE DESIGNATORS
G GENERAL	0 - GENERAL
H HAZARDOUS MATERIALS	1 - PLANS
V SURVEY/MAPPING	2 - ELEVATIONS
B GEOTECHNICAL	3 - SECTIONS
C CIVIL	4 - LARGE SCALE VIEWS
L LANDSCAPE	5 - DETAILS
S STRUCTURAL	6 - SCHEDULES & DIAGRAMS
A ARCHITECTURAL	7 - USER DEFINED
I INTERIORS	8 - USER DEFINED
O EQUIPMENT	9 - 3D REPRESENTATIONS
P FIRE PROTECTION	
PL PLUMBING	
D PROCESS	
M MECHANICAL	
E ELECTRICAL	
W DISTRIBUTED ENERGY	
T TELECOMMUNICATIONS	
R RESOURCE	
X OTHER DISCIPLINES	
Z CONTRACTOR/SHOP DRAWINGS	
O OPERATIONS	

BUILDING IDENTIFIER - WHERE OCCURS
DISCIPLINE DESIGNATOR - LEVEL 1
DISCIPLINE DESIGNATOR - LEVEL 2
REPLACE DASH WHERE OCCURS
SHEET TYPE DESIGNATOR
SHEET TYPE SUBSET DESIGNATOR
LEVEL/SEQUENCE DESIGNATOR
AREA IDENTIFIER - WHERE OCCURS
UNIQUE PORTION IDENTIFIER - WHERE OCCURS

C.A-123AB



PROJECT
JOHN F KENNEDY HIGH SCHOOL
SWIMMING POOL UPGRADE

6715 GLORIA DR
SACRAMENTO, CA 95831

CLIENT
SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

ISSUED	MARK	DATE	DESCRIPTION

MANAGEMENT	
LIONAKIS PROJECT NO.	022364
CLIENT PROJECT NO.	
COPYRIGHT:	LIONAKIS 2017

DEFERRED SUBMITTALS

NONE.

COVER SHEET

SHEET
G-001

IF THIS SHEET IS NOT 30"x42", IT IS A REDUCED PRINT - SCALE ACCORDINGLY

1:24-031\CIVIL\DWG\24-031 - 101 - VF101.DWG

4/29/2024 5:48:23 PM

IDENTIFICATION STAMP
 DIV. OF THE STATE ARCHITECT
 APP: 02-122170 INC.
 REVIEWED FOR: _____
 DATE: 05/09/2024

LIONAKIS

2025 Nineteenth Street
 Sacramento, CA 95818
 P 916.558.1900
 www.lionakis.com

CONSULTANT
WCE
 WARREN CONSULTING ENGINEERS, INC.
 1117 WINDFIELD WAY, SUITE 110
 EL DORADO HILLS, CA 95762 | (916) 985-1870

SEAL

 ANTHONY J. TABANO
 REGISTERED PROFESSIONAL ENGINEER
 STATE OF CALIFORNIA
 4/28/2024

PROJECT
**JOHN F. KENNEDY HIGH SCHOOL
 SWIMMING POOL UPGRADE**

6715 GLORIA DRIVE
 SACRAMENTO, CA 95831

CLIENT
 SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

ISSUED

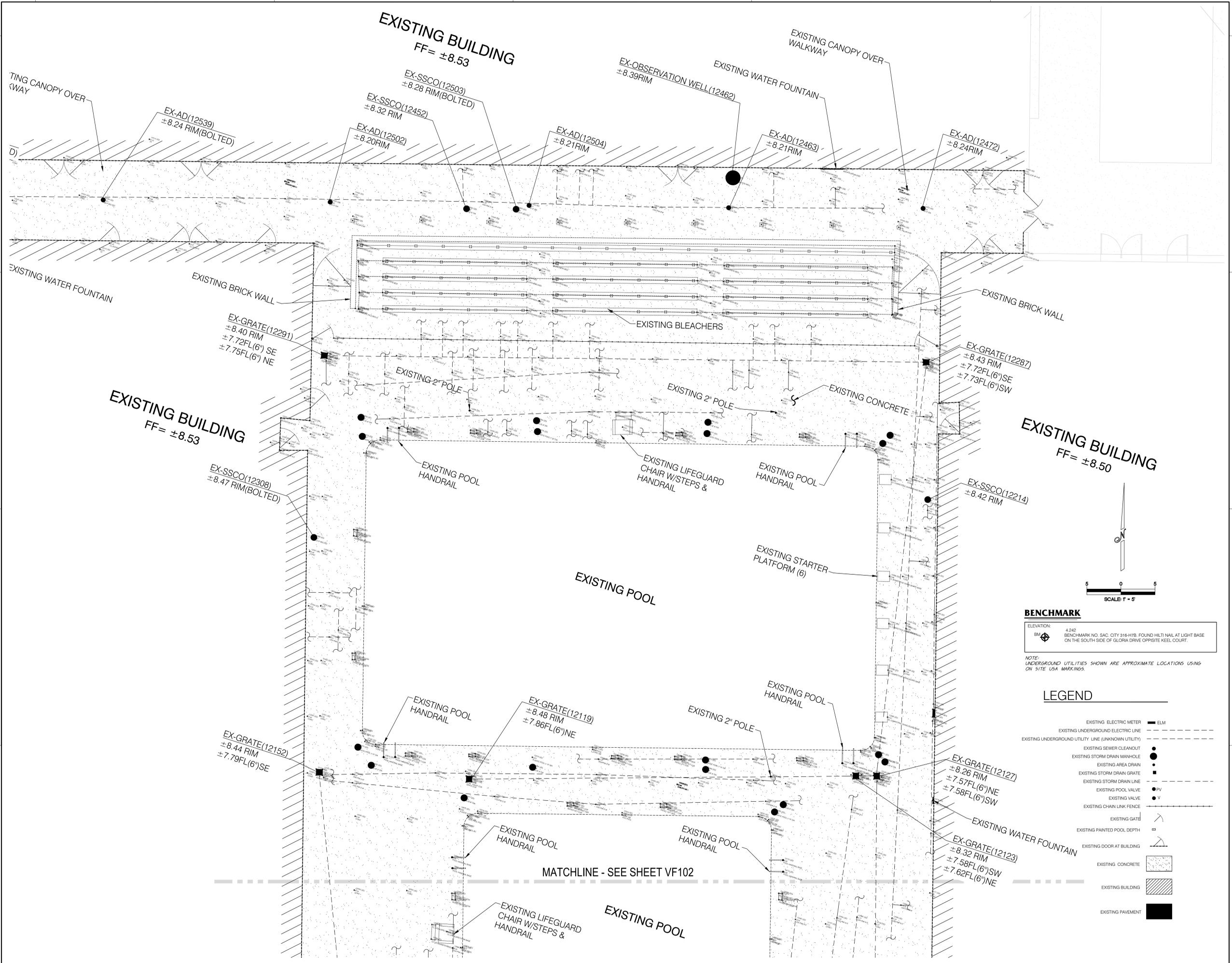
MARK	DATE	DESCRIPTION

MANAGEMENT
 LIONAKIS PROJECT NO: 023283
 CLIENT PROJECT NO: N/A
 COPYRIGHT: LIONAKIS 2023

AGENCY

TITLE
**TOPOGRAPHIC
 SURVEY**

SHEET
VF101



BENCHMARK
 ELEVATION: 4.242
 BM  BENCHMARK NO. SAC. CITY 316-H7B. FOUND HILT NAIL AT LIGHT BASE ON THE SOUTH SIDE OF GLORIA DRIVE OPPOSITE KEEL COURT.

NOTE:
 UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE LOCATIONS USING ON SITE USA MARKINGS.

LEGEND

EXISTING ELECTRIC METER	— ELM
EXISTING UNDERGROUND ELECTRIC LINE	- - - - -
EXISTING UNDERGROUND UTILITY LINE (UNKNOWN UTILITY)	- - - - -
EXISTING SEWER CLEANOUT	●
EXISTING STORM DRAIN MANHOLE	●
EXISTING AREA DRAIN	●
EXISTING STORM DRAIN GRATE	■
EXISTING STORM DRAIN LINE	- - - - -
EXISTING POOL VALVE	● PV
EXISTING VALVE	● V
EXISTING CHAIN LINK FENCE	- - - - -
EXISTING GATE	∩
EXISTING PAINTED POOL DEPTH	∩
EXISTING DOOR AT BUILDING	∩
EXISTING CONCRETE	
EXISTING BUILDING	
EXISTING PAVEMENT	



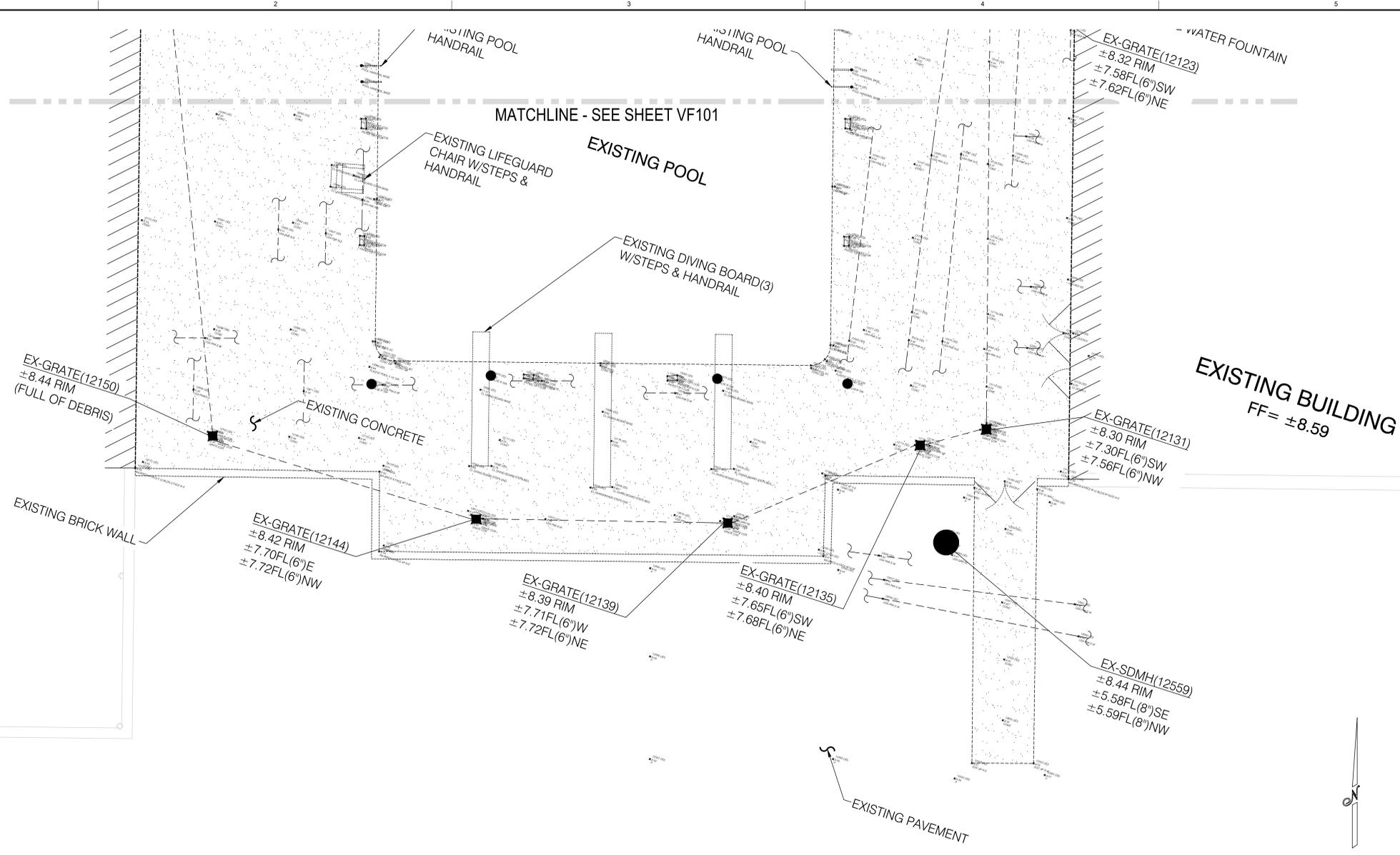
IF THIS SHEET IS NOT 30"x42", IT IS A REDUCED PRINT - SCALE ACCORDINGLY

C

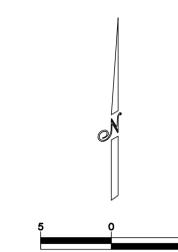
B

1:24-031\CIVIL\DWG\24-031 - 101 - VF101.DWG

4/29/2024 5:48:12 PM



EXISTING BUILDING
FF = ±8.59



BENCHMARK
ELEVATION: 4.242
BM BENCHMARK NO. SAC. CITY 316-H78. FOUND HILT NAIL AT LIGHT BASE ON THE SOUTH SIDE OF GLORIA DRIVE OPPOSITE KEEL COURT.

NOTE: UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE LOCATIONS USING ON SITE USA MARKINGS.

LEGEND

EXISTING ELECTRIC METER	■ ELM
EXISTING UNDERGROUND ELECTRIC LINE	---
EXISTING UNDERGROUND UTILITY LINE (UNKNOWN UTILITY)	---
EXISTING SEWER CLEANOUT	●
EXISTING STORM DRAIN MANHOLE	●
EXISTING AREA DRAIN	●
EXISTING STORM DRAIN GRATE	■
EXISTING STORM DRAIN LINE	---
EXISTING POOL VALVE	● PV
EXISTING VALVE	● V
EXISTING CHAIN LINK FENCE	---
EXISTING GATE	∩
EXISTING PAINTED POOL DEPTH	∩
EXISTING DOOR AT BUILDING	∩
EXISTING CONCRETE	
EXISTING BUILDING	
EXISTING PAVEMENT	

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122170 INC.
REVIEWED FOR:
SS FLS ACS
DATE: 05/09/2024

LIONAKIS

2025 Nineteenth Street
Sacramento, CA 95818
P 916.558.1900
www.lionakis.com

CONSULTANT

WCE
WARREN CONSULTING ENGINEERS, INC.
1117 WINDFIELD WAY, SUITE 110
EL DORADO HILLS, CA 95762 | (916) 985-1870

SEAL



PROJECT
**JOHN F. KENNEDY HIGH SCHOOL
SWIMMING POOL UPGRADE**

6715 GLORIA DRIVE
SACRAMENTO, CA 95831

CLIENT
SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

ISSUED

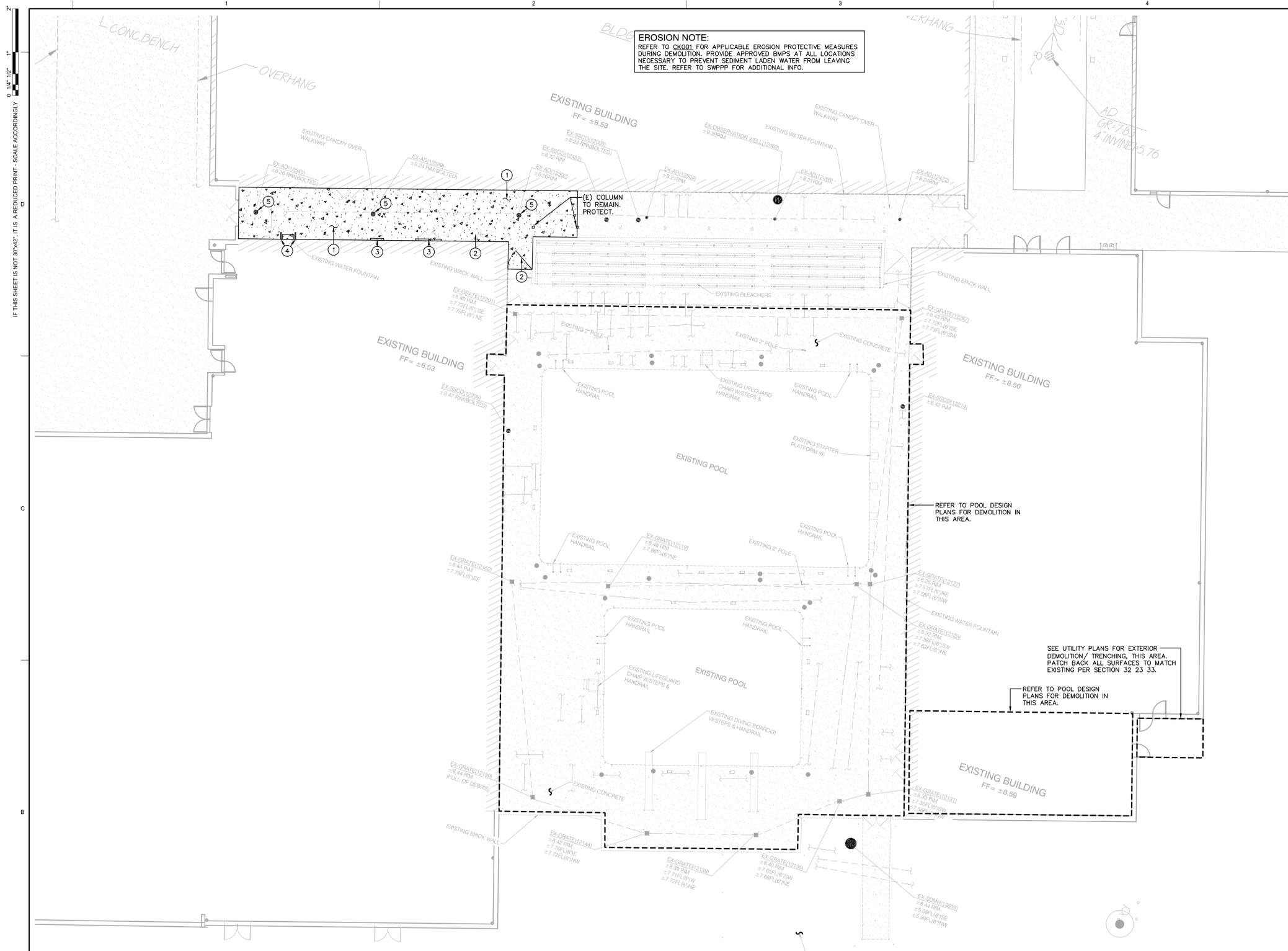
MARK	DATE	DESCRIPTION

MANAGEMENT
LIONAKIS PROJECT NO. 023283
CLIENT PROJECT NO. N/A
COPYRIGHT: LIONAKIS 2023

AGENCY

TITLE
**TOPOGRAPHIC
SURVEY**

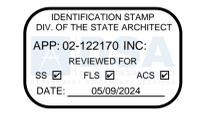
SHEET
VF102



EROSION NOTE:
 REFER TO EROSION FOR APPLICABLE EROSION PROTECTIVE MEASURES DURING DEMOLITION. PROVIDE APPROVED BMPs AT ALL LOCATIONS NECESSARY TO PREVENT SEDIMENT LADEN WATER FROM LEAVING THE SITE. REFER TO SWPPP FOR ADDITIONAL INFO.

- DEMOLITION GENERAL NOTES**
- IN THE EVENT THAT ANY UNUSUAL CONDITIONS NOT COVERED BY THE GEOTECHNICAL INVESTIGATION REPORT OR ARE ENCOUNTERED DURING GRADING OPERATIONS THE GEOTECHNICAL ENGINEER AND THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTIONS.
 - NO BURNING OR BLASTING SHALL BE PERMITTED.
 - ADDITIONAL DEMOLITION INFORMATION MAY BE SHOWN ON THE GRADING, DRAINAGE, AND UTILITY PLANS, AND THOSE PLANS PREPARED BY OTHER DISCIPLINES FOR THIS PROJECT.
 - ALL DEMOLISHED ITEMS SHALL BE DISPOSED OF OFFSITE AT A SUITABLE, LEGAL, DUMP SITE OR OTHER FACILITY.
 - ALL DISPOSED OF MATERIALS SHALL BE RECYCLED IF POSSIBLE.
 - THE TYPES, LOCATIONS, SIZES AND/OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN IN THESE PLANS WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. THE CONTRACTOR IS CAUTIONED THAT ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS, AND DEPTHS OF SUCH UNDERGROUND UTILITIES. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND UTILITIES. HOWEVER, WARREN CONSULTING ENGINEERS CAN ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF ITS DELINEATION OF SUCH UNDERGROUND UTILITIES, NOR FOR THE EXISTENCE OF OTHER BURIED OBJECTS OR UTILITIES WHICH MAY BE ENCOUNTERED BUT WHICH ARE NOT SHOWN ON THESE DRAWINGS. THE CONTRACTOR OR ANY SUBCONTRACTOR FOR THIS CONTRACT SHALL NOTIFY THE DISTRICT TWO (2) WORKING DAYS IN ADVANCE OF PERFORMING ANY EXCAVATION WORK IN ORDER TO VERIFY TO THE GREATEST EXTENT POSSIBLE THE EXISTING UTILITY LINES, CONFLICTS AND PROPOSED UTILITY CONNECTION POINTS.
 - THE SCHOOL DISTRICT SHALL HAVE SALVAGE RIGHTS TO ANY DEMOLISHED ITEMS SHOWN HEREON. THE CONTRACTOR SHALL GIVE THE DISTRICT NOTICE 7 DAYS PRIOR TO THE START OF DEMOLITION. THE DISTRICT SHALL MOVE ANY RETAINED ITEMS OUT OF THE CONTRACTORS WORK AREA, UNLESS ANOTHER ARRANGEMENT IS MADE WITH THE CONTRACTOR. ANY REMAINING ITEMS BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE. ANY ITEMS NOT SHOWN FOR REMOVAL SHALL REMAIN AND SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION TO A REASONABLE EXTENT.
 - EXISTING UTILITY STRUCTURES IN AREAS OF NEW PAVING SHALL BE REMOVED AND REINSTALLED AT NEW GRADE UNLESS SPECIFICALLY NOTED OTHERWISE.
 - ITEMS OUTSIDE THE LIMITS OF DEMOLITION SHALL REMAIN AND BE PROTECTED FROM DAMAGE DURING CONSTRUCTION.
 - CONTRACTOR SHALL COMPLY WITH CHAPTER 33 OF THE 2022 CFC, "FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION" AT ALL TIMES DURING CONSTRUCTION.
 - CONTRACTOR SHALL HIRE A UTILITY LOCATING COMPANY AND SHALL SCAN THE ENTIRE AREA WITHIN THE LIMITS OF NEW WORK. ALL UTILITIES LOCATED SHALL BE MARKED AND PROTECTED DURING THE LAYOUT OPERATIONS AS WELL AS ANY EXCAVATING TASKS. ANY LOCATED UTILITY DAMAGED WITHIN THE LIMITS OF WORK WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR.
 - ALL DEMOLITION SHALL BE APPROPRIATELY SUPPORTED AND REINFORCED DURING REMOVAL TO PREVENT INJURY FROM FALLING, PROJECTILE, OR OTHERWISE MOVING DEBRIS OR OTHER DELETERIOUS MATERIAL. ON-SITE SAFETY WITHIN THE LIMITS OF WORK IS THE CONTRACTORS SOLE RESPONSIBILITY.

- DEMOLITION NOTES**
- AND/OR
 LEGEND
- REMOVE EXISTING CONCRETE PAVING AND BASE AGGREGATES (IF EXIST), WHERE SAWCUTS ARE NECESSARY, THEY SHALL BE A NEAT STRAIGHT LINE. CUT SHALL BE MADE AT NEAREST EXISTING JOINT TO LOCATION SHOWN.
 - REMOVE EXISTING LARGE MAINTENANCE GATE. SEE ARCHITECTURAL PLANS FOR NEW GATE.
 - REMOVE EXISTING METAL THRESHOLD. SEE GRADING PLANS FOR NEW FLATWORK. SEE ARCHITECTURAL PLANS FOR NEW THRESHOLD.
 - REMOVE EXISTING DRINKING FOUNTAIN HANDRAILS. SALVAGE AND RE-INSTALL ON NEW CONCRETE FLATWORK.
 - REMOVE EXISTING FLOOR DRAIN. PROTECT EXISTING PIPING SYSTEMS.



LIONAKIS

2025 Ninth Street
 Sacramento, CA 95818
 P 916.558.1900
 www.lionakis.com



SEAL



PROJECT
JOHN F. KENNEDY HIGH SCHOOL SWIMMING POOL UPGRADE

6715 GLORIA DRIVE
 SACRAMENTO, CA 95831

CLIENT
 SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

MARK	DATE	DESCRIPTION

MANAGEMENT	
LIONAKIS PROJECT NO.	023283
CLIENT PROJECT NO.	N/A
COPYRIGHT:	LIONAKIS 2023

AGENCY

TITLE
SURFACE DEMOLITION PLAN

SHEET
CD101

1 SURFACE DEMOLITION PLAN

SCALE 1" = 10'-0"

EXISTING UTILITIES AND LOCATING
 VARIOUS UTILITIES EXIST BENEATH THE PROPOSED IMPROVEMENTS. CONTRACTOR SHALL ACQUIRE UNDERGROUND LOCATOR TO LOCATE ALL UTILITIES IN ACCORDANCE WITH EARTHWORK SECTION 31 0000. APPROXIMATE LOCATIONS HAVE BEEN SHOWN ON THESE PLANS FROM RECORD SOURCES BUT FIELD CONDITIONS MAY VARY. CELLULAR CONDUITS REQUIRE EXTREME CAUTION WHEN WORKING AROUND. SHALLOW UTILITIES, MAY REQUIRE ADDITIONAL WORK AS OUTLINED IN THESE PLANS AND SPECIFICATIONS TO AVOID DAMAGE TO UTILITIES. CONTACT ARCHITECT IMMEDIATELY IF FOUND UTILITIES CONFLICT WITH NEW WORK.

UTILITY VERIFICATION NOTE
 PRIOR TO THE START OF CONSTRUCTION, VERIFY AND POTHOLE ALL UTILITY POINTS OF CONNECTION FOR LOCATION, DEPTH, AND SIZE. IF CONFLICT IS FOUND, CONTACT THE ENGINEER IMMEDIATELY FOR DIRECTION.

CONCRETE SAWCUT NOTE
 SAWCUTS AND SUBSEQUENT PATCH BACK OF CONCRETE WALKS, SHALL BE TO THE EXISTING CONCRETE JOINT BEYOND NEAREST LOCATION OF DEMOLITION AS SHOWN. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE, SHOW AND COORDINATE WITH EXISTING JOINTS, HOWEVER IF FIELD CONDITIONS ARE OTHERWISE, IT IS UNDERSTOOD TO REMOVE AND PATCH BACK TO THE NEAREST JOINTS BEYOND DEMOLITION.

IRRIGATION DEMOLITION
 WITHIN LANDSCAPE AREAS TO BE DEMOLISHED THERE MAY BE EXISTING IRRIGATION LINES NOT SHOWN ON THIS PLAN. CONTRACTOR SHALL REMOVE LATERAL LINE AND HEADS ENCOUNTERED, PROVIDED THAT THE MAIN LINES AND CONTROL WIRES ONLY IF ROUTING IS KNOWN AND REMOVAL WILL NOT DEACTIVATE AN IRRIGATION SYSTEM INTENDED TO REMAIN. IF CONFLICT IS FOUND, CONTACT THE ENGINEER FOR DIRECTION.
 WHEN IRRIGATION LINES ENTERING NEW WORK ARE CUT TEMPORARILY FOR CONSTRUCTION, EVEN IF THEY ARE TO BE RE-CONNECTED TO AT SOME POINT DURING CONSTRUCTION, SHALL BE CAPPED TO ALLOW UPSTREAM HEADS IN THAT SYSTEM ZONE TO OPERATE. CAPS SHALL BE REMOVED IF A RE-CONNECTION IS PLANNED.

CAL-GREEN - Waste Diversion

5.408.1 Construction waste management. Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with Section 5.408.1.1, 5.408.1.2 or 5.408.1.3, or meet a local construction and demolition waste management ordinance, whichever is more stringent.

5.408.1.1 Construction waste management plan. Where a local jurisdiction does not have a construction and demolition waste management ordinance that is more stringent, submit a construction waste management plan that:

- Contractor shall identify the construction and demolition waste materials to be diverted from disposal, to comply with 65% criteria listed above, by efficient usage, recycling, reuse on the project or salvage for future use or sale.
- Contractor shall determine if construction and demolition waste materials will be sorted on-site (source-separated) or bulk mixed (single stream). Either method is the responsibility of the contractor.
- Contractor shall identify diversion facilities where construction and demolition waste material collected will be taken. Transport to such facilities is contractor's responsibility.
- Contractor shall record and provide record of the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both.

5.408.1.2 Waste management company. Utilize a waste management company that can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with this section.

Contractor shall make the determination if the construction and demolition waste material will be diverted by a waste management company. Contractor shall make any and all arrangements with waste management company for pickup of materials.

Exceptions to Sections 5.408.1.1 and 5.408.1.2:

- Excavated soil and land-clearing debris.
- Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist.
- Demolition waste meeting local ordinance or calculated in consideration of local recycling facilities and markets.

5.408.1.3 Waste stream reduction alternative. The combined weight of new construction disposal that does not exceed two pounds per square foot of building area may be deemed to meet the 65 percent minimum requirement as approved by the enforcing agency.

CAL-GREEN - Waste Diversion Documentation Required (Ref Calgreen 5.408.1.4)
 Contractor shall prepare and provide documentation to the enforcing agency which demonstrates compliance with Calgreen Sections 5.408.1.1 through 5.408.1.3. The waste management plan shall be updated as necessary and shall be accessible during construction for examination by the enforcing agency.

Notes:

- Sample forms found in "A Guide to the California Green Building Standards Code (Nonresidential)" located at <http://www.tbc.ca.gov/Home/CALGreen.aspx> may be used to assist in documenting compliance with the waste management plan.
- Mixed construction and demolition debris (C&D) processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle).

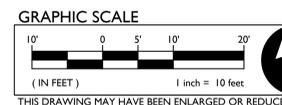
CAL-GREEN - Excavated Soil & Land Clearing

5.408.3 Excavated soil and land clearing debris. 100 percent of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed.

Exception: Reuse, either on- or off-site, of vegetation or soil contaminated by disease or pest infestation.

Notes:

- If contamination by disease or pest infestation is suspected, contact the County Agricultural Commissioner and follow its direction for recycling or disposal of the material. (www.cdffa.ca.gov/excec/county_contacts.html)
- For a map of known pest and/or disease quarantine zones, consult with the California Department of Food and Agriculture. (www.cdffa.ca.gov)

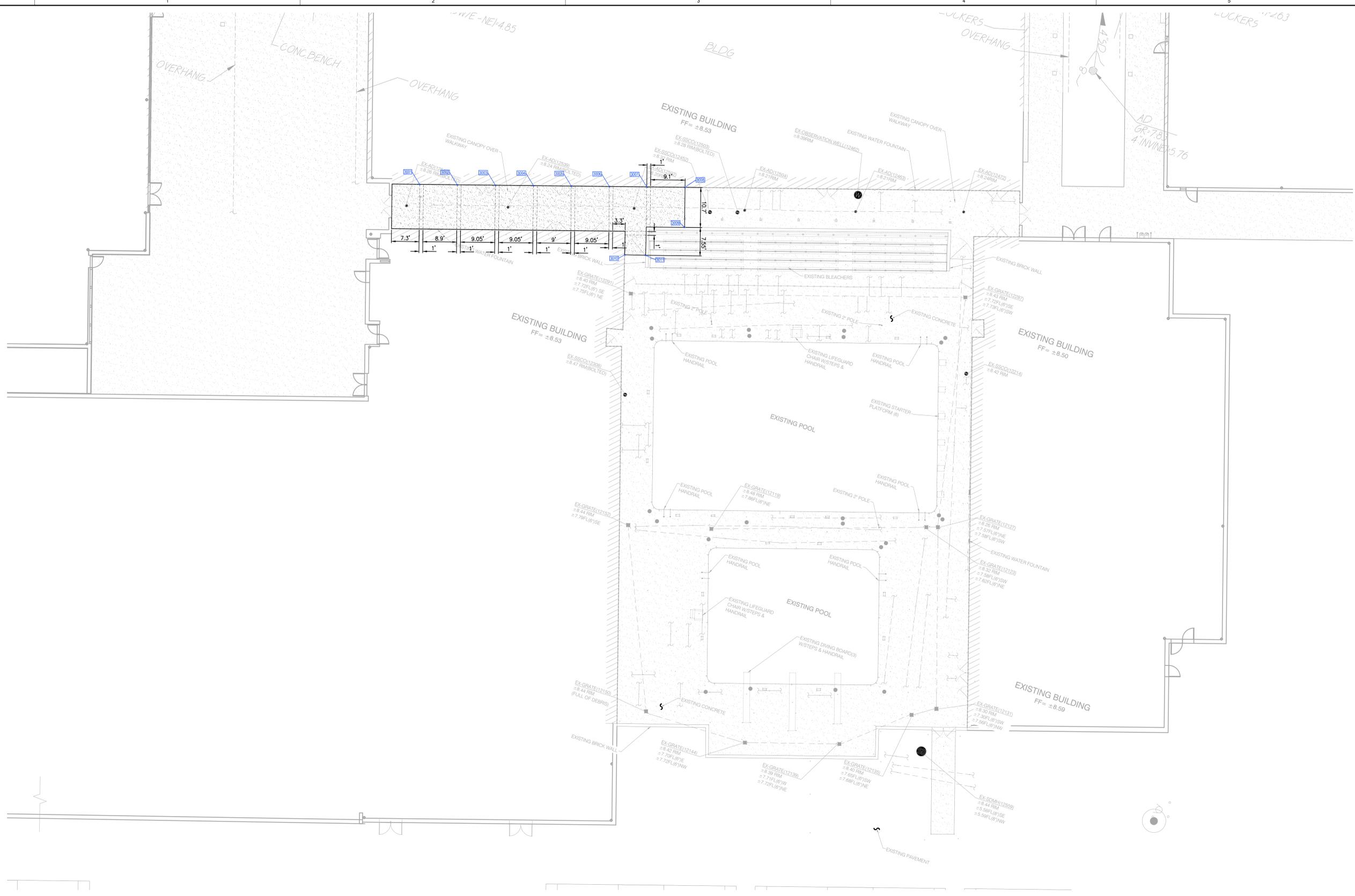


IF THIS SHEET IS NOT 30"x42", IT IS A REDUCED PRINT - SCALE ACCORDINGLY

C

B

1:24-031\CIVIL\DWG\24-031-106- CS101.dwg 4/29/2024 5:47:31 PM



1 HORIZONTAL CONTROL PLAN

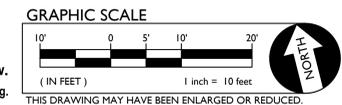
SCALE 1" = 10'-0"

Project Control Point List				
Point #	Raw Description	Elevation	Northing	Easting
3001	JOINT	9858.2691	10353.7381	
3002	JOINT	9861.2272	10363.2020	
3003	JOINT	9864.2261	10372.7980	
3004	JOINT	9867.2256	10382.3924	
3005	JOINT	9870.2030	10391.9181	
3006	JOINT	9873.1983	10401.5007	
3007	JOINT	9876.1415	10410.9169	
3008	JOINT	9879.1521	10420.5488	
3009	JOINT	9868.9584	10423.7327	
3010	JOINT	9857.1245	10410.9477	
3011	JOINT	9858.7174	10416.2568	

Construction Point List			
Point #	Raw Description	Northing	Easting
3001	JOINT	9858.2691	10353.7381
3002	JOINT	9861.2272	10363.2020
3003	JOINT	9864.2261	10372.7980
3004	JOINT	9867.2256	10382.3924
3005	JOINT	9870.2030	10391.9181
3006	JOINT	9873.1983	10401.5007
3007	JOINT	9876.1415	10410.9169
3008	JOINT	9879.1521	10420.5488
3009	JOINT	9868.9584	10423.7327
3010	JOINT	9857.1245	10410.9477
3011	JOINT	9858.7174	10416.2568



COORDINATE NOTE: AS DRAWINGS MAY BE SUBJECT TO CHANGE FOR A VARIETY OF REASONS, CONTRACTOR SHOULD REVIEW COORDINATES PROVIDED ON THIS PLAN WITH APPROVED STRUCTURAL DRAWINGS, PRIOR TO STAKING.



LEGEND

	COORDINATE LOCATION
	COORDINATE NUMBER
COORDINATE LIST SEE LEFT	IBM LIST SEE LEFT
RELEASE OF CAD FILES CAD FILES WILL BE AVAILABLE UPON REQUEST AND WITH SIGNED ELECTRONIC FILE RELEASE AGREEMENT TO BE PROVIDED. WARREN CONSULTING ENGINEERS INC. WILL PROVIDE SUCH CAD FILES WITHIN 2 WORKING DAYS OF RECEIPT OF SIGNED CAD RELEASE AGREEMENT. FILED WILL BE AUTOCAD, VERSION 2018.	

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122170 INC.
REVIEWED FOR:
SS FLS ACS
DATE: 05/09/2024

LIONAKIS

2025 Nineteenth Street
Sacramento, CA 95818
P 916.558.1900
www.lionakis.com

CONSULTANT



WARREN CONSULTING ENGINEERS, INC.
1117 WINDFIELD WAY, SUITE 110
EL DORADO HILLS, CA 95762 | (916) 985-1870

SEAL



PROJECT
**JOHN F. KENNEDY HIGH SCHOOL
SWIMMING POOL UPGRADE**

6715 GLORIA DRIVE
SACRAMENTO, CA 95831

CLIENT
SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

ISSUED		
MARK	DATE	DESCRIPTION

MANAGEMENT	
LIONAKIS PROJECT NO:	023283
CLIENT PROJECT NO:	N/A
COPYRIGHT:	LIONAKIS 2023

AGENCY

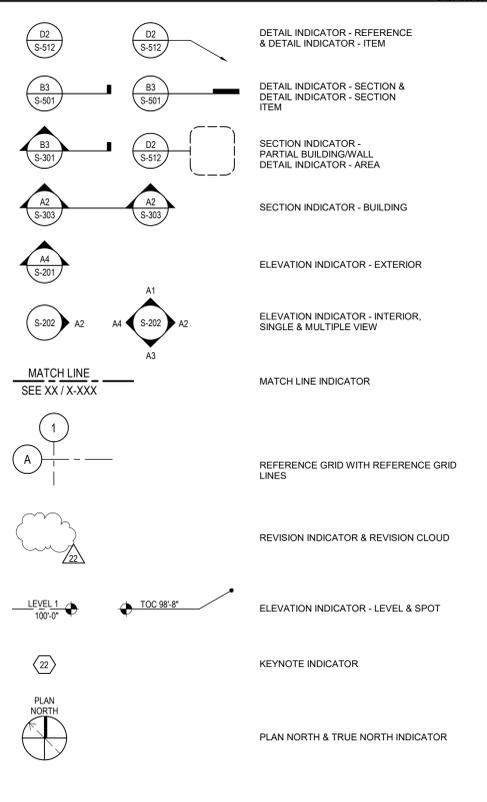
TITLE
**HORIZONTAL CONTROL
PLAN**

SHEET
CS101

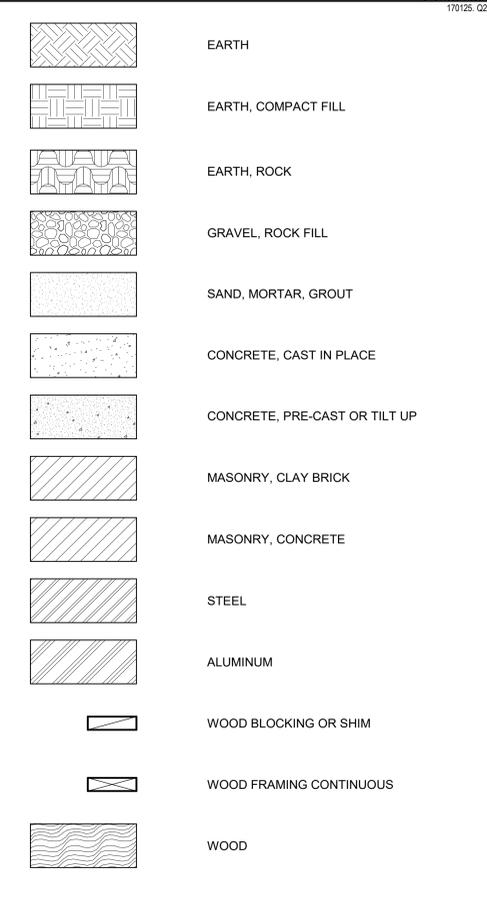
STRUCTURAL ABBREVIATIONS LEGEND

Table listing structural abbreviations and their corresponding symbols. Includes categories like AND, AT, (E), FOOT, INCH, NUMBER, #, #E, AB, ABV, ADDL, AF, AFG, AFS, ALT, ALUM, APPROX, ARCH, ARCH, BFF, BCK, BLDG, BLKG, BLW, BM, BMS, BN, BNS, BTWN, C, CB, CBC, CFSF, CG, CJ, CLR, CMU, CLC, CNCR, CONN, CNT, CRS, CSK, CTR, D, DBL, DCM, DEG, DEMO, DET, DIA, DIAG, DIM, DJ, DL, DO, DOUG FIR, DWG, EWL, EA, EE, EF, EFX, ELEV, ELEC, ELEV, EMBD, EN, EOS, EQ, ES, EW, EXT, F/F, FA, FB, FDN, FIN, FLG, FLR, FMH, FN, FOC, FOF, FOM, FOS, FOW, FRMG, FRTW, FS, FT, FTG, FURG, GA, GALV, GLB, GR, H, HDR, HGR, HLDN, HORIZ, HS, HSB, HSS, HT, IC, ID, IJ, INFO, INT.

STRUCTURAL SYMBOLS LEGEND



MATERIAL SYMBOL LEGEND



STRUCTURAL GENERAL NOTES

- 1. THE STRUCTURAL NOTES AND TYPICAL DETAILS, WHETHER SPECIFICALLY REFERENCED OR NOT, ARE GENERAL AND APPLY TO ALL CONSTRUCTION DOCUMENTS. PROVIDE ALL STRUCTURAL ELEMENTS INDICATED IN THE STRUCTURAL NOTES AND TYPICAL DETAILS AS REQUIRED TO CONFORM TO THE PROJECT AS INDICATED IN OTHER CONSTRUCTION DOCUMENTS. PROVIDE ALL STRUCTURAL ELEMENTS INDICATED IN OTHER CONSTRUCTION DOCUMENTS. STRUCTURAL CONSTRUCTION DOCUMENTS SHALL BE USED IN CONJUNCTION WITH ALL OTHER CONSTRUCTION DOCUMENTS. SEE OTHER CONSTRUCTION DOCUMENTS FOR COMPLETE PROJECT REQUIREMENTS.
2. REFERENCES TO CONSTRUCTION DOCUMENTS ARE TO THE ENFORCEMENT AGENCY APPROVED DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT. SUPPLEMENTAL DOCUMENTS INCLUDING, BUT NOT LIMITED TO, ADDENDA, REVISED DRAWINGS, FIELD INSTRUCTIONS AND MODIFICATIONS PROVIDED FOR THIS PROJECT SHALL BE CONSIDERED A PART OF THE CONSTRUCTION DOCUMENT. ALL REQUIREMENTS OF THE INITIALLY APPROVED CONSTRUCTION DOCUMENTS SHALL APPLY TO ANY SUPPLEMENTAL DOCUMENTS.
3. WHERE THE CONSTRUCTION DOCUMENTS INDICATE TO NOTIFY THE STRUCTURAL ENGINEER, SUCH NOTIFICATION SHALL BE SUBMITTED IN WRITING WITH SUFFICIENT ALLOWANCE FOR A REASONABLE TIME PERIOD FOR THE DESIGN, ENFORCEMENT AGENCY APPROVAL AS REQUIRED AND WRITTEN RESPONSE SO AS NOT TO AFFECT THE CONSTRUCTION SCHEDULE. OBTAIN WRITTEN RESPONSE BEFORE PROCEEDING WITH THE AFFECTED WORK.
4. CAREFULLY EXAMINE THE CONSTRUCTION DOCUMENTS AND NOTIFY THE STRUCTURAL ENGINEER OF ANY CONFLICTS OR DISCREPANCIES WITHIN THE STRUCTURAL CONSTRUCTION DOCUMENTS AND BETWEEN ALL OTHER CONSTRUCTION DOCUMENTS. DEVIATIONS SHALL NOT BE MADE TO THE REQUIREMENTS INDICATED IN THE STRUCTURAL CONSTRUCTION DOCUMENTS.
5. PORTIONS OF THESE CONSTRUCTION DOCUMENTS ARE DIAGRAMMATIC ONLY. ITEMS INCLUDING, BUT NOT LIMITED TO, LOCATIONS, SIZES, QUANTITIES, ACCESSORIES AND CONNECTIONS ARE NOT TO BE REPRESENTED IN A REPRESENTATIONAL MANNER AND MAY NOT BE COMPLETELY SHOWN. PROVIDE ALL WORK AND MATERIALS NECESSARY TO COMPLETE THE PROJECT AS REPRESENTED IN THE CONSTRUCTION DOCUMENTS.
6. DIMENSIONS AND ELEVATIONS INDICATED ARE FOR STRUCTURAL ELEMENTS ONLY. ELEVATIONS SHOWN ARE BASED ON A REFERENCE ELEVATION. COORDINATE REFERENCE ELEVATIONS WITH ACTUAL ELEVATIONS. COORDINATE WITH ALL OTHER CONSTRUCTION DOCUMENTS FOR DIMENSIONS AND ELEVATIONS NOT INDICATED ON THE STRUCTURAL CONSTRUCTION DOCUMENTS. DO NOT SCALE DRAWINGS.
7. CONSTRUCTION SHALL COMPLY WITH ALL BUILDING, HEALTH AND SAFETY STANDARDS, CODES AND REGULATIONS APPLICABLE TO THIS PROJECT. NOTHING IN THE CONSTRUCTION DOCUMENTS SHALL BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE STANDARDS, CODES AND REGULATIONS.
8. REFERENCES TO STANDARDS, CODES AND REGULATIONS INCLUDING, BUT NOT LIMITED TO, ICC, IBC, CBC, ACI, ASTM, ASCE, ANSI, AWS, AISI, AISC AND AISC SHALL BE TO THE LATEST EDITION AS ADOPTED BY THE ENFORCEMENT AGENCY.
9. FEATURES OF CONSTRUCTION INDICATED ARE TYPICAL, WHERE FEATURES ARE NOT FULLY OR SPECIFICALLY INDICATED BY THE CONSTRUCTION DOCUMENTS, THEIR CONSTRUCTION SHALL BE AS INDICATED FOR IDENTICAL OR SIMILAR FEATURES ELSEWHERE IN THE CONSTRUCTION DOCUMENTS. IF ANY CONDITIONS REQUIRE CONSTRUCTION DIFFERENT THAN THAT INDICATED ON THE CONSTRUCTION DOCUMENTS, NOTIFY THE STRUCTURAL ENGINEER.
10. STRUCTURAL ELEMENTS SHALL NOT BE REMOVED OR MODIFIED UNLESS INDICATED IN THE STRUCTURAL CONSTRUCTION DOCUMENTS. IF STRUCTURAL ELEMENTS INTERFERE WITH THE WORK INDICATED IN ANY OTHER CONSTRUCTION DOCUMENTS, NOTIFY THE STRUCTURAL ENGINEER.
11. THE CONSTRUCTION DOCUMENTS AND THE DESIGNS INCORPORATED THEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, ARE NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT.
12. STRUCTURAL ELEMENTS REPRESENTED IN THE CONSTRUCTION DOCUMENTS ARE INDICATED IN THEIR COMPLETE CONSTRUCTION. THE CONSTRUCTION DOCUMENTS DO NOT INDICATE MEANS, METHODS OR SEQUENCES OF CONSTRUCTION UNLESS SPECIFICALLY NOTED OTHERWISE. PROVIDE ALL MEASURES NECESSARY AS REQUIRED FOR THE PROTECTION OF LIFE AND PROPERTY AND TO ASSURE THE CORRECT AND ACCURATE STRUCTURE GEOMETRY AND STABILITY DURING CONSTRUCTION. MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, PROVIDING ADEQUATE FORMING, SHORING AND BRACING. MEASURES SHALL REMAIN IN PLACE UNTIL THE STRUCTURE IS COMPLETE AND ALL OTHER STRUCTURAL ELEMENTS USED TO SUPPORT THEM HAVE BEEN COMPLETED AND HAVE ATTAINED THEIR REQUIRED DESIGN STRENGTHS.
13. PROTECT ALL ELEMENTS, WHETHER CONCEALED OR NOT, INCLUDING, BUT NOT LIMITED TO, PROPERTIES, STRUCTURES, FINISHES, STREETS, LANDSCAPING AND UTILITIES ADJACENT TO OR ON THIS SITE DURING THE CONSTRUCTION OF THIS PROJECT. SHOULD DAMAGE OCCUR TO ANY ELEMENTS, THEY SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER. CONTROL ITEMS SUCH AS, BUT NOT LIMITED TO, DUST, DIRT, WATER, FUMES, SMOKE, TRASH, AND VIBRATION CREATED AS A RESULT OF ANY OPERATIONS DURING CONSTRUCTION IN CONFORMANCE WITH APPLICABLE STANDARDS, CODES AND REGULATIONS.
14. STRUCTURAL DESIGN LOADS, STRENGTHS, CAPACITIES AND CRITERIA INDICATED ON THE CONSTRUCTION DOCUMENTS ARE FOR THE COMPLETED STRUCTURE ONLY. THE USE OF ANY PART OR PARTS OF THE COMPLETED STRUCTURE FOR THE SUPPORT OF THE SUPPORT OF CONSTRUCTION ITEMS INCLUDING, BUT NOT LIMITED TO, OTHER PORTIONS OF THE STRUCTURE, PERSONNEL, MATERIALS AND EQUIPMENT IS LIMITED TO THE SAFE CAPACITY OF THE STRUCTURE AT THE TIME IT IS TO BE USED FOR SUCH SUPPORT. PROVIDE ALL MEASURES NECESSARY AS REQUIRED TO PREVENT OVERLOADING, EXCESSIVE MOVEMENT AND DAMAGE TO ANY PART OR PARTS OF THE STRUCTURE.
15. IF SUBSTITUTIONS ARE REQUESTED FOR STRUCTURAL ELEMENTS INDICATED IN THE CONSTRUCTION DOCUMENTS, NOTIFY THE STRUCTURAL ENGINEER. SUBMIT DATA AND DOCUMENTATION INCLUDING, BUT NOT LIMITED TO, COMPARATIVE QUALITY, SUITABILITY, PERFORMANCE, STRUCTURAL CAPACITY, ICC APPROVAL AND ENFORCEMENT AGENCY ACCEPTABILITY SUBSTANTIATING THE COMPLETE COMPLIANCE OF EACH PROPOSED SUBSTITUTION WITH THE CONSTRUCTION DOCUMENTS. ONLY ONE REQUEST FOR SUBSTITUTION WILL BE ALLOWED FOR EACH STRUCTURAL ELEMENT. SUBSTITUTIONS WILL NOT BE CONSIDERED WHEN SUBMITTALS ARE INCOMPLETE OR ACCEPTANCE WOULD REQUIRE REVISIONS TO THE CONSTRUCTION DOCUMENTS. PROVIDE OWNER REIMBURSEMENT FOR SERVICES REQUIRED TO OBTAIN ENFORCEMENT AGENCY APPROVAL OF SUBSTITUTIONS. IF A PROPOSED SUBSTITUTION SUBMITTAL IS NOT COMPLETE, NOT ACCEPTABLE TO THE STRUCTURAL ENGINEER, OR NOT APPROVED BY THE ENFORCEMENT AGENCY PROVIDE THE SPECIFIED ITEM AS INDICATED IN THE CONSTRUCTION DOCUMENTS. THE STRUCTURAL ENGINEER WILL BE THE SOLE JUDGE OF THE ACCEPTABILITY OF THE PROPOSED SUBSTITUTION VERSUS THE SPECIFIED ITEM. ACCEPTANCE OF A SUBSTITUTION SHALL NOT BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS.
16. SCHEDULES, LEGENDS, ABBREVIATIONS, TYPICAL NOTES AND TYPICAL DETAILS ON THE STRUCTURAL CONSTRUCTION DOCUMENTS MAY REFERENCE STRUCTURAL ELEMENTS OR REQUIREMENTS NOT SPECIFICALLY INDICATED OR REQUIRED ELSEWHERE IN THE CONSTRUCTION DOCUMENTS.
17. THE STRUCTURAL CONSTRUCTION DOCUMENTS ARE NOT COMPLETE AND READY FOR CONSTRUCTION UNTIL THEY ARE APPROVED BY THE ENFORCEMENT AGENCY AND SIGNED BY THE STRUCTURAL ENGINEER.

EXISTING CONSTRUCTION

- 1. CAREFULLY EXAMINE THE CONSTRUCTION DOCUMENTS AND NOTIFY THE STRUCTURAL ENGINEER OF ANY CONFLICTS OR DISCREPANCIES WITHIN THE STRUCTURAL CONSTRUCTION DOCUMENTS AND BETWEEN ALL OTHER CONSTRUCTION DOCUMENTS AND THE EXISTING CONSTRUCTION.
2. EXISTING CONSTRUCTION INDICATED IN THE CONSTRUCTION DOCUMENTS IS BASED UPON INFORMATION SHOWN ON AVAILABLE EXISTING DRAWINGS AND/OR LIMITED VISUAL OBSERVATIONS. THE EXISTING CONSTRUCTION MAY VARY FROM THAT INDICATED ON THE CONSTRUCTION DOCUMENTS. PROVIDE ALL WORK AND MATERIALS NECESSARY TO COMPLETE THE PROJECT AS REPRESENTED IN THE CONSTRUCTION DOCUMENTS.
3. VERIFY ALL DIMENSIONS AND ELEVATIONS OF THE EXISTING CONSTRUCTION PRIOR TO STARTING CONSTRUCTION OR FABRICATION. DO NOT SCALE EXISTING DRAWINGS.
4. PROVIDE AND MAINTAIN A COMPLETE AND LEGIBLE COPY OF THE EXISTING CONSTRUCTION DOCUMENTS AND MAKE THEM AVAILABLE FOR USE ON THE JOB SITE.
5. EXISTING STRUCTURAL ELEMENTS SHALL NOT BE REMOVED OR MODIFIED UNLESS INDICATED IN THE STRUCTURAL CONSTRUCTION DOCUMENTS. IF EXISTING STRUCTURAL ELEMENTS INTERFERE WITH THE WORK INDICATED IN ANY CONSTRUCTION DOCUMENT, OR IF UNCERTAIN THAT AN ELEMENT IS STRUCTURAL, NOTIFY THE STRUCTURAL ENGINEER.
6. PROVIDE ALL MEASURES NECESSARY FOR PROTECTION OF THE EXISTING STRUCTURE AND SITE DURING DEMOLITION AND CONSTRUCTION. MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, PROVIDING ADEQUATE SHORING, BRACING, WEATHER PROTECTION AND DUST PROTECTION. THE REMOVAL OR MODIFICATION OF EXISTING STRUCTURAL ELEMENTS SHALL BE PERFORMED IN A MANNER TO PREVENT DAMAGE TO THOSE ELEMENTS TO REMAIN. SHOULD DAMAGE OCCUR TO ANY EXISTING ELEMENTS, THEY SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
7. EXISTING FOUNDATIONS THAT MAY BE AFFECTED BY ANY EXCAVATIONS REQUIRED FOR THIS PROJECT SHALL BE UNDERPINNED, SHORED OR SUPPORTED ADEQUATELY TO PREVENT SETTLEMENT AND LATERAL MOVEMENT.
8. IF EXISTING STRUCTURAL ELEMENTS NOT INDICATED FOR REPLACEMENT OR REPAIR ARE DISCOVERED TO BE DAMAGED OR DIFFERENT THAN INDICATED ON THE CONSTRUCTION DOCUMENTS, NOTIFY THE STRUCTURAL ENGINEER. SUCH DAMAGE OR DIFFERENCE SHALL INCLUDE, BUT NOT BE LIMITED TO, DRY-ROT, WATER DAMAGE, INSECT DAMAGE, POOR WORKMANSHIP OR UP-LOOSE, BUCKLING, EXCESSIVE DEFLECTION, SAGGING, TWISTING, WARPING, AND DIFFERENT SIZE, ORIENTATION, GRADE, QUALITY OR MATERIAL.
9. WHEN DRILLING/CORING HOLES AT EXISTING CONCRETE OR MASONRY, DO NOT DAMAGE EXISTING REINFORCING (REBAR OR PRE/POST-TENSIONED STRANDS) UNLESS SPECIFICALLY NOTED OTHERWISE. LOCATE ALL EXISTING REINFORCING AT AFFECTED AREAS USING NON-DESTRUCTIVE MEANS PRIOR TO DRILLING/CORING HOLES. MAINTAIN A MINIMUM CLEARANCE OF TWO INCHES BETWEEN THE REINFORCEMENT AND THE HOLE.
10. WHEN SAW-CUTTING EXISTING STRUCTURAL ELEMENTS, DO NOT OVERCUT. INTERSECTING SAW-CUTS SHALL NOT OVERLAP. SAW-CUTS MAY INTERSECT AT SMALL DIAMETER CORE-DRILLED HOLES. SAW-CUTS SHALL BE TANGENT TO AND SHALL NOT EXTEND BEYOND CORE-DRILLED HOLES. CAREFULLY REMOVE REMAINING MATERIAL TO EDGE OF SAW-CUT LINE.
11. ALL CONSTRUCTION INDICATED IS NEW UNLESS SPECIFICALLY DENOTED AS EXISTING.

STRUCTURAL DESIGN CRITERIA

- BUILDING CODE: 2022 CBC
ENFORCEMENT AGENCY: DIVISION OF THE STATE ARCHITECT (DSA)
A. VERTICAL DESIGN CRITERIA (UNLESS OTHERWISE SHOWN OR NOTED)
ROOF LIVE LOADS:
- TYP ROOF AREA 20 PSF (REDUCIBLE)
B. LATERAL DESIGN CRITERIA
SEISMIC SITE CRITERIA: SS=0.62, S1=20.27, SDS=0.54, S01=1.4, SITE CLASS: D (DEFAULT)
BUILDING CRITERIA:
SEISMIC:
- RISK CATEGORY= II
- IMPORTANCE FACTOR: I=1.00
- SEISMIC DESIGN CATEGORY = D
- SEISMIC FORCE RESISTING SYSTEM: (E) LIGHT-FRAMED WOOD SHEAR WALLS
WIND:
BASIC DESIGN WIND SPEED, V(U1T) = 94 MPH
ALLOWABLE STRESS DESIGN WIND SPEED, (V(ASD)) = 72 MPH
RISK CATEGORY = II
WIND EXPOSURE = C
GCP1 = +1.016
WIDTH OF PRESSURE COEFFICIENT ZONE, z = 3'-0"
COMPONENTS AND CLADDING WIND PRESSURES TO BE DETERMINED PER ASCE 7-16
C. SOIL DESIGN CRITERIA
SOIL INFO IS BASED ON GEOTECHNICAL REPORT REFERENCED ON SHEET S-1 OF DSA APP 02-26814
LOWRY & ASSOCIATES / 64-304
SPREAD FOUNDATIONS:
- ALLOWABLE BEARING PRESSURE:
DL = 2000 PSF
DL + LL = 3000 PSF
DL + LL + LATERAL = 4000 PSF
D. HAZARDS
FLOOD DESIGN DATA: N/A - PROJECT SITE DOES NOT OCCUR IN COMMUNITY FLOOD HAZARD REGION AND NOT SUBJECT TO GREATER THAN 1% CHANCE OF FLOODING IN ANY YEAR.

PROJECT DIRECTORY

Table listing project directory information including Owner (SACRAMENTO CITY UNIFIED SCHOOL DISTRICT), Structural Engineer (LIONAKIS), Civil Engineer (WARREN CONSULTING ENGINEERS, INC.), Mechanical Engineer (CAPITAL ENGINEERING), Pool Engineer (AQUATIC DESIGN GROUP), Architect (LIONAKIS), and Electrical Engineer (LP CONSULTING ENGINEERING).

STRUCTURAL SHEET INDEX

Table showing sheet index with columns for Sheet Number and Sheet Name. Includes sheets S-001 through S-561.

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT APP: 02-122170 INC. REVIEWED FOR DATE: 05/09/2024



2025 Nineteenth Street Sacramento CA 95818 P 916.558.1900 www.lionakis.com

CONSULTANT

PROJECT JOHN F KENNEDY HIGH SCHOOL SWIMMING POOL UPGRADE 6715 GLORIA DR SACRAMENTO, CA 95831

CLENT SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

ISSUED table with columns MARK, DATE, DESCRIPTION. Includes entries for 02/29/2024 DSA SUBMITTAL and 04/30/2024 DSA APPROVAL.



MANAGEMENT LIONAKIS PROJECT NO: 023264 CLIENT PROJECT NO: LIONAKIS 2017 COPYRIGHT: LIONAKIS 2017

TITLE GENERAL NOTES SHEET S-001

IF THIS SHEET IS NOT 34" x 42" IT IS A REDUCED PRINT - SCALE ACCORDINGLY

STRUCTURAL SUBMITTALS

- S. 013000 N002A
170125 02
- SUBMITTALS INCLUDE, BUT ARE NOT LIMITED TO, SHOP DRAWINGS, FABRICATION DRAWINGS, PLACEMENT DRAWINGS, CALCULATIONS, DESIGNS, TEST DATA, PRODUCT DATA, SAMPLES, CERTIFICATIONS AND REPORTS AS REQUIRED BY THE CONSTRUCTION DOCUMENTS.
 - SUBMITTALS, AS A MINIMUM, SHALL CONSIST OF TWO (2) COPIES OF EACH SHEET.
 - SUBMITTALS SHALL NOT CONTAIN NOR CONSIST OF REPRODUCTIONS OF THE CONSTRUCTION DOCUMENTS. SUBMITTALS CONTAINING REPRODUCTIONS OF ANY PORTION OF THE CONSTRUCTION DOCUMENTS ARE SUBJECT TO REJECTION.
 - EACH SUBMITTAL SHALL HAVE A COVER SHEET IDENTIFYING THE CONTENTS BY SPECIFICATION SECTION AND LISTING EACH ITEM AND SHEET NUMBER. EACH SUBMITTAL SHALL HAVE A UNIQUE IDENTIFICATION NUMBER.
 - PRIOR TO SUBMISSION TO THE STRUCTURAL ENGINEER, STAMP SUBMITTALS INDICATING THEY HAVE BEEN REVIEWED AND APPROVED FOR COMPLETENESS AND CONFORMANCE WITH THE INTENT OF THE CONSTRUCTION DOCUMENTS. SUBMITTALS THAT ARE DETERMINED TO BE INCOMPLETE, IN THE JUDGMENT OF THE STRUCTURAL ENGINEER, WILL BE RETURNED WITHOUT REVIEW SO THEY CAN BE COMPLETED. THE STRUCTURAL ENGINEER SHALL NOT BE REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.
 - PRIOR TO SUBMISSION TO THE STRUCTURAL ENGINEER, THE OWNER'S TESTING LABORATORY SHALL STAMP THE FOLLOWING MARKED SUBMITTALS INDICATING THEY HAVE BEEN REVIEWED AND APPROVED FOR COMPLETENESS AND CONFORMANCE WITH THE INTENT OF THE CONSTRUCTION DOCUMENTS:
 - CONCRETE MIX DESIGNS AND SUBSTITUTING TEST DATA
 - MASONRY GROUT MIX DESIGNS AND SUBSTITUTING TEST DATA
 - WELDING PROCEDURE SPECIFICATIONS
 - SUBMITTALS SHALL BE REVIEWED BY THE STRUCTURAL ENGINEER PRIOR TO UTILIZATION, INSTALLATION, FABRICATION OR CONSTRUCTION OF ITEMS CONTAINED WITHIN THE SUBMITTALS.
 - SUBMITTALS SHALL BE DELIVERED TO THE STRUCTURAL ENGINEER TO ALLOW SUFFICIENT TIME, IN THE STRUCTURAL ENGINEER'S JUDGMENT, FOR A REASONABLE PERIOD FOR ADEQUATE REVIEW, ENFORCEMENT AGENCY APPROVAL AS REQUIRED AND RESPONSE SO AS NOT TO AFFECT THE CONSTRUCTION SCHEDULE. ALLOW THE STRUCTURAL ENGINEER THE GREATER SUBMITTAL REVIEW PERIOD OF: TEN (10) WORK DAYS, OR FIVE (5) WORK DAYS FOR EACH 100 SHEETS, OR PORTION THEREOF, FOR EACH SUBMITTAL. SUBMITTAL REVIEW PERIOD COMMENCES THE NEXT WORK DAY AFTER SUBMITTAL RECEIPT BY THE STRUCTURAL ENGINEER. CONCURRENT SUBMITTALS OF MULTIPLE PORTIONS OF THE SAME SUBMITTAL ITEM WILL BE REVIEWED IN THEIR ENTIRETY AS ONE SUBMITTAL SUBJECT TO THE REVIEW PERIOD LIMITATION ABOVE. SCHEDULE SUBMITTAL REVIEWS AND CONSTRUCTION ACCORDINGLY.
 - REVIEW OF SUBMITTALS BY THE STRUCTURAL ENGINEER WILL INCLUDE CHECKING FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONSTRUCTION DOCUMENTS. IT WILL NOT INCLUDE REVIEW OF THE ACCURACY OR COMPLETENESS OF ITEMS SUCH AS QUANTITIES, DIMENSIONS, WEIGHTS OR GAUGES, FABRICATION PROCESSES, CONSTRUCTION MEANS OR METHODS, COORDINATION WITH THE WORK OF OTHER TRADES, OR CONSTRUCTION SAFETY PRECAUTIONS. REVIEW OF A SPECIFIC ITEM SHALL NOT INDICATE THAT THE STRUCTURAL ENGINEER HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. THE STRUCTURAL ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS NOT BROUGHT TO THE STRUCTURAL ENGINEER'S ATTENTION IN WRITING.
 - SUBMITTALS PROCESSED BY THE STRUCTURAL ENGINEER ARE NOT CHANGE ORDERS.
 - SUBMITTALS THAT WILL REQUIRE ADDITIONAL REVIEW, IN THE STRUCTURAL ENGINEER'S JUDGMENT, WILL BE MARKED "RESUBMIT". THE SUBMITTAL SHALL BE REVISED AND RESUBMITTED FOR RE-REVIEW AND IS SUBJECT TO ALL THE REQUIREMENTS OF THE INITIAL SUBMITTAL. PROVIDE OWNER REIMBURSEMENT FOR STRUCTURAL ENGINEER COSTS INCURRED TO RE-REVIEW SUBMITTALS.
 - SUBMITTALS THAT HAVE BEEN REVIEWED AND RETURNED BY THE STRUCTURAL ENGINEER REGARDLESS OF THE NUMBER OF SUBMITTALS, SHALL NOT BE PERMITTED TO PERMIT WORK NOT CONFORMING TO THE REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS.
 - THE MINIMUM REQUIRED STRUCTURAL SUBMITTALS INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING MARKED ITEMS:
 - PILE FABRICATION DRAWINGS AND CALCULATIONS
 - CONCRETE MIX DESIGNS AND SUBSTITUTING TEST DATA
 - CONCRETE REINFORCING PLACEMENT DRAWINGS
 - CONCRETE PRODUCT CERTIFICATION AND DATA SHEETS
 - SLAB JOINT LAYOUT
 - MASONRY REINFORCING PLACEMENT DRAWINGS
 - MASONRY GROUT MIX DESIGNS AND SUBSTITUTING TEST DATA
 - MASONRY MORTAR MIX DESIGNS
 - MASONRY PRODUCT CERTIFICATION AND DATA SHEETS
 - STRUCTURAL STEEL SHOP DRAWINGS
 - STEEL DECK PLACEMENT DRAWINGS AND DATA SHEETS
 - WELDING PROCEDURE SPECIFICATIONS
 - METAL-PLATE-CONNECTED WOOD TRUSS PLACEMENT DRAWINGS AND CALCULATIONS
 - WOOD JOIST PLACEMENT DRAWINGS AND CALCULATIONS
 - METAL WEB WOOD JOIST PLACEMENT DRAWINGS AND CALCULATIONS
 - GLUED/LAMINATED TIMBER FABRICATION AND PLACEMENT DRAWINGS AND CERTIFICATIONS
 - PRE-ENGINEERED LUMBER CERTIFICATIONS AND DATA SHEETS
 - OPEN WEB STEEL JOIST PLACEMENT DRAWINGS AND CALCULATIONS
 - PRE-ENGINEERED STEEL STAIR SHOP DRAWINGS AND CALCULATIONS
 - COLD-FORMED STEEL FRAMING PRODUCTS, ACCESSORIES, DATA SHEETS AND CALCULATIONS

STRUCTURAL TESTING & INSPECTION

- S. 014500 N002A
181002 02
- SPECIAL INSPECTION IS DEFINED AS THE INSPECTION OF THE MATERIALS, INSTALLATION, FABRICATION, ERECTION OR PLACEMENT OF COMPONENTS AND CONNECTIONS REQUIRING SPECIAL EXPERTISE TO ENSURE COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS AND REFERENCED STANDARDS.
 - THE OWNER SHALL EMPLOY ONE OR MORE SPECIAL INSPECTORS TO PERFORM INSPECTIONS DURING CONSTRUCTION FOR ITEMS NOTED IN DSA FORM 103. REFER TO PROJECT DETAILS AND LIST BELOW FOR SPECIFIC ITEMS EXEMPT FROM TESTING AND INSPECTION REQUIREMENTS.
 - CONCRETE BATCH PLANT INSPECTION NOT REQUIRED AT SITE. FLATWORK PROVIDED A LICENSED WEIGHMASTER POSITIVELY IDENTIFIES QUANTITY OF MATERIALS AND CERTIFIES EACH LOAD BY A BATCH TICKET.
 - WELDING TESTING/INSPECTION NOT REQUIRED FOR NON-STRUCTURAL COMPONENTS THAT ARE LESS THAN 400# SUPPORTED ON A FLOOR OR ROOF WITH CENTER OF MASS 4' OR LESS ABOVE SUPPORTING FLOOR OR ROOF, AND COMPONENTS THAT ARE LESS THAN 20# (FOR DISCRETE UNITS) OR 5 LBS (FOR DISTRIBUTED SYSTEMS).
 - THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE ENFORCEMENT AGENCY AND THE ARCHITECT/STRUCTURAL ENGINEER, FOR THE INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.
 - SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE ENFORCEMENT AGENCY, OWNER, CONTRACTOR AND ARCHITECT/STRUCTURAL ENGINEER. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS OR WAS NOT COMPLETED IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS.
 - DISCREPANCIES IN THE INSPECTED WORK SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THEY ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENFORCEMENT AGENCY, OWNER, CONTRACTOR AND ARCHITECT/STRUCTURAL ENGINEER PRIOR TO THE COMPLETION OF THAT PHASE OF THE WORK.
 - A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED TO THE ENFORCEMENT AGENCY, OWNER, CONTRACTOR AND ARCHITECT/STRUCTURAL ENGINEER AT THE COMPLETION OF THE WORK INCLUDED IN THE CONSTRUCTION DOCUMENTS.
 - SCHEDULE AND COORDINATE ALL STRUCTURAL TESTS AND SPECIAL INSPECTIONS. NOTIFY THE SPECIAL INSPECTOR 48 HOURS MINIMUM PRIOR TO PERFORMING ANY WORK REQUIRING THE SPECIAL INSPECTOR'S PRESENCE. COORDINATE WITH THE SPECIAL INSPECTOR SO THAT THE WORK REQUIRING THE TESTS AND INSPECTIONS NOTED ABOVE IS ACCESSIBLE AND EXPOSED FOR TESTING AND INSPECTION PURPOSES. REMOVE AND/OR REPLACE MATERIALS AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER TO ALLOW TESTS AND INSPECTIONS.

STRUCTURAL OBSERVATION

- S. 014500 N001A
170125 02
- STRUCTURAL OBSERVATION IS THE VISUAL OBSERVATION OF THE STRUCTURAL SYSTEM BY THE STRUCTURAL OBSERVER (THE STRUCTURAL ENGINEER OR OWNER'S DESIGNATED REPRESENTATIVE) FOR GENERAL CONFORMANCE TO THE ENFORCEMENT AGENCY APPROVED CONSTRUCTION DOCUMENTS AT SIGNIFICANT CONSTRUCTION STAGES AND AT COMPLETION OF THE STRUCTURAL SYSTEM.
 - STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR THE INSPECTIONS REQUIRED BY THE ENFORCEMENT AGENCY OR BY OTHER SECTIONS OF THE BUILDING CODE. REQUIRED INSPECTIONS DO NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR STRUCTURAL OBSERVATION.
 - STRUCTURAL OBSERVATION DOES NOT INCLUDE THE SUPERVISION OF CONSTRUCTION FOR PROPER EXECUTION OF THE WORK SHOWN IN THE CONSTRUCTION DOCUMENTS.
 - THE FOLLOWING COMPLETED CONSTRUCTION STAGES MARKED ARE SUBJECT TO STRUCTURAL OBSERVATION IF DEEMED NECESSARY DURING CONSTRUCTION BY THE STRUCTURAL OBSERVER:
 - FOUNDATION EXCAVATIONS AND REINFORCEMENT PRIOR TO CONCRETE PLACEMENT
 - FORMWORK CONSTRUCTION AND REINFORCEMENT PRIOR TO CONCRETE PLACEMENT
 - CONCRETE TILT-UP PANEL INSTALLATION
 - MASONRY INSTALLATION AND REINFORCEMENT PRIOR TO GROUT PLACEMENT
 - STEEL FRAMING ERECTION
 - STEEL DECK INSTALLATION AND REINFORCEMENT PRIOR TO CONCRETE FILL PLACEMENT
 - STEEL DECK INSTALLATION ON FRAMING
 - WOOD FRAMING ERECTION
 - WOOD STRUCTURAL PANEL INSTALLATION ON FRAMING
 - WOOD HARDWARE AND CONNECTOR INSTALLATION ON STRUCTURAL FRAMING
 - COLD-FORMED STEEL FRAMING ERECTION
 - PRE-FABRICATED STRUCTURAL ELEMENT INSTALLATION
 - PRIOR TO THE CLOSING OF ANY PHASE
 - STRUCTURAL SYSTEM COMPLETION
 - NOTIFY THE STRUCTURAL OBSERVER 48 HOURS MINIMUM IN ADVANCE OF THE COMPLETION OF THE ABOVE CONSTRUCTION STAGES TO FACILITATE STRUCTURAL OBSERVATIONS BY THE STRUCTURAL OBSERVER. COORDINATE WITH THE STRUCTURAL OBSERVER SO THAT THE WORK FOR THE CONSTRUCTION STAGES NOTED ABOVE IS ACCESSIBLE AND EXPOSED FOR STRUCTURAL OBSERVATION PURPOSES. REMOVE AND/OR REPLACE MATERIALS AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER TO ALLOW STRUCTURAL OBSERVATION.
 - DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS NOTED DURING STRUCTURAL OBSERVATIONS SHALL BE CORRECTED AT NO ADDITIONAL COST TO THE OWNER.
 - PROVIDE OWNER REIMBURSEMENT FOR DESIGN PROFESSIONAL COSTS INCURRED TO CORRECT DEVIATIONS AND TO MAKE REVISIONS TO THE CONSTRUCTION DOCUMENTS, INCLUDING OBTAINMENT OF ENFORCEMENT AGENCY APPROVAL AS REQUIRED.
 - CORRECTIVE WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE ENFORCEMENT AGENCY APPROVED CONSTRUCTION DOCUMENTS AND THE BUILDING CODE.
 - AT THE COMPLETION OF THE WORK INCLUDED IN THE CONSTRUCTION DOCUMENTS, THE STRUCTURAL OBSERVER SHALL SUBMIT TO THE ENFORCEMENT AGENCY A WRITTEN STATEMENT THAT THE STRUCTURAL OBSERVATIONS HAVE BEEN MADE AND IDENTIFY ANY REPORTED DEFICIENCIES THAT, TO THE BEST OF THE STRUCTURAL OBSERVER'S KNOWLEDGE, HAVE NOT BEEN RESOLVED.

FOUNDATION AND EARTHWORK

- S. 030000 N001A
170125 02
- ALL FOUNDATION AND EARTHWORK INCLUDING, BUT NOT LIMITED TO, EXCAVATION, GRADING, FILLING, SUB-GRADE PREPARATION, SOIL TREATMENT, ASSOCIATED SITE WORK, TRENCHING AND BACKFILLING SHALL BE PERFORMED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.
 - THE GEOTECHNICAL INFORMATION PROVIDED IS BASED UPON INFORMATION CONTAINED WITHIN EXISTING CONSTRUCTION DOCUMENTS PROVIDED BY THE OWNER FOR THIS PROJECT.
 - THE GEOTECHNICAL INFORMATION PROVIDED IS NOT A WARRANTY OF THE SITE OR SUBSURFACE CONDITIONS. PRIOR TO BIDDING AND AT NO COST TO THE OWNER, SITE VISITS TO INVESTIGATE OR TO PERFORM ADDITIONAL SUBSURFACE INVESTIGATIONS MAY BE MADE TO DETERMINE THE EXISTING CONDITIONS. SUCH INVESTIGATIONS MAY BE PERFORMED ONLY UNDER THE SCHEDULES AND ARRANGEMENTS APPROVED BY THE OWNER IN ADVANCE.
 - AN OWNER-RETAINED SPECIAL INSPECTOR/GEOTECHNICAL ENGINEER SHALL PROVIDE TESTING AND INSPECTION SERVICES DURING ALL FOUNDATION AND EARTHWORK. PRIOR TO REQUESTING AN ENFORCEMENT AGENCY FOUNDATION INSPECTION, OBTAIN WRITTEN DOCUMENTATION FROM THE SPECIAL INSPECTOR/GEOTECHNICAL ENGINEER THAT THE FOUNDATION AND EARTHWORK IS IN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS.
 - NOTIFY THE SPECIAL INSPECTOR/GEOTECHNICAL ENGINEER 48 HOURS IN ADVANCE OF THE TIME WHEN THE FOUNDATION EXCAVATIONS AND EARTHWORK WILL BE COMPLETE AND READY FOR FORMS OR REINFORCING PLACEMENT. NO FORMS OR REINFORCING SHALL BE PLACED IN ANY FOUNDATION UNTIL THE EXCAVATION HAS BEEN INSPECTED AND APPROVED BY THE SPECIAL INSPECTOR/GEOTECHNICAL ENGINEER.
 - FOUNDATIONS SHALL EXTEND INTO FIRM BEARING IN UNDISTURBED SOIL, OR WHERE REQUIRED, IN COMPACTED FILL MATERIAL OR CONTROLLED LOW-STRENGTH MATERIAL PER THE CONSTRUCTION DOCUMENTS. FOUNDATION DEPTHS SHOWN ON THE CONSTRUCTION DOCUMENTS ARE MINIMUM DEPTHS ONLY. FOUNDATION EXCAVATIONS MAY BE REQUIRED TO BE OVER-EXCAVATED TO REACH SUITABLE BEARING MATERIAL, WHERE THE SPECIAL INSPECTOR/GEOTECHNICAL ENGINEER HAS DETERMINED OVER-EXCAVATION IS REQUIRED. THE REMOVED MATERIAL MAY BE REPLACED WITH COMPACTED FILL MATERIAL OR CONTROLLED LOW-STRENGTH MATERIAL PER THE CONSTRUCTION DOCUMENTS.
 - FOUNDATIONS BELOW GRADE SHALL BE FORMED UNLESS WRITTEN DOCUMENTATION PERMITTING UNFORMED FOOTINGS IS OBTAINED FROM THE SPECIAL INSPECTOR/GEOTECHNICAL ENGINEER. FORWARD WRITTEN DOCUMENTATION TO THE STRUCTURAL ENGINEER FOR REVIEW PRIOR TO THE START OF FOUNDATION EXCAVATIONS. THE SIDES OF UNFORMED FOUNDATION EXCAVATIONS MUST BE ABLE TO STAND WITHOUT CAVING OR SLOUGHING. PROVIDE FORMS OR PROTECTION AS REQUIRED TO PREVENT THE EROSION OF SOIL INTO EXCAVATIONS. WHERE UNFORMED FOUNDATIONS ARE USED, COORDINATE AND COMPLY WITH THE CONCRETE PROTECTION REQUIREMENTS FOR REINFORCEMENT PLACED ADJACENT TO EARTH. FOUNDATIONS ABOVE GRADE SHALL BE FORMED. ALL FORMS SHALL BE REMOVED ABOVE OR BELOW GRADE, UNLESS OTHERWISE NOTED.
 - THE TOP SURFACE OF FOUNDATIONS SHALL BE LEVEL. THE BOTTOM SURFACE OF FOUNDATIONS IS PERMITTED TO HAVE A SLOPE NOT EXCEEDING ONE UNIT VERTICAL IN TEN UNITS HORIZONTAL. FOOTINGS SHALL BE STEPPED WHERE IT IS NECESSARY TO CHANGE THE ELEVATION OF SOIL INTO EXCAVATIONS. WHERE UNFORMED FOUNDATIONS ARE USED, ADJACENT EXTERIOR FINISHED GRADE OR SURFACE SLOPES DOWN AND AWAY FROM THE FOUNDATION. THE TOP OF EXTERIOR FOOTINGS SHALL BE NO HIGHER THAN THE ELEVATION OF THE FINISHED GRADE OR SURFACE LOCATED 18 INCHES FROM THE FACE OF SUCH FOOTING. UNLESS OTHERWISE NOTED, STEP FOOTINGS AS REQUIRED PER TYPICAL DETAILS TO OBTAIN THE MINIMUM DIMENSIONS REQUIRED.
 - FOUNDATION DEPTHS SHOWN ON THE CONSTRUCTION DOCUMENTS ARE MINIMUM DEPTHS ONLY AND DO NOT NECESSARILY ACCOUNT FOR ALL PIPES, CONDUITS, UTILITIES AND TRENCHES ADJACENT TO OR CROSSING FOOTINGS AS REQUIRED BY ALL OTHER CONSTRUCTION DOCUMENTS. SHALL NOT BE CONSIDERED TO COMPLY WITH THE REQUIREMENTS OF TYPICAL DETAILS FOR PIPES AND CONDUITS AT FOOTINGS.
 - FOR DAMP-PROOFING, WATER-PROOFING AND DRAINAGE SYSTEMS ADJACENT TO FOUNDATIONS, SEE ALL OTHER CONSTRUCTION DOCUMENTS.
 - FOUNDATION ELEMENTS SHOWN ARE INDICATED IN THEIR COMPLETED LOCATION AND CONDITION. FILL AROUND FOUNDATION ELEMENTS SHALL BE PLACED IN LIFTS AND COMPACTED IN A MANNER THAT DOES NOT DAMAGE OR MOVE THE FOUNDATION, WATER-PROOFING OR DAMP-PROOFING. SHORE AND ADEQUATELY SUPPORT FOUNDATION ELEMENTS WHILE PLACING FILL UNTIL THE FOUNDATION ELEMENTS AND THEIR SUPPORTING STRUCTURAL ELEMENTS HAVE BEEN COMPLETED AND ATTAINED THEIR REQUIRED DESIGN STRENGTHS.
 - FOUNDATION EXCAVATIONS SHALL BE CLEARED OF DEBRIS, LOOSE SOIL AND STANDING WATER DURING CONSTRUCTION AND IMMEDIATELY PRIOR TO CONCRETE PLACEMENT. PROVIDE FUR DE-WATERING IF WATER IS PRESENT IN THE EXCAVATIONS DUE TO ANY SOURCE.
 - FOUNDATION EXCAVATIONS SHALL BE MADE TO THE SIZES AND SHAPES REQUIRED BY THE CONSTRUCTION DOCUMENTS. NO MATERIAL IS TO BE EXCAVATED UNNECESSARILY.
 - EXTERIOR FINISHED GRADES OR SURFACES SHALL HAVE POSITIVE DRAINAGE AWAY FROM FOUNDATIONS. GROUND SURFACES WITHIN TEN FEET OF THE BUILDING FOUNDATION SHALL BE SLOPED A MINIMUM OF 5%. PAVED SURFACES WITHIN TEN FEET OF THE BUILDING FOUNDATION SHALL BE SLOPED A MINIMUM OF 2%. PLANTERS SHALL HAVE ADEQUATE SURFACE DRAINAGE TO PREVENT STANDING WATER ADJACENT TO THE FOUNDATIONS.
 - WHERE EXCAVATIONS OCCUR ADJACENT TO EXISTING STRUCTURES, PROVIDE ADEQUATE UNDERPINNING, SHORING OR SUPPORT TO PREVENT SETTLEMENT AND LATERAL MOVEMENT OF THE EXISTING FOUNDATIONS. FOUNDATIONS ADJACENT TO EXISTING FOUNDATIONS SHALL PENETRATE A MINIMUM OF THE SAME DEPTH AS EXISTING, UNLESS OTHERWISE NOTED.
 - FOUNDATION SIZES SHALL BE AS REQUIRED ON THE CONSTRUCTION DOCUMENTS. THE MINIMUM DEPTH NOTED SHALL BE BELOW THE ADJACENT UNDISTURBED GROUND SURFACE. THE MINIMUM DEPTH SHALL ALSO EXTEND BELOW THE FROST LINE OF THE LOCALITY. FOOTINGS SHALL NOT BEAR ON FROZEN SOIL.

CONTROLLED LOW STRENGTH MATERIAL (CLSM)

- S. 030000 N002A
200201 02
- CLSM SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH BETWEEN 50 PSI AND 150 PSI AS TESTED PER ASTM D4822.
 - CLSM MATERIALS SHALL MEET THE RECOMMENDATIONS OF ACI 220R.
 - CLSM SHALL HAVE A MINIMUM SLUMP OF 10".
 - TESTING LAB SHALL FIELD VERIFY STRENGTH OF CLSM WITH A MINIMUM FREQUENCY OF ONE TEST PER DAY.

REINFORCED CONCRETE

- S. 030000 N002A
180302 02
- CONCRETE MATERIALS, QUALITY CONTROL AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 318.
 - SEE CONCRETE MIX DESIGN TABLE FOR REQUIRED CONCRETE PROPERTIES.
 - PORTLAND CEMENT SHALL CONFORM TO ASTM C150, TYPE II.
 - AGGREGATES SHALL CONFORM TO ASTM C33 FOR NORMAL-WEIGHT AND ASTM C330 FOR LIGHTWEIGHT CONCRETE. MAXIMUM AGGREGATE SIZE USED IN MIXES SHALL BE APPROPRIATE FOR FORM AND REBAR CLEARANCES TO BE ENCOUNTERED.
 - REINFORCING STEEL SHALL CONFORM TO ASTM A706, GRADE 60, OR ASTM A615, GRADE 60.
 - REINFORCING STEEL TO BE WELDED SHALL CONFORM TO ASTM A706, GRADE 60. WELD FILLER METAL FOR REINFORCING STEEL SHALL COMPLY WITH AWS D1.4, Fu=60 KSI. WELDING SHALL CONFORM WITH AWS D1.4.
 - WELDED WIRE REINFORCEMENT SHALL BE COMPOSED OF FLAT SHEETS AND CONFORM TO ASTM A194.
 - DIMENSIONS LOCATING REINFORCING STEEL ARE TO THE FACE OF REINFORCING STEEL AND DENOTE CLEAR COVERAGE. MINIMUM CONCRETE COVER SHALL BE AS FOLLOWS, UNO:
 - CONCRETE CAST AGAINST EARTH (EXCEPT SLAB ON GRADE) - 3"
 - SLAB ON GRADE - CENTER REINF IN SLAB, UNO
 - CONCRETE FORMED & EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND:
 - BEAMS & COLUMNS - 1 1/2"
 - SLABS & WALLS: #14 & #18 BARS - 1 1/2"; #11 BAR & SMALLER - 3/4"
 - SPICES IN CONTINUOUS REINFORCING SHALL BE LAPPED AS NOTED IN THE TYPICAL DETAIL, UNO. SPICES IN ADJACENT BARS SHALL BE STAGGERED SO THERE IS NO OVERLAP. LAP SPICES OF #14 & #18 REBAR IS NOT PERMITTED AND BARS SHALL BE CONTINUOUS ONE PIECE FOR THE FULL LENGTH SHOWN. LAP SPICES OF REBAR IN A BUNDLE SHALL BE EQUAL TO THE LAP SPICE LENGTH REQUIRED FOR THE INDIVIDUAL BARS WITHIN THE BUNDLE MULTIPLIED BY 1.33. INDIVIDUAL BAR SPICES WITHIN A BUNDLE SHALL NOT OVERLAP. ENTIRE BUNDLES SHALL NOT BE LAP SPICED.
 - UNLESS DETAILED OTHERWISE: REINFORCING IN CONTINUOUS BEAMS AND SPANDRELS SHALL HAVE THE TOP BARS SPICED AT MID-SPAN AND THE BOTTOM BARS SPICED AT THE CENTERLINE OF SUPPORTS. REINFORCING IN CONTINUOUS SOIL-BEARING GRADE BEAMS OR FOOTINGS SHALL HAVE THE TOP BARS SPICED AT CENTERLINE OF COLUMN SUPPORTS AND THE BOTTOM BARS SPICED AT MID-SPAN. AT DISCONTINUOUS ENDS, THE BARS SHALL BE TERMINATED WITH A STANDARD HOOK EXTENDED TO THE FAR FACE OF THE SUPPORT OR BEAM.
 - PROVIDE FOUNDATION DOWELS TO MATCH GRADE, QUANTITY, SIZE & SPACING OF WALL/COLUMN REINFORCEMENT. EXTEND DOWELS INTO FOOTINGS AND TERMINATE WITH A STANDARD HOOK 3" ABOVE BOTTOM OF FOOTING, UNO. PROVIDE STANDARD LAP AT DOWELS TO EACH WALL/COLUMN REBAR.
 - HOOKS SHALL BE STANDARD HOOKS, UNO.
 - UNLESS TO BE EMBEDDED IN CONCRETE, SUCH AS REINFORCING, DOWELS, BOLTS, ANCHORS, SLEEVES, ETC SHALL BE SECURELY TIED AND SUPPORTED PRIOR TO PLACING CONCRETE.
 - THE LOCATION OF SLAB ON GRADE JOINTS SHALL BE AS INDICATED ON THE DRAWINGS. SLAB ON GRADE JOINT SPACINGS ARE NOT TO EXCEED 12'-0" IN EITHER DIRECTION, UNO. SUBMIT LOCATION PLAN FOR ALL PROPOSED JOINTS FOR REVIEW.
 - SURFACE OF CONSTRUCTION JOINTS SHALL BE CLEANED AND LAITANCE REMOVED. IMMEDIATELY BEFORE CONCRETE IS PLACED, CONSTRUCTION JOINTS SHALL BE WETTED AND STANDING WATER REMOVED. CONSTRUCTION JOINT SURFACES SHALL BE ROUGHENED TO A 1/4" MINIMUM AMPLITUDE, UNO.
 - FORM 3/4" CHAMFER AT ALL EXPOSED WALL AND COLUMN EDGES AND CORNERS, UNO.
 - EXTERIOR SLABS INCLUDING SIDEWALKS SHALL BE 4" MIN THICKNESS AND HAVE 6x6-W1.4xW1.4 WWR IN CENTER OF SLAB, UNO.
 - NO CONDUIT, PIPE, OR SLEEVES LARGER THAN 1" OD SHALL BE PLACED IN OR THROUGH CONCRETE BEAMS OR SLABS UNLESS SPECIFICALLY DETAILED AND APPROVED BY THE STRUCTURAL ENGINEER. CONDUIT OR PIPES 3" OD AND SMALLER SHALL BE SPACED & POSITIONED SUCH THAT THE EFFECTIVENESS OF THE REBAR IS NOT REDUCED.

CONCRETE MIX DESIGN

S. 030000 N002A
220302 02

MIX DESIGN TABLE							
LOCATION	MAX SCM (% BY WEIGHT OF TOTAL CEMENTITIOUS MATERIALS)	REG EARLY COMPRESSIVE STRENGTH (PSI)	REG 28 DAY COMPRESSIVE STRENGTH (PSI)	AIR CONTENT (%)	MAX W/C RATIO	MAX AIR DRY WEIGHT (LBS/FT ³)	ACI EXPOSURE CLASS
SLAB ON GRADE AND BUILDING CURBS/FTGS	15	2500 PRIOR TO LOADING	3000	NONE	0.45	145	F0, S0, W0, C1

STRUCTURAL STEEL

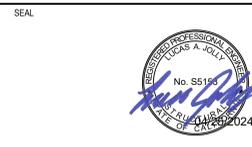
- S. 051000 N001A
231010 02
- THE DESIGN, FABRICATION AND ERECTION OF STEEL SHALL BE IN ACCORDANCE WITH AISC 360 AND AISC 341 INCLUDING ANY ENFORCEMENT AGENCY AMENDMENTS.
 - STEEL MATERIALS SHALL CONFORM TO THE FOLLOWING, UNO.

STEEL PRODUCT	ASTM SPECIFICATION, UNO	COMMENTS
W & WT SHAPES	A992, GRADE 50	Fy = 50ksi
HP SHAPES	A572, GRADE 50	Fy = 50ksi
M, MT, S & ST SHAPES	A36	Fy = 36ksi
CHANNELS (C & MC)	A36	Fy = 36ksi
ANGLES	A36	Fy = 36ksi
PLATES & BARS	A36, TYP, UNO	Fy = 36ksi
	A572, GRADE 50	Fy = 50ksi
RODS, PLAIN & ALL-THREADED	A36	Fy = 36ksi
RAISED-PATTERN FLOOR PLATE	A786, MEETING ASTM A36	Fy = 36ksi
PIPES	A53, GRADE B	Fy = 35ksi
CIRCULAR HSS	A500, GRADE C	Fy = 45ksi
RECTANGULAR & SQUARE HSS	A500, GRADE C	Fy = 45ksi
BOLTS	A307, GRADE A, HEX	Fy = 60ksi
WASHERS	F544	Fy = 36ksi
PLATE WASHERS	A36	Fy = 36ksi
HARDENED WASHERS	F436, TYPE I	
NUTS FOR BOLTS & RODS	A563, HEAVY HEX, GRADE A TYP, UNO	
	GRADE DH IF GALVANIZED	
	GRADE DH W/ F1564 GRADE 105 BOLTS	
ANCHOR BOLTS & RODS (HEADED OR THREADED & NUTTED)	GRADE 36 TYP, UNO	Fy = 36ksi
	GRADE 55 S1 & S4	Fy = 55ksi
	GRADE 105, S4 & S5	Fy = 105ksi
WELDED HEADED STUDS, SHEAR STUDS, & WELDED THREADED STUDS	A108, GRADES 1010 - 1020	
DEFORMED BAR ANCHORS	A496	Fy = 75ksi
WELD FILLER METAL	AWS D1.1	
TURNBUCKLES	A668	
ANCHORS, DOWELS, PINS, COTTER PINS	A668	
EYEBOLTS & EYEBOLTS	ANSI C-1030	
SLEEVE NUTS	A563, HEAVY HEX	
RECESSING NUTS & PINS	A563, HEAVY HEX	
COUPLING NUTS	A563, HEAVY HEX	
 - EXPOSED INTERIOR STEEL SHALL RECEIVE ONE COAT OF PRIMER PAINT, UNO. DO NOT PAINT SURFACES IN DIRECT CONTACT WITH CONCRETE OR MASONRY, WHERE FIELD WELDING IS REQUIRED, WHERE FIRE-PROOFING IS REQUIRED OR CONTACT SURFACES OF STEEL-TO-STEEL, AND DECK-TO-STEEL CONNECTIONS. CONCEALED STEEL DOES NOT REQUIRE PAINT, UNO.
 - EXPOSED EXTERIOR STEEL & FASTENERS SHALL BE HOT DIP GALVANIZED, UNO. PROVIDE FILL AND VENT HOLES AT ENCLOSED SPACES OF HOLLOW PIECES. SEAL HOLES WATER-TIGHT AFTER GALVANIZING. PROVIDE DRAIN HOLES AS REQUIRED AT SOLID PIECES. HOLE SIZES AND LOCATIONS SHALL NOT DETRIMENTALLY AFFECT THE PIECES STRUCTURAL CAPACITY AND ARE SUBJECT TO THE STRUCTURAL ENGINEER'S REVIEW. WELDS PERFORMED ON GALVANIZED STEEL AND ANY AREAS OF DAMAGED GALVANIZING SHALL BE COATED WITH A ZINC-RICH PAINT.
 - PROVIDE CONCRETE / MASONRY COVER AT STEEL BELOW GRADE. STEEL EMBEDDED IN CONCRETE CAST AGAINST EARTH SHALL HAVE 3" MIN COVER. STEEL EMBEDDED IN FORMED CONCRETE OR MASONRY SHALL HAVE 2" MIN COVER.
 - WELDING MATERIALS & PROCEDURES SHALL CONFORM WITH AWS D1.1 AND AWS D1.8 WHERE APPLICABLE.
 - MINIMUM SIZE OF FILLET WELDS: 1/8" FOR MATERIAL 1/8" TO 1/4" THICK, 3/16" FOR MATERIAL OVER 1/4" TO 1/2" THICK, 1/4" FOR MATERIAL OVER 1/2" TO 3/4" THICK, AND 5/16" FOR MATERIAL OVER 3/4" THICK. MATERIAL THICKNESS IS FOR THINNER PART JOINED. SINGLE PASS WELDS MUST BE USED FOR SIZES SHOWN. SIZE OF WELD IS LEG DIMENSION OF FILLET. MINIMUM EFFECTIVE LENGTH OF FILLET WELDS SHALL BE NOT LESS THAN FOUR TIMES THE FILLET SIZE. MINIMUM EFFECTIVE LENGTH OF INTERMITTENT FILLET WELDS SHALL BE 12".
 - WHERE "ALL AROUND" FILLET WELDS ARE INDICATED AT CONCEALED/NON-EXPOSED SQUARE OR RECTANGULAR HSS CONNECTIONS TO PLATES, FILLET WELDS ARE NOT REQUIRED AT RADIUS CORNERS, UNO.
 - BOLTS FOR STEEL-TO-STEEL CONNECTIONS SHALL BE PLACED IN STANDARD SIZE HOLES, TYP, UNO. BOLTS FOR STEEL-TO-CONCRETE/MASONRY CONNECTIONS SHALL BE PLACED IN ANCHOR ROD HOLES, TYP, UNO. USE STANDARD AISI PITCH & GAGE FOR BOLTED CONNECTIONS, UNO.
 - BOLTS AND RODS SHALL BE CUT-THREAD TYPE WITH FULL DIAMETER BODY STYLE MEETING REQUIREMENTS OF ASME B18.2.1. THE BODY DIAMETER SHALL NOT BE LESS THAN THE MINIMUM MAJOR DIAMETER WHEN THREADS ARE CUT. REDUCED DIAMETER BODY STYLE ROLLED THREAD BOLTS OR RODS ARE NOT PERMITTED.
 - BOLT HEADS, NUTS OR "DTTS" OF BOLTED STEEL-TO-STEEL AND STEEL-TO-CONCRETE/ MASONRY CONNECTIONS BEARING ON SLOPING SURFACES SHALL USE A BEVELED HARDENED WASHER IN THE BOLT ASSEMBLY AT THAT SURFACE.



2025 Nineteenth Street
Sacramento CA 95818
P 916.558.1900
www.lionakis.com

CONSULTANT



PROJECT
**JOHN F KENNEDY HIGH SCHOOL
SWIMMING POOL UPGRADE**

6715 GLORIA DR
SACRAMENTO, CA 95831

CLIENT
SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

ISSUED

MARK	DATE	DESCRIPTION
	02/29/2024	DSA SUBMITTAL
	04/30/2024	DSA APPROVAL

MANAGEMENT

LIONAKIS PROJECT NO.	023264
COPYRIGHT:	LIONAKIS 2017

TITLE
TYPICAL NOTES

SHEET
S-011

IF THIS SHEET IS NOT 30" X 42" IT IS A REDUCED PRINT - SCALE ACCORDINGLY

Autodesk Docs: 023264-SDUSD_IPMIS Pool Upgrade/023264_IPMIS/STR_NZL_CENTRAL.rvt 4/25/2024 9:08:18 AM

ADHESIVE ANCHORS IN CONCRETE

S: 066000 N056A
190816 02

- REFERENCES TO "EPOXY" OR "CHEMICAL" ANCHORS EMBEDDED IN CONCRETE SHALL REFER TO THESE NOTES.
- ACCEPTABLE ADHESIVE PRODUCTS ARE:
 - "HILTI" HIT-RE 500 V3 (ICC ESR-3814)
 - "HILTI" HIT-HY 200 AIR V3 (ICC ESR-4868)
 - "SIMPSON" SET-3G (ICC ESR-4057)
 - "SIMPSON" AT-XP (IAPMO ER-283)
 - "DEWALT" PURE 110+ (ICC ESR-3298)
 - "DEWALT" AC208+ (GALD) (ICC ESR-4427)
- THREADED ROD AND REBAR USED W/ ADHESIVE ANCHORS SHALL MEET THE REQUIREMENTS OF THE EVALUATION AGENCY REPORT.
- EMBEDMENT DEPTHS SHALL BE 8 TIMES THE NOMINAL DIAMETER OF ANCHOR, UNO.
- CONCRETE SHALL MEET THE SPECIFIED DESIGN STRENGTH PRIOR TO INSTALLATION, AND SHALL HAVE A MINIMUM AGE OF 21 DAYS, UNO.
- TEST LOADS SHALL BE AS INDICATED IN DRAWINGS. IF NO TEST LOAD IS SPECIFIED, TEST LOAD SHALL BE 1000 LBS.

SCREW ANCHORS IN CONCRETE

S: 066000 N056A
210816 02

- EMBEDMENT SHALL BE AS INDICATED IN THE TABLE BELOW. TYP UNO. ALL EMBEDMENTS SPECIFIED ARE NOMINAL EMBEDMENT DEPTHS REQUIRED.

"HILTI" KWIK HUS-EZ (KH-EZ) / KWIK HUS-EZ1 (KH-EZ1) INSTALLED IN NORMAL WEIGHT OR LIGHT WEIGHT CONCRETE (F_c = 3000 PSI MIN) (ICC REPORT ESR 3027)

		GENERAL CONCRETE				
ANCHOR DIA		1/4"	3/8"	1/2"	5/8"	3/4"
STD EMBED, Hnom TYP UNO		1 5/8"	1 5/8"	3"	5"	6 1/4"
MIN CONC THICKNESS, T		3 1/4"	3 1/4"	4 3/4"	7"	8 1/4"
MAX INSTALLATION TORQUE (LB-FT)		18	40	45	85	95
TORQUE TEST LOAD (LB-FT)		9	20	23	43	58

"SIMPSON" TITEN HD INSTALLED IN NORMAL WEIGHT OR LIGHT WEIGHT CONCRETE (F_c = 3000 PSI MIN) (ICC REPORT ESR 2713)

		GENERAL CONCRETE				
ANCHOR DIA		1/4"	3/8"	1/2"	5/8"	3/4"
STD EMBED, Hnom TYP UNO		1 5/8"	2 1/2"	3 1/4"	4"	5 1/2"
MIN CONC THICKNESS, T		3 1/4"	4"	5"	6"	8 3/4"
MAX INSTALLATION TORQUE (LB-FT)		24	50	65	100	150
TORQUE TEST LOAD (LB-FT)		12	25	33	50	75

"DEWALT" SCREWBOLT+ INSTALLED IN NORMAL WEIGHT OR LIGHT WEIGHT CONCRETE (F_c = 3000 PSI MIN) (ICC REPORT ESR 3869)

		GENERAL CONCRETE				
ANCHOR DIA		1/4"	3/8"	1/2"	5/8"	3/4"
STD EMBED, Hnom TYP UNO		1 5/8"	2"	3"	4"	4 1/4"
MIN CONC THICKNESS, T		3 1/4"	3 1/2"	5 1/4"	6"	6"
MAX INSTALLATION TORQUE (LB-FT)		19	25	45	60	70
TORQUE TEST LOAD (LB-FT)		9	12	25	30	35



GENERAL CONC

EXPANSION ANCHORS IN CONCRETE

S: 066000 N056A
210729 02

- EMBEDMENT SHALL BE AS INDICATED IN THE TABLE BELOW. TYP UNO. ALL EMBEDMENTS SPECIFIED ARE NOMINAL EMBEDMENT DEPTHS. REFER TO EVALUATION AGENCY REPORT FOR EFFECTIVE EMBEDMENTS.

"HILTI" KWIK BOLT-TZ2 INSTALLED IN NORMAL WEIGHT OR LIGHT WEIGHT CONCRETE (F_c = 3000 PSI MIN) (ICC REPORT ESR 4266)

		GENERAL CONCRETE				
ANCHOR DIA		1/4"	3/8"	1/2"	5/8"	3/4"
STD EMBED, Hnom TYP UNO		1 3/4"	2 1/2"	3 3/4"	4 1/2"	5 1/2"
MIN CONC THICKNESS, T		3 1/4"	4"	5 1/2"	6"	8"
CARBON STEEL TORQUE TEST LOAD (LB-FT)		4	30	50	40	110
STAINLESS STEEL TORQUE TEST LOAD (LB-FT)		6	30	40	60	125

"SIMPSON" STRONG-BOLT 2 INSTALLED IN NORMAL WEIGHT OR LIGHT WEIGHT CONCRETE (F_c = 3000 PSI MIN) (ICC REPORT ESR 3037)

		GENERAL CONCRETE				
ANCHOR DIA		1/4"	3/8"	1/2"	5/8"	3/4"
STD EMBED, Hnom TYP UNO		1 3/4"	1 7/8"	3 7/8"	3 3/8"	4 1/8"
MIN CONC THICKNESS, T		3 1/4"	3 1/4"	6"	5 1/2"	6 3/4"
TORQUE TEST LOAD (LB-FT)		4	30	60	90	150

"DEWALT" POWER-STUD+ SD2 INSTALLED IN NORMAL WEIGHT OR LIGHT WEIGHT CONCRETE (F_c = 3000 PSI MIN) (ICC REPORT ESR 2502)

		GENERAL CONCRETE				
ANCHOR DIA		3/8"	1/2"	5/8"	3/4"	
STD EMBED, Hnom TYP UNO		2 3/8"	3 3/4"	4 7/8"	5 3/4"	
MIN CONC THICKNESS, T		4"	5 3/4"	6 1/2"	10"	
TORQUE TEST LOAD (LB-FT)		20	40	60	110	



GENERAL CONC

POST INSTALLED ANCHORS

S: 066000 N056A
170729 02

THESE NOTES SHALL APPLY TO THE INSTALLATION, INSPECTION, AND TESTING OF EXPANSION, ADHESIVE, AND SCREW ANCHORS. USE SPECIFIC PRODUCTS WHERE INDICATED. IF A SPECIFIC PRODUCT / MANUFACTURER IS NOT NOTED, SELECT ANCHOR FROM THE PROVIDED TABLES BASED ON ANCHOR TYPE, DIAMETER AND BASE MATERIAL. POST-INSTALLED ANCHORS / REINFORCING ARE NOT PERMITTED TO REPLACE CAST-IN ANCHORS/REINFORCING UNLESS SPECIFICALLY NOTED.

- INSTALLATION**
- INSTALL PER REQUIREMENTS OF THE EVALUATION AGENCY REPORT & MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS FOR THE SPECIFIC ANCHOR.
 - INSTALLATION OF ADHESIVE ANCHORS INSTALLED IN HORIZONTAL OR UPWARDLY INCLINED ORIENTATIONS RESISTING SUSTAINED TENSION LOADS (AS SPECIFICALLY NOTED ON DETAILS) SHALL BE PERFORMED BY PERSONNEL CERTIFIED BY AN APPLICABLE CERTIFICATION PROGRAM. CERTIFICATION SHALL INCLUDE A WRITTEN TEST AND PERFORMANCE TEST IN ACCORDANCE WITH THE ANCHOR'S ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM, OR EQUIVALENT. CERTIFICATION PROGRAM SHALL BE SUBMITTED TO STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
 - ANCHOR INSTALLATION SHALL MEET THE MINIMUM EMBEDMENT, EDGE DISTANCE, SPACING, AND BASE MATERIAL THICKNESS CRITERIA ESTABLISHED BY THE RELEVANT EVALUATION AGENCY REPORT & MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS.
 - ANCHOR INSTALLATION & CURE TEMPERATURES SHALL FOLLOW EVALUATION AGENCY REPORT & MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS.
 - WHEN INSTALLING ANCHORS IN CONCRETE OR MASONRY, DO NOT DAMAGE REINFORCING (REBAR AND/OR PRE/TENSIONED STRANDS). LOCATE ALL REINFORCING AT AFFECTED AREAS USING NON-DESTRUCTIVE MEANS PRIOR TO INSTALLING ANCHORS. MAINTAIN A MINIMUM CLEARANCE OF TWO INCHES BETWEEN THE REINFORCEMENT AND THE ANCHOR.

INSPECTION

- PROVIDE SPECIAL INSPECTION AS REQUIRED BY THE EVALUATION AGENCY REPORT AND ENFORCEMENT AGENCY, WHERE EVALUATION AGENCY REPORT PERMITS EITHER PERIODIC OR CONTINUOUS INSPECTION, USE CONTINUOUS.

- ADHESIVE ANCHORS INSTALLED IN HORIZONTAL OR UPWARDLY INCLINED ORIENTATIONS RESISTING SUSTAINED TENSION LOADS (AS SPECIFICALLY NOTED ON DETAILS) SHALL BE CONTINUOUSLY INSPECTED BY AN INSPECTOR SPECIALLY APPROVED FOR THAT PURPOSE BY THE ENFORCEMENT AGENCY.

TESTING

- TEST ANCHORS IN ACCORDANCE WITH THE EVALUATION AGENCY REPORT AND ENFORCEMENT AGENCY REQUIREMENTS FOR THE SPECIFIC ANCHOR AND IN ACCORDANCE WITH THE FREQUENCIES AND TEST METHODS LISTED BELOW.

- TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE PROJECT INSPECTOR AND A REPORT OF THE TEST RESULTS SHALL BE SUBMITTED TO THE ENFORCEMENT AGENCY AND STRUCTURAL ENGINEER.

- REACTION LOADS FROM TEST FIXTURE(S) MAY BE APPLIED CLOSE TO THE ANCHOR BEING TESTED, PROVIDED THE ANCHOR IS NOT RESTRAINED BY THE FIXTURE(S) FROM WITHDRAWING.

- TEST METHOD SHALL BE AS NOTED FOR SPECIFIC ANCHOR TYPES AND THE FOLLOWING CRITERIA APPLY FOR THE ACCEPTANCE OF INSTALLED ANCHORS:
 - HYDRAULIC RAM METHOD (TENSION TESTING):
 - THE ANCHOR SHALL MAINTAIN THE TEST LOAD FOR 15 SECONDS AND SHALL HAVE NO OBSERVABLE MOVEMENT AT THE APPLICABLE TEST LOAD. A PRACTICAL WAY TO DETERMINE OBSERVABLE MOVEMENT IS THAT THE WASHER UNDER THE NUT BECOMES LOOSE.
 - TORQUE WRENCH METHOD (TORQUE TESTING):
 - THE APPLICABLE TEST TORQUE MUST BE REACHED WITHIN THE FOLLOWING LIMITS:
 - ONE-HALF (1/2) TURN OF THE NUT, TYP UNO.
 - ONE-QUARTER (1/4) TURN OF THE NUT FOR THE 3/8" SLEEVE ANCHOR ONLY.
 - ONE-QUARTER (1/4) TURN OF THE SCREW AFTER INITIAL SEATING OF THE SCREW HEAD FOR SCREW ANCHORS.

- TESTING FREQUENCIES SHALL BE AS INDICATED IN THE TABLE BELOW. WHEN MULTIPLE ANCHORS ARE USED IN A SINGLE GROUP OR CONNECTION, THE PERCENT OF ANCHORS TESTED AT EACH LOCATION SHALL BE AS INDICATED BELOW.

- IF ANY ANCHOR FAILS TESTING, ALL ANCHORS OF THE SAME CATEGORY NOT PREVIOUSLY TESTED SHALL BE TESTED UNTIL 20 CONSECUTIVE ANCHORS PASS, THEN THE INITIAL TESTING FREQUENCY SHALL BE RESUMED.

TESTING FREQUENCY	
APPLICATION	PERCENT OF ALL ANCHORS
SILL PLATE BOLTING AND REBAR AT SLAB ON GRADE, UNO	10 PERCENT
STRUCTURAL EXCLUDING SILL PLATE BOLTING	100 PERCENT
NON-STRUCTURAL INCLUDING EQUIPMENT ANCHORAGE	50 PERCENT

POWER ACTUATED FASTENERS

S: 066000 N056A
190225 02

- POWER ACTUATED FASTENERS SHALL BE "HILTI" X-U (ICC ESR 2269), "SIMPSON" PDPA (ICC ESR 2138), OR "DEWALT" POWER DRIVEN FASTENERS (ICC ESR 2024), TYP UNO.
- INSTALLATION OF FASTENERS SHALL BE IN ACCORDANCE WITH THE EVALUATION AGENCY REPORT. INSTALL FASTENERS WITH SUFFICIENT EDGE DISTANCE AND SPACING TO ACHIEVE FULL CAPACITY, UNO.
- FASTENERS TO CONCRETE OR MASONRY SHALL HAVE 1" MIN EMBEDMENT (1 1/4" MIN FOR "SIMPSON" PDPA IN MASONRY), TYP UNO.
- FASTENERS TO STRUCTURAL STEEL SHALL HAVE MIN EMBEDMENT TO STEEL PER MANUFACTURER, TYP UNO.
- FASTENERS MAY NOT BE USED FOR TENSION LOADS EXCEPT FOR THE FOLLOW CONDITIONS:
 - VERTICAL SUSPENSION WIRES FOR ACOUSTICAL TILE OR LAY-IN CEILINGS
 - VERTICAL SUPPORTS OF MECH DUCTS, CONDUITS, ETC WHERE THE SERVICE LOAD ON EACH ANCHOR DOES NOT EXCEED 90 LBS FOR FASTENERS IN CONCRETE OR 250 LBS FOR FASTENERS IN STRUCTURAL STEEL.
 - FASTENERS ARE NOT PERMITTED AT SEISMIC BRACING ATTACHMENTS.
- WHEN INSTALLING FASTENERS IN PRE/POST-TENSIONED CONCRETE DO NOT DAMAGE STRANDS. LOCATE STRANDS AT AFFECTED AREAS USING NON-DESTRUCTIVE MEANS PRIOR TO INSTALLING FASTENERS. MAINTAIN A MINIMUM CLEARANCE OF 2" BETWEEN THE STRANDS AND THE FASTENERS.
- THE OPERATOR, TOOL, & FASTENER SHALL BE PRE-QUALIFIED BY THE PROJECT INSPECTOR WHO SHALL OBSERVE THE TESTING OF THE FIRST 10 FASTENER INSTALLATIONS. THEREAFTER, RANDOM TESTS UNDER THE PROJECT INSPECTOR'S SUPERVISION SHALL BE MADE TO APPROXIMATELY 1 IN 10 PINS. IF ANY PIN FAILS, TEST ALL PINS OF THE SAME CATEGORY NOT PREVIOUSLY TESTED UNTIL 20 CONSECUTIVE PASS, THEN RESUME THE INITIAL TESTING FREQUENCY.
- TENSION TEST LOAD SHALL BE 1 1/4 TIMES THE NOMINAL TENSION CAPACITY OR 2 TIMES THE ALLOWABLE TENSION CAPACITY LISTED IN THE EVALUATION AGENCY REPORT.
- TEST LOAD SHALL BE APPLIED TO THE PIN IN SUCH A MANNER AS NOT TO RESIST THE SPALLING TENDENCY OF THE CONCRETE SURROUNDING THE PIN.
- TESTING IS NOT REQUIRED FOR STEEL-TO-STEEL CONNECTIONS OR FASTENERS USED AT SILLS OF INTERIOR NON-STRUCTURAL WALLS PROVIDED THERE ARE A MINIMUM OF (3) FASTENERS PER SEGMENT OF SILL.
- A REPORT OF TEST RESULTS SHALL BE SUBMITTED TO THE ENFORCEMENT AGENCY AND STRUCTURAL ENGINEER.



LIONAKIS

2025 Nineteenth Street
Sacramento CA 95818
P 916.558.1900
www.lionakis.com

CONSULTANT

SEAL



PROJECT
**JOHN F KENNEDY HIGH SCHOOL
SWIMMING POOL UPGRADE**

6715 GLORIA DR
SACRAMENTO, CA 95831

CLIENT
SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

ISSUED		
MARK	DATE	DESCRIPTION
	02/29/2024	DSA SUBMITTAL
	04/30/2024	DSA APPROVAL

MANAGEMENT
LIONAKIS PROJECT NO: 023264
CLIENT PROJECT NO:
COPYRIGHT: LIONAKIS 2017

TITLE
TYPICAL NOTES

SHEET
S-012

IF THIS SHEET IS NOT 30"x42" IT IS A REDUCED PRINT - SCALE ACCORDINGLY

Autodesk Docs: 023264-SOUSD-IPMS Pool Upgrade/023264_IPCMSTR_024-CENTRAL.rvt

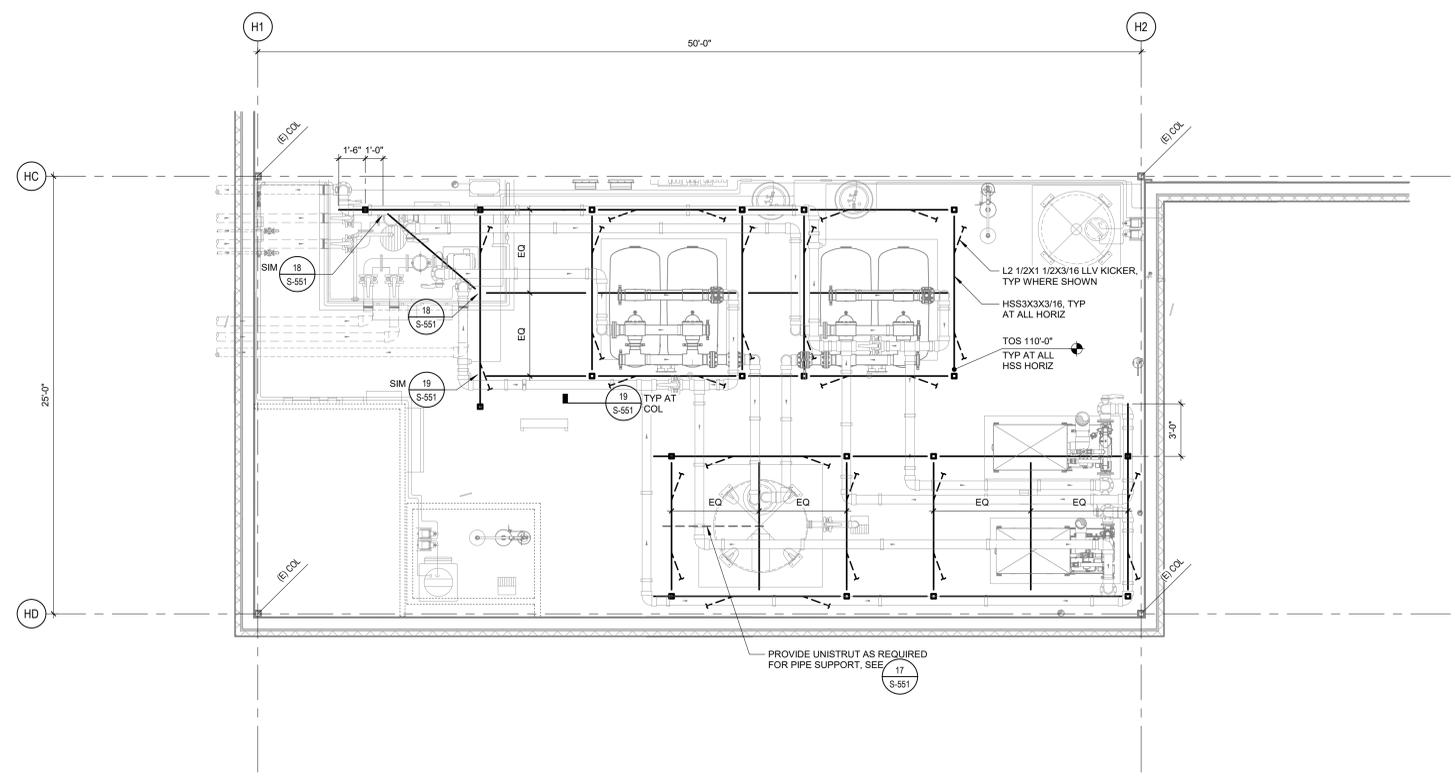
4/25/2024 9:09:20 AM

0 1/4" 1/2" 1"

IF THIS SHEET IS NOT 30"x42" IT IS A REDUCED PRINT - SCALE ACCORDINGLY

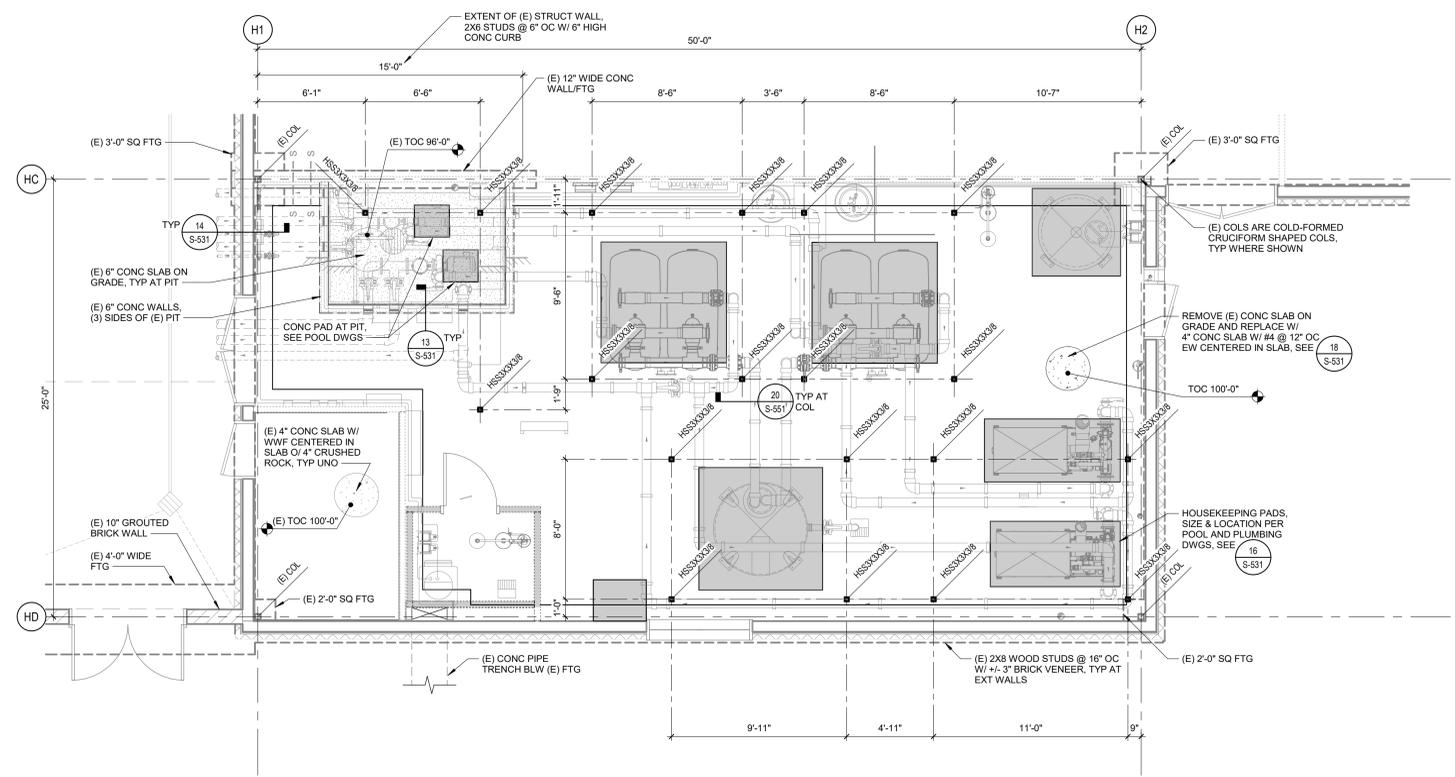
Address: 022304 SUSD - JFHS Pool Upgrade 022304_ARCH.MSTR_LAYOUT.rvt

4/25/2024 9:02:21 AM



PIPE RACK NOTES:
 1. PIPE RACK DESIGNED TO SUPPORT 10 PSF OVER ENTIRE RACK AREA. SEE DETAILS FOR SPECIFIC LOADING CRITERIA AT INDIVIDUAL SUPPORT LOCATIONS
 2. SEISMIC DESIGN CRITERIA: $F_p = 0.18W_p$ ($h/z = 0, a_p = 2.5, R_p = 3.0, \Omega = 2.0$)
 3. ALL FRAMING AT PIPE RACKS TO BE HOT-DIPPED GALVANIZED

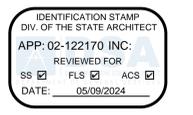
1 PARTIAL PLAN - PIPE RACK FRAMING
 SCALE 1/4" = 1'-0"



2 PARTIAL PLAN - FOUNDATION
 SCALE 1/4" = 1'-0"

NOTES

- SEE S-000 SERIES SHEETS FOR GENERAL NOTES & S-500 SERIES SHEETS FOR TYPICAL DETAILS.
- DIMENSIONS ARE TO FOS OR CENTERLINE OF COLUMNS/POSTS, UNO. SEE SECTIONS & DETAILS FOR FOC LOCATIONS RELATIVE TO FOS.
- SEE ARCH & OTHER CONSULTANT DWGS FOR DIMENSIONS & LOCATIONS OF WALL OPENINGS.
- SEE ARCH & OTHER CONSULTANT DWGS FOR FLOOR PENETRATIONS NOT SHOWN. SAWCUT OR CORE DRILL CLEAN HOLES WITH NO OVERCUTTING. COMPLY WITH TYPICAL DETAILS.
- EXTERIOR CONCRETE FLATWORK IS NOT SHOWN, SEE CIVIL & POOL DWGS.



LIONAKIS

2025 Nineteenth Street
 Sacramento CA 95818
 P 916.558.1900
 www.lionakis.com

CONSULTANT

SEAL



PROJECT
 JOHN F KENNEDY HIGH SCHOOL
 SWIMMING POOL UPGRADE

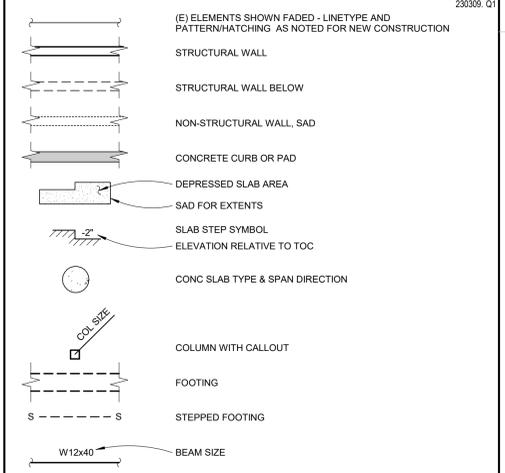
6715 GLORIA DR
 SACRAMENTO, CA 95831

CLIENT
 SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

MARK	DATE	DESCRIPTION
	02/29/2024	DSA SUBMITTAL
	04/30/2024	DSA APPROVAL

MANAGEMENT	
LIONAKIS PROJECT NO:	022304
CLIENT PROJECT NO:	
COPYRIGHT:	LIONAKIS 2017

LEGEND



TITLE
 PARTIAL FOUNDATION
 & CEILING FRAMING
 PLANS

SHEET
 S-111

0 1/4" = 1'

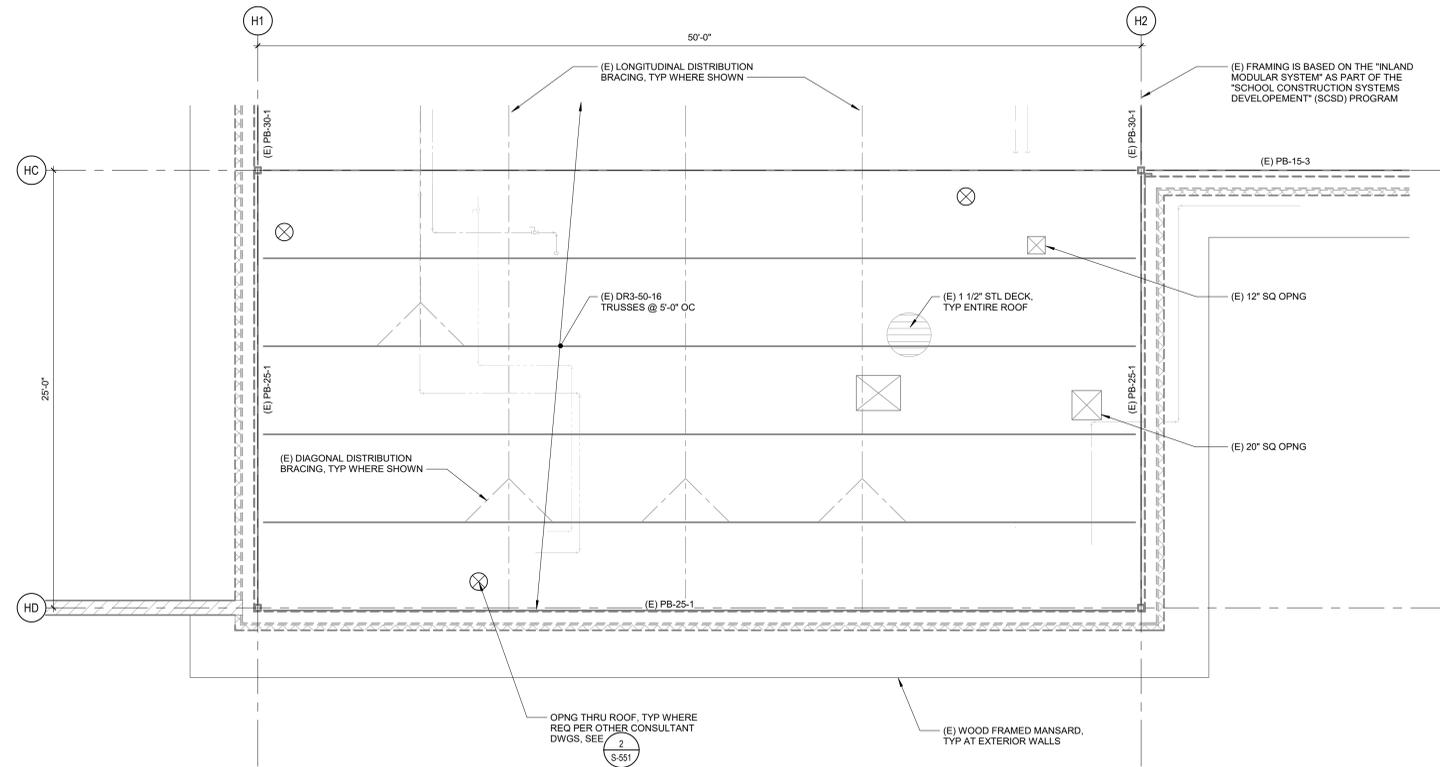
IF THIS SHEET IS NOT 30"x42", IT IS A REDUCED PRINT - SCALE ACCORDINGLY

C

B

Autodesk Docs: 022324-SCUSD-JFMS Pool Upgrade/022324_ARCH/MSTR_LAYOUT/1

4/25/2024 9:02:21 AM



1 PARTIAL PLAN - ROOF FRAMING
SCALE 1/4" = 1'-0"



NOTES

- SEE S-000 SERIES SHEETS FOR GENERAL NOTES & S-500 SERIES SHEETS FOR TYPICAL DETAILS.
- DIMENSIONS ARE TO FOS OR CENTERLINE OF COLUMNS/POSTS, UNO. SEE SECTIONS & DETAILS FOR FOC LOCATIONS RELATIVE TO FOS.
- SEE ARCH & OTHER CONSULTANT DWGS FOR ROOF PENETRATIONS NOT SHOWN. COMPLY WITH TYPICAL DETAILS.

170828_02



LIONAKIS

2025 Nineteenth Street
Sacramento CA 95818
P 916.558.1900
www.lionakis.com

CONSULTANT

SEAL



PROJECT
**JOHN F KENNEDY HIGH SCHOOL
SWIMMING POOL UPGRADE**

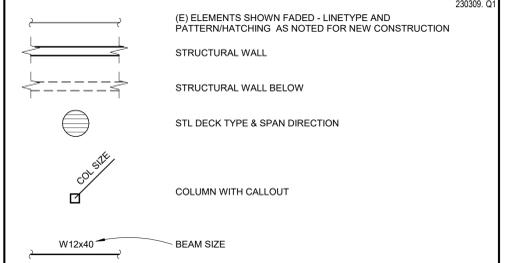
6715 GLORIA DR
SACRAMENTO, CA 95831

CLIENT
SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

MARK	DATE	DESCRIPTION
	02/29/2024	DSA SUBMITTAL
	04/30/2024	DSA APPROVAL

MANAGEMENT
LIONAKIS PROJECT NO: 023284
CLIENT PROJECT NO:
COPYRIGHT: LIONAKIS 2017

LEGEND



TITLE
**PARTIAL PLAN - ROOF
FRAMING**

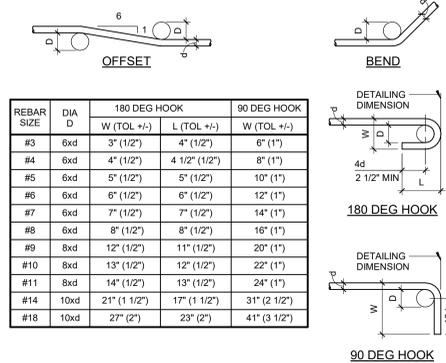
SHEET
S-132

ISSUED

MARK	DATE	DESCRIPTION
	02/29/2024	DSA SUBMITTAL
	04/30/2024	DSA APPROVAL

MANAGEMENT

LIONAKIS PROJECT NO:	0223264
CLIENT PROJECT NO:	
COPYRIGHT:	LIONAKIS 2017

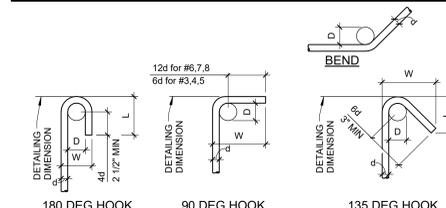


NOTES:
1. D = MINIMUM FINISHED INSIDE BEND DIA, d = NOMINAL REBAR DIAMETER
2. TOL = TOLERANCE (PER ACI 117)

1 TYP REBAR BENDS AND HOOKS

SCALE: NTS S-032000_T001A 140127

REBAR SIZE	DIA D	180 DEG HOOK		90 DEG HOOK		135 DEG HOOK	
		W (TOL +/-)	L (TOL +/-)	W (TOL +/-)	L (TOL +/-)	W (TOL +/-)	L (TOL +/-)
#3	4xd	2 1/4" (1/2")	3 3/4" (1/2")	3 1/2" (1")	4" (1/2")	3" (1/2")	3" (1/2")
#4	4xd	3" (1/2")	4" (1/2")	4 1/2" (1")	5" (1/2")	3" (1/2")	3" (1/2")
#5	4xd	3 3/4" (1/2")	4 1/2" (1/2")	5 3/4" (1")	6" (1/2")	4" (1/2")	4" (1/2")
#6	6xd	6" (1/2")	6" (1/2")	12" (1")	9" (1/2")	5 1/4" (1/2")	
#7	6xd	7" (1/2")	7" (1/2")	14" (1")	10" (1/2")	6" (1/2")	
#8	6xd	8" (1/2")	8" (1/2")	16" (1")	11" (1/2")	7" (1/2")	



NOTES:
1. D = MINIMUM FINISHED INSIDE BEND DIA, d = NOMINAL REBAR DIAMETER
2. TOL = TOLERANCE (PER ACI 117)

2 TYP REBAR HOOP, STIRRUP, TIE HOOKS & BENDS

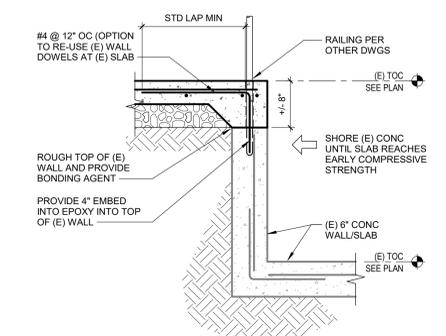
SCALE: NTS S-032000_T002A 140127

Fc (psi)	#3	#4	#5	#6	#7	#8	#9	#10	#11
TOP	28	38	47	56	81	93	105	118	131
BOT	22	29	36	43	63	72	81	91	101

NOTES:
1. ALL LAP SPLICES SHALL BE FULL CONTACT SPLICES, UNO.
2. ADJACENT REINFORCING BEING LAP SPICED MUST MEET ONE OF THE FOLLOWING CONDITIONS:
A. CASE 1: THE CLEAR SPACING OF THE BARS IS NOT LESS THAN ONE BAR DIAMETER, CLEAR COVER IS NOT LESS THAN ONE BAR DIAMETER, AND STIRRUPS OR TIES THROUGHOUT THE SPLICE LENGTH.
B. CASE 2: THE CLEAR SPACING OF THE BARS IS NOT LESS THAN TWO BAR DIAMETERS AND THE CLEAR COVER IS NOT LESS THAN ONE BAR DIAMETER.
C. FOR ALL OTHER CASES, MULTIPLY THE SPLICES SHOWN BY 1.5.
3. THE ABOVE VALUES ARE FOR UNCOATED REINFORCEMENT, GRADE 60 REBAR, CLASS B.
4. TOP BARS ARE HORIZONTAL REINFORCEMENT WITH MORE THAN 12" OF NEW CONCRETE PLACED BELOW THE BAR. BOTTOM BARS ARE ALL OTHER HORIZONTAL OR VERTICAL REINFORCEMENT.

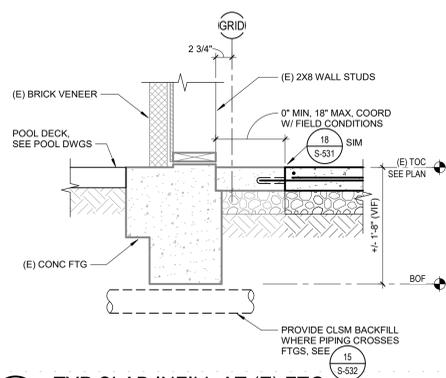
3 TYP CONCRETE REBAR LAP SPLICE LENGTHS (INCHES)

SCALE: NTS S-032000_T003A 190526_Q2



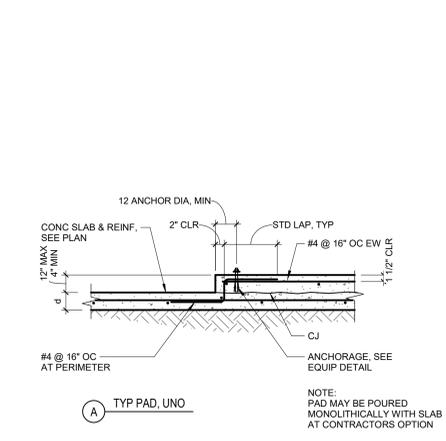
13 TYP SLAB INFILL AT (E) CONC PIT

SCALE: NTS 1" = 1'-0" 01

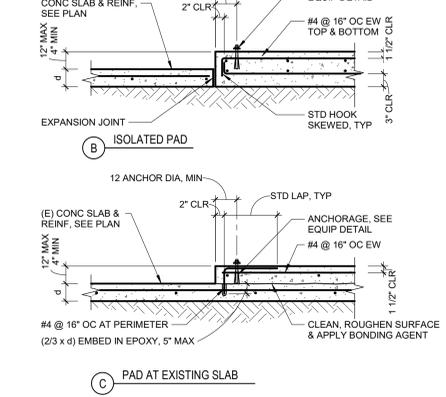


14 TYP SLAB INFILL AT (E) FTG

SCALE: NTS 1" = 1'-0" 01

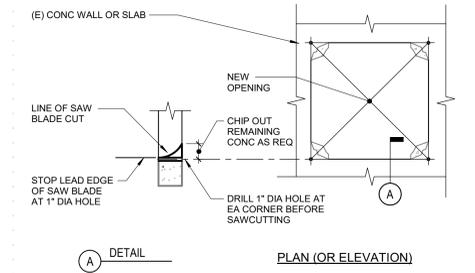


15 TYP PAD, UNO



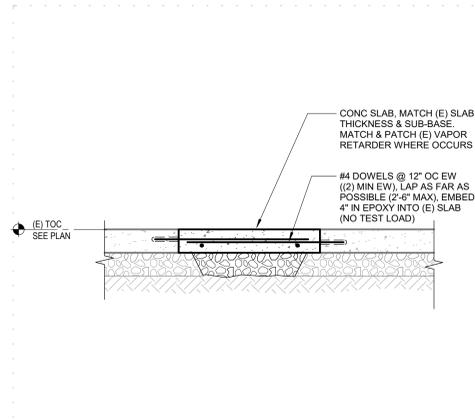
16 TYP HOUSEKEEPING PADS

SCALE: NTS S-033000_T002A 140127



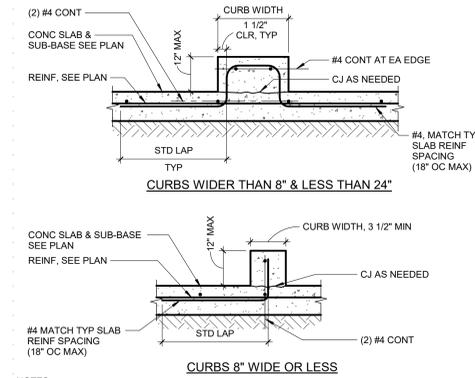
17 TYP SAWCUT OF OPENING IN (E) CONC SLAB / WALL

SCALE: NTS S-033000_T005A 140127_Q2



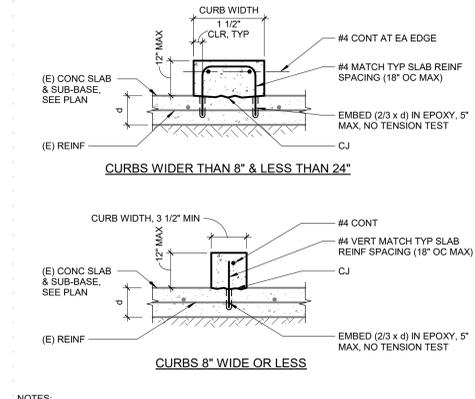
18 TYP INFILL AT (E) SLAB

SCALE: NTS S-033000_T003A 140728



19 TYP CURB AT CONC SLAB

SCALE: NTS S-033000_T004A 150107_Q2



20 TYP CURB AT (E) CONC SLAB

SCALE: NTS S-033000_T007A 150107_Q2

0 1/4" 1/2" 1"

IF THIS SHEET IS NOT 30"x42", IT IS A REDUCED PRINT - SCALE ACCORDINGLY

C

B

Autodesk Docs: 0223264-501USD_IPFMS Pool Upgrade/0223264_IPFMS/STR_L201_CENTRAL.rvt

4/25/2024 9:02:23 AM

STIFFENER BAR TABLE A		
L	NOT MORE THAN 12"	GREATER THAN 12"
BAR SIZE	1/2" X 2"	3/4" X 2"

NOTE: SMALL ROOF OPENING MAY BE LOCATED ONLY WITHIN AREAS INDICATED IN THE PLAN AND TABLE B AND SHALL NOT BE SPACED CLOSER THAN 5' OC IN THE LONGITUDINAL DIRECTION OF THE TRUSS IN THE 3'-0" WIDE REGION INDICATED

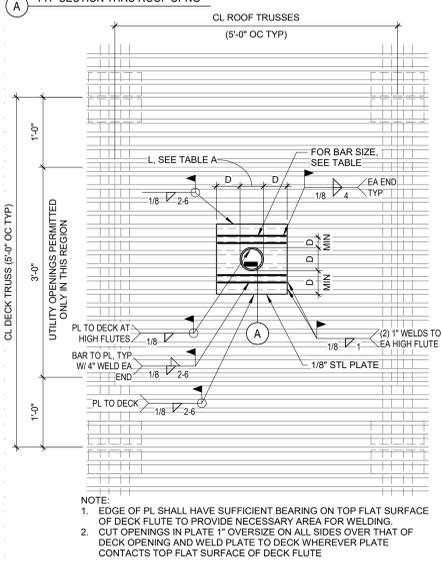
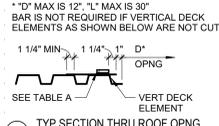
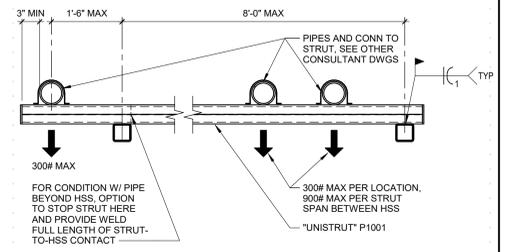


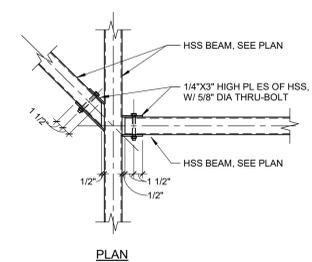
TABLE B			
TRUSS NO.	MAX DIST TO CL OF END SUPPORT	TRUSS NO.	MAX DIST TO CL OF END SUPPORT
DR3-45-16 TO DR3-70-16	ANYWHERE	DR3-50-16+20	ANYWHERE

2 TYP ROOF DECK OPENING
1" = 1'-0"

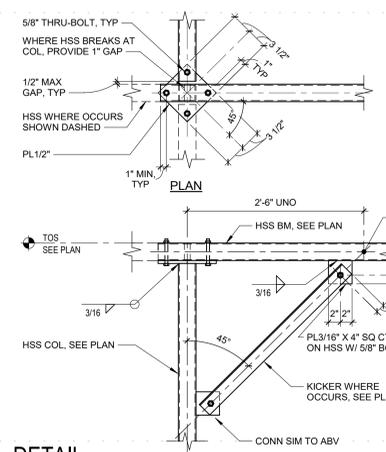


NOTES:
1. VERIFY STRUT LAYOUT WITH REQUIRED PIPE SUPPORTS PER OTHER CONSULTANT DWGS.
2. LOADING CRITERIA IS AS SHOWN, PROVIDE ADDITIONAL STRUTS TO SUPPORT PIPE TO MAINTAIN LOADING LIMITS. SEE FRAMING PLAN FOR OVERALL PIPE RACK DESIGN CRITERIA.

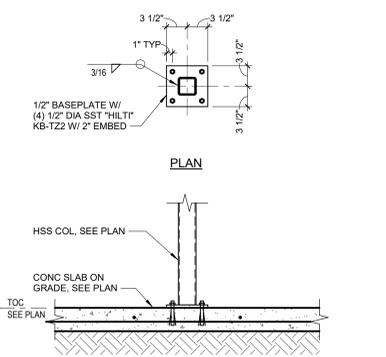
17 DETAIL
1" = 1'-0"



18 DETAIL
1" = 1'-0"



19 DETAIL
1" = 1'-0"



20 DETAIL
1" = 1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122170 INC.
REVIEWED FOR:
SS FLS ACS
DATE: 05/09/2024

LIONAKIS

2025 Nineteenth Street
Sacramento CA 95818
P 916.558.1900
www.lionakis.com

CONSULTANT

SEAL



PROJECT
JOHN F KENNEDY HIGH SCHOOL
SWIMMING POOL UPGRADE

6715 GLORIA DR
SACRAMENTO, CA 95831

CLIENT
SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

MARK	DATE	DESCRIPTION
	02/29/2024	DSA SUBMITTAL
	04/30/2024	DSA APPROVAL

MANAGEMENT
LIONAKIS PROJECT NO: 023264
CLIENT PROJECT NO:
COPYRIGHT: LIONAKIS 2017

TITLE
DETAILS - STRUCTURAL
STEEL

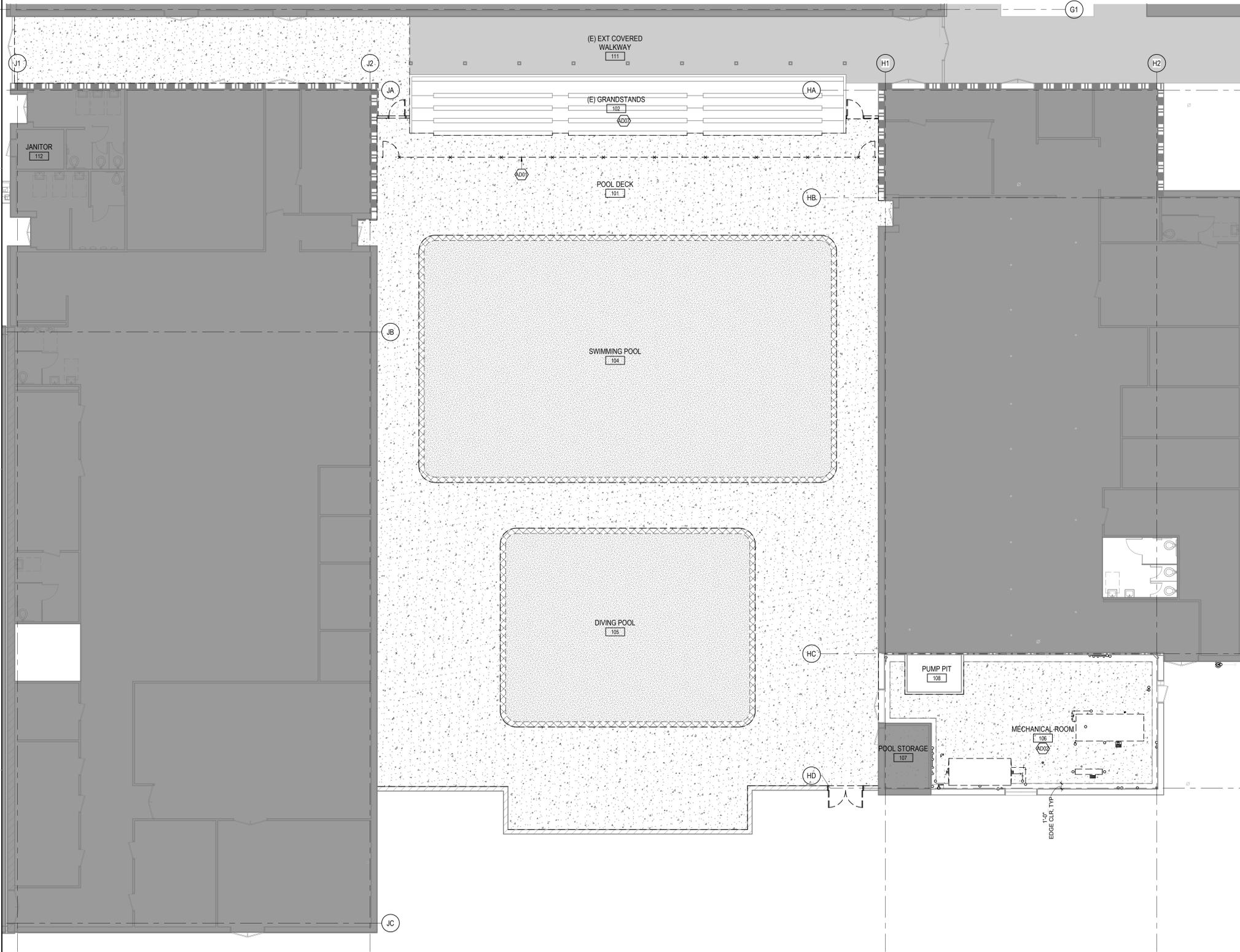
SHEET
S-551

0 1/4" = 1'

IF THIS SHEET IS NOT 30"x42" IT IS A REDUCED PRINT - SCALE ACCORDINGLY

Autodesk Docs: 022324.SOLIDWORKS.JPMIS Pool Upgrade022324_ARCH.MSTR_SOL_CENTRAL.rvt

4/30/2024 7:59:00 AM



1 DEMOLITION FLOOR PLAN - LEVEL 1 - OVERALL
SCALE: 1/8" = 1'-0"

GENERAL NOTES

- REFER TO DOOR AND FRAME SCHEDULES FOR REFERENCED FRAMED OPENINGS AND REQUIRED DEMOLITION OF OPENINGS IN EXISTING CONCRETE WALLS TO ACCOMMODATE FRAMED OPENINGS.
- COORDINATE WITH OWNER ALL ITEMS NOTED TO BE TURNED OVER TO THE DISTRICT.
- DEMOLITION KEYNOTES ARE FOR REFERENCE AS AN OVERALL LIST. NOT ALL DEMOLITION NOTES LISTED ARE APPLICABLE TO EACH SHEET. REFER TO SPECIFIC DEMOLITION PLANS FOR NOTES THAT APPLY.
- IN AREAS OF DEMOLISHED FLOOR AND WALL FINISHES, CONTRACTOR SHALL BE RESPONSIBLE TO FULLY REMOVE ALL EXISTING CONSTRUCTION MATERIAL INCLUSIVE OF EXISTING ADHESIVES AND/OR MECHANICAL FASTENERS AND CERAMIC TILE MORTAR BED. CONTRACTOR SHALL PREP ALL EXISTING SURFACES AS REQUIRED TO ACCOMMODATE FINISHES (INCLUDING MECHANICAL BRADING OF EXISTING SURFACES AND FILLING OF HOLES, WITH APPROPRIATE MATERIALS, AS NECESSARY).
- IN AREAS OF DEMOLISHED PLUMBING FIXTURES, ALL REMAINING DRAIN PIPES, TUBING, ETC. SHALL BE ABANDONED AND CAPPED OFF IN SUCH A WAY THAT IT SHALL NOT INTRUDE ON ANY CONSTRUCTION. PATCH FINISHES AS NECESSARY.
- REFER TO SWIMMING DRAWINGS FOR EXTENT OF DEMOLITION REQUIRED FOR INSTALLATION OF SWIMMING POOL WORK.
- REFER TO MECHANICAL/PLUMBING AND ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION WORK REQUIRED TO ACCOMMODATE CONSTRUCTION, INCLUDING FILTERING OF VENTS, DIFFUSERS, AND CONDUITS WITH UNISTRATS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY BARRIERS AND/OR ACCESS ENCLOSURES TO PROVIDE A MEANS OF CONTROLLED ACCESS TO THE FACILITY FUNCTIONS DURING SEQUENCING OF CONSTRUCTION. VERIFY ALL BARRIER LOCATIONS WITH OWNER PRIOR TO INSTALLATION.
- CONTRACTOR SHALL COORDINATE AND MAINTAIN FIRE AND LIFE SAFETY REQUIREMENTS PER CFC CHAPTER 14 DURING RENOVATIONS OF EXISTING FACILITY.
- MEANS OF EGRESS FOR EXISTING BUILDINGS SHALL COMPLY WITH CFC SECTION 1027 AND MAINTENANCE OF MEANS OF EGRESS SHALL COMPLY WITH CFC SECTION 1028.
- (E) FLOOR EQUIPMENT ANCHORAGE TO BE REMOVED AND PATCHED.

DEMOLITION FLOOR PLAN LEGEND

- DASHED LINE INDICATES ITEM TO BE DEMOLISHED
- - - - - (E) WALL TO BE REMOVED TO EXTENT SHOWN
- (E) WALL TO REMAIN
- ⌋ (E) DOOR TO BE REMOVED. SALVAGE DOOR HARDWARE COMPONENTS
- ⌋ (E) DOOR TO REMAIN
- ▨ (E) POOL DECK/CONC SLAB ON GRADE TO BE REMOVED. FOR ADDITIONAL INFO, SEE CIVIL AND POOL DWGS.
- ▨ (E) POOL FINISHES TO BE REMOVED. (E) CONC SHELL TO REMAIN. SAWCUT WHERE REQUIRED FOR NEW CONNECTIONS. SEE POOL DWGS.
- ▨ (E) POOL COPING TO BE REMOVED. SEE POOL DWGS.
- (E) BUILDING NOT IN SCOPE
- (E) COVERED WALKWAY NOT IN SCOPE

○ SHEET KEYNOTES

- AD01 DEMO (E) CHAIN-LINK FENCING ASSEMBLY.
- AD02 DEMO (E) MECHANICAL EQ. SEE POOL, MECH, AND ELEC DWGS.
- AD07 REMOVE (E) FINISH COAT ON (E) GRANDSTAND ASSEMBLY, SUPPORTS, AND METAL ANGLE. EMBED, CLEAN AND PATCH AND REPAIR (E) CONC STEPS.



LIONAKIS

2025 Nineteenth Street
Sacramento CA 95818
P 916.558.1900
www.lionakis.com

CONSULTANT

SEAL



PROJECT
**JOHN F KENNEDY HIGH SCHOOL
SWIMMING POOL UPGRADE**

6715 GLORIA DR
SACRAMENTO, CA 95831

CLIENT
SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

ISSUED	MARK	DATE	DESCRIPTION

MANAGEMENT	
LIONAKIS PROJECT NO:	023284
CLIENT PROJECT NO:	
COPYRIGHT:	LIONAKIS 2017

TITLE
**DEMOLITION FLOOR
PLAN - LEVEL 1**

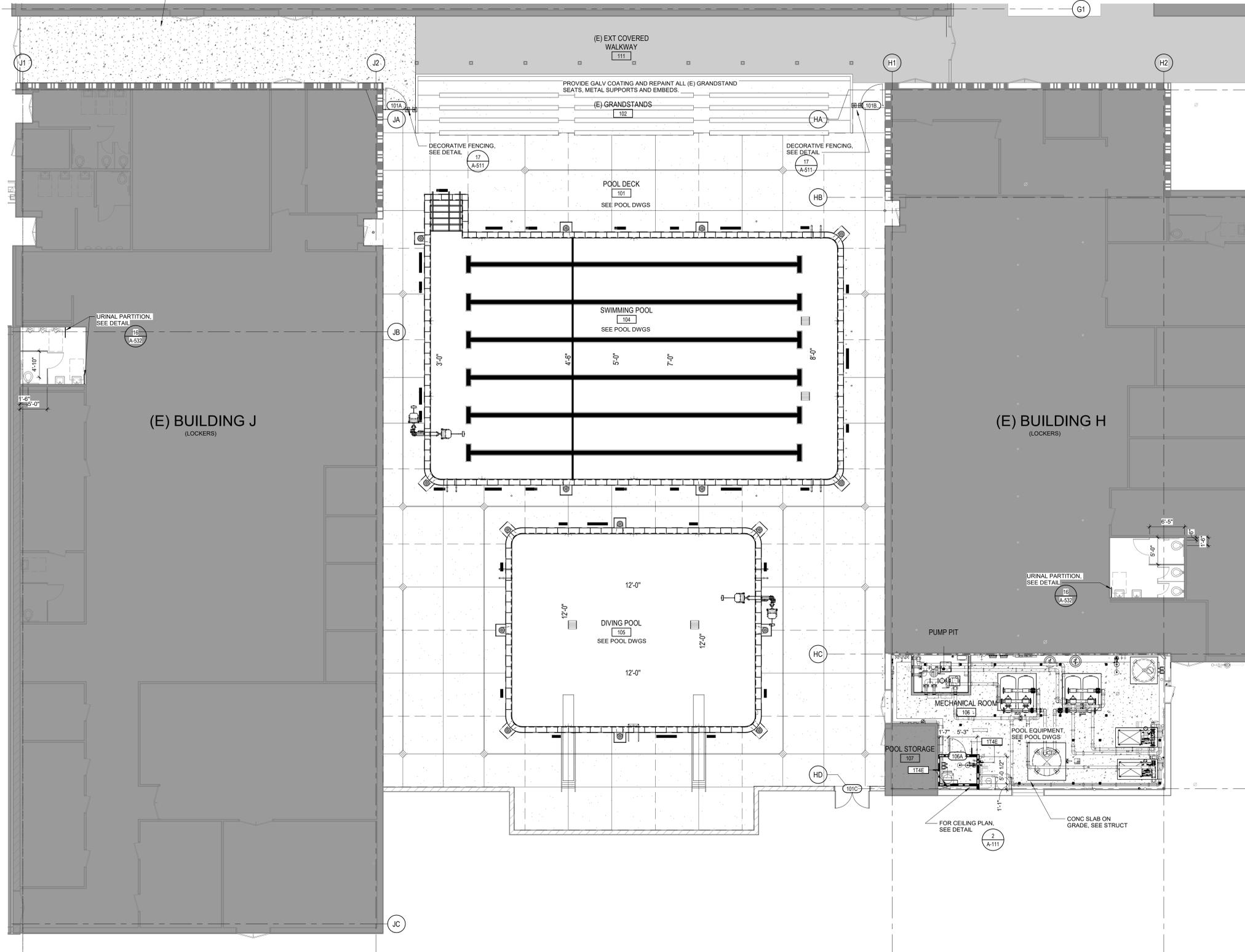
SHEET
AD111

0 1/4" = 1'

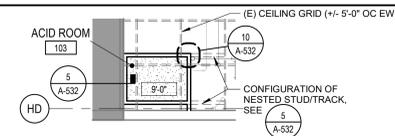
IF THIS SHEET IS NOT 30"x42" IT IS A REDUCED PRINT - SCALE ACCORDINGLY

Address: 022364.S01.DWG - JFNIS Pool Upgrade 022364_ARCH.MSTR - 024_CENTRAL.rvt

4/30/2024 7:59:04 AM



1 FLOOR PLAN - POOL
SCALE 1/8" = 1'-0"



2 CEILING PLAN - ACID ROOM
SCALE 1/8" = 1'-0"

GENERAL NOTES

1. ALL WALL DIMENSIONS ARE MEASURED FROM FACE OF STUDS OR CENTERLINE OF COLUMN GRID UNLESS OTHERWISE NOTED. EXCEPTION: CLEAR DIMENSIONS AT DOOR, PLUMBING FIXTURES AND 5'-0" DIA FLOOR CLEARANCE CIRCLE ARE TO FACE OF FINISH, TYP.
2. DIMENSIONS NOTED "CLEAR" OR "CLR" ARE TO FACE OF FINISH.
3. ACCESS TO EXISTING EXIT WAYS TO REMAIN OPEN AT ALL TIMES DURING CONSTRUCTION.
4. FOR SYMBOL LEGEND SEE SHEET G-001
5. PATCH AND REPAIR EXISTING PORTIONS OF BUILDING TO REMAIN THAT ARE DAMAGED DURING DEMOLITION. DOCUMENT ALL EXISTING DAMAGED CONDITIONS PRIOR TO DEMOLITION.
6. PROTECT AS NECESSARY ALL EXISTING CONSTRUCTION TO REMAIN AND IN-PLACE CONSTRUCTION DURING CONSTRUCTION PROCEDURES.

FLOOR PLAN LEGEND

- | | | |
|--|------------------------------|---|
| | ROOM NAME | ROOM IDENTIFIER WITH ROOM NAME & NUMBER |
| | DOOR/GATE | SEE DOOR SCHEDULE SHEET A-511 AND A-532 |
| | DOOR/GATE OPENING IDENTIFIER | |
| | PH | PANIC HARDWARE |
| | | 60" CLEAR ACCESSIBLE TURNING SPACE |
| | | (E) COVERED WALKWAY NOT IN SCOPE |
| | | (E) BUILDING NOT IN SCOPE |
| | | WALL TAG, SEE PARTITION SCHEDULE |

WALL LEGEND

- | | |
|--|---|
| | (E) WOOD STUD FRAMED WALLS |
| | (E) 2-HR FIRE SEPARATED WOOD STUD FRAMED WALLS |
| | (E) 1-HR FIRE SEPARATED "MODULAR" SYSTEM PARTITION METAL STUDS @ 40" OC W/ STEEL COVERED GYP BD PANELS. |
| | 1-HR FIRE BARRIER, SEE SHEET A-531 FOR TYPE |



LIONAKIS

2025 Nineteenth Street
Sacramento CA 95818
P 916.558.1900
www.lionakis.com

CONSULTANT

SEAL



PROJECT
**JOHN F KENNEDY HIGH SCHOOL
SWIMMING POOL UPGRADE**

6715 GLORIA DR
SACRAMENTO, CA 95831

CLIENT
SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

ISSUED	MARK	DATE	DESCRIPTION

MANAGEMENT	LIONAKIS PROJECT NO.	023264
	CLIENT PROJECT NO.	
	COPYRIGHT:	LIONAKIS 2017

TITLE
FLOOR PLAN - LEVEL 1

SHEET
A-111

IF THIS SHEET IS NOT 30"x42" IT IS A REDUCED PRINT - SCALE ACCORDINGLY

C

B

Autodesk Docs: 022364.SOUSD_IPHNS Pool Upgrade/022364_ARCH/MSTR_LAYOUT/022364

4/30/2024 9:03:31 AM

GATE SCHEDULE							
DOOR NO	HDW GP	DOORS		FRAMES		COMMENTS	
		LEAF 2 WIDTH	HEIGHT	JAMB			
101A	101	4'-0"	6'-0"	20/A-511		DECORATIVE METAL GATE WITH PH	
101B	101	4'-0"	6'-0"	20/A-511		DECORATIVE METAL GATE WITH PH	
101C	102	3'-2"	7'-0"	(E)		REPLACE (E) FRAME AND PROVIDE 2" HOLLOW METAL FRAME AT HEADER AND JAMB. REPLACE DOOR WITH PH	

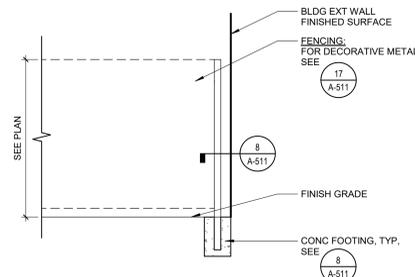
1. MINIMUM INTERMEDIATE POST HOLE DIAMETERS:

PIPE OUTSIDE DIA. (in)	POST HOLE DIA. (in)	SETTING DEPTH (in)
2.375	12.0	30.0
2.875	16.0	36.0
4.0	18.0	42.0
6.625	24.0	48.0

2. MINIMUM TERMINAL POST (END, CORNER, GATE) HOLE DIAMETER AND SETTING DEPTH:

GATE LEAF WIDTH (ft)	FABRIC HEIGHT (ft)	POST SIZE (in)	HOLE DIA (in)	SETTING DEPTH (in)
4	6 OR LESS	2.375	16	30
OVER 4 - 10	6 OR LESS	2.875	16	36
OVER 10 - 18	6 OR LESS	4.0	18	42

SEE SPEC SECTION 32.31.19 FOR ADDITIONAL INFO

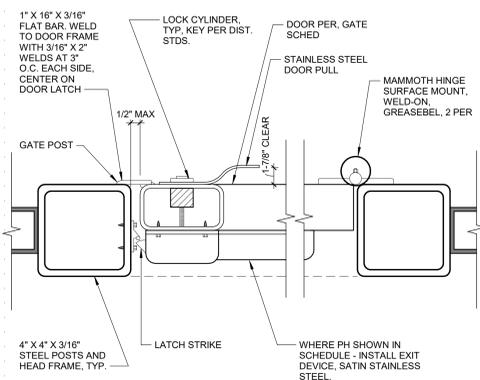


2 FENCE POST FOUNDATION

0500_FENCE POST FOUNDATION_02

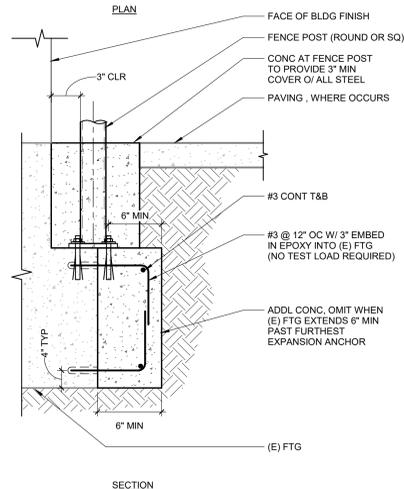
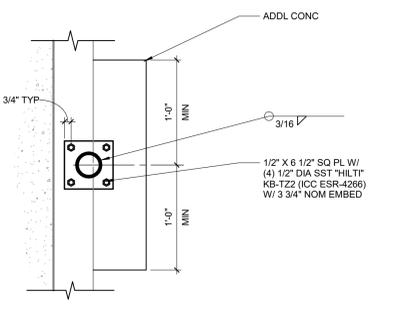
6 FENCE AT BUILDING

0500_FENCE AT BUILDING 0_02



3 SECTION SINGLE GATE DOOR LATCHING HARDWARE

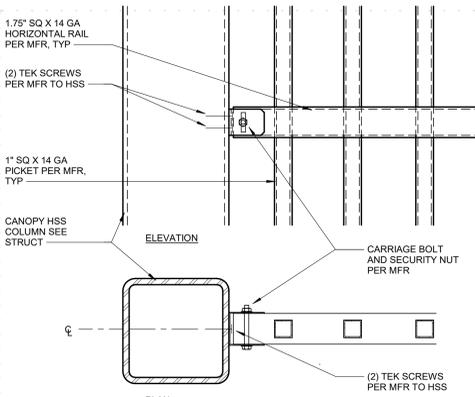
0500_SECTION SINGLE GATE DOOR LATCHING HARDWARE



NOTE: THIS APPLIES TO FENCES W/ MAX HEIGHT OF 6'-0\"/>

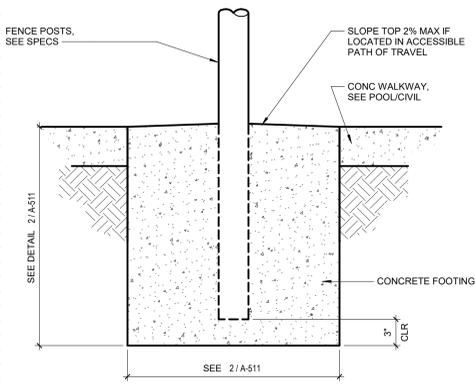
8 FENCE POST MOUNTING AT BUILDING

0500_FN POST BASE BLDG_1



11 DECORATIVE METAL GATE AT HSS

0500_DECORATIVE METAL GATE AT HSS COL



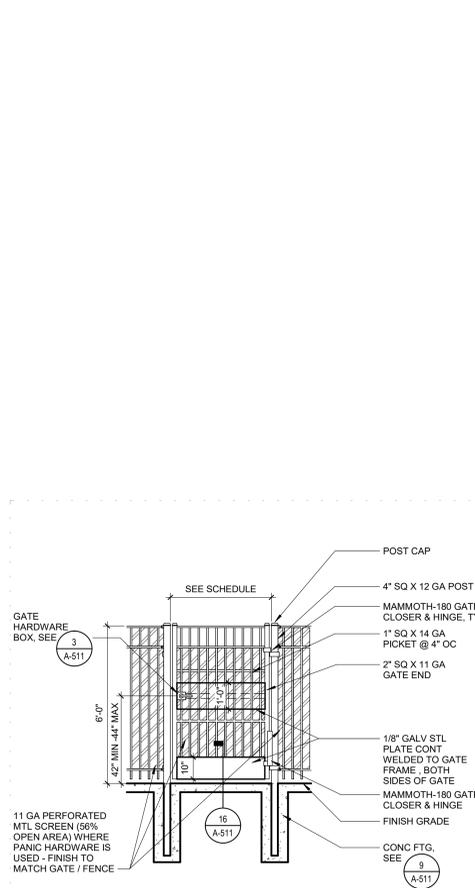
9 FENCE FOOTING - UP TO 6'-0" HIGH

0500_FENCE FOOTING / MOW STRIP_02



16 METAL GATE KICK PLATE

0500_GATE KICK PLATE

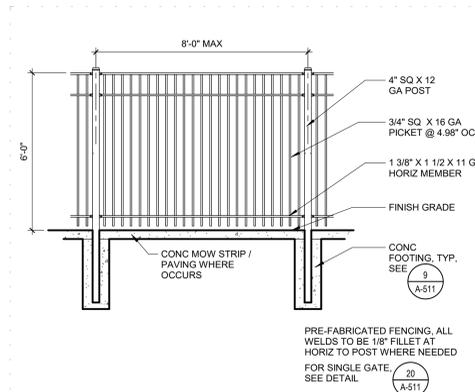


20 SINGLE DECORATIVE GATE - 6'

0500_SINGLE DECORATIVE GATE - 6'

17 DECORATIVE METAL FENCE - 6' HIGH

0500_DECORATIVE METAL FENCE 6'



PRE-FABRICATED FENCING, ALL WELDS TO BE 1/8\"/>

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122170 INC.
REVIEWED FOR:
SS FLS ACS
DATE: 05/09/2024

LIONAKIS

2025 Nineteenth Street
Sacramento CA 95818
P 916.558.1900
www.lionakis.com

CONSULTANT

SEAL



PROJECT
JOHN F KENNEDY HIGH SCHOOL
SWIMMING POOL UPGRADE

6715 GLORIA DR
SACRAMENTO, CA 95831

CLIENT
SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

ISSUED

MARK	DATE	DESCRIPTION

MANAGEMENT

LIONAKIS PROJECT NO.	023264
CLIENT PROJECT NO.	
COPYRIGHT:	LIONAKIS 2017

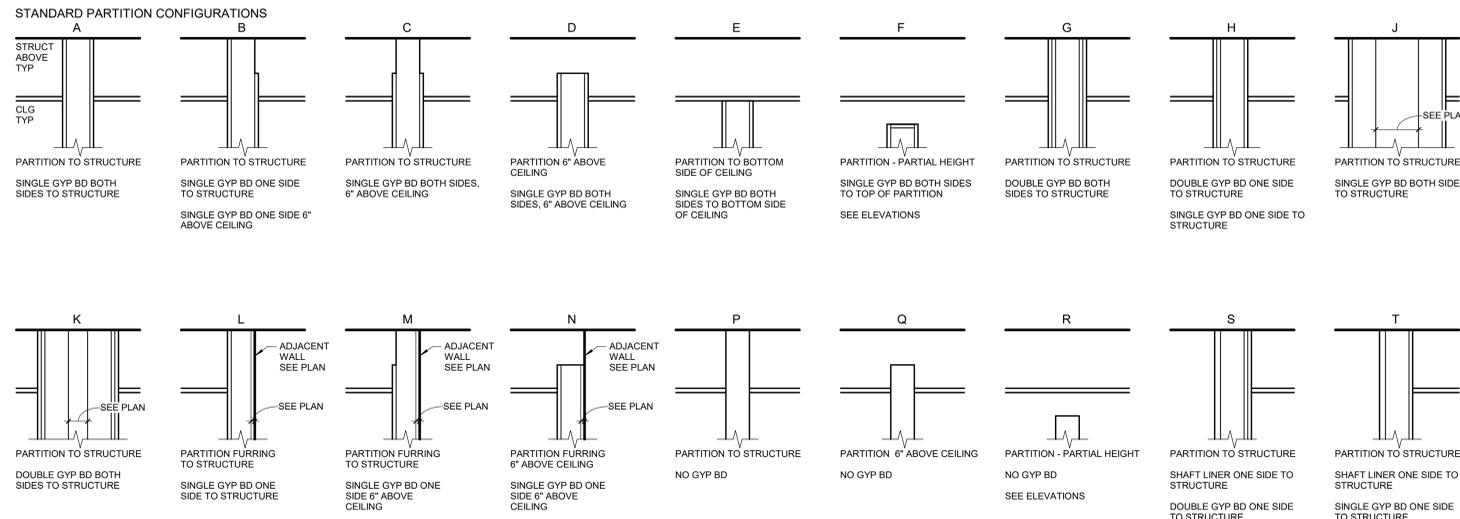
TITLE
DECORATIVE METAL
FENCE & GATE DETAILS

SHEET

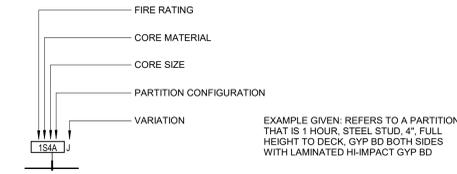
A-511

IF THIS SHEET IS NOT 30" X 42" IT IS A REDUCED PRINT - SCALE ACCORDINGLY

PARTITION CONFIGURATION DIAGRAMS (FOURTH CHARACTER DESIGNATOR)



PARTITION TYPE SYMBOL KEY



PARTITION SYMBOL DESIGNATORS

FIRST CHARACTER [154A] J		SECOND CHARACTER [154A] J	
DESIGNATOR	FIRE RATING	DESIGNATOR	CORE MATERIAL
0	NON-RATED	C	CONCRETE
1	1 HR	D	DETENTION WALL
2	2 HR	E	EXISTING
3	3 HR	F	FURRING - WOOD
4	4 HR	H	STEEL HAT CHANNELS
		M	MASONRY
		S	STEEL STUD
		T	SHAFTWALL STUD
		W	WOOD STUD
		Z	STEEL ZEE CHANNELS

THIRD CHARACTER [154A] J		CORE MATERIAL SIZE											
DESIGNATOR		C	D	F	H	M	S	T	W	Z	--	--	--
1				3/4"	3/4"		1 5/8"					7/8"	
2		2"		1 1/2"	1 1/2"		2 1/2"					1 1/2"	
3				2 1/2"	2 1/2"		3 5/8"	2 1/2"					
4	4"						4"	4"	3 1/2"				
6	6"					5 5/8"	6"	6"	5 1/2"				
8	8"					7 5/8"	8"	8"	7 1/4"				
10	10"					9 5/8"	10"	10"	9 1/4"				
12	12"					11 5/8"	12"	12"	11 1/4"				

FOURTH CHARACTER [154A] J

SEE PARTITION CONFIGURATION DIAGRAMS AT LEFT

FIFTH CHARACTER [154A] J	
DESIGNATOR	VARIATION MATERIAL
A	MOISTURE RESISTANT GYP BD
B	CEMENTITIOUS BACKER BD
C	GYP BD, ADDITIONAL LAYER
D	REMOVE GYP BD
E	SOUND DAMPENING GYP BD
F	HI-IMPACT GYP BD
G	PLYWOOD
H	LEAD BACKED GYP BD
J	LAMINATED HI-IMPACT GYP BD
K	RIGID INSULATION
L	BULLET RESISTANT COMPOSITE PANELS
M	WITHOUT ACOUSTIC INSULATION
P	PARTITION
S	SMOKE
W	FIRE

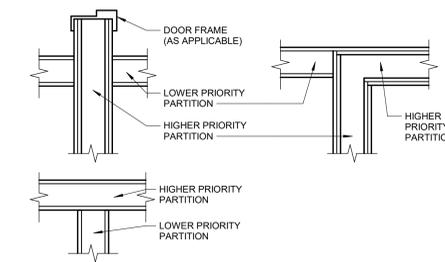
PARTITION TYPE GENERAL NOTES

- REFER TO THE FLOOR PLANS FOR PARTITION TYPE SYMBOLS. A PARTITION TYPE IS INDICATED BY A SYMBOL CONTAINING THE PARTITION IDENTIFICATION WHICH REFERS TO A SPECIFIC ASSEMBLY INDICATED ON THIS SHEET.
- THE CONSTRUCTION OF EXTERIOR WALLS ARE SHOWN ON WALL SECTIONS & CORRESPONDING DETAILS. PARTITION SYMBOLS ARE ONLY USED TO SHOW INTERIOR CONDITIONS, INCLUDING INTERIOR FURRING OF EXTERIOR WALLS.
- PARTITION TYPES AS NOTED BY THE SYMBOL CONTINUE BETWEEN ROOM/SPACE CORNERS OR ANY INTERSECTING PARTITION.
- SEE PLANS FOR STRUCTURE ABOVE NOTED IN PARTITION CONFIGURATION DIAGRAMS.
- THE PARTITION TYPE ABOVE OR BELOW ANY OPENING IS TO BE THE SAME AS THAT SCHEDULED FOR EITHER SIDE OF THE OPENING, UNO.
- DIFFERING PARTITION TYPES SHALL ALIGN SO THAT PARTITION FINISH PLANES CONTINUE UNBROKEN WITHIN AND/OR ACROSS SPACES.
- IN CASES WHERE TWO DIFFERENT CEILING HEIGHTS ABUT PARTITIONS, THE PARTITION SHALL EXTEND ABOVE THE HIGHEST CEILING INDICATED.
- GYPSON BOARD SHALL BE FIRE RESISTANT, TYPE 'X' UNO. FIRE RATED PARTITIONS SHALL BE CONSTRUCTED PER CBC, TABLE 720.1(2).
- PROVIDE MOISTURE RESISTANT GYP BOARD AT PARTITIONS IN WET AREAS (FLOOR TO FINISH CEILING) INCLUDING BUT NOT LIMITED TO THE FOLLOWING ROOMS:
 - A. TOILET ROOMS
 - B. JANITOR CLOSETS
 - C. OUTSIDE AIR SHAFTS
 - D. MECHANICAL ROOMS
 - E. DRINKING FOUNTAIN ALCOVES
 - F. KITCHENS
 - G. LOCKERS
- PROVIDE CEMENTITIOUS BACKER BOARD AT WET AREAS SCHEDULED WITH TILE FINISH.
- PROVIDE ACOUSTICAL TREATMENT AT PARTITIONS WITH ACOUSTIC INSULATION.
 - FILL STUD CAVITIES & RUN INSULATION CONTINUOUS AROUND COLUMNS & OTHER OBSTRUCTIONS TO FORM A CONTINUOUS ACOUSTIC BARRIER.
 - A. INSTALL ACOUSTIC BATT INSULATION, FULL WIDTH, DEPTH, AND HEIGHT.
- INSTALL ACOUSTICAL SEALANT AT PARTITION HEAD, SILL & JAMB TRANSITIONS, AS WELL AS AT PENETRATIONS THROUGH THE GYPSUM BOARD MEMBRANE INCLUDING PENETRATIONS AT MOUNTING FASTENERS. FIRE STOPPING REQUIREMENTS SHALL SUPERCEDE ACOUSTIC TREATMENT.
- GYPSON BOARD SILL & JAMB EDGES TERMINATING AT DISSIMILAR MATERIAL (CMU, CONCRETE, METAL PANEL, ETC) SHALL ALLOW 1/4" CONTINUOUS GAP AND BE SEALED AIRTIGHT WITH AN ACOUSTIC SEALANT.
- THE BACK AND SIDES OF DUPLEX ELECTRICAL OUTLETS, TELEPHONE OUTLETS, CABLE TV OUTLETS, FIRE ALARM DEVICES, THERMOSTATS, ETC. SHALL BE SEALED WITH FIRE STOP PUTTY PADS AS SPECIFIED FOR FIRE RATED ASSEMBLIES. ELSEWHERE, BACK-TO-BACK OUTLET BOXES TO BE SEPARATED BY ONE EMPTY STUD SPACE AND A MINIMUM OF 16 INCHES.
- PARTITIONS INDICATED AS FIRE OR SMOKE RATED FORM A SEPARATION THAT SHALL BE CONTINUOUS FROM FLOOR TO STRUCTURE ABOVE WITH NO BREAKS AT CONCEALED SPACES, COLUMNS, TRANSITIONS OR OTHER OBSTRUCTIONS.
- PENETRATIONS THROUGH RATED PARTITIONS SHALL BE SEALED WITH UL LISTED FIRE/SMOKE STOP ASSEMBLY.
- SEE PARTITION PRIORITY LEGEND FOR PRIORITIZATION OF INTERSECTING PARTITIONS.

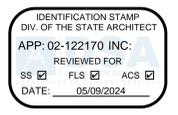
PARTITION TYPE SCHEDULE

PARTITION TYPE	VARIATION	UL ASSEMBLY	STC RATING	HEAD	SILL	HEAD	SILL	REMARKS
1T4E		UL415		5/A-532	7/A-532			

PARTITION PRIORITY LEGEND



- PARTITION PRIORITY LEGEND**
- ALL PARTITIONS MAY NOT BE USED. SEE PLANS.
 - PARTITIONS WITH HIGHER ASSIGNED PRIORITY SHALL BE CONTINUOUS THROUGH INTERSECTIONS.



LIONAKIS

2025 Nineteenth Street
Sacramento CA 95818
P 916.558.1900
www.lionakis.com

CONSULTANT

PROJECT
JOHN F KENNEDY HIGH SCHOOL SWIMMING POOL UPGRADE

6715 GLORIA DR
SACRAMENTO, CA 95831

CLIENT
SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

ISSUED	MARK	DATE	DESCRIPTION

MANAGEMENT
LIONAKIS PROJECT NO. 023264
CLIENT PROJECT NO.
COPYRIGHT: LIONAKIS 2017

TITLE
PARTITION TYPES & SCHEDULE

SHEET
A-531

Address: 023264-SOUSD-IPMS Pool Upgrade-023264_ARCH-MSTR_LAYOUT-1.rvt 4/30/2017 7:59:09 AM

DOOR SCHEDULE																		
DOOR NO	LOCATION	FIRE RATING (MINS)	HDW GP	DOORS								FRAMES						COMMENTS
				TYPE	WIDTH	LEAF 2 TYPE	WIDTH	MATL	HEIGHT	FINISH	GL	TYPE	MATL	FINISH	GL	HEAD	JAMB	
106A	MECHANICAL ROOM	45	(none)	DF1	3'-0"			HM	7'-0"	PT			FB1	HM	PT	9/A-532	9/A-532	

DOOR SCHEDULE GENERAL NOTES

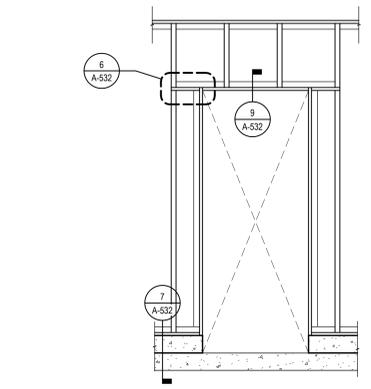
- GENERAL DOOR SHEET NOTES ARE TYPICAL UNLESS NOTED OTHERWISE.
- FLOORS OR LANDINGS ON EACH SIDE OF EXIT DOORS SHALL NOT EXCEED 1/2' FROM THE TOP OF THE DOOR THRESHOLD TO THE FLOOR OR LANDING SURFACE ON EITHER SIDE OF THE DOOR ASSEMBLY.
- EXITS AND EXIT ACCESS DOORS SHALL BE MARKED BY AN APPROVED EXIT SIGN READILY VISIBLE FROM ANY DIRECTION OF TRAVEL.
- THE FORCE FOR PUSHING OR PULLING OPEN INTERIOR SWINGING EGRESS DOORS, OTHER THAN FIRE DOORS, SHALL NOT EXCEED 5 POUNDS. FOR OTHER SWINGING DOORS, AS WELL AS SLIDING AND FOLDING DOORS, THE DOOR LATCH SHALL RELEASE WHEN SUBJECTED TO A 15 POUND MAXIMUM FORCE.
- LATCHING AND LOCKING DOORS THAT ARE HAND ACTIVATED AND WHICH ARE IN THE PATH OF TRAVEL SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE, PANIC BARS, PUSH-PULL ACTIVATING BARS OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP, PINCH OR TWIST THE OPENING HARDWARE.
- THE BOTTOM 10" OF ALL DOORS EXCEPT AUTOMATIC AND SLIDING DOORS SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION. WHERE NARROW FRAME DOORS ARE USED, A 10" HIGH SMOOTH PANEL SHALL BE INSTALLED ON THE PUSH SIDE OF THE DOOR, WHICH WILL ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION.
- RATED DOORS SHALL BE POSITIVE LATCHING AND SELF CLOSING.
- FIRE RATED DOORS AND GLASS SHALL HAVE AN APPROVED LABEL OR LISTING MARK INDICATING THE FIRE PROTECTION RATING WHICH IS PERMANENTLY AFFIXED AT THE FACTORY WHERE FABRICATION AND ASSEMBLY OCCUR.
- DOOR AND FRAME ASSEMBLY DIMENSIONS SHALL BE FIELD VERIFIED PRIOR TO FABRICATION AND INSTALLATION.
- COORDINATE OVERALL DOOR FRAME DEPTHS WITH WALL TYPES.
- FOR DOOR HARDWARE GROUPS, SEE PROJECT SPECIFICATIONS.



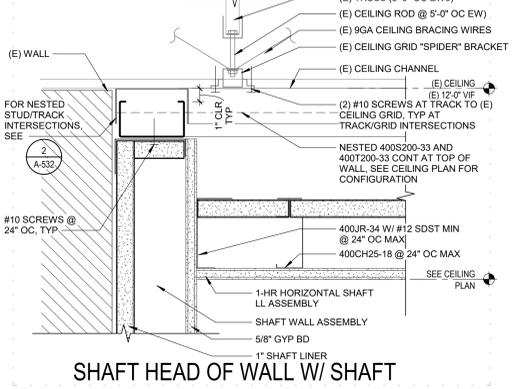
LIONAKIS

2025 Nineteenth Street
Sacramento CA 95818
P 916.558.1900
www.lionakis.com

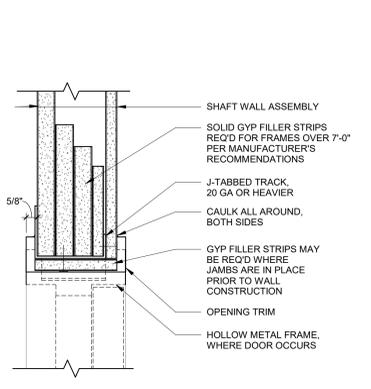
CONSULTANT



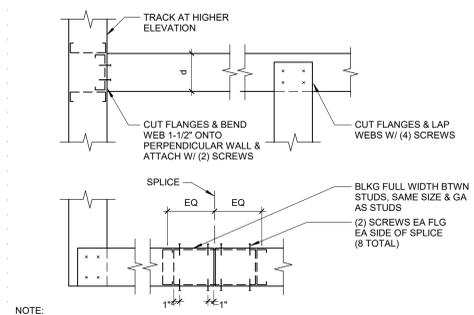
1 SHAFT WALL - DR OPENING
1/2" = 1'-0"



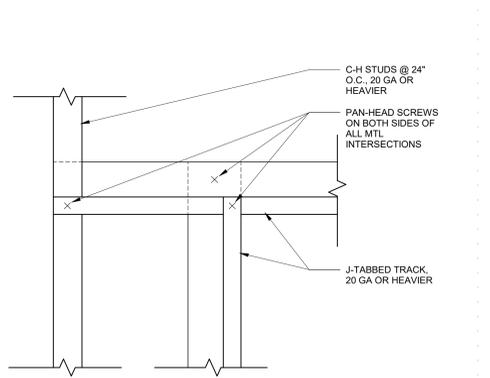
5 SHAFT HEAD OF WALL W/ SHAFT CEILING
3" = 1'-0"



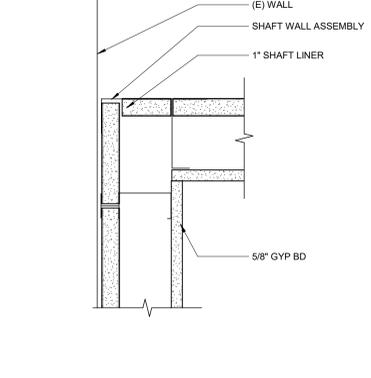
9 SHAFT WALL - HEAD (JAMB SIM)
3" = 1'-0"



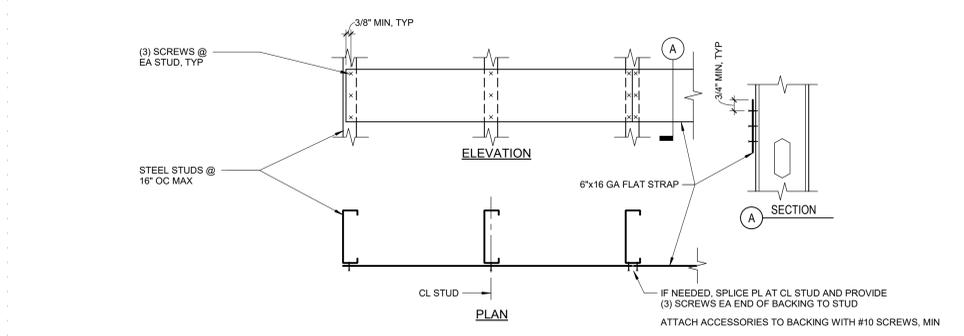
2 TYP STEEL TOP TRACK FRAMING AT CORNERS, INTERSECTIONS, AND SPLICES
SCALE: NTS



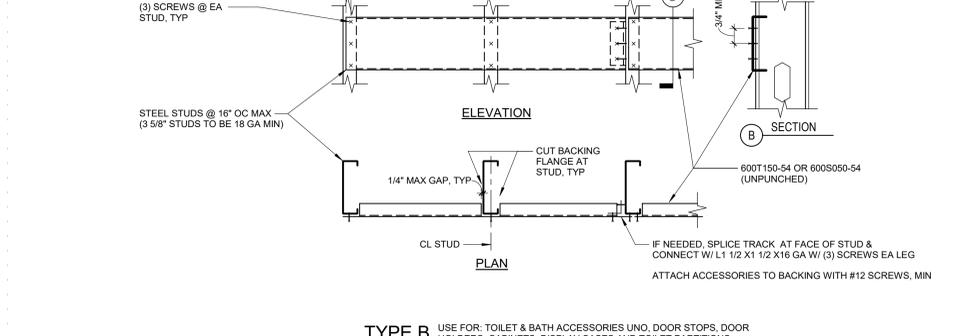
6 OPNG INSIDE CRNR (SHAFT WALL)
3" = 1'-0"



10 SHAFT WALL - CORNER FRAMING - PLAN
3" = 1'-0"



8 TYP STEEL STUD WALL BACKING PLATE
SCALE: NTS



7 SHAFT WALL SILL
3" = 1'-0"



16 URINAL PARTITION ATTACHMENT
3" = 1'-0"

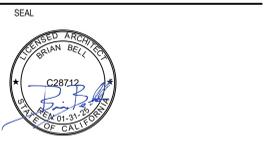
LEGEND

- (E) = EXISTING
ADO = AUTOMATIC DOOR OPERATOR
ADC = AUTOMATIC DOOR CLOSER
CR = CARD READER
EL = ELECTRIC LOCK
HDW GP = HARDWARE GROUP
HO = HOLD OPEN
PH = PANIC HARDWARE
V = VINYL STRIPS
- MATERIAL**
ALUM = ALUMINUM
DHM = DETENTION HOLLOW METAL
HM = HOLLOW METAL
SST = STAINLESS STEEL
WD = WOOD
- FINISH**
ANOD = ANODIZED
FRP = FIBER REINFORCED PLASTIC
PLAM = PLASTIC LAMINATE
PT = PAINT
ST = STAIN
- GLASS LEGEND:**
GL = GLASS
LG = LEADED GLASS
RG = RATED GLASS
SG = SPANDREL GLASS
TG = TEMPERED GLASS
- GLASS LEGEND NOTES:**
1. SEE SPECS FOR GLASS TYPES NOTED

COLD-FORMED STEEL SHAFT WALL

- SHAFT WALL ASSEMBLY SHALL BE DESIGNED TO UL 415
- THE DESIGN, INSTALLATION AND CONSTRUCTION OF COLD-FORMED STEEL SHAFT WALL FRAMING SHALL COMPLY WITH THE REQUIREMENTS OF FIRE-RESISTANCE RATED ASSEMBLIES INDICATED IN THE UNITED STATES GYPSUM (USG) SYSTEM FOLDER SA926.
- PRODUCTS SHALL BE MANUFACTURED BY OR FOR THE UNITED STATES GYPSUM COMPANY AND COMPLY WITH ICC AER-09036.
- STEEL MEMBERS SHALL COMPLY WITH ASTM C645.
- ALL STEEL SHAFT WALL MEMBERS SHALL HAVE THE MINIMUM EFFECTIVE STRUCTURAL SECTION PROPERTIES AS GIVEN IN TABLES BELOW.
- J-RUNNERS AND JAMB STRUT SHALL BE ASTM A653 SS GRADE 33 FOR 24GA. MINIMUM THICKNESS AND ASTM A653 SS GRADE 40 FOR 20GA MINIMUM THICKNESS.
- C-H AND E STUDS SHALL BE MANUFACTURED FROM COLD ROLL-FORMED LIGHT GAUGE STEEL CONFORMING TO ASTM A653 SS GRADE 33 FOR 25GA THICKNESS AND ASTM A653 SS GRADE 40 FOR 20GA MINIMUM THICKNESS.

SHAFT WALL COMPONENT SECTION PROPERTIES									
COMPONENT	USG PRODUCT IDENTIFICATION	MEMBER DEPTH, d (in)	FLANGE WIDTH, b (in)	MILS	REF GA	AREA, A (in ²)	EFFECTIVE AREA, A _e (in ²)	S _x (in ³)	S _y (in ³)
C-H STUDS	212CH-18	2 1/2	1 1/2	18	25	0.1524	0.129	0.093	
	212CH-34	2 1/2	1 1/2	34	20	0.2910	0.239	0.1741	
	400CH-18	4	1 1/2	18	25	0.1798	0.383	0.162	
	400CH-34	4	1 1/2	34	20	0.3433	0.730	0.318	
DOUBLE E-STUDS	600CH-34	6	1 1/2	34	20	0.4227	1.988	0.569	
	600ES-18	6	2	18	25	0.3982	2.004	0.628	
J-RUNNER	600ES-34	6	2	34	20	0.6304	3.400	1.094	
	212JR-23	2 1/2	1 & 2	23	24	0.1346	0.117	0.085	
	212JR-34	2 1/2	1 & 2	34	20	0.2039	0.192	0.130	
	400JR-23	4	1 & 2	23	24	0.1705	0.351	0.163	
	400JR-34	4	1 & 2	34	20	0.2577	0.574	0.251	
	600JR-23	6	1 & 2	23	24	0.2163	0.937	0.295	
JAMB STRUT	600JR-34	6	1 & 2	34	20	0.3295	1.523	0.457	
	212JS-34	2 1/2	1 & 3	34	20	0.2398	0.226	0.143	
	400JS-34	4	1 & 3	34	20	0.2936	0.647	0.270	
600JS-34	6	1 & 3	34	20	0.3654	1.673	0.485		



PROJECT
JOHN F KENNEDY HIGH SCHOOL SWIMMING POOL UPGRADE

6715 GLORIA DR
SACRAMENTO, CA 95831

CLIENT
SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

MARK	DATE	DESCRIPTION

MANAGEMENT
LIONAKIS PROJECT NO. 023264
CLIENT PROJECT NO.
COPYRIGHT: LIONAKIS 2017

DETAILS

SHEET
A-532

IF THIS SHEET IS NOT 30"x42" IT IS A REDUCED PRINT - SCALE ACCORDINGLY

Address: 023264.SUSD_IPMS Pool Upgrade023264_ARCHMASTER_RDL_CENTRAL.rvt

4/30/2024 7:59:12 AM

SYMBOLS LEGEND		
SYMBOL	ABBREVIATION	DESCRIPTION
	-	3 WAY VALVE
	-	ANCHOR
	AVN	ANGLE VALVE
	AQ	AQUASTAT
	-	AUTOMATIC AIR VENT
	BFP, BP, DCW	BACKFLOW PREVENTER, BACKFLOW PREVENTER, DOUBLE CHECK VALVE
	-	BALANCING VALVE
	-	BALL VALVE
	-	BOTTOM CONNECTION
	-	CHECK VALVE
	CP	CIRCULATING PUMP
	CO	CLEANOUT
	EJ	EXPANSION JOINT
	-	FLEXIBLE CONNECTOR
	FD	FLOOR DRAIN
	FS	FLOOR SINK
	GCK	GAGE COCK
	GSCCK, PC	GAS COCK, PLUG COCK
	GM	GAS METER
	GPR	GAS PRESSURE REGULATOR
	-	GATE VALVE
	HD	HOPPER DRAIN
	HB	HOSE BIBB
	-	PIPE BREAK, PIPE CONTINUATION
	-	PIPE CAP
	-	PIPE DOWN
	-	PIPE GUIDE
	-	PIPE UP
	-	POINT OF CONNECTION
	-	PRESSURE RELIEF VALVE
	-	REDUCER
	-	SOLENOID VALVE
	-	STRAINER
	-	THERMOMETER
	TP	TRAP PRIMER
	-	UNION
	-	VALVE IN RISER/DROP
	VB	VALVE IN VALVE BOX
	-	OVERHEAD CLEANOUT, WALL CLEANOUT
	WHA	WATER HAMMER ARRESTOR
	WM	WATER METER
	-	HOT AND COLD WATER CONNECTION
	-	EXISTING PIPING TO BE ABANDONED
	-	EXISTING PIPING TO BE REMOVED

PLUMBING ABBREVIATIONS			
ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
ABC	ABOVE CEILING	INV OR I.E.	INVERT ELEVATION
AFB	ABOVE FINISHED FLOOR	LAV	LAVATORY SINK
AFG	ABOVE FINISHED GRADE	MS	MOP SINK
AF, BF	ABOVE FLOOR, BELOW FLOOR	(N), (E)	NEW, EXISTING
AP	ACCESS PANEL	NTS	NOT TO SCALE
BEL	BELOW	OH	OVERHEAD
BOF	BOTTOM OF FOOTING	(R), (D)	RISE, DROP
CLG	CEILING	SK	SINK
DN	DOWN	TOF	TOP OF FOOTING
DFU	DRAIN FIXTURE UNIT	TYP	TYPICAL
DF	DRINKING FOUNTAIN	UN	UNION
DL	DEVELOPED LENGTH	UG	UNDERGROUND
FA	FROM (LEVEL OR ROOF) ABOVE	WH	WALL HYDRANT
FB	FROM (LEVEL OR UG) BELOW	WC	WATER CLOSET
FD	FLOOR DRAIN	WSFU	WATER SUPPLY FIXTURE UNITS
FCO	FLOOR CLEANOUT		
FLR	FLOOR		
FS	FLOOR SINK		
GCO	GRADE CLEANOUT		

PLUMBING SYSTEMS LEGEND		
SYMBOL	ABBREVIATION	DESCRIPTION
	CD	CONDENSATE DRAIN
	CW	DOMESTIC COLD WATER
	D	DRAIN
	HW	DOMESTIC HOT WATER
	HWR	DOMESTIC HOT WATER RETURN
	HHWR	HEATING HOT WATER RETURN
	HHWS	HEATING HOT WATER SUPPLY
	NGLP	NATURAL GAS - LOW PRESSURE
	NGMP	NATURAL GAS - MEDIUM PRESSURE
	NGHP	NATURAL GAS - HIGH PRESSURE
	NPCW	NON-POTABLE COLD WATER
	OD	OVERFLOW DRAIN
	PCD	PUMPED CONDENSATE DRAIN
	PSD	PUMPED STORM DRAIN
	PSS	PUMPED SANITARY DRAIN
	SD	STORM DRAIN
	SSD	SUB-SOIL DRAINAGE
	SS	SANITARY SEWER
	TW	TEMPERED DOMESTIC WATER
	TWR	TEMPERED DOMESTIC WATER RETURN
	TPW	TRAP PRIMER WATER
	V	VENT FOR SANITARY SEWER

FIRE STOPPING	
1.	PACK THE ANNULAR SPACE BETWEEN THE PIPE SLEEVES AND THE PIPE THROUGH ALL FLOORS AND WALLS WITH UL LISTED FIRE STOP, AND SEALED AT THE ENDS. ALL PIPE PENETRATIONS SHALL BE UL LISTED, HILTI, 3M PRO-SET, OR EQUAL.
A.	INSTALL FIRE CAULKING BEHIND MECHANICAL SERVICES INSTALLED WITHIN FIRE RATED WALLS, TO MAINTAIN CONTINUOUS RATING OF WALL CONSTRUCTION.
2.	PROVIDE SPECSEAL SYSTEMS UL FIRE RATED SLEEVE/COUPLING PENETRATORS FOR EACH PIPE PENETRATION OR FIXTURE OPENING PASSING THROUGH FLOORS, WALLS, PARTITIONS OR FLOOR/CEILING ASSEMBLIES. ALL PENETRATORS SHALL COMPLY WITH UL FIRE RESISTANCE DIRECTORY (LATEST EDITION), AND IN ACCORDANCE WITH CHAPTER 7, CBC REQUIREMENTS.
3.	SLEEVE PENETRATORS SHALL HAVE A BUILT IN ANCHOR RING FOR WATERPROOFING AND ANCHORING INTO CONCRETE POURS OR USE THE SPECIAL FIT CORED HOLE PENETRATOR FOR CORED HOLES.
4.	COPPER AND STEEL PIPING SHALL HAVE SPECSEAL PLUGS ON BOTH SIDES OF THE PENETRATOR TO REDUCE NOISE AND TO PROVIDE WATERPROOFING.
5.	ALL ABOVE SYSTEMS TO BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS. 6. ALTERNATE FIRE STOPPING SYSTEMS ARE ACCEPTABLE IF APPROVED EQUAL. HOWEVER, ANY DEVIATION FROM THE ABOVE SPECIFICATION REQUIRES THE CONTRACTOR TO BE RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE PROPOSED PRODUCTS AND THEIR INTENDED USE, AND THE CONTRACTOR SHALL ASSUME ALL RISKS AND LIABILITIES WHATSOEVER IN CONNECTION THEREWITH.

PLUMBING GENERAL NOTES	
1.	REFER TO ARCHITECTURAL DRAWINGS FOR BUILDING DIMENSIONS AND EXACT LOCATIONS OF PLUMBING FIXTURES.
2.	DRAWINGS SHALL BE CONSIDERED DIAGRAMMATIC ONLY. CONTRACTOR SHALL FIELD VERIFY WHERE POSSIBLE, EXACT LOCATIONS, SIZES, AND ELEVATIONS OF ALL ITEMS SHOWN PRIOR TO THE INSTALLATION OF ANY NEW WORK.
3.	CONTRACTOR SHALL FIELD VERIFY ALL POINTS OF CONNECTION TO SITE PIPING (LOCATIONS AND INVERT) PRIOR TO EXCAVATION, FABRICATION AND INSTALLATION OF ASSOCIATED PIPING RUNS. NOTIFY ARCHITECT AND/OR ENGINEER IMMEDIATELY IF POINTS OF CONNECTION OR INVERTS ARE DIFFERENT THAN REPRESENTED ON THE DRAWINGS.
4.	CLOSELY COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO TRENCHING OR INSTALLATION OF NEW. IDENTIFY SIZE AND LOCATIONS OF ALL PENETRATIONS THROUGH FOUNDATIONS, WALLS OR ROOFS PRIOR TO FABRICATION OF ANY SYSTEMS OR ORDERING MATERIALS AFFECTED BY POSSIBLE COORDINATION CONFLICTS.
5.	ACCESS PANELS SHALL BE PROVIDED AS NECESSARY TO PROPERLY ACCESS THE PLUMBING SYSTEM INCLUDING VALVES, REFER TO SPECIFICATIONS FOR MORE INFORMATION.
6.	OFFSET VENT THROUGH ROOFS 10'-0" MINIMUM FROM AIR INTAKES AND 4'-0" FROM OUTSIDE WALLS.
7.	HVAC EQUIPMENT IS SHOWN FOR THE COORDINATION OF UTILITIES ONLY. REFER TO 'M' SHEETS FOR MORE INFORMATION.
8.	THE CONNECTION OF NATURAL GAS LINES TO EQUIPMENT SHALL INCLUDE A LINE SIZE SHUT-OFF VALVE, UNION AND A MINIMUM 6" LONG DIRT LEG WITH ACCESSIBLE END CAP.
9.	THE CONNECTION OF CONDENSATE DRAIN LINES TO HVAC EQUIPMENT SHALL INCLUDE A MINIMUM 4" DEEP "P"-TRAP AND PLUGGED TEE AT ALL OFFSETS.
10.	PROVIDE WATER HAMMER ARRESTORS (WHA) AS INDICATED ON PLUMBING PLANS AND/OR AS DESCRIBED WITHIN DIVISION 22 SPECIFICATIONS. SIZING SHALL BE IN ACCORDANCE WITH PDI STANDARD WH-201.
11.	FOR PIPES PASSING THROUGH, UNDER OR PARALLEL TO BUILDING FOOTINGS, RETAINING WALLS ETC. REFER TO STRUCTURAL DETAILS, 'S' SHEETS, FOR TYPICAL ARRANGEMENT.
12.	OFFSET ALL RISERS AND DROPS TO AVOID PENETRATIONS AT TOP PLATES.
13.	PENETRATION OF PIPES, CONDUIT, ETC., IN WALLS AND/OR FLOORS REQUIRING PROTECTED OPENINGS SHALL BE FIRE STOPPED. MATERIAL SHALL BE A TESTED ASSEMBLY APPROVED BY THE STATE FIRE MARSHAL.
14.	SEAL ALL PIPE PENETRATIONS THRU FLOORS WATERTIGHT.
15.	ALL VALVES SHOWN SHALL BE FULL LINE SIZE UNLESS OTHERWISE NOTED.
16.	PIPING SHALL BE SUPPORTED AND BRACED IN STRICT COMPLIANCE WITH DIVISION 22 SPECIFICATIONS.
17.	ALL NEW SANITARY WASTE PIPING SHOWN SHALL BE SLOPED AT 1/4" PER FOOT MINIMUM UNLESS OTHERWISE NOTED ON PLANS. WHERE SLOPE IS LESS THAN 1/4" PER FOOT IS INDICATED, CONTRACTOR SHALL SLOPE NEW PIPING UNIFORMLY BETWEEN UPPER TERMINAL OF PIPE AND THE POINT OF CONNECTION TO THE SITE PIPING (AS INDICATED ON THE CIVIL PLANS) TO ACHIEVE MAXIMUM SLOPE POSSIBLE AND IN NO CASE SHALL THE PIPING BE SLOPED LESS THAN THE MINIMUM INDICATED.
18.	CONCEAL ALL PIPING IN WALL FURRING, PARTITIONS, ETC., EXCEPT AT MECHANICAL ROOMS.
19.	PROVIDE FUSION JOINT POLYPROPYLENE PIPING ON ALL GREASE WASTE, ACID WASTE & ACID VENT PIPING. INSTALL AND TEST PER MANUFACTURER GUIDELINES.
20.	ALL QUANTITIES SHOWN ON CALCULATION TABLES ARE STRICTLY INTENDED FOR DESIGN CALCULATIONS ONLY. IT SHALL NOT BE CONSTRUED THAT SUCH QUANTITIES CAN BE USED FOR BIDDING/ESTIMATION PURPOSES.
21.	PROVIDE INSULATION ON ALL CONDENSATE DRAINS INSIDE BUILDING.

MEP COMPONENT ANCHORAGE NOTE	
ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA-APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC SECTIONS 1617A.1.16 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26, AND 30.	
1.	ALL PERMANENT EQUIPMENT AND COMPONENTS.
2.	TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
3.	TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.
THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS.	
A.	COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
B.	COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.
THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL, AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.	

PIPING, DUCTWORK & ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE	
PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8, AND 2022 CBC, SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.	
THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., HCAI OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.	
MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):	
MP <input type="checkbox"/> MD <input type="checkbox"/> PP <input type="checkbox"/> E <input type="checkbox"/>	OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS
MP <input type="checkbox"/> MD <input type="checkbox"/> PP <input type="checkbox"/> E <input type="checkbox"/>	OPTION 2: SHALL COMPLY WITH HCAI (OSHPO) PRE-APPROVAL (OPM #) _____, AS INCLUDED IN THESE DRAWINGS WITH PROJECT-SPECIFIC NOTES AND DETAILS.



LIONAKIS
 2025 Nineteenth Street
 Sacramento CA 95818
 P 916.558.1900
 www.lionakis.com



FOR REVIEW ONLY / NOT FOR CONSTRUCTION
 THE CONSTRUCTION DOCUMENTS HAVE NOT BEEN APPROVED BY THE ENFORCEMENT AGENCY AND ARE NOT COMPLETE OR READY FOR CONSTRUCTION. ELEMENTS, MEMBERS, SYSTEMS AND ASSOCIATED DETAILS AND SPECIFICATIONS MAY NOT BE SHOWN OR FULLY DEVELOPED. FOR BIDDING/ESTIMATING PURPOSES, UTILIZE ADDITIONAL MATERIALS AND QUANTITIES TO ACCOUNT FOR THOSE ITEMS NOT SHOWN OR FULLY DEVELOPED.



PROJECT
JOHN F KENNEDY HIGH SCHOOL SWIMMING POOL UPGRADE
 6715 GLORIA DR
 SACRAMENTO, CA 95831

CLIENT
 SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

ISSUED		
MARK	DATE	DESCRIPTION

MANAGEMENT	
LIONAKIS PROJECT NO:	023284
CLIENT PROJECT NO:	
COPYRIGHT:	LIONAKIS 2017

TITLE
PLUMBING NOTES, LEGEND & ABBREVIATIONS

SHEET
P-001

EWH-1 WATER HEATER SIZING
ELECTRIC TANK TYPE - KITCHEN AREA D

SYMBOL	FIXTURE NAME	QTY	USER HW TEMP	GPH EACH @ USER TEMP	GPH EACH @ WH TEMP	GPH TOTAL PER ITEM
(E) LAV	COMMERCIAL - LAVATORY	17	105.00	6.00	4.62	78.46
(E) SH	SHOWER	4	105.00	30.00	23.08	92.31
(E) MS	SERVICE SINK	2	120.00	20.00	20.00	40.00
WMB	CLOTHES WASHING MACHINE CONNECTION BOX	0.00	120.00	40.00	40.00	0.00
ESH-EW	EMERGENCY SHOWER-EYEWASH	2	68.00	345	69.00	138.00
TOTAL GPH						348.77

INLET TEMP	55.00	TANK VOL	100	GALLONS
WH TEMP	120.00	±1ST HR RECOV @ ΔT	347.91	GALLONS
TEMP DIFF, ΔT	65.00	1KW =	3412.142	BTUH
WATER HEATER EFFICIENCY	0.980			
GPH USAGE DIVERSITY FACTOR	0.75			
GPH WITH DIV FACTOR = TOTAL GPH X FACTOR	261.58			
POWER INPUT = GPH X TEMP DIFF X 8.33LBS/GAL X 1BTU/LB/F / WATER HEATER EFF				
=	144,521.25	BTUH		
=	42.35	KW		
USE =	45.00	KW		
	277.91	GPH RECOVERY EQUIV @ CONSTANT EFF @ TEMP DIFF ABV		

- NOTES:
- 1.0 USER HW TEMP VALUES SHOWN ABOVE ARE ASSUMED WARMEST BEARABLE TEMPERED WATER AT FAUCET OUTLET, SET BY USER UNLESS SHOWN OTHERWISE. SEE PLUMBING FIXTURE SCHEDULE FOR TEMP SETTING SPECIFICS AT FIXTURE OR AT POINT OF USE TMV IF ANY.
 - 2.0 WARNING: PER ASHRAE CHAPTER 50 FIGURE 9, IT TAKES ABT 10 MINS TO CAUSE 3RD DEGREE BURNS USING 120F HOT WATER. FOR 140F HOTWATER, IT ONLY TAKES ABOUT 5 SECONDS TO DO SAME DAMAGE. PLEASE LIMIT HOT WATER TEMP THRU USE OF THERMOSTATIC MIXING VALVES OR USE OF INTEGRAL LIMITING DEVICE IF AVAILABLE.
 - 3.0 1ST HR RECOVERY BASED FROM 0.7xWH TANK VOLUME + PERFORMANCE GPH
 - 4.0 CPC 2022 416.1 EMERGENCY EYEWASH & SHOWER EQUIPMENT SHALL COMPLY WITH ANSI/ISEA Z358.1 (TEPID WATER 60-100°F). EMERGENCY SHOWER SHALL BE NO LESS THAN 20GPM FOR 15 MINUTES. EYEWASH NO LESS THAN 0.4GPM FOR 15 MINUTES. AND EYE-FACE WASH NO LESS THAN 3.0GPM FOR 15MINUTES.
 - 5.0 WATER TEMPERATURE FOR LAV SINKS AND HANDWASHING STATIONS COMPLYING WITH CAL RETAIL CODE SHALL BE AT LEAST 100F, BUT NOT GREATER THAN 108F. CAL RETAIL CODE 113953
 - 6.0 GPH USAGE DIVERSITY FACTOR SHALL BE EQUAL TO PEAK DEMAND X CHANCES OF PEAK DEMAND BEING REACHED
 - 7.0 GPH @ WATER HEATER TEMPERATURE = GPH@USER TEMP x (USER HW TEMP - INLET CW TEMP) / (WH TEMP - CW INLET TEMP). SEE ASPE HANDBOOK #2 EQUATION 6-6 FOR MORE INFORMATION.
 - 8.0 $Q = mc\Delta T$, $Q_H = m_H \cdot c \cdot \Delta T$, $c = \text{sp heat of fluid} = 1\text{BTU/lb/F}$; 8.33lbs of H₂O = 1 Gal of H₂O; Q in BTU and Q_H in BTUH

GAS PRESSURE REGULATOR SCHEDULE

UNIT	LOCATION	"MFR" MODEL NO. SIZE	MAX LOAD < GPR MAX (MBH)	MAX INDIVIDUAL LOAD (MBH)	MIN & MAX INLET PRESSURE	OUTLET PRESSURE	NOTES
GPR H1	BLDG H POOL EQUIP RM	MAXITROL 325-11L210G 2" X 2"	3000 < 4500	1500 < 4500	1.5 PSI MIN 5 PSI MAX	7"WC	1 2 3 4 5 6 7 8

- NOTES:
1. FOR INDOOR INSTALLATION, PROVIDE VENT LIMITER ACCESSORY (CPC 1208.8.4) OR RUN VENT TO OUTDOORS IF SHOWN ON PLANS. FOR OUTDOOR INSTALLATION, PROVIDE MAXITROL VENT PROTECTOR ACCESSORY. PROVIDE MODEL WITH SUFFIX "B" IMBLUE TECHNOLOGY FOR INCREASED CORROSION RESISTANCE IF LOCATED OUTDOORS OR IN CORROSIVE ENVIRONMENTS. VENT LIMITER AND VENT PROTECTION FOR MAXITROL 325-L SERIES ARE AVAILABLE FOR MODELS 325-3 THRU 325-9 ONLY.
 2. VERIFY MINIMUM AND MAXIMUM PRESSURE REQUIRED BY APPLIANCES TO BE SERVED PRIOR TO PROCUREMENT.
 3. PROVIDE SOV ON BOTH SIDES OF GPR. GPR INLET & OUTLET SIZE SHALL BE EQUAL TO THE LARGER OF THE CONNECTING UPSTREAM OR DOWNSTREAM PIPE. SEE SITE PLAN/FLOOR PLANS FOR MORE INFORMATION.
 4. PROVIDE PIPE LENGTH OF 10 TIMES THE PIPE DIAMETER BEFORE CHANGING DIRECTION DOWNSTREAM OF GPR. SEE GPR INSTALLATION INSTRUCTIONS FOR MORE INFORMATION.
 5. PROVIDE 1/2" GAUGE PORT WITH SOV AT THE OUTLET SIDE OF THE GAS REGULATOR. PROVIDE CAP AND SEAL AIR TIGHT.
 6. MINIMUM MBH CAPACITY ABOVE IS THE TOTAL MBH REQUIREMENT OF THE SYSTEM DOWNSTREAM OF THE GPR. ANY SUBSTITUTED PRODUCT SHALL BE ANSI Z21.80 CERTIFIED, AND SHALL BE WITHIN PARAMETERS SET FORTH ABV. SIZE OF SUBSTITUTED REGULATOR SHALL BE SIMILAR TO SIZE OF THE OUTLET PIPE.
 7. REGULATOR VENT SHALL TERMINATE AT LEAST 3FT FROM ANY SOURCE OF IGNITION. CPC 1208.8.4 (3)

ELECTRIC WATER HEATER SCHEDULE

UNIT	LOCATION	"AO SMITH" MODEL NO.	STORAGE CAPACITY GALLONS	RECOVERY GALLONS @ 100°F RISE	TEMP SETTING	KW	VOLTAGE	AMPS	WEIGHT (FULL)	PIPING DETAIL	MOUNTING DETAIL	NOTES
EWH H1	BLDG H MECH RM 106	DSE-100A 45KW	100	184	140°F	45	480-3PH	54.1	1300LBS	1 P-501	8 P-501	2 x 50A CONTACTORS. PROVIDE 4" HOUSE KEEPING PAD AND DRAIN PAN. SLOPE DRAIN FROM PAN TO APPROVED RECEPTOR. SET WATER HEATER TO 140F.

CIRCULATING PUMP SCHEDULE

UNIT	LOCATION	"B&G" MODEL NO.	GPM	FT OF HEAD	WATTS	VOLTAGE	NOTES
CP H1	BLDG H MECH RM 106	NBF-12U	5	8.0	55	115V/1Ø	9.5 LBS: 0.48FLA. PROVIDE AQUASTAT TO TURN PUMP AT 115F, OFF AT 120F. PROVIDE TIMER, COORDINATE SCHEDULE WITH DISTRICT
CP H2	BLDG H MECH RM 106	NBF-12U	5	8.0	55	115V/1Ø	9.5 LBS: 0.48FLA. PROVIDE AQUASTAT TO TURN PUMP AT 115F, OFF AT 120F. PROVIDE TIMER, COORDINATE SCHEDULE WITH DISTRICT

EXPANSION TANK SCHEDULE

UNIT	LOCATION	"AMTROL" MODEL NO.	TANK VOLUME GALLONS	MAX. ACCEPT. VOLUME	DETAIL	NOTES
ET H1	BLDG H MECH RM 106	THERM-X-TROL ST-25V	10.3	10.3	-	3/4"NPTM CONNECTION, 1.5"DIAMETER. OPERATING WEIGHT 110LBS

TEMPERATURE MIXING VALVE

UNIT	LOCATION	"POWERS" MODEL NO.	CV	PSI DROP @ GPM	MIN. FLOWRATE (GPM)	MIN WALL SPACE REQ'D (LxHxDEPTH)	NOTES
TMV H1	BLDG H MECH RM 106	LF5H1434-13	19.00	5 / 42	1	16"x10"x6"	1 1/2"INLETS, 1 1/2"OUTLET, ASSE 1017 APPROVED, HI-LO COMPACT. SET OUTLET TEMP TO 130°F. SERVES LOCKER ROOMS & BOY'S SHOWERS.
TMV H2	BLDG H MECH RM 106	LF5H1434-13	19.00	5 / 42	1	16"x10"x6"	1 1/2"INLETS, 1 1/2"OUTLET, ASSE 1017 APPROVED, HI-LO COMPACT. SET OUTLET TEMP TO 110°F. SERVES GIRL'S SHOWERS.

- NOTES:
1. PRESSURE DROP = (FLOWRATE / (CV/SQ))^2. SG for water = 1
 2. MIN WALL SPACE ABOVE DOES NOT INCLUDE REQUIRED WORKING CLEARANCE AROUND VALVES. COORDINATE SHOP DRAWINGS.

ROOM EXHAUST DESIGN CALCULATION

ROOM NAME & NUMBER	ROOM AREA (SF)	MINIMUM EXHAUST RATE / AREA (CFM/SF)	MINIMUM EXHAUST RATE (CFM)	EXHAUST RATE PROVIDED (CFM)
ACID ROOM	34.5	1.5	51.7	240.0
MECHANICAL ROOM	1105.0	1.5	1657.5	1100 X 2

- NOTES:
1. EXHAUST RATE PER 2022 CMC TABLE 403.7

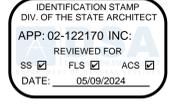
CHEMICAL ROOM EXHAUST FAN

CEF H1	"FANAM" CHEMICAL EXHAUST FAN (CEF) MODEL CBI-160, 240 CFM AT 0.5" SP. 115208 V 1PH 9.0/5.4 AMP, 0.25HP, 1725 RPM MOTOR. EXHAUST FAN WITH 8" PVC VENTING THRU ROOF. COORDINATE SHOP DRAWINGS AMONGST TRADES PRIOR TO ANY INSTALLATION. SEE DETAIL 3/P-501 AND 7/P-501. WEIGHT = 27 LBS.
CEF H2	"FANAM" CHEMICAL EXHAUST FAN (CEF) MODEL CBI-225, 1100 CFM AT 0.5" SP. 115208 V 1PH 5.4/2.8 AMP, 0.25HP, 1725 RPM MOTOR. EXHAUST FAN WITH 10" PVC VENTING THRU ROOF. COORDINATE SHOP DRAWINGS AMONGST TRADES PRIOR TO ANY INSTALLATION. SEE DETAIL 3/P-501 AND 7/P-501. WEIGHT = 62 LBS.

PLUMBING FIXTURE SPECIFICATION & CONNECTION SCHEDULE

ADA	SYMBOL	FIXTURE	FIXTURE MANUFACTURER AND MODEL No.	FAUCET OR VALVE MANUFACTURER AND MODEL No.	TRIM MANUFACTURER AND MODEL No.	REMARKS	VENT	WASTE		COLD WATER		HOT WATER	
								BRANCH	OUTLET	BRANCH	OUTLET	BRANCH	OUTLET
	BFP-1	BACKFLOW PREVENTER POOL SYSTEM	"ZURN" WILKINS 375 PROVIDE AIR GAP AND DRAIN TO NEAREST APPROVED RECEPTOR.										
	BFP-2	BACKFLOW PREVENTER BOILER - MAKE-UP WATER	"ZURN" WILKINS 975XL2. PROVIDE AIR GAP AND DRAIN TO NEAREST APPROVED RECEPTOR.										
	FS	FLOOR SINK	MECHANICAL SPACES - ZURN MODEL ZN-1901-KC-2, OR EQUAL, 12 INCH x 12 INCH x 8 INCH DEEP, A.R.E. INTERIOR WITH NICKEL BRONZE RIM, HALF GRATE AND DOME STRAINER. OTHER APPROVED EQUAL MANUFACTURERS INCLUDE: JAY R. SMITH, WATTS & MIFAB.	PROVIDE SEEPAGE PAN WITH CLAMPING COLLAR.		COORDINATE & PROVIDE GRATES AS REQUIRED PER KITCHEN DRAWINGS	2" 3"	2" 3"	2" 3"	- -	- -	- -	- -
	FD	FLOOR DRAIN	GENERAL SERVICE FD - ZURN MODEL Z-115, OR EQUAL, WITH TYPE "B" STRAINER FOR EXPOSED CONCRETE AND TYPE "S" STRAINER FOR TILE FLOOR. PROVIDE BRONZE TRIM.				2"	2"	2"	-	-	-	-
	TP	TRAP PRIMER	MIFAB "M-500" SERIES, REQUIRES 3PSI DROP TO ACTIVATE.			PROVIDE ACCESS PANEL SEE DETAIL 6/P-502	-	-	-	1/2"	1/2"	-	-
	TP-2	ELEC TRAP PRIMER	SIOUX CHIEF 695-E501 ELECTRONIC TRAP PRIMER, PROVIDE DISTRIBUTION SPLITTER TO PRIME UP TO 8 DRAINS. PROVIDE 120VAC 9.2WATTS 60HZ POWER SUPPLY.				-	-	-	1/2"	1/2"	-	-
	HB	HOSE BIBB	INTERIOR WALL MOUNTED - ACORN MODEL 8121CP-LF WOODFORD MODEL 24PC, OR EQUAL. ROOF MOUNTED - WOODFORD MODEL RHMC-MS WITH INTEGRAL UNDERDECK FLANGE, OR EQUAL. ROOF MOUNTED ON PARAPET OR SIDE OF AC UNIT - ACORN MODEL 8121CR-LF OR WOODFORD MODEL 24CH, OR EQUAL.	WITH INTEGRAL VACUUM BREAKER PROTECTED. CARTRIDGE OPERATED HOSE VALVE WITH LOCK SHIELD BONNET AND REMOVABLE KEY HANDLE.		SET HEIGHT AT 18" ABOVE FINISHED FLOOR OR AS INDICATED ON ARCHITECTURAL DRAWINGS	-	-	-	1"	3/4"	-	-
	WH	WALL HYDRANT COLD WATER ONLY	EXTERIOR WALL MOUNTED RECESSED WOODFORD MODEL 886 OR EQUAL.	WITH INTEGRAL VACUUM BREAKER PROTECTED. CARTRIDGE OPERATED HOSE VALVE WITH LOCK SHIELD BONNET AND LOOSE KEY OPERATION.		SET HEIGHT AT 18" ABOVE FINISHED FLOOR OR AS INDICATED ON ARCHITECTURAL DRAWINGS	-	-	-	1"	3/4"	-	-
	WHA	WATER HAMMER ARRESTOR	SEE SPECIFICATIONS										

- GENERAL NOTES:
1. WATER SUPPLIES AND STOPS:
 - A. PROVIDE 85 PERCENT IPS RED BRASS PIPE, SECURELY ANCHORED TO BUILDING CONSTRUCTION, FOR EACH CONNECTION TO FAUCETS, STOPS, HOSE BIBBS, ETC. EACH FIXTURE, EXCEPT HOSE BIBBS, SHALL HAVE A STOP VALVE INSTALLED ON WATER SUPPLY LINES TO PERMIT REPAIRS WITHOUT SHUTTING OFF WATER MAINS.
 - B. PROVIDE ALL WATER SUPPLIES TO FIXTURES WITH COMPRESSION SHUT-OFF STOPS WITH IPS INLETS WITH THREADED BRASS NIPPLES AT PIPE CONNECTION AND LOCK SHIELD LOOSE KEY. PROVIDE COMBINATION FIXTURES WITH COMPRESSION STOP AND IPS INLET ON EACH WATER SUPPLY FITTING. PROVIDE LOOSE KEY HANDLE FOR EACH STOP.
 - C. PROVIDE 1/2 INCH RISER TUBES WITH REDUCING COUPLING FOR ALL FIXTURES, UNLESS OTHERWISE NOTED. REFER TO SPECIFICATION SECTION 22 40 00.
 2. PIPE, PLUMBING FITTINGS, FIXTURES, SOLDER AND FLUX SHALL COMPLY WITH LEAD FREE REQUIREMENTS OF THE CALIFORNIA HEALTH AND SAFETY CODE SECTION 116875. PROVIDE PRODUCTS LISTED AND LABELED AS COMPLYING WITH NSF 61, ANNEX G, OR PROVIDE OTHER EVIDENCE OF COMPLIANCE WITH THE CALIFORNIA HEALTH AND SAFETY CODE SECTION 116875. PROVIDE PRODUCT SUBMITTAL INFORMATION PROVING COMPLIANCE WITH LEAD FREE REQUIREMENTS. ALSO SEE GENERAL NOTE 22 ON SHEET P0.1 AND SPECIFICATION SECTIONS, 22 00 50, 22 10 00 AND 22 40 00.



LIONAKIS

2025 Nineteenth Street
Sacramento CA 95818
P 916.558.1900
www.lionakis.com

CONSULTANT



FOR REVIEW ONLY / NOT FOR CONSTRUCTION
THE CONSTRUCTION DOCUMENTS HAVE NOT BEEN APPROVED BY THE ENFORCEMENT AGENCY AND ARE NOT COMPLETE OR READY FOR CONSTRUCTION. ELEMENTS, MEMBERS, SYSTEMS AND ASSOCIATED DETAILS AND SPECIFICATIONS MAY NOT BE SHOWN OR FULLY DEVELOPED. FOR BIDDING ESTIMATING PURPOSES, UTILIZE ADDITIONAL MATERIALS AND QUANTITIES TO ACCOUNT FOR THOSE ITEMS NOT SHOWN OR FULLY DEVELOPED.

SEAL



PROJECT
JOHN F KENNEDY HIGH SCHOOL SWIMMING POOL UPGRADE

6715 GLORIA DR
SACRAMENTO, CA 95831

CLIENT
SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

MARK	DATE	DESCRIPTION

MANAGEMENT
LIONAKIS PROJECT NO: 023264
CLIENT PROJECT NO:
COPYRIGHT: LIONAKIS 2017

TITLE
PLUMBING EQUIPMENT SCHEDULE

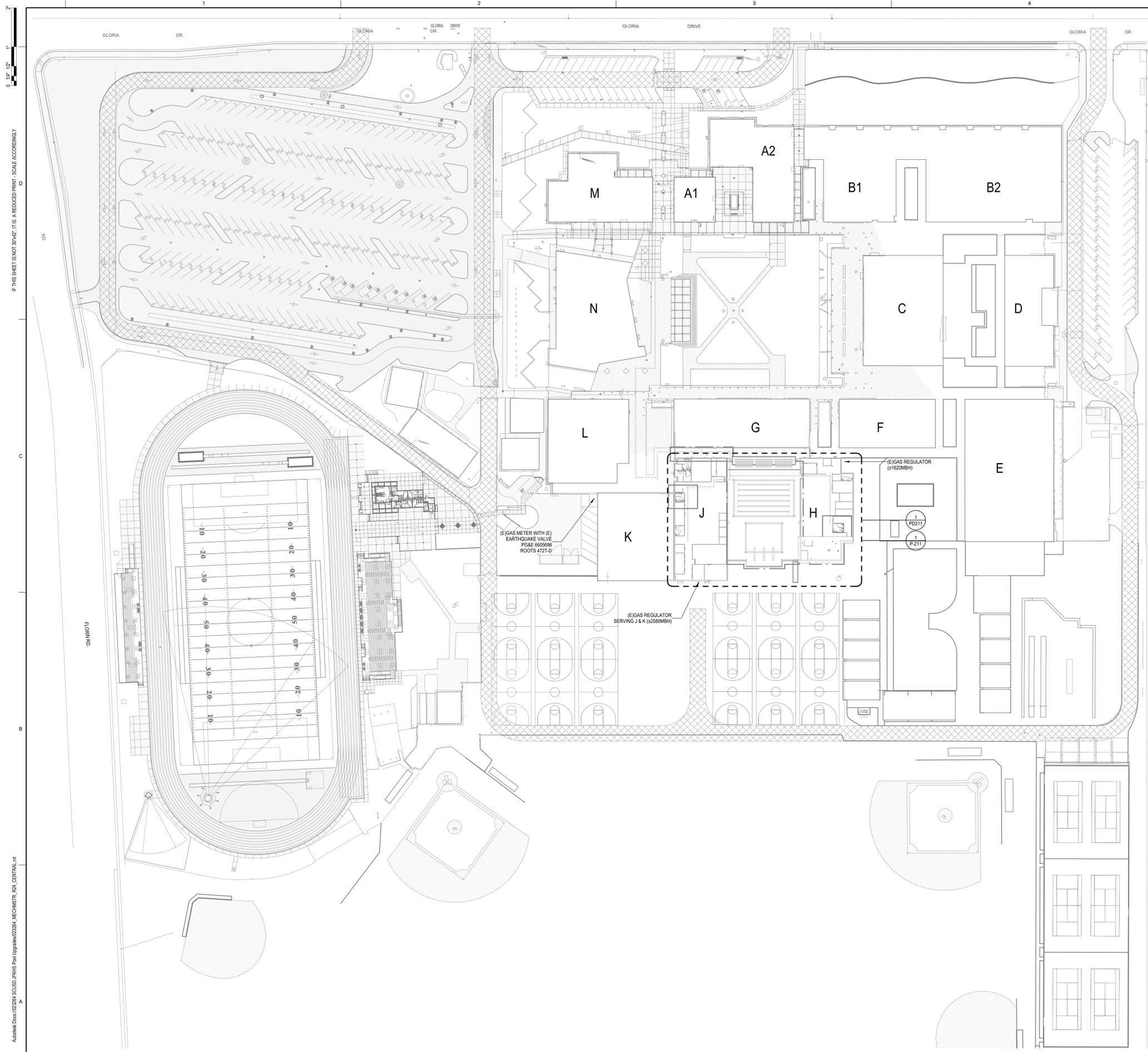
SHEET
P-002

IF THIS SHEET IS NOT 30"x42" IT IS A REDUCED PRINT - SCALE ACCORDINGLY

C

B

Address: Doc: 023264_SCDUSD_IPMS Pool Upgrade022924_MECHSTR_024_CENTRAL.rvt 4/30/2024 9:14:40 AM



PLUMBING SHEET NOTES:

1. ANY MATERIAL REQUIRED FOR WORK NOT READILY AVAILABLE FOR PURCHASE SHALL HAVE LEAD TIME INDICATED ON THE BID AND ON THE SUBMITTALS. SUCCESSFUL PROCUREMENT OF ALL MATERIALS REQUIRED FOR THE COMPLETION OF WORK SHALL BE ASCERTAINED BY CONTRACTOR PRIOR TO SCHEDULING OF WORK.
2. EXISTING PLUMBING LAYOUT ARE BASED FROM AVAILABLE RECORD DRAWINGS OF UNKNOWN ACCURACY. ACTUAL CONDITIONS MAY BE DIFFERENT ESPECIALLY FOR THOSE WITHIN CONCEALED SPACES AND/OR UNDERGROUND. CONTRACTOR SHALL INVESTIGATE EXISTING PIPE ROUTE, ELEVATION, SIZE AND CONDITION THRU VISUAL OBSERVATIONS, POT-HOLING, RADAR INSPECTION OR OTHER MEANS NECESSARY TO COMPLETE WORK. WELL AHEAD OF NEW PIPE INSTALLATION. SCHEDULE WORK ACCORDINGLY TO PROVIDE ENOUGH TIME TO FIND SOLUTIONS SHOULD VERIFIED INFORMATION BE DIFFERENT FROM HEREWITH. REFLECT ALL FINDINGS ON SHOP DRAWINGS FOR COORDINATION AMONGST TRADES, AND ON AS-BUILT DRAWINGS.
3. FOR CONNECTIONS TO EXISTING PIPE FOUND SMALLER THAN WHAT IS SHOWN ON PLANS. FIELD VERIFY TO LOCATE & CONNECT TO CLOSEST LARGEST PIPE UPSTREAM FOR SUPPLY PIPING. FOR DRAIN PIPING, FIELD VERIFY TO LOCATE & CONNECT TO CLOSEST LARGEST PIPE OF SUFFICIENT DEPTH DOWNSTREAM. REFLECT ON SHOP DRAWINGS FOR COORDINATION AMONGST TRADES.
4. CONTRACTOR SHALL PREPARE AND MAINTAIN AS-BUILT DRAWINGS OF ALL PLUMBING SYSTEMS AS INSTALLED AT THE JOB SITE. DRAWN BY CONTRACTOR OVER THE DESIGN PLANS. THEY SHALL BE READILY AVAILABLE TO VIEW & INSPECT UPON REQUEST BY PROJECT INSPECTOR, ENGINEER OR OWNER. AS-BUILTS SHALL CLEARLY SHOW CHANGES, REVISIONS, CLARIFICATIONS & SUBSTITUTIONS INSTALLED IN THE PROJECT INCLUDING BUT NOT LIMITED TO: EXACT PIPE ROUTE ESPECIALLY THOSE CONCEALED AND/OR UNDERGROUND. UNDERGROUND PIPE ELEVATIONS, PIPE SIZES, DIMENSIONS FROM WALLS/GRID LINES OF ANY REROUTED PIPE. RFI/CC/ASI TAG AS REFERENCE TO WHERE CHANGES OCCURRED FROM IF ANY, AND ANY INFORMATION THAT MAY CLARIFY HOW SYSTEMS & COMPONENTS HAD BEEN INSTALLED OR HOW IT DIFFERS FROM ORIGINAL DESIGN PLANS. REFERENCE TO AN RFI/CC/ASI ALONE SHALL NOT CONSTITUTE COMPLETE AS-BUILT DRAWINGS. AS-BUILT DRAWINGS SHALL BE IN HARD COPY AND DIGITAL (PDF) FORMAT. AS-BUILTS AND QUALITY OF SUCH ARE CRITICAL REQUIREMENTS FOR MAINTENANCE UPKEEP AND FOR USE AS BASIS FOR POSSIBLE FUTURE CONSTRUCTION IMPROVEMENTS WHERE SUCH COMPLETELY RELIES ON CONTRACTOR. CONTRACTOR SHALL PROVIDE 'AS-BUILT' TAG AND CONTRACTOR INFORMATION ON ALL AS-BUILT SHEETS.
5. REFER TO CIVIL DRAWINGS, ELECTRICAL & ALL OTHER DISCIPLINE DRAWINGS WITH SITE PLAN FOR LOCATION OF OTHER UTILITIES, LOCATION OF TREES, GRADING AND PAVING INFORMATION, AND OTHER INFORMATION THAT MAY AFFECT WORK. COORDINATE EXACT ROUTE THRU SHOP DRAWINGS AMONGST TRADES CONCERNED AT SITE.
6. FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AT SITE. REROUTE ANY PIPING THAT MAY CONFLICT WITH NEW CONSTRUCTION. COORDINATE AMONGST TRADES.
7. ALL EXISTING FACILITIES TO REMAIN SHALL BE IN OPERATION DURING TIME OF CONSTRUCTION. PROVIDE TEMPORARY VALVES, PIPING, FITTINGS, GAS METERS, BACKFLOW DEVICES, ETC. AND ANY TEMPORARY STRUCTURE THAT MAY BE REQUIRED FOR THE INSTALLATION OF TEMPORARY FACILITIES.
8. COORDINATE CONSTRUCTION WORK AND SCHEDULE OF WORK WITH SCHOOL DISTRICT. CONTRACTOR SHALL INCLUDE IN BID MEANS AND/OR METHODS REQUIRED FOR THE WORK INCLUDING ANY REQUIRED SERVICE SHUT DOWNS, TEMPORARY LINES, ROAD CLOSURES, SPECIAL INSPECTIONS, ETC. TO ACCOMPLISH SCOPE. SCHEDULING OF WORK SHALL BE AMICABLE BETWEEN OWNER AND CONTRACTOR.
9. PROVIDE SLEEVES ON ANY GAS PIPING RUNNING UNDERGROUND BENEATH ANY SHADE STRUCTURE WITH INTEGRAL SLAB. SEE STRUCTURAL DRAWINGS AND GEO-TECHNICAL REPORT IF ANY. FOR TRENCHING BETWEEN/AROUND STRUCTURES FOUNDATION.
10. CONTRACTOR SHALL FOLLOW GENERAL PIPE ROUTE AND VALVE LOCATIONS, AND GENERAL ORDER OF SYSTEM COMPONENTS SHOWN ON PLANS. ADJUST PIPE ELEVATIONS OR ROUTING TO AVOID STRUCTURAL COMPONENTS & OTHER BUILDING COMPONENTS WHEN POSSIBLE. IF NECESSARY & IF AMICABLE BETWEEN TRADES COORDINATE ALL SHOP DRAWINGS AMONGST TRADES PRIOR TO ANY PIPE FABRICATION OR INSTALLATION.

IDENTIFICATION STAMP
 DIV. OF THE STATE ARCHITECT
 APP: 02-122170 INC.
 REVIEWED FOR
 SS FLS ACS
 DATE: 05/09/2024

LIONAKIS

2025 Nineteenth Street
 Sacramento CA 95818
 P. 916.558.1900
 www.lionakis.com

CONSULTANT



FOR REVIEW ONLY / NOT FOR CONSTRUCTION
 THE CONSTRUCTION DOCUMENTS HAVE NOT BEEN APPROVED BY THE ENFORCEMENT AGENCY AND ARE NOT COMPLETE OR READY FOR CONSTRUCTION. ELEMENTS, MEMBERS, SYSTEMS AND ASSOCIATED DETAILS AND SPECIFICATIONS MAY NOT BE SHOWN OR FULLY DEVELOPED. FOR BIDDING/ESTIMATING PURPOSES. UTILIZE ADDITIONAL MATERIALS AND QUANTITIES TO ACCOUNT FOR THOSE ITEMS NOT SHOWN OR FULLY DEVELOPED.

SEAL



PROJECT
JOHN F KENNEDY HIGH SCHOOL SWIMMING POOL UPGRADE

6715 GLORIA DR
 SACRAMENTO, CA 95831

CLIENT
 SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

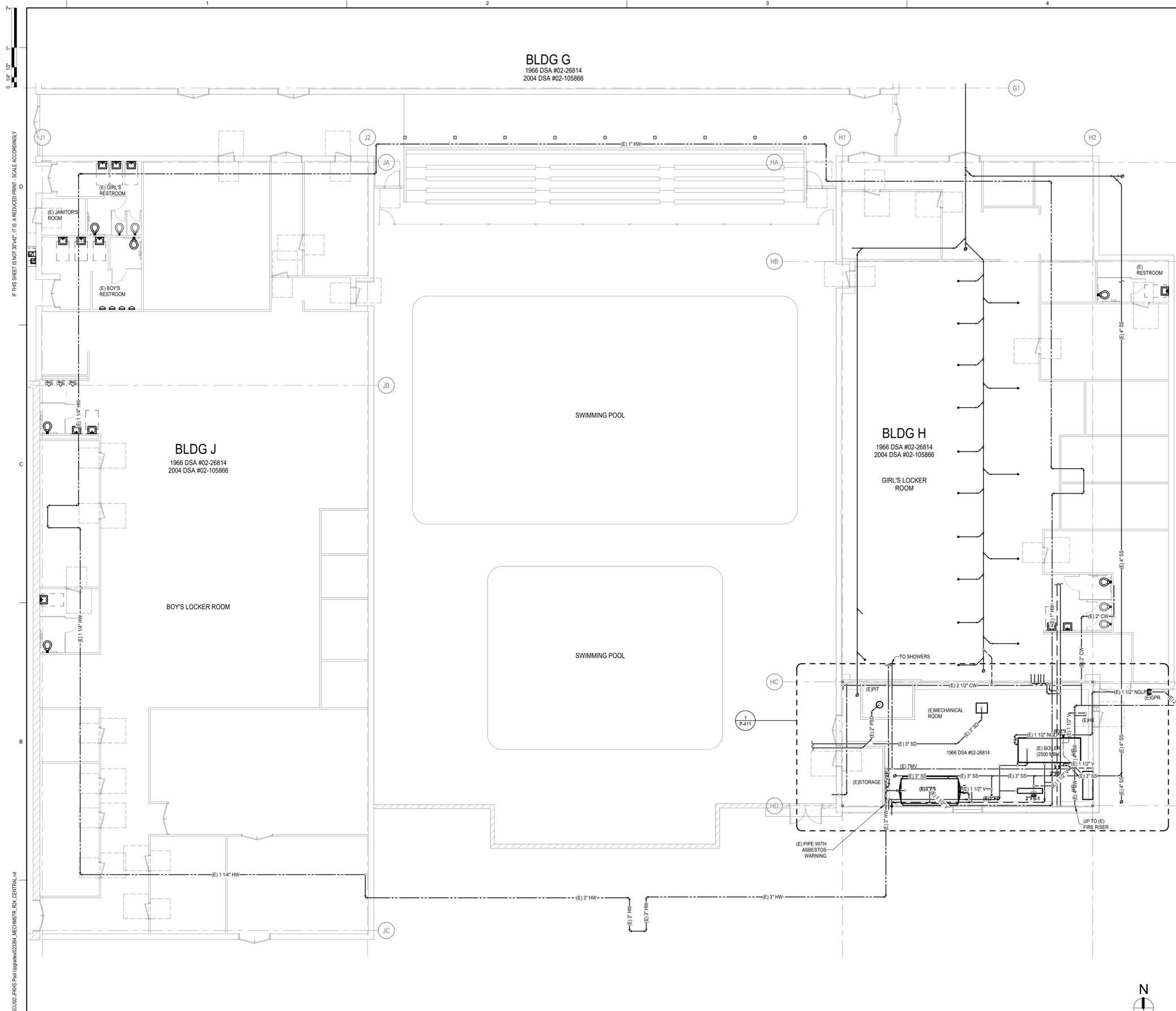
MARK	DATE	DESCRIPTION

MANAGEMENT
 LIONAKIS PROJECT NO: 023284
 CLIENT PROJECT NO:
 COPYRIGHT: LIONAKIS 2017

TITLE
PLUMBING SITE PLAN

SHEET
P-101

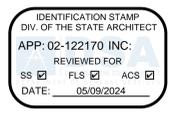
1 PLUMBING SITE PLAN
 P-101 SCALE: 1" = 50'-0"



1 PLUMBING DEMO PLAN
PD211 SCALE: 1/8" = 1'-0"

PLUMBING DEMO SHEET NOTES:

- ALL WORK FOR THE REMOVAL OF HAZARDOUS MATERIALS SHALL BE FULLY COORDINATED BETWEEN THE CONTRACTOR AND THE OWNER. THE ARCHITECT AND ENGINEERS THAT HAVE CREATED THE DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT ARE NOT RESPONSIBLE FOR SPECIFYING REQUIREMENTS FOR, OR CONSTRUCTION OBSERVATION OF, HAZARDOUS MATERIAL REMOVAL. THE OWNER SHALL PROVIDE SEPARATE DOCUMENTS REQUIRED FOR HAZARDOUS MATERIAL REMOVAL AND SEPARATE CONSTRUCTION OBSERVATION OF HAZARDOUS MATERIAL REMOVAL. CONTACT OWNER FOR MORE INFORMATION.
- EXISTING PLUMBING LAYOUT SHOWN HERewith ARE BASED FROM AVAILABLE RECORD DRAWINGS OF UNKNOWN ACCURACY. ACTUAL CONDITIONS MAY BE DIFFERENT ESPECIALLY FOR THOSE WITHIN CONCEALED SPACES AND/OR UNDERGROUND. CONTRACTOR SHALL INVESTIGATE EXISTING PIPE ROUTE, ELEVATION, SIZE AND CONDITION, THRU VISUAL OBSERVATIONS, POT-HOLING, RADAR INSPECTION OR OTHER MEANS NECESSARY TO COMPLETE WORK, WELL AHEAD OF NEW PIPE INSTALLATION. SCHEDULE WORK ACCORDINGLY TO PROVIDE ENOUGH TIME TO FIND SOLUTIONS SHOULD VERIFIED INFORMATION BE DIFFERENT FROM HERewith. REFLECT ALL FINDINGS ON SHOP DRAWINGS FOR COORDINATION AMONGST TRADES, AND ON AS-BUILT DRAWINGS.
- SHOULD EXISTING PIPE BE FOUND SMALLER THAN WHAT IS SHOWN ON PLANS, FIELD VERIFY LOCATION OF CLOSEST LARGEST PIPE UPSTREAM FOR SUPPLY PIPING, AND CLOSEST LARGEST PIPE DOWNSTREAM FOR DRAIN PIPING. REFLECT ON SHOP DRAWINGS FOR COORDINATION AMONGST TRADES.
- CONTRACTOR SHALL REFLECT EXISTING AND/OR ABANDONED PIPING ON THE AS-BUILT DRAWINGS IF FOUND DIFFERENTLY FROM DESIGN PLANS FOR OWNER'S REFERENCE AND RECORD KEEPING.
- UNLESS NOTED OTHERWISE, CONTRACTOR SHALL REMOVE ALL INACTIVE PLUMBING PIPING ENCOUNTERED/VISIBLE WITHIN WORK AREA. CAP BEHIND ARCHITECTURAL FINISHES. REFLECT CAP LOCATIONS ON AS-BUILT DRAWINGS.
- PATCH ALL UNUSED WALL & ROOF PENETRATIONS TO MATCH EXISTING. SEE ARCHITECTURAL DRAWINGS FOR MORE INFORMATION.
- PROVIDE SLABWALL DEMOLITION WORK AS NECESSARY TO REMOVE, REPLACE, REROUTE OR ADD PIPING. PATCH BACK TO MATCH EXISTING.
- REUSE EXISTING SLEEVE PENETRATIONS THRU DECK WHEN NEEDED, IF AVAILABLE AND IF POSSIBLE. AVOID REPAIRS WHEN PROVIDING NEW SLEEVE PENETRATIONS. INVESTIGATE AND MARK REPAIR LOCATIONS PRIOR TO CORING OR SAWCUTTING THRU EXISTING OR INSTALLED SLAB, WALL OR FOOTING. SEAL ALL PENETRATIONS, SEE SPECIFICATIONS FOR MORE INFORMATION. USE ALL GATHERED DATA IN PROVIDING SHOP DRAWINGS. SHOP DRAWINGS SHALL BE COORDINATED BETWEEN TRADES.
- WHEN CONNECTING TO EXISTING UTILITIES, CONTRACTOR TO ENSURE THAT THE EXISTING PIPE IS ACTIVE PRIOR TO CONNECTION. FIELD VERIFY AT SITE. FOR DRAIN LINES, USE PIPE CAMERA. REPORT BACK FOR ANY ISSUES.
- PROVIDE TEMPORARY UTILITIES TO ALL FIXTURES & EQUIPMENT TO REMAIN IN SERVICE DURING CONSTRUCTION PERIOD.
- COORDINATE CONSTRUCTION WORK AND SCHEDULE OF WORK WITH SCHOOL DISTRICT. CONTRACTOR SHALL INCLUDE IN BID MEANS AND/OR METHODS REQUIRED FOR THE WORK INCLUDING ANY REQUIRED SERVICE SHUT DOWNS, TEMPORARY LINES, ROAD CLOSURES, SPECIAL INSPECTIONS, ETC. TO ACCOMPLISH SCOPE. SCHEDULING OF WORK SHALL BE AMICABLE BETWEEN OWNER AND CONTRACTOR.



LIONAKIS

2025 Nineteenth Street
Sacramento CA 95818
P 916.558.1900
www.lionakis.com

CONSULTANT



FOR REVIEW ONLY / NOT FOR CONSTRUCTION
THE CONSTRUCTION DOCUMENTS HAVE NOT BEEN APPROVED BY THE ENFORCEMENT AGENCY AND ARE NOT COMPLETE OR READY FOR CONSTRUCTION. ELEMENTS, MEMBERS, SYSTEMS AND ASSOCIATED DETAILS AND SPECIFICATIONS MAY NOT BE SHOWN OR FULLY DEVELOPED. FOR BIDDING/ESTIMATING PURPOSES, UTILIZE ADDITIONAL MATERIALS AND QUANTITIES TO ACCOUNT FOR THOSE ITEMS NOT SHOWN OR FULLY DEVELOPED.

SEAL



DATE SIGNED: 2024-04-29
PROJECT
JOHN F KENNEDY HIGH SCHOOL
SWIMMING POOL UPGRADE

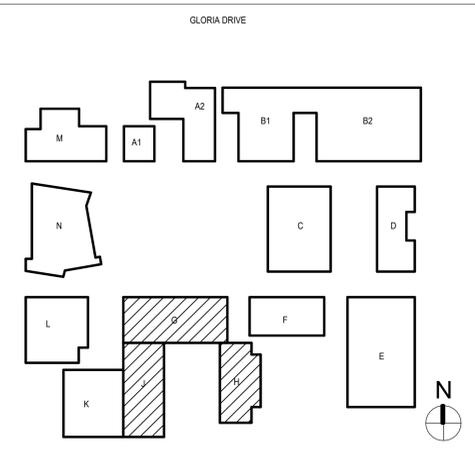
6715 GLORIA DR
SACRAMENTO, CA 95831

CLIENT
SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

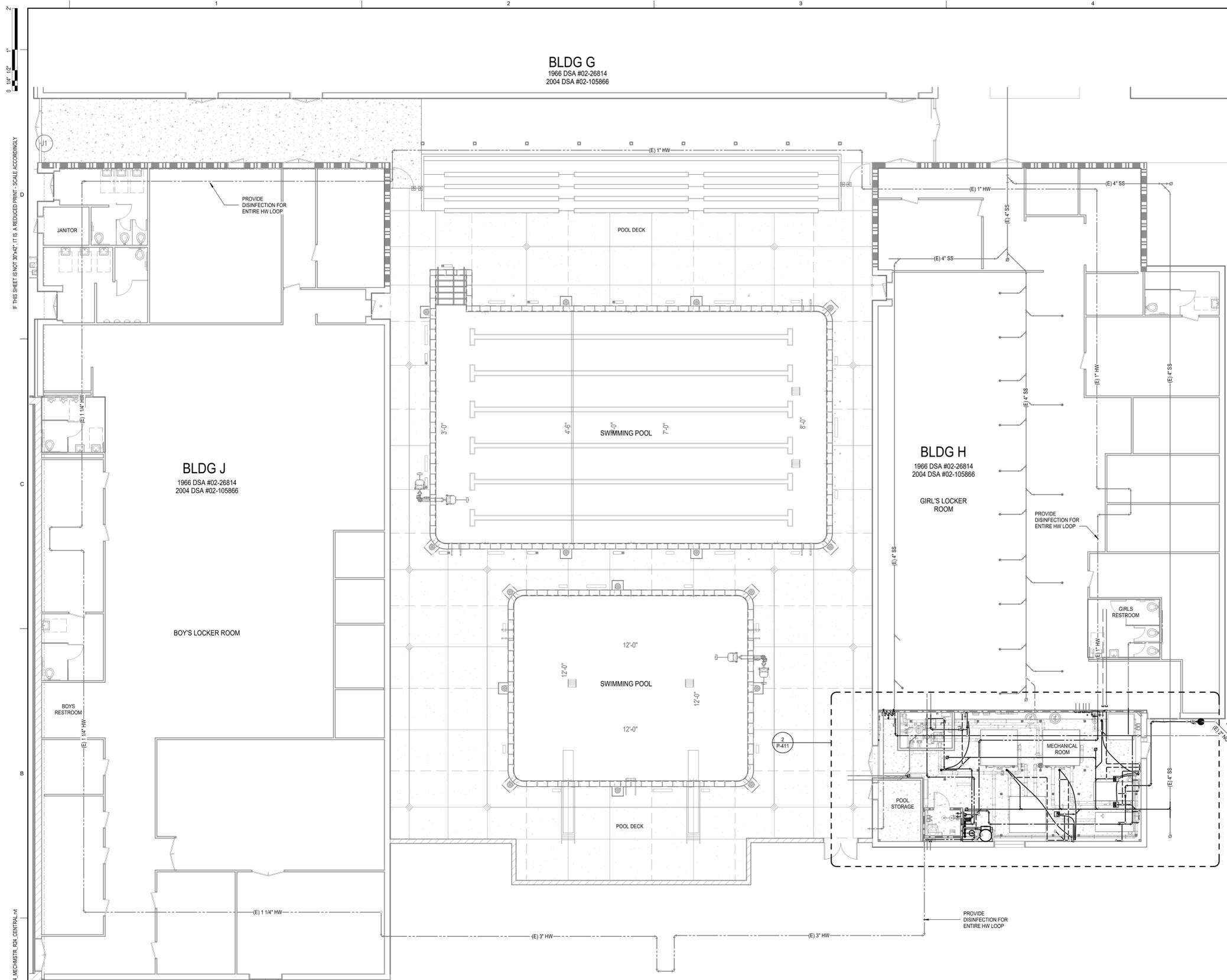
ISSUED	MARK	DATE	DESCRIPTION

MANAGEMENT	CLIENT PROJECT NO.
LIONAKIS PROJECT NO.:	023264
CLIENT PROJECT NO.:	
COPYRIGHT:	LIONAKIS 2017

KEYPLAN



4/30/2024 9:14:48 AM Autodesk Docs: 1023264_SCDUSD_JFMS Tool Upgrades/023264_MECHANSTR_DCA_CENTRAL.rvt



BLDG G
1966 DSA #02-26814
2004 DSA #02-105866

BLDG J
1966 DSA #02-26814
2004 DSA #02-105866

BLDG H
1966 DSA #02-26814
2004 DSA #02-105866

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

PLUMBING SHEET NOTES:

- ALL WORK FOR THE REMOVAL OF HAZARDOUS MATERIALS SHALL BE FULLY COORDINATED BETWEEN THE CONTRACTOR AND THE OWNER. THE ARCHITECT AND ENGINEERS THAT HAVE CREATED THE DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT ARE NOT RESPONSIBLE FOR SPECIFYING REQUIREMENTS FOR, OR CONSTRUCTION OBSERVATION OF, HAZARDOUS MATERIAL REMOVAL. THE OWNER SHALL PROVIDE SEPARATE DOCUMENTS REQUIRED FOR HAZARDOUS MATERIAL REMOVAL AND SEPARATE CONSTRUCTION OBSERVATION OF HAZARDOUS MATERIAL REMOVAL. CONTACT OWNER FOR MORE INFORMATION.
- ANY MATERIAL REQUIRED FOR WORK NOT READILY AVAILABLE FOR PURCHASE SHALL HAVE LEAD TIME INDICATED ON THE BID AND ON THE SUBMITTALS. SUCCESSFUL PROCUREMENT OF ALL MATERIALS REQUIRED FOR THE COMPLETION OF WORK SHALL BE ASCERTAINED BY CONTRACTOR PRIOR TO SCHEDULING OF WORK.
- ALL FINISH FLOOR ELEVATIONS (FF) BASED FROM CIVIL GRADING DRAWINGS. PLEASE REFER TO CIVIL DRAWINGS FOR MORE INFORMATION. SEE VALUES ARE ALL BASED FROM FINISH FLOOR ELEVATION INSIDE BUILDING. COORDINATE EXACT ELEVATIONS THRU SHOP DRAWINGS AND AT SITE.
- EXISTING PLUMBING LAYOUT ARE BASED FROM AVAILABLE RECORD DRAWINGS OF UNKNOWN ACCURACY. ACTUAL CONDITIONS MAY BE DIFFERENT ESPECIALLY FOR THOSE WITHIN CONCEALED SPACES AND/OR UNDERGROUND. CONTRACTOR SHALL INVESTIGATE EXISTING PIPE ROUTE, ELEVATION, SIZE AND CONDITION, THRU VISUAL OBSERVATIONS, MEASUREMENTS, AND/OR OTHER MEANS NECESSARY TO COMPLETE WORK. WELL AHEAD OF NEW PIPE INSTALLATION. SCHEDULE WORK ACCORDINGLY TO PROVIDE ENOUGH TIME TO FIND SOLUTIONS SHOULD VERIFIED INFORMATION BE DIFFERENT FROM HEREWITH. REFLECT ALL FINDINGS ON SHOP DRAWINGS FOR COORDINATION AMONGST TRADES, AND ON AS-BUILT DRAWINGS.
- SEE PREVIOUS AS-BUILT DRAWINGS FOR CONTINUATION OF EXISTING PLUMBING UTILITIES OUTSIDE OF THIS PROJECT'S SCOPE FOR REFERENCE.
- FOR CONNECTIONS TO EXISTING PIPE FOUND SMALLER THAN WHAT IS SHOWN ON PLANS, FIELD VERIFY TO LOCATE CLOSEST LARGEST PIPE UPSTREAM FOR SUPPLY PIPING. FOR DRAIN PIPING, FIELD VERIFY TO LOCATE CLOSEST LARGEST PIPE OF SUFFICIENT DEPTH DOWNSTREAM. REFLECT ON SHOP DRAWINGS FOR COORDINATION AMONGST TRADES.
- PROVIDE TEMPORARY UTILITIES TO ALL FIXTURES & EQUIPMENT TO REMAIN IN SERVICE DURING CONSTRUCTION PERIOD.
- COORDINATE CONSTRUCTION WORK AND SCHEDULE OF WORK WITH SCHOOL DISTRICT. CONTRACTOR SHALL INCLUDE IN BID MEANS AND/OR METHODS REQUIRED FOR THE WORK INCLUDING ANY REQUIRED SERVICE SHUT DOWNS, TEMPORARY LINES, ROAD CLOSURES, SPECIAL INSPECTIONS, ETC. TO ACCOMPLISH SCOPE. SCHEDULING OF WORK SHALL BE AMICABLE BETWEEN OWNER AND CONTRACTOR.
- CONTRACTOR SHALL FOLLOW GENERAL PIPE ROUTE AND VALVE LOCATIONS, AND GENERAL ORDER OF SYSTEM COMPONENTS SHOWN ON PLANS. ADJUST PIPE ELEVATIONS OR ROUTING TO AVOID STRUCTURAL COMPONENTS & OTHER BUILDING COMPONENTS WHEN POSSIBLE. IF NECESSARY & ONCE AMICABLE BETWEEN TRADES, COORDINATE ALL SHOP DRAWINGS AMONGST TRADES PRIOR TO ANY PIPE FABRICATION OR INSTALLATION.
- CONTRACTOR SHALL PREPARE AND MAINTAIN AS-BUILT DRAWINGS OF ALL PLUMBING SYSTEMS AS INSTALLED AT THE JOB SITE. DRAWN BY CONTRACTOR OVER THE DESIGN PLANS. THEY SHALL BE READILY AVAILABLE TO VIEW & INSPECT UPON REQUEST BY PROJECT INSPECTOR, ENGINEER OR OWNER. AS-BUILTS SHALL CLEARLY SHOW CHANGES, REVISIONS, CLARIFICATIONS & SUBSTITUTIONS INSTALLED IN THE PROJECT INCLUDING BUT NOT LIMITED TO: EXACT PIPE ROUTE ESPECIALLY THOSE CONCEALED AND/OR UNDERGROUND, UNDERGROUND PIPE ELEVATIONS, PIPE SIZES, DIMENSIONS FROM WALL/GRID LINES OF ANY REROUTED PIPE, RFI/CDC/ASI TAG AS REFERENCE TO WHERE CHANGES OCCURRED FROM IF ANY, AND ANY INFORMATION THAT MAY CLARIFY HOW SYSTEMS & COMPONENTS HAD BEEN INSTALLED OR HOW IT DIFFERS FROM ORIGINAL DESIGN PLANS. REFERENCE TO AN RFI/CDC/ASI ALONE SHALL NOT CONSTITUTE COMPLETE AS-BUILT DRAWINGS. AS-BUILT DRAWINGS SHALL BE IN HARD COPY AND DIGITAL (PDF) FORMAT. AS-BUILTS AND QUALITY OF SUCH ARE CRITICAL REQUIREMENTS FOR MAINTENANCE UPKEEP AND FOR USE AS BASIS FOR POSSIBLE FUTURE CONSTRUCTION IMPROVEMENTS. FUTURE DESIGNER/CONTRACTOR WOULD RELY ON CONTRACTOR SHALL PROVIDE "AS-BUILT" TAG AND CONTRACTOR INFORMATION ON ALL AS-BUILT SHEETS.
- CONNECT WASTE, VENT & COLD WATER LINES TO ALL NEW FIXTURES. SEE FIXTURE SCHEDULE FOR BRANCH AND FIXTURE OUTLET/INLET CONNECTION SIZES.
- HORIZONTAL DRAINAGE PIPING SHALL BE RUN IN PRACTICAL ALIGNMENT AND A UNIFORM SLOPE OF NOT LESS THAN 2% TOWARD THE POINT OF DISPOSAL UNLESS IMPRACTICAL DUE TO BUILDING'S STRUCTURAL FEATURES, OR IF CONNECTING TO EXISTING PIPE AT ITS EXISTING UPSTREAM/DOWNSTREAM DEPTH IS IMPOSSIBLE WITHOUT SLOPING LESS THAN 2%. IN SUCH CONDITIONS, PIPE CAN BE SLOPED AT NO LESS THAN 1%. COORDINATE SHOP DRAWINGS AMONGST TRADES PRIOR TO FABRICATION AND INSTALLATION THEN REFLECT ALL CHANGES ON THE AS-BUILT DRAWINGS.
- COORDINATE ALL CONNECTION POINTS AMONGST TRADES AT SITE PRIOR TO FABRICATION OR INSTALLATION.
- UNLESS INSIDE UTILITY ROOMS, ALL OVERHEAD PIPING INSIDE ROOM WITH AN EXPOSED CEILING SHALL HAVE THE PIPING INSTALLED AS HIGH AS POSSIBLE. FULLY COORDINATE AMONGST TRADES.
- ALL PUMPED CONDENSATE DRAIN LINES (PCD) SHALL SLOPE AND DISCHARGE DOWN TO A GRAVITY CD BY A MINIMUM OF 8" TO AVOID BACKFLOW TO MECH UNIT.
- SEDIMENT TRAPS ON A GAS CONNECTION SHALL BE INSTALLED AS ILLUSTRATED ON CPC FIGURE 1212.9 OF THE 2022 CPC. INCOMING GAS FLOW SHALL ALWAYS COME FROM THE TOP TO ALLOW SEDIMENTS SETTLE IN DOWN IN THE TRAP. A TEE BEFORE TRAP SHALL SERVE AS THE BRANCH CONNECTING TO THE APPLIANCE.
- ALL VALVES ABOVE CEILING, ACCESSIBLE THRU ACCESS PANELS WITH AN OPENING OF NO MORE THAN 14"x14", SHALL BE WITHIN ARMS REACH FROM THE ACCESS PANEL OPENING.
- PRIME AND PAINT ALL EXPOSED PIPING TO MATCH ARCHITECTURAL FINISH. KEEP PAINT OFF OF TAGS AND MARKS IDENTIFYING SYSTEM, SIZE, MODEL OR OTHER IMPORTANT INFORMATION.
- PROTECT ALL INSTALLED DRAINS, DRAIN STRAINERS, EQUIPMENT COMPONENTS, FIXTURES ESPECIALLY THOSE WITH STAINLESS STEEL SURFACES FROM DAMAGE. PLUMBING SYSTEM SHALL BE CLEAN, UNDAMAGED, WORKING AND IN NEW CONDITION UP TO HAND OFF TO OWNER. SEE SPECIFICATIONS FOR MORE INFORMATION ON CLOSING DCC.
- NO EXPOSED PIPING SHALL BE LEFT TO RUST OR SUBJECTED TO CONDITIONS DETRIMENTAL TO THE PIPE WITHOUT PROVIDING PROTECTION, TEMPORARY OR OTHERWISE, SUITABLE FOR THE TYPE OF PIPE BEING PROTECTED.
- CLOSELY COORDINATE PENETRATIONS THRU STRUCTURAL MEMBERS AMONGST TRADES AT THE SITE THRU SHOP DRAWINGS PRIOR TO CONSTRUCTION. PENETRATION THRU CONCRETE FOUNDATION SHALL BE PROPERLY SLEEVED WHEN REQUIRED. COORDINATE DROPPING FOOTING IF REQUIRED. ALL NOTCHES AND HOLES SHALL BE NEATLY BORED. SEE STRUCTURAL DRAWINGS FOR MORE INFORMATION. <<LOOK FOR THAT JOB>>
- THERE SHALL BE NO PIPING WITHIN ELECTRICAL EQUIPMENT'S DEDICATED SPACE. ELECTRICAL EQUIPMENT SUCH AS PANEL BOARDS, SWITCHBOARDS AND MOTOR CONTROL CENTERS LOCATED INDOORS MUST HAVE EXCLUSIVE DEDICATED SPACE FROM THE FLOOR UPWARD TO YET ABOVE THE EQUIPMENT. THE TOOTH AND DEPTH OF THE EQUIPMENT. COORDINATE SHOP DRAWINGS AMONGST TRADES LOCATING ALL ELECTRICAL EQUIPMENT PRIOR TO ANY PIPE INSTALLATION. THERE SHALL ALSO BE NO PIPING ABOVE THE DEDICATED SPACE UNLESS PROTECTION IS PROVIDED FOR EQUIPMENT SHOULD THE PIPING LEAK OR BREAK.
- CONTRACTOR TO AVOID GROUNDING ELECTRICAL HARDWARES SUCH AS TELEPHONES TO AVAILABLE WATER LINES, WHEN POSSIBLE TO AVOID METALLIC TASTE IN WATER FROM DRINKING FOUNTAINS.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122170 INC.
REVIEWED FOR
SS FLS ACS
DATE: 05/09/2024

LIONAKIS

2025 Nineteenth Street
Sacramento CA 95818
P 916.558.1900
www.lionakis.com

CONSULTANT



FOR REVIEW ONLY / NOT FOR CONSTRUCTION
THE CONSTRUCTION DOCUMENTS HAVE NOT BEEN APPROVED BY THE ENFORCEMENT AGENCY AND ARE NOT COMPLETE OR READY FOR CONSTRUCTION. ELEMENTS, MEMBERS, SYSTEMS AND ASSOCIATED DETAILS AND SPECIFICATIONS MAY NOT BE SHOWN OR FULLY DEVELOPED. FOR BIDDING/ESTIMATING PURPOSES, UTILIZE ADDITIONAL MATERIALS AND QUANTITIES TO ACCOUNT FOR THOSE ITEMS NOT SHOWN OR FULLY DEVELOPED.



PROJECT
**JOHN F KENNEDY HIGH SCHOOL
SWIMMING POOL UPGRADE**

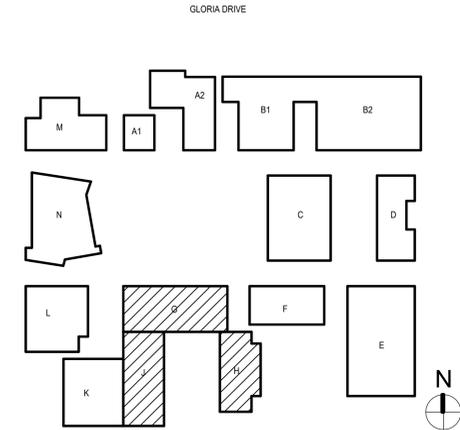
6715 GLORIA DR
SACRAMENTO, CA 95831

CLIENT
SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

MARK	DATE	DESCRIPTION

MANAGEMENT
LIONAKIS PROJECT NO: 023284
CLIENT PROJECT NO:
COPYRIGHT: LIONAKIS 2017

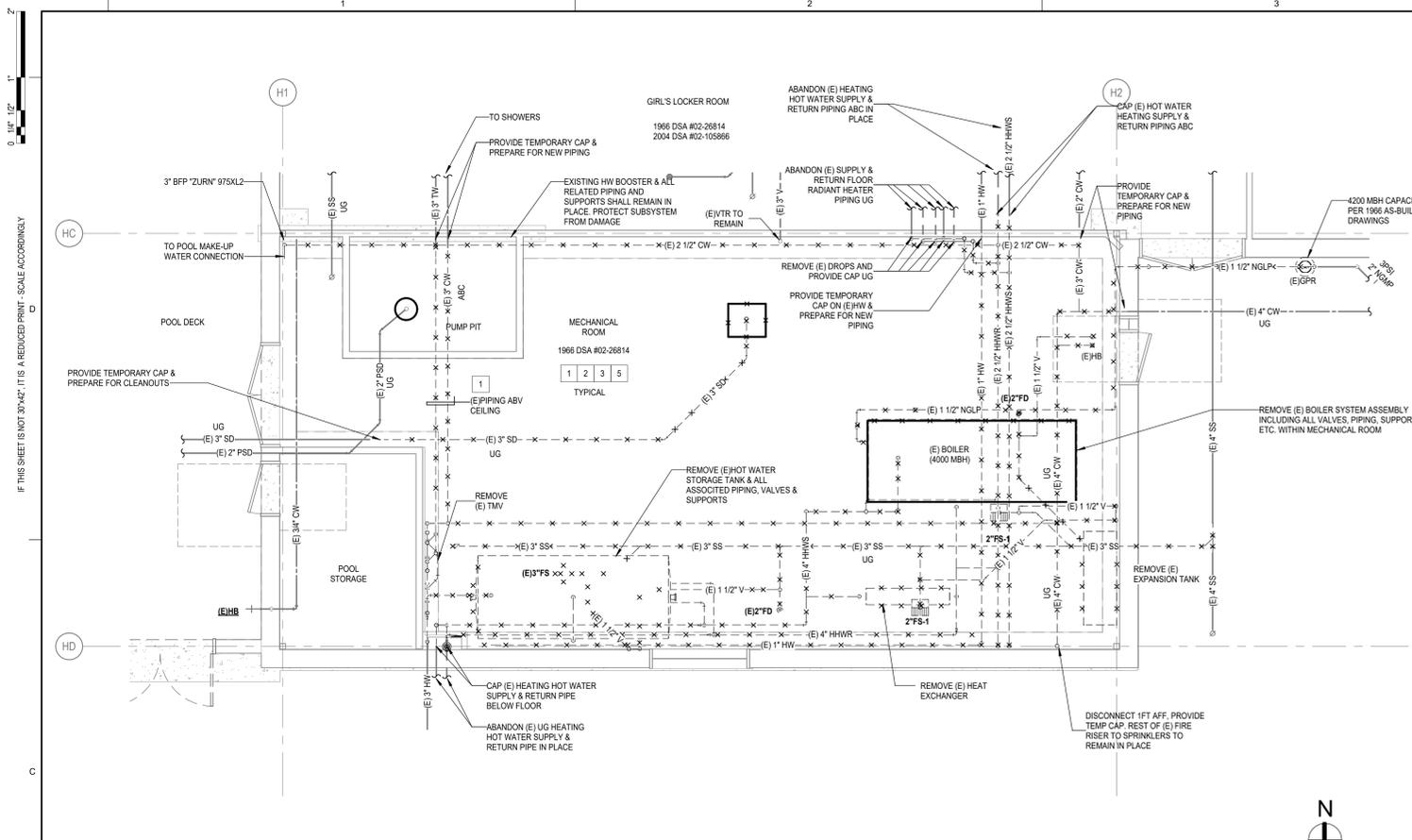
KEYPLAN



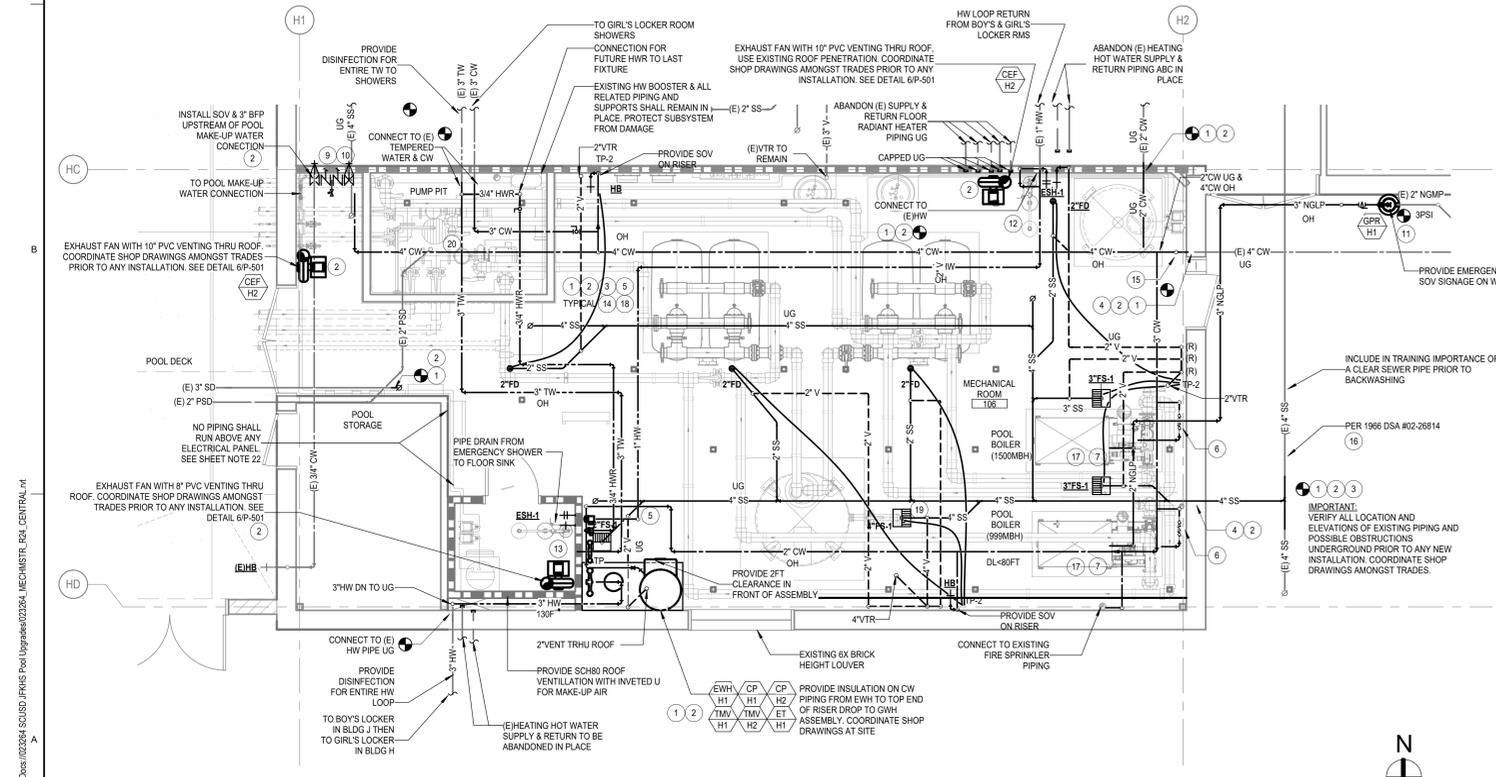
IF THIS SHEET IS NOT 30"x42" IT IS A REDUCED PRINT - SCALE ACCORDINGLY

Autodesk Docs: 02/26/24 5:05:04 PM S:\JPMIS Tool Updates\022624_MECH\BTR_024_CENTRAL.rvt

4/30/2024 9:14:53 AM



1 ENLARGED PLUMBING DEMO PLAN - POOL MECHANICAL ROOM
 P-411 SCALE: 1/4" = 1'-0"



2 PLUMBING FLOOR PLAN
 P-411 SCALE: 1/4" = 1'-0"

PLUMBING DEMO KEY NOTES:

- VERIFY EXACT SIZE AND LOCATION OF EXISTING PIPE. REFLECT VERIFIED INFORMATION ON SHOP DRAWINGS FOR COORDINATION AMONGST TRADES PRIOR TO ANY PIPE INSTALLATION. REFLECT ON AS-BUILT DRAWING IF DIFFERENT FROM HEREWITH.
- VERIFY EXACT LOCATION OF ALL BUILDING COMPONENTS THAT MAY OBSTRUCT PATH OF NEW PIPING WELL AHEAD OF INSTALLATION. REFLECT VERIFIED INFORMATION ON SHOP DRAWINGS AND COORDINATE AMONGST TRADES PRIOR TO ANY PIPE INSTALLATION. REROUTE PIPING IF REQUIRED, REFLECT ON AS-BUILT DRAWINGS IF DIFFERENT FROM HEREWITH.
- ENSURE ALL CONDITIONS AFFECTING WORK, SUCH AS VERIFICATION OF TIE-IN ELEVATION TO EXISTING BY OTHERS, ARE WELL COORDINATED AMONGST TRADES PRIOR TO ANY INSTALLATION OR FABRICATION WORK. ADJUST PIPE ROUTE IF NEEDED. REFLECT ON AS-BUILT IF DIFFERENT FROM HEREWITH.
- UNLESS NOTED OTHERWISE, REMOVE ALL EXISTING UNUSED MECHANICAL AND PLUMBING PIPING WITHIN MECHANICAL ROOM. COORDINATE ALL DEMO WORK AMONGST TRADES AND WITH SCHOOL DISTRICT PRIOR TO DEMO WORK.

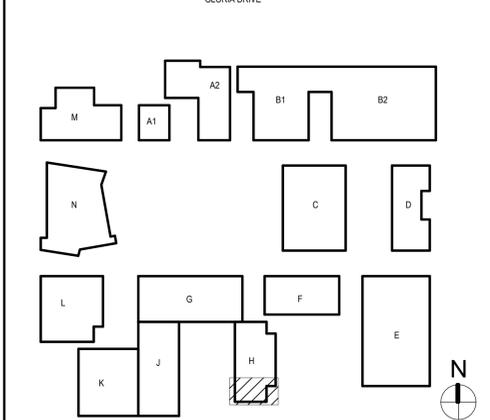
PLUMBING KEY NOTES:

- VERIFY EXACT SIZE AND LOCATION OF EXISTING PIPE. REFLECT VERIFIED INFORMATION ON SHOP DRAWINGS FOR COORDINATION AMONGST TRADES PRIOR TO ANY PIPE INSTALLATION. REFLECT ON AS-BUILT DRAWINGS IF DIFFERENT FROM HEREWITH.
- VERIFY EXACT LOCATION OF ALL BUILDING COMPONENTS THAT MAY OBSTRUCT PATH OF NEW PIPING WELL AHEAD OF INSTALLATION. REFLECT VERIFIED INFORMATION ON SHOP DRAWINGS AND COORDINATE AMONGST TRADES PRIOR TO ANY PIPE INSTALLATION. REROUTE PIPING IF REQUIRED, REFLECT ON AS-BUILT DRAWINGS IF DIFFERENT FROM HEREWITH.
- ENSURE ALL CONDITIONS AFFECTING WORK, SUCH AS VERIFICATION OF TIE-IN ELEVATION TO EXISTING BY OTHERS, ARE WELL COORDINATED AMONGST TRADES PRIOR TO ANY INSTALLATION OR FABRICATION WORK. ADJUST PIPE ROUTE IF NEEDED. REFLECT ON AS-BUILT IF DIFFERENT FROM HEREWITH.
- STRUCTURAL PROVISIONS FOR PROVISIONS ON A REQUIREMENTS WHEN RUNNING PIPE THROUGH, BELOW OR IN CLOSE PROXIMITY TO STRUCTURAL COMPONENTS. COORDINATE ALL SHOP DRAWINGS AMONGST TRADES PRIOR TO ANY INSTALLATION.
- ALL PLUMBING COMPONENTS SHALL RUN NEATLY ON WALL OR AS CLOSE AS POSSIBLE TO EQUIPMENT SERVED. NO COMPONENT SHALL PROTRUDE OUT ENCRoACHING PERSONNEL PATH OF TRAVEL NOR WITHIN ANY AREA RESERVED FOR SERVICE CLEARANCE OF OTHER UNITS WITHIN ROOM. COORDINATE ALL SHOP DRAWINGS PRIOR TO ANY INSTALLATION.
- CW MAKE-UP WATER FOR POOL BOILERS. PROVIDE SOV, BFP-2 & PRV NO HIGHER THAN 3FT FROM FF. SET PRV TO 15PSI. SEE BOILER INSTALLATION INSTRUCTIONS FOR MORE INFORMATION. PROVIDE AIR GAP AND DRAIN LINE TO NEAREST APPROVED RECEPTOR.
- CONNECT GAS PIPE TO POOL BOILER. PROVIDE SOV & DIRT LEG. SEE BOILER INSTALLATION INSTRUCTIONS FOR MORE INFORMATION.
- MAKE-UP WATER FOR POOL SYSTEM. PROVIDE SOV ON RISER ABOUT 4'00" ABOVE FLOOR.
- BFP-1 WILKINS 375. PROVIDE AIR GAP FITTING AND DRAIN TO PIT. REFER TO POOL DRAWINGS FOR EXACT LOCATION.
- INSTALL GAS REGULATOR 3FT MINIMUM AWAY FROM IGNITION SOURCES. TYP.
- PROVIDE TMV & SOV TO ESH-EV. TMV ACCESSORY SHALL BE FROM SAME MANUFACTURER AS THE EMERGENCY SHOWER-EYEWASH COMBO. SEE POOL DRAWINGS FOR EMERGENCY SHOWER-EYEWASH COMBO MODEL NUMBER.
- IMPORTANT: VERIFY ALL LOCATION AND ELEVATIONS OF EXISTING PIPING AND POSSIBLE OBSTRUCTIONS UNDERGROUND PRIOR TO ANY NEW INSTALLATION. COORDINATE SHOP DRAWINGS AMONGST TRADES.
- ANY METALLIC PLUMBING PIPING OR METALLIC SUPPORT COMPONENTS FOR PLUMBING PIPING SHALL BE COATED WITH NMECS SERIES COATING TO RESIST CORROSION. PREPARE SURFACE OF METAL PRIOR TO APPLYING PRIME COAT, STRIKE COAT AND FINISH COAT. EXACT COATING AND PROCEDURES SHALL BE PER MANUFACTURER RECOMMENDATIONS.
- PROVIDE BLDG SHUT OFF VALVE 3FT AFF. ALL FIXTURES INCLUDING HOSE BIBBS AND TRAP PRIMERS IN BUILDING SHALL BE CONNECTED DOWNSTREAM OF THIS SHUT OFF VALVE. 10 VALVE AS MAIN SHUT OFF VALVE FOR BUILDING.
- CLEAN AND FLUSH ALL EXISTING SEWER LINES DOWNSTREAM OF NEW FIXTURES TO THE 6" MAIN SS LINE.
- PROVIDE INTAKE AND EXHAUST VENT. INSTALL PER BOILER INSTALLATION INSTRUCTIONS AND DETAIL 4IP-501
- INSTALL PIPING BELOW STEEL FRAME. SEE STRUCTURAL DRAWINGS AND DETAILS FOR MORE INFORMATION. LOCATE PIPING WITHIN 1.5FT HORIZONTAL FROM FRAMES. COORDINATE SHOP DRAWINGS AMONGST TRADES PRIOR TO ANY INSTALLATION.
- PROVIDE LABEL TO LIMIT DISCHARGE FLOW TO NO MORE THAN 50GPM. INCLUDE IN TRAINING IMPORTANCE OF HAVING A CLEAN SEWER SYSTEM DURING BACKWASH.
- PROVIDE NEW SUMP PUMP ZOLLER 55 115V-1PH-9.7AMP. PROVIDE NEW BACKWATER VALVE & SOV. CONNECT TO EXISTING PIPE.

PLUMBING SHEET NOTES:

- ALL WORK FOR THE REMOVAL OF HAZARDOUS MATERIALS SHALL BE FULLY COORDINATED BETWEEN THE CONTRACTOR AND THE OWNER. THE ARCHITECT AND ENGINEERS THAT HAVE CREATED THE DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT ARE NOT RESPONSIBLE FOR SPECIFYING REQUIREMENTS FOR, OR CONSTRUCTION OBSERVATION OF, HAZARDOUS MATERIAL REMOVAL. THE OWNER SHALL PROVIDE SEPARATE DOCUMENTS REQUIRED FOR HAZARDOUS MATERIAL REMOVAL AND SEPARATE CONSTRUCTION OBSERVATION OF HAZARDOUS MATERIAL REMOVAL. CONTACT OWNER FOR MORE INFORMATION.
- ANY MATERIAL REQUIRED FOR WORK NOT READILY AVAILABLE FOR PURCHASE SHALL HAVE LEAD TIME INDICATED ON THE BID AND ON THE SUBMITTALS. SUCCESSFUL PROCUREMENT OF ALL MATERIALS REQUIRED FOR THE COMPLETION OF WORK SHALL BE ASCERTAINED BY CONTRACTOR PRIOR TO SCHEDULING OF WORK.
- ALL FINISH FLOOR ELEVATIONS (FF) BASED FROM CIVIL GRADING DRAWINGS. PLEASE REFER TO CIVIL DRAWINGS FOR MORE INFORMATION. BFF VALUES ARE ALL BASED FROM FINISH FLOOR ELEVATION INSIDE BUILDING. COORDINATE EXACT ELEVATIONS THRU SHOP DRAWINGS AND AT SITE.
- EXISTING PLUMBING LAYOUT ARE BASED FROM AVAILABLE RECORD DRAWINGS OF UNKNOWN ACCURACY. ACTUAL CONDITIONS MAY BE DIFFERENT ESPECIALLY FOR THOSE WITHIN CONCEALED SPACES AND/OR UNDERGROUND. CONTRACTOR SHALL INVESTIGATE EXISTING PIPE ROUTE, ELEVATION, SIZE AND CONDITION. THRU VISUAL OBSERVATION, RADIOGRAPH INSPECTION OR OTHER MEANS NECESSARY TO COMPLETE WORK, WELL AHEAD OF NEW PIPE INSTALLATION. SCHEDULE WORK ACCORDINGLY TO PROVIDE ENOUGH TIME TO FIND SOLUTIONS SHOULD VERIFIED INFORMATION BE DIFFERENT FROM HEREWITH. REFLECT ALL FINDINGS ON SHOP DRAWINGS FOR COORDINATION AMONGST TRADES, AND ON AS-BUILT DRAWINGS.
- SEE PREVIOUS AS-BUILT DRAWINGS FOR CONTINUATION OF EXISTING PLUMBING UTILITIES OUTSIDE OF THIS PROJECT'S SCOPE FOR REFERENCE.
- FOR CONNECTIONS TO EXISTING PIPE FOUND SMALLER THAN WHAT IS SHOWN ON PLANS, FIELD VERIFY TO LOCATE CLOSEST LARGEST PIPE UPSTREAM FOR SUPPLY PIPING. FOR DRAIN PIPING, FIELD VERIFY TO LOCATE CLOSEST LARGEST PIPE OF SUFFICIENT DEPTH DOWNSTREAM. REFLECT ON SHOP DRAWINGS FOR COORDINATION AMONGST TRADES.
- PROVIDE TEMPORARY UTILITIES TO ALL FIXTURES & EQUIPMENT TO REMAIN IN SERVICE DURING CONSTRUCTION PERIOD.
- COORDINATE CONSTRUCTION WORK AND SCHEDULE OF WORK WITH SCHOOL DISTRICT. CONTRACTOR SHALL INCLUDE IN BID MEANS AND/OR METHODS REQUIRED FOR THE WORK INCLUDING ANY REQUIRED SERVICE SHUT DOWNS, TEMPORARY LINES, ROAD CLOSURES, SPECIAL INSPECTIONS, ETC. TO ACCOMPLISH SCOPE. SCHEDULING OF WORK SHALL BE AMICABLE BETWEEN OWNER AND CONTRACTOR.
- CONTRACTOR SHALL FOLLOW GENERAL PIPE ROUTE AND VALVE LOCATIONS, AND GENERAL ORDER OF SYSTEM COMPONENTS SHOWN ON PLANS. ADJUST PIPE ELEVATIONS OR ROUTING TO AVOID STRUCTURAL COMPONENTS & OTHER BUILDING COMPONENTS WHEN POSSIBLE. IF NECESSARY & ONCE AMICABLE BETWEEN TRADES, COORDINATE ALL SHOP DRAWINGS AMONGST TRADES PRIOR TO ANY PIPE FABRICATION OR INSTALLATION.
- CONTRACTOR SHALL PREPARE AND MAINTAIN AS-BUILT DRAWINGS OF ALL PLUMBING SYSTEMS AS INSTALLED AT THE JOB SITE. DRAWN BY CONTRACTOR OVER THE DESIGN PLANS. THEY SHALL BE READILY AVAILABLE TO VIEW & INSPECT UPON REQUEST BY PROJECT INSPECTOR, ENGINEER OR OWNER. AS-BUILTS SHALL CLEARLY SHOW CHANGES, REVISIONS, CLARIFICATIONS & SUBSTITUTIONS INSTALLED IN THE PROJECT INCLUDING BUT NOT LIMITED TO EXACT PIPE ROUTE ESPECIALLY THOSE CONCEALED AND/OR UNDERGROUND. UNDERGROUND PIPE ELEVATIONS, PIPE SIZES, DIMENSIONS FROM WALL/SIGRID LINES OF ANY REROUTED PIPE, RFI/CDC/ASI TAG AS REFERENCE TO WHERE CHANGES OCCURRED FROM IF ANY, AND ANY INFORMATION THAT MAY CLARIFY HOW SYSTEMS & COMPONENTS HAD BEEN INSTALLED OR HOW IT DIFFERS FROM ORIGINAL DESIGN PLANS. REFERENCE TO AN RFI/CDC/ASI ALONE SHALL NOT CONSTITUTE COMPLETE AS-BUILT DRAWINGS. AS-BUILT DRAWINGS SHALL BE IN HARD COPY AND DIGITAL (PDF) FORMAT. AS-BUILTS AND QUALITY OF SUCH ARE CRITICAL REQUIREMENTS FOR MAINTENANCE UPKEEP AND FORWARD USE AS BASIS FOR POSSIBLE FUTURE CONSTRUCTION IMPROVEMENTS. FUTURE DESIGNER/CONTRACTOR WOULD RELY ON CONTRACTOR SHALL PROVIDE "AS-BUILT" TAG AND CONTRACTOR INFORMATION ON ALL AS-BUILT SHEETS.
- CONNECT WASTE, VENT & COLD WATER LINES TO ALL NEW FIXTURES. SEE FIXTURE SCHEDULE FOR BRANCH AND FIXTURE OUTLET/INLET CONNECTION SIZES.
- HORIZONTAL DRAINAGE PIPING SHALL BE RUN IN PRACTICAL ALIGNMENT AND A UNIFORM SLOPE OF NOT LESS THAN 2% TOWARD THE POINT OF DISPOSAL UNLESS IMPRACTICAL. DUE TO BUILDING'S STRUCTURAL FEATURES, OR IF CONNECTING TO EXISTING PIPE AT ITS EXISTING UPSTREAM/DOWNSTREAM DEPTH IS IMPOSSIBLE WITHOUT SLOPING LESS THAN 2% IN SUCH CONDITIONS, PIPE CAN BE SLOPED AT NO LESS THAN 1%. COORDINATE SHOP DRAWINGS AMONGST TRADES PRIOR TO FABRICATION AND INSTALLATION THEN REFLECT ALL CHANGES ON THE AS-BUILT DRAWINGS.
- COORDINATE ALL CONNECTION POINTS AMONGST TRADES AT SITE PRIOR TO FABRICATION OR INSTALLATION.
- UNLESS INSIDE UTILITY ROOMS, ALL OVERHEAD PIPING INSIDE ROOM WITH AN EXPOSED CEILING SHALL HAVE THE PIPING INSTALLED AS HIGH AS POSSIBLE. FULLY COORDINATE AMONGST TRADES.
- ALL PUMPED CONDENSATE DRAIN LINES (PCD) SHALL SLOPE AND DISCHARGE DOWN TO A GRAVITY CD BY A MINIMUM OF 6" TO AVOID BACKFLOW TO MECH UNIT.
- ON A GAS CONNECTION SHALL BE INSTALLED AS ILLUSTRATED ON CPC FIGURE 1212.9 OF THE 2022 CPC. INCOMING GAS FLOW SHALL ALWAYS COME FROM THE TOP TO ALLOW SEDIMENTS SETTLE IN DOWN IN THE TRAP. A TEST BEFORE TRAP SHALL SERVE AS THE BRANCH CONNECTING TO THE APPLIANCE.
- ALL VALVES ABOVE CEILING, ACCESSIBLE THRU ACCESS PANELS WITH AN OPENING OF NO MORE THAN 14"x14", SHALL BE WITHIN ARMS REACH FROM THE ACCESS PANEL OPENING.
- PRIME AND PAINT ALL EXPOSED PIPING TO MATCH ARCHITECTURAL FINISH. KEEP PAINT OFF OF TAGS AND MARKS IDENTIFYING SYSTEM, SIZE, MODEL OR OTHER IMPORTANT INFORMATION.
- PROTECT ALL INSTALLED DRAINS, DRAIN STRAINERS, EQUIPMENT COMPONENTS, FIXTURES ESPECIALLY THOSE WITH STAINLESS STEEL SURFACES FROM DAMAGE. PLUMBING SYSTEM SHALL BE CLEAN, UNDAMAGED, WORKING AND IN NEW CONDITION UP TO HAND OFF TO OWNER. SEE SPECIFICATIONS FOR MORE INFORMATION ON CLOSING DCC.
- NO EXPOSED PIPING SHALL BE LEFT TO RUST OR SUBJECTED TO CONDITIONS DETRIMENTAL TO THE PIPE WITHOUT PROVIDING PROTECTION, TEMPORARY OR OTHERWISE, SUITABLE FOR THE TYPE OF PIPE BEING PROTECTED.
- CLOSELY COORDINATE PENETRATIONS THRU STRUCTURAL MEMBERS AMONGST TRADES AT THE SITE THRU SHOP DRAWINGS PRIOR TO CONSTRUCTION. PENETRATION THRU CONCRETE FOUNDATION SHALL BE PROPERLY SLEEVED WHEN REQUIRED. COORDINATE DROPPING FOOTING IF REQUIRED. ALL NOTCHES AND HOLES SHALL BE NEATLY BORED. SEE STRUCTURAL DRAWINGS FOR MORE INFORMATION. <<LOOK FOR THAT JOB>>
- THERE SHALL BE NO PIPING WITHIN ELECTRICAL EQUIPMENTS DEDICATED SPACE. ELECTRICAL EQUIPMENT SUCH AS PANEL BOARDS, SWITCHBOARDS AND MOTOR CONTROL CENTERS LOCATED IN ROOMS MUST HAVE EXCLUSIVE DEDICATED SPACE FROM THE FLOORING AND TIE ABOVE THE EQUIPMENT. THE WIDTH AND DEPTH OF THE EQUIPMENT. COORDINATE SHOP DRAWINGS AMONGST TRADES LOCATING ALL ELECTRICAL EQUIPMENT PRIOR TO ANY PIPE INSTALLATION. THERE SHALL ALSO BE NO PIPING ABOVE THE DEDICATED SPACE UNLESS PROTECTION IS PROVIDED FOR EQUIPMENT FROM PIPING LEAK OR BREAK.
- CONTRACTOR TO AVOID GRABBING ELECTRICAL HARDWARES SUCH AS TELEPHONES TO AVAILABLE WATER LINES, WHEN POSSIBLE TO AVOID METALLIC TASTE IN WATER FROM DRINKING FOUNTAINS.

KEYPLAN



IDENTIFICATION STAMP
 DIV. OF THE STATE ARCHITECT
 APP: 02-122170 INC.
 REVIEWED FOR
 SS FLS ACS
 DATE: 05/09/2024

LIONAKIS
 2025 Ninth Street
 Sacramento, CA 95818
 P 916.558.1900
 www.lionakis.com

CONSULTANT

capital engineering
 RANCHO COVINA, CALIFORNIA
 MB - JV 232142.00
 PM - DESIGN TEAM PROJECT NO.

FOR REVIEW ONLY / NOT FOR CONSTRUCTION
 THE CONSTRUCTION DOCUMENTS HAVE NOT BEEN APPROVED BY THE ENFORCEMENT AGENCY AND ARE NOT COMPLETE OR READY FOR CONSTRUCTION. ELEMENTS, MEMBERS, SYSTEMS AND ASSOCIATED DETAILS AND SPECIFICATIONS MAY NOT BE SHOWN OR FULLY DEVELOPED. FOR BIDDING ESTIMATING PURPOSES, UTILIZE ADDITIONAL MATERIALS AND QUANTITIES TO ACCOUNT FOR THOSE ITEMS NOT SHOWN OR FULLY DEVELOPED.

PROFESSIONAL SEAL
 JOHN F. KENNEDY
 STATE OF CALIFORNIA
 DATE SIGNED: 2024-04-29

PROJECT
**JOHN F KENNEDY HIGH SCHOOL
 SWIMMING POOL UPGRADE**

6715 GLORIA DR
 SACRAMENTO, CA 95831

CLIENT
 SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

MARK	DATE	DESCRIPTION

MANAGEMENT	
LIONAKIS PROJECT NO.	023264
CLIENT PROJECT NO.	
COPYRIGHT:	LIONAKIS 2017

TITLE
**ENLARGED PLUMBING
 DEMO &
 CONSTRUCTION PLAN**

SHEET
P-411