SOLANO COMMUNITY COLLEGE DISTRICT



4000 SUISUN VALLEY RD FAIRFIELD, CA 94534

BUILDING 300 AND 1200 VAULT REPAIR

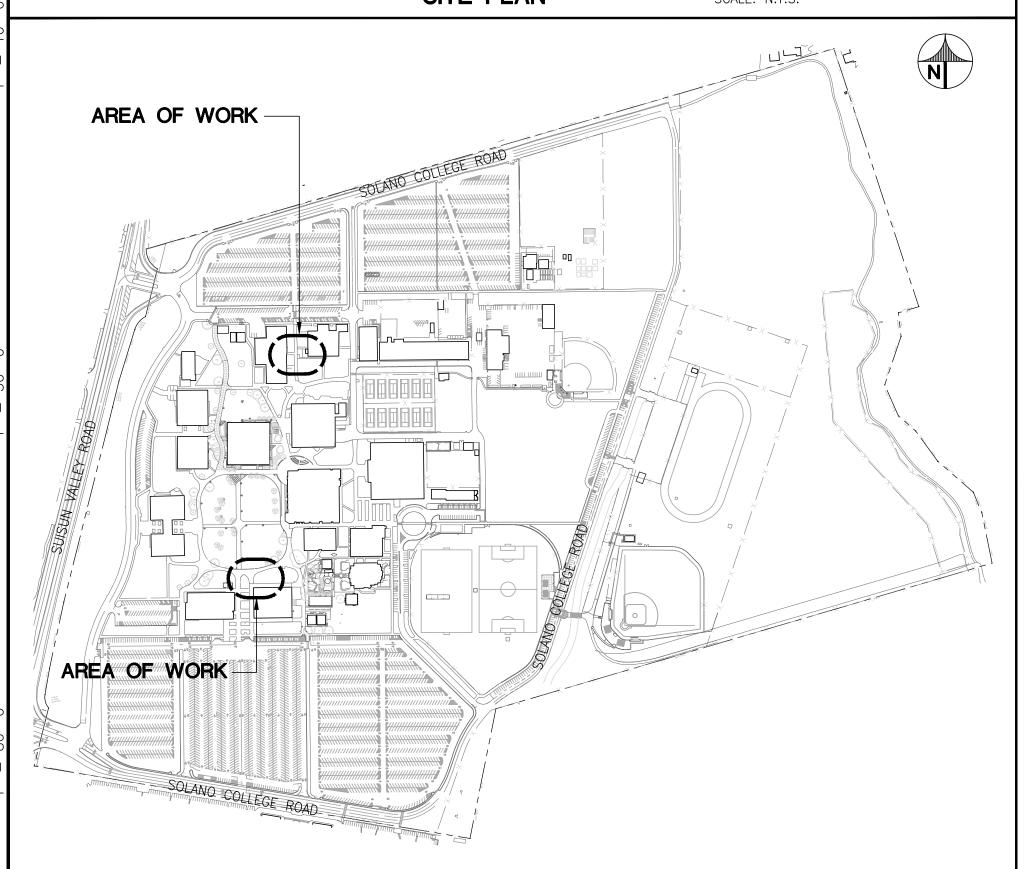
Rockville Rd Rockville Rd LOCATION

VICINITY MAP

SITE PLAN

SCALE: N.T.S.

SCALE: N.T.S.



MECHANICAL

EXCAVATE OPEN TRENCHES AT VAULTS 3 (NORTH OF BUILDING 300) & 7 (EAST OF BUILDING 1200) TO EXPOSE <E>HHW SUPPLY/RETURN PIPING AND ANCHORS, AND <E>CHW SUPPLY/RETURN VAULT PENETRATIONS. PROVIDE TEMPORARY FENCING AROUND THE AREA OF WORK AROUND THE VAULTS (I.E. INCLUDING VAULT & OPEN TRENCHES). COORDINATE WITH DISTRICT FOR FENCING PLAN APPROVAL.

SUMMARY OF WORK

- DEMO & REMOVE <E>HEATING HOT WATER SUPPLY & RETURN PIPING OUTSIDE VAULT #3 (SERVING BUILDING 300) AND #7 (SERVING BUILDING 1200), 5 FEET FROM THE FACE OF THE VAULT IN EACH DIRECTION TO THE NEAREST UNCOMPROMISED <E>SITE PIPING (INCLUDING ANCHORS WHERE INDICATED). DEMO & REMOVE <E>HEATING HOT WATER SUPPLY & RETURN PIPING INSIDE THE VAULT, INCLUDING VALVES, COUPLINGS, VENTS, DRAINS, INSULATION/JACKETING, AND PENETRATION SEALS. SAWCUT VAULT WALLS FOR NEW PENETRATIONS.
- DEMO & REMOVE <E>INSULATION AND JACKETING FROM THE <E>CHILLED WATER SUPPLY & RETURN PIPING INSIDE VAULT #3 (SERVING BUILDING 300) AND #7 (SERVING BUILDING 1200). CLEAN CHILLED WATER PIPE SURFACE AND REPORT SIGNIFICANT CORROSION AND/OR COMPROMISED PIPING TO ENGINEER IMMEDIATELY IF DISCOVERED. CLEAN <E>PENETRATIONS FROM DEGRADED OR COMPROMISED SEALANT (IF ANY) AT INTERIOR AND EXTERIOR OF THE VAULT.
- PROVIDE & INSTALL NEW PRE-FABRICATED HEATING HOT WATER SUPPLY & RETURN PIPING FROM EXISTING, THE VAULT WALL (VAULT INTERIOR). REFER TO DETAIL 1/M-5.1. FURNISH PRE-FABRICATED ANCHORS AND ENCASE IN CONCRETE (BY CONTRACTOR) AS INDICATED. PROVIDE LINK SEALS AT PENETRATIONS. PROVIDE & FIELD INSTALL HEATING HOT WATER PIPING INSIDE THE VAULT(S) BETWEEN THE TERMINATION POINTS OF THE PRE-FABRICATED PIPING AT THE VAULT PENETRATIONS WITH WELDED JOINTS AND WELDED/FLANGED FITTINGS, INCLUDING FIELD INSTALLATION OF VALVES, TEES, INSULATION, JACKETING, VENTS, DRAINS, SUPPORTS, ETC.
- 5. CLEAN. PRIME & PAINT <E>CHILLED WATER SUPPLY & RETURN PIPING EXPOSED INSIDE AND OUTSIDE (IF ANY) THE VAULT. PROVIDE SIKA-FLEX SEALANT/CAULK AT EXTERIOR AND INTERIOR OF THE <E>PENETRATION TO COMPLETE A WATERTIGHT SEAL BETWEEN THE FACE OF THE VAULT WALL AND THE PENETRATING PIPE(S) OUTER SURFACE. PROVIDE & INSTALL VAPOR BARRIER, INSULATION, JACKETING, AND PIPE MARKERS.
- PRESSURE TEST ALL PIPING INSTALLED TO 75 PSIG FOR NOT LESS THAN 2 HOURS. IF PIPING HOLDS PRESSURE FOR THE DURATION OF THE 2-HOUR TEST, WITH NO LOSS IN PRESSURE, THE SYSTEM HAS PASSED THE PRESSURE TEST. ONCE PRESSURE TEST IS COMPLETE WITH A "PASS", FLUSH, DRAIN, AND TREAT NEW PIPING PER CAMPUS STANDARD
- ONCE PRESSURE TESTS ARE COMPLETE WITH A "PASS", AT BOTH VAULTS, THE SYSTEM IS READY FOR FINAL FLUSHING, DRAIN, & TREATMENT PROCESS. PROVIDE WATER TREATMENT SERVICES (BY CONTRACTOR) TO FLUSH, DRAIN, AND TREAT THE ENTIRE HEATING HOT WATER DISTRIBUTION SYSTEM (APPROXIMATELY 25,000 GALLONS). SUBMIT WATER TREATMENT PLAN PRIOR TO PROCEEDING WITH WORK.
- 8. UPON COMPLETION OF THE HEATING HOT WATER SUPPLY & RETURN PIPING REPLACEMENT AT VAULT(S), PROVIDE & INSTALL PIPE BEDDING, DETECTABLE TAPE, BACKFILL, AND REPAIR SURFACES TO MATCH ADJACENT BE IT LANDSCAPING OR HARDSCAPE - MATCH ADJACENT EXISTING MATERIALS & CONSTRUCTION (I.E. RETURN TO PRIOR
- 9. DEMO & REMOVE THE TEMPORARY FENCING AROUND VAULT 3 & VAULT 7 ONCE HHWS&R PIPING REPAIRS ARE COMPLETED AND TRENCH IS BACKFILLED AND RESTORED TO MATCH <E>LANDSCAPE/HARDSCAPE CONDITION.
- 10. PROVIDE SUPPORTS AND INSULATION AS PER LIST OF MATERIALS.
- 11. PROVIDE AS-BUILTS OF ALL PIPING INSTALLED, INDICATING LINE & GRADE.
- 12. LIST OF MATERIALS:
 - A. PIPING (VAULT INTERIOR): SCHEDULE 40 STEEL (ASTM A-53, GRADE B, ERW), WELDED JOINTS, WELDED FLANGED FITTINGS, PRIMED, PAINTED AND INSULATED.
- B. PIPING (EXTERIOR OF VAULT): THERMACOR FERRO-THERM PRE-INSULATED PIPING SYSTEM (OR APPROVED EQUAL) CONSISTING OF SCH. 40 STEEL CARRIER PIPE (ASTM A-53, GRADE B, ERW), POLYURETHANE FOAM INSULATION (RATED TO 250F) IN THE ANNULAR SPACE BETWEEN THE CARRIER PIPE AND JACKET, AND A HIGH DENSITY POLYETHYLENE (HDPE) JACKET. PROVIDE PRESSURE TESTABLE FIELD INSULATION KITS FOR CONNECTION TO <E>PIPING SYSTEMS.
- C. FLANGES: CLASS 150 WELDING FLANGES, WITH BEVELED ENDS. STAINLESS STEEL HARDWARE, STANDARD GASKETING.
- D. VALVES (BLDG 1200 VAULT): DEZURIK BAW (AWWA) BUTTERFLY VALVES, CLASS 150 FLANGES, CAST IRON BODY, EPDM PACKING/SEAT MATERIALS, DUCT IRON DISC WITH 316 SS EDGE, 304 SS SHAFT, FURNISH W/ EPOXY COATING, FURNISH WITH SS HARDWARE, AND SCOTCH YOLK WITH TRAVELING NUT (DIRECTY BURY RATED) OPERATER WITH HANDWHEEL.
- E. VALVES (BLDG 300 VAULT): LUG PATTERN, RUBBER LINED BUTTERFLY VALVES NIBCO LD-2000 WITH EPOXY COATING AND SST HARDWARE, LEVER OPERATED 4" AND UNDER, GEAR OPERATED 5" AND LARGER.
- F. PIPE SUPPORTS: PIPE SADDLES SIZED FOR INSULATION AROUND PIPING. PROVIDE WITH U-BOLT, MOUNTING BASE AND ADJUSTABLE HEIGHT STANCHION, WITH 4 BOLT MOUNTING BASE. 1" +/- GROUT UNDER BASE. PROVIDE CALCIUM-SILICATE INSULATION THERMAL SHIELDS AT EACH SUPPORT. PIPE SUPPORTS SHALL OCCUR AT THE MIDPOINT OF THE PIPING SPANNING THROUGH THE VAULT INTERIOR.
- G. PIPE INSULATION: PYROGEL XTE BLANKET INSULATION FOR MOISTURE INTRUSION RESISTANCE & THERMAL PERFORMANCE FOR 200F HHW TEMP WITH PVC JACKETING FINISH:

PIPE SIZE THICKNESS THRU 1.25" 0.8"

- H. QUICK-CONNECT DRAIN PIPE: SCH. 80 PVC PIPE WITH SOLVENT WELDED JOINTS. SUPPORT USING 2-HOLE PIPE CLAMPS, STRUT CHANNELS, AND EXPANSION ANCHORS, MAX. 4 FT. SPANS AND AT CHANGES IN DIRECTION. PROVIDE ROUND SUMP STRAINER WITH THREADED CONNECTION AT <E>VAULT SUMP (OR LOW POINT). PROVIDE MALE ADAPTER LAY DOWN QUICK CONNECTION, TERMINATE 2" BENEATH THE VAULT LID.
- I. PLASTIC TAPE PIPE MARKERS: FLEXIBLE, VINYL FILM TAPE WITH PRESSURE SENSITIVE ADHESIVE BACKING AND PRINTED MARKINGS. WHITE LETTERING ON GREEN BACKGROUND.
- J. DETECTIBLE MARKING TAPE: 6" WIDE METALLIC BURIAL TAPE MARKED WITH UTILITY TYPE (HHW OR CHW) PLACED 12" TO 18" ABOVE PIPE. TAPE TO BE DETECTABLE WITH UTILITY DETECTION EQUIPMENT AT GROUND
- K. PENETRATIONS: PROVIDE LINK SEAL AT VAULT WALL PENETRATIONS. SAW CUT LARGER PENETRATIONS AT VAULT WALLS TO ACCOMMODATE O.D. OF PRE-INSULATED (FERRO-THERM) PIPING SYSTEM AND THE THICKNESS OF

BID ALTERNATE #1 (ADDITIVE)

IF EXISTING CONCRETE ENCASED ANCHORS ARE NOT DISCOVERED, OR IF AN ACTIVE LEAK IS DISCOVERED, CONTINUE TRENCHING TO LENGTHS INDICATED FOR BID. ALT. #1 (HARDSCAPE SAWCUT AND REMOVAL, AS NEEDED/DEPICTED). MAINTAIN ASSUMPTION THAT PIPING IS 6 FEET BELOW GRADE (BG). INCLUDE DEMO OF <E>HHWS&R PIPING FOR LENGTH OF TRENCH. IF EXISTING ANCHOR IS STILL NOT DISCOVERED, REPORT FINDINGS TO ENGINEER IMMEDIATELY.

IF ACCEPTED, CONTINUE BEDDING, BACKFILL, AND COMPACTION OF OPEN TRENCH(ES) INCLUDING HARDSCAPE/LANDSCAPE REPAIRS TO LENGTHS AND FINISHES AS INDICATED FOR BID. ALT. #1. INCLUDE NEW PREFABRICATED HHWS&R PIPING FOR LENGTH OF TRENCH, PROVIDE PRESSURE TESTABLE JOINT CLOSURE KITS AS NEEDED.

THE SCOPE AT EACH CARDINAL DIRECTION OF THE VAULT SHALL HAVE SEPARATE BID AMOUNTS, AND SHALL BE ACCEPTED OR REJECTED ON AN INDIVIDUAL BASIS IF/AS CONDITIONS NECESSITATE THE NEED FOR FURTHER DISCOVERY.

M:\AA-PROJECTS\2510-00061-00 Solano CCD, Bldg 1200 Vault Repair\03 Drawings\2510-00061G-0.0.dwg 2/24/2025 4:22 PM Minh Ong

- A. VAULT #3 EAST: B. VAULT #3 - SOUTH: C. VAULT #3 — WEST: D. VAULT #7 - EAST: E. VAULT #7 — WEST:
- IF ADDITIONAL DISCOVERY/DEMO BEYOND DIMENSIONS INDICATED WAS NEEDED, ADDITIONAL REPAIRS SHALL BE AT A \$ PER LINEAR FOOT (\$/LF) COST AS CALCULATED FROM THE SUBMITTED BID ALT. #1 COSTS AT EACH CARDINAL

PROJECT SPECIFICATIONS

- A. PRODUCT DATA: INCLUDE DATA ON PIPE MATERIALS, PIPE FITTINGS, VALVES, HANGERS, BRACING AND ACCESSORIES. PROVIDE MANUFACTURERS CATALOGUE INFORMATION. INDICATE VALVE DATA & RATINGS.
- B. WELDING PROCEDURE SPECIFICATIONS: SUBMIT WELDING PROCEDURE SPECIFICATIONS (WPS'S) OR STANDARD WELDING PROCEDURE SPECIFICATIONS (SWPS'S) PUBLISHED BY AWS FOR ALL WELDED PIPING SYSTEMS TO BE
- C. WELDER'S QUALIFICATIONS: SUBMIT PROOF OF WELDER QUALIFICATIONS FOR EACH WPS TO BE USED, EITHER CERTIFICATIONS THROUGH ASME BPVC-IX OR AWS D1.1/D1.1M FOR EVERY WELDER TO BE USED ON THE
- D. PIPING PRESSURE TEST REPORTS: PROVIDE PIPING PRESSURE TEST REPORTS INDICATING:
 - SOLANO COMMUNITY COLLEGE. FAIRFIELD CAMPUS PROJECT ADDRESS
- PROJECT NAME
- TESTING CONTRACTOR PIPE SEGMENT TESTED
- VI. PIPE SIZE, SERVICE AND MATERIAL (INCLUDING WALL THICKNESS INFORMATION
- [SCHEDULE, SDR, ETC.]) VII. TEST MEDIUM
- VIII. DATE AND TIME OF TEST START IX. STARTING PRESSURE AND TEMPERATURE OF TEST MEDIUM
- DATE AND TIME OF TEST END XII. ENDING PRESSURE AND TEMPERATURE OF TEST MEDIUM
- XIII. ENDING AMBIENT TEMPERATURE XIV. OBSERVATIONS AND CONCLUSIONS

. QUALITY ASSURANCE:

SUBMITTALS:

- A. MANUFACTURER QUALIFICATIONS: COMPANY SPECIALIZING IN MANUFACTURING PRODUCTS OF THE TYPE SPECIFIED IN THIS SECTION, WITH MINIMUM THREE YEARS OF DOCUMENTED EXPERIENCE.
- B. INSTALLER QUALIFICATIONS: COMPANY SPECIALIZING IN PERFORMING WORK OF THE TYPE SPECIFIED IN THIS SECTION, WITH MINIMUM THREE YEARS OF EXPERIENCE.
- C. PIPE WELDING QUALITY: COMPLY WITH ASME B31.9, BUILDING SYSTEMS PIPING FOR ALL WELDING PROCEDURES. WELDER QUALIFICATIONS AND INSPECTION AND ACCEPTANCE CRITERIA FOR WELDING MATERIALS AND PROCEDURES.
- D. HYDRONIC PIPING SYSTEMS SHALL BE HYDRO TESTED PER CMC REQUIREMENTS, UNLESS OTHERWISE NOTED.

3. HYDRONIC SYSTEM REQUIREMENTS:

OF A FAILURE.

- A. COMPLY WITH ASME B31.9 AND APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.
- B. PIPE-TO-VALVE AND PIPE-TO-EQUIPMENT CONNECTIONS: USE FLANGES OR UNIONS TO ALLOW DISCONNECTION
- OF COMPONENTS FOR SERVICING; DO NOT USE DIRECT WELDED, SOLDERED, OR THREADED CONNECTIONS. C. PROVIDE DRAIN VALVES AT MAIN SHUT OFF VALVES, LOW POINTS OF PIPING, BASES OF VERTICAL RISERS, AND AT EQUIPMENT. USE 3/4 INCH BALL VALVES WITH CAP.
- D. PROVIDE MANUAL AIR VENTS AT SYSTEM HIGH POINTS.
- E. HHW PIPING SHALL BE CONNECTED BY WELDED JOINTS (ASTM A234/A234M). WELDING MATERIALS AND PROCEDURES SHALL CONFORM TO AWS D1.1/D1.1M AS REQUIRED BY WPS.
- F. HYDRONIC PRESSURE TESTING: HYDRONIC PRESSURE TESTING SHALL OCCUR PRIOR TO INSULATING FIELD WELDS/JOINTS. UNLESS OTHERWISE NOTED, HYDROSTATICALLY TEST ALL PIPING INSTALLED UNDER THIS CONTRACT TO 75 PSIG FOR A PERIOD OF NOT LESS THAN TWO HOURS WITH NO PERCEPTIBLE LOSS OF PRESSURE. PROVIDE NECESSARY CAPS OR BLINDS TO PROTECT EQUIPMENT NOT RATED FOR TEST PRESSURE (SAFETY VALVES, REGULATORS, ETC.), REFER TO CALIFORNIA MECHANICAL CODE REQUIREMENTS, CARE SHALL BE TAKEN TO INSURE ALL TRAPPED AIR IS REMOVED FROM THE SYSTEM PRIOR TO THE TEST. APPROPRIATE SAFETY PRECAUTIONS SHALL BE TAKEN TO GUARD AGAINST POSSIBLE INJURY TO PERSONNEL IN THE EVENT
- G. THERMACOR FERRO-THERM PRE-INSULATED PIPING (EXTERIOR OF VAULTS): INSTALL PER MFR'S REQUIREMENTS. ALL JOINT CLOSURES (PRESSURE TESTABLE) AND INSULATION SHALL OCCUR AT STRAIGHT SECTIONS OF PIPE. ALL INSULATION AND JACKETING MATERIALS SHALL BE FURNISHED BY THERMACOR. FITTINGS (INCLUDING EXPANSION LOOPS, ELBOWS, TEES, REDUCERS, AND ANCHORS) SHALL BE FACTORY PRE-FABRICATED AND PRE-INSULATED WITH POLYURETHANE FOAM TO THE THICKNESS SPECIFIED AND JACKETED WITH A ONE-PIECE SEAMLESS MOLDED HDPE FITTING COVER, A BUTT FUSION WELDED, OR AN EXTRUSION WELDED AND MITERED HDPE JACKET.
- H. THERMACOR PRESSURE TESTABLE JOINT CLOSURE (EXTERIOR OF VAULT): ALL FIELD JOINTS SHALL UNDERGO & PASS HYDRONIC PRESSURE TESTING (PER NOTE "F" ABOVE) PRIOR TO INSTALLATION OF PRESSURE TESTABLE CLOSURE. INSTALL PRESSURE TESTABLE JOINT CLOSURE PER MFR'S REQUIREMENTS. AFTER COMPLETING THE ELECTRIC FUSION INSTALLATION OF THE JOINT CLOSURE, AND PRIOR TO POURING THE INSULATION, PRESSURE TEST THE JOINT CLOSURE AT 5 PSI FOR 5 MINUTES WHILE SIMULTANEOUSLY SOAP TESTED AT THE JOINT CLOSURE'S SEAMS FOR POSSIBLE LEAKS. AFTER PASSING THE PRESSURE TEST, THE FIELD JOINT SHALL BE FILLED WITH POLYURETHANE INSULATION. ALLOW INSULATION TO SET, TRIM EXCESS, AND FUSION WELD A CLOSURE PLUG TO COMPLETE THE ASSEMBLY (AS PER JOINT CLOSURE INSTRUCTIONS) OVER THE FOAM HOLES. ALL FIELD JOINT CLOSURES AND INSULATION SHALL OCCUR AT STRAIGHT SECTIONS OF PIPE ONLY. FIELD INSULATION OF FITTINGS IS NOT PERMITTED.
- I. WHERE PIPE SUPPORT MEMBERS ARE WELDED, SCRAPE, BRUSH CLEAN, AND APPLY ONE COAT OF ZINC-RICH
- J. INSTALL VALVES WITH STEMS UPRIGHT OR HORIZONTAL, NOT INVERTED.
- K. INSULATION SHALL BE INSTALLED IN COMPLIANCE WITH TITLE 24, CA ENERGY CODE FOR HHW SYSTEMS OPERATING AT TEMPERATURES BETWEEN 141F - 200F. INSTALL INSULATION PER MFR'S INSTRUCTIONS. VERIFY THAT SURFACES ARE CLEAN AND DRY, WITH FOREIGN MATERIAL REMOVED. VERIFY THAT PIPING HAS BEEN PRESSURE TESTED PRIOR TO APPLYING INSULATION MATERIALS.
- . VALVE STEMS, DRAIN PIPES, AIR VENTS, AND OTHER OPERABLE SPECIALTIES CONNECTED TO THE HYDRONIC PIPING SHALL BE INSTALLED WITH EXTENSIONS SO THAT OPERABLE COMPONENTS EXTEND OUTSIDE THE INSULATION/JACKETING ASSEMBLY.
- M. INSTALL PIPE MARKERS IN ACCORDANCE WITH MFR'S INSTRUCTIONS. DEGREASE AND CLEAN SURFACES TO RECEIVE ADHESIVE FOR IDENTIFICATION MATERIALS.
- N. CONTRACTOR TO PROVIDE WATER TREATMENT SERVICES TO FLUSH, DRAIN, AND TREAT ENTIRE HEATING HOT WATER DISTRIBUTION SYSTEM. ESTIMATED VOLUME OF EXISTING HHW SYSTEM IS APPROXIMATELY 25,000 GALLONS. FLUSH SYSTEM PIPING WITH CLEAN CITY WATER USING TEMPORARY BYPASSES AND PUMPS AT A VELOCITY BETWEEN 3 - 4.5 FPS FOR A DURATION OF 2 HOURS PRIOR TO DRAINING TO SEWER. REPEAT UNTIL CLEAN/CLEAR WATER IS OBSERVED TO DRAIN. AFTER COMPLETING FLUSH, RECOMMEND TREATING THE SYSTEM WITH CORROSION INHIBITOR TREATMENT SUCH AS NITRITE—BASED OR MOLYBDATE—BASED INHIBITOR BUT SHALL BE COORDINATED AND ACCEPTED BY WATER TREATMENT SUBCONTRACTOR. UPON COMPLETION OF TREATMENT, PROVIDE FINAL FLUSH AT 2.5 - 4 FPS. REFILL SYSTEM AND INJECT FINAL CHEMICAL TREATMENT. SUBMIT WATER TREATMENT PLAN PRIOR TO PROCEEDING WITH WORK. INSPECT SYSTEM FOR LEAKS

APPLICABLE CODES

- UNLESS OTHERWISE INDICATED OR SPECIFIED, PERFORM THE WORK IN CONFORMANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE REGULATORY REQUIREMENTS, INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING: 1. CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE 24): 2022
- 2. CALIFORNIA BUILDING CODE (PART 2, TITLE 24): 2021 IBC WITH 2022 CA AMENDMENTS
- 3. CALIFORNIA ELECTRICAL CODE (PART 3, TITLE 24): 2020 NEC WITH 2022 CA AMENDMENTS 4. CALIFORNIA MECHANICAL CODE (PART 4, TITLE 24): 2021 UMC WITH 2022 CA AMENDMENTS
- 5. CALIFORNIA PLUMBING CODE (PART 5, TITLE 24) 2021 UPC WITH 2022 CA AMENDMENTS
- 6. CALIFORNIA ENERGY CODE (PART 6, TITLE 24): 2022
- 7. CALIFORNIA FIRE CODE (PART 9, TITLE 24): 2021 IFC WITH 2022 CA AMENDMENTS
- 8. CALIFORNIA EXISTING BUILDING CODE (PART 10, TITLE 24): (2021 INTERNATIONAL EXISTING BUILDING CODE WITH 2022 CA AMENDMENTS) 9. CALIFORNIA GREEN BUILDING STANDARDS CODE OR CAL GREEN (PART 11, TITLE 24): 2022
- 10. CALIFORNIA REFERENCED STANDARDS CODE (PART 12, TITLE 24): 2022 11. CALIFORNIA CODE OF REGULATIONS PUBLIC SAFETY (TITLE 19), STATE FIRE MARSHAL: CURRENT EDITION
- AMERICANS WITH DISABILITIES ACT (A.D.A.) FEDERAL ACCESSIBILITY STANDARDS
- FOR A COMPLETE LIST OF APPLICABLE NFPA STANDARDS REFER TO 2022 CBC (SFM) CHAPTER 35 AND CALIFORNIA FIRE CODE CHAPTER 80. SEE CALIFORNIA BUILDING CODE CHAPTER 35 FOR STATE OF CALIFORNIA AMENDMENTS TO THE NFPA

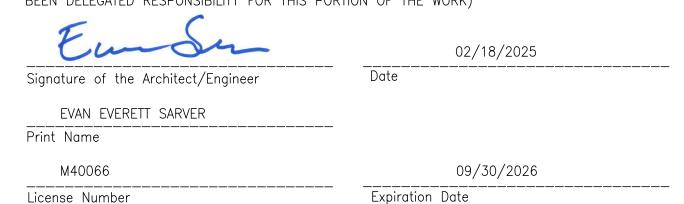
DEFERRED APPROVAL

NONE

STATEMENT OF GENERAL CONFORMANCE

THESE DRAWINGS AND/OR SPECIFICATIONS AND/OR CALCULATIONS FOR THE ITEMS LISTED BELOW 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 DESIGN INTENT AND HAVE BEEN FOUND TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE-24. CALIFORNIA CODE OF REGULATIONS AND THE PROJECT SPECIFICATIONS

THE LIST DRAWING INDEX HAVE BEEN COORDINATED WITH MY PLANS AND SPECIFICATIONS AND ARE ACCEPTABLE FOR INCORPORATION INTO THE CONSTRUCTION OF THIS PROJECT FOR WHICH I AM THE INDIVIDUAL DESIGNATED TO BE IN GENERAL RESPONSIBLE CHARGE (OR FOR WHICH I HAVE BEEN DELEGATED RESPONSIBILITY FOR THIS PORTION OF THE WORK)



SPECIAL REQUIREMENTS FOR TRENCHING, **EXCAVATION, & BACKFILL**

- EXISTING UTILITIES SHALL BE LOCATED BY CONTRACTOR THROUGH THE CONTRACTOR PROVIDED UTILITY LOCATING SERVICE SUBCONTRACTOR. UTILITIES SHALL BE CLEARLY MARKED WITH NON-PERMANENT PAINT WITH DEPTH ESTIMATES PROVIDED BY THE LOCATING SUBCONTRACTOR.
- CONTRACTOR SHALL POTHOLE A MINIMUM OF 10' IN ADVANCE OF ANY TRENCHING OR EXCAVATING OPERATIONS. POTHOLING SHALL LOCATE AND EXPOSE ANY AND ALL UTILITIES IN THE PATH OF TRENCHING OR EXCAVATING ACTIVITIES. POTHOLING SHALL BE BY VACUUM EXCAVATING EQUIPMENT OR HAND DIGGING. ALL UTILITIES ENCOUNTERED SHALL BE CLEARLY MARKED. AND HAND EXCAVATED TO PREVENT DAMAGE.
- ALL UTILITIES LOCATED, WHETHER OR NOT SHOWN ON CONTRACT DRAWINGS ARE TO BE MARKED ON THE PROJECT RECORD DRAWINGS, AS TO SIZE AND SERVICE, WITH EITHER A REFERENCE TO STATION NUMBER OR REFERENCE TO PERMANENT SURFACE FEATURES, AND ELEVATIONS NOTED (REFERENCED TO SEA LEVEL). REGARDLESS OF OTHER REQUIREMENTS (OR LACK THEREOF) FOR AS-BUILT DRAWINGS, CONTRACTOR SHALL PROVIDE AS-BUILT, ELECTRONIC DOCUMENTATION OF ALL UTILITIES CROSSED OR EXPOSED, INDICATING LOCATION, SIZE, SERVICE AND ELEVATION, WHETHER SHOWN ON CONTRACT DOCUMENTS OR NOT.
- ANY AND ALL REI'S OR CLARIFICATIONS RELATED TO UNDERGROUND INTERFERENCES FOR ANY TRENCHING OR EXCAVATION ACTIVITIES SHALL INCLUDE ALL INFORMATION RELATING TO SIZE, SERVICE, LOCATION AND ELEVATION OF SUBJECT UNDERGROUND OBSTRUCTION, AND A PROPOSED SOLUTION.
- THE COLLEGE AND CONTRACTOR ACKNOWLEDGE THAT THAT DURING THE COURSE OF EXCAVATION, IRRIGATION PIPING WILL LIKELY BE ACCIDENTALLY CUT OR IN SOME WAY BROKEN SEVERAL TIMES AND/OR IN SEVERAL PLACES. CONTRACTOR SHALL INCLUDE IN BASE BID MONIES TO ACCOMMODATE MATERIAL AND LABOR TO REPAIR THE IRRIGATION PIPING - ASSUME 1 BREAK PER 10 FEET OF TRENCH AT EACH TRENCH LOCATION. THIS INCLUDES:
- A. IMMEDIATELY CAPPING BROKEN SECTION OF PIPE (WHETHER ACTIVE OR INACTIVE) AND IMMEDIATELY
- NOTIFYING THE COLLEGE OF THE IRRIGATION PIPING INCIDENT. B. CUTTING AND REPLACEMENT OF DAMAGED IRRIGATION PIPE.
- C. REPAIR OF CONTROL WIRING.
- D. REPAIR AND REPLACEMENT OF CONTROL VALVES.
- E. PUMPING OF EXCESS WATER OR ANY POOLED WATER INTO THE NEAREST STORM DRAIN.
- F. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INVENTORY AND ITEMIZE IRRIGATION PIPING REPAIRS THAT OCCUR WITHIN TWO WEEKS OF OCCURRENCE.
- G. IN THE EVENT THAT WATER IS ALLOWED TO FLOW UNCHECKED FROM A BROKEN OR RUPTURED LINE FOR GREATER THAN 15 MINUTES, THE DISTRICT SHALL HAVE THE RIGHT TO HAVE THE LINE REPAIRED AND THE CONTRACTOR SHALL BE BILLED FOR THE REPAIR WORK.
- PROVIDE LABOR, MATERIAL, EQUIPMENT AND SERVICES NECESSARY TO COMPLETE THE TRENCHING, BACKFILLING AND COMPACTING NECESSARY FOR THIS PROJECT. COMPLY WITH DISTRICT STANDARDS. SECTION 31 23 33 -TRENCHING, BACKFILLING AND COMPACTING. THE RELATIVE COMPACTION OF TAMPED BEDDING MATERIAL SHALL BE NOT LESS THAN 90%. THE RELATIVE COMPACTION OF THE INITIAL BACKFILL SHALL BE NOT LESS THAN 90%. THE RELATIVE COMPACTION OF BACKFILL SHALL NOT BE LESS THAN 95% WITHIN 2-1/2 FEET OF FINISHED PERMANENT SURFACE GRADE OR 1-1/2 FEET BELOW THE FINISHED SUBGRADE. WHICHEVER IS
- A GEOTECHNICAL TESTING AGENCY (BY DISTRICT) SHALL BE RESPONSIBLE FOR COMPACTION TESTING. MOISTURE CONTENT TESTING, AND FOR QUALITY CONTROL TESTING DURING THE FILL OPERATIONS. TEST RESULTS SHALL BE SUBMITTED TO THE PROJECT MANAGER. GEOTECHNICAL AGENCY SHALL REVIEW FILL MATERIALS WITH RESPECT TO COMPLIANCE OF DISTRICT STANDARDS.
- COORDINATE WITH DISTRICT FOR LOCATION OF NATIVE SOILS, AND LAYDOWN AREAS FOR MATERIALS. CONTRACTOR SHALL OFF-HAUL SPOILS.
- . COORDINATE ALL CLOSURES & PATHWAY OBSTRUCTIONS OR BLOCKAGES WITH DISTRICT PRIOR TO PROCEEDING WITH WORK. ALL DISRUPTION TO CAMPUS ACTIVITIES SHALL BE COORDINATED WITH DISTRICT.

DSA ADMINISTRATIVE REQUIREMENT

1. DSA HAS DETERMINED THAT THIS PROJECT IS EXEMPT FROM DSA REVIEW BASED ON IR A-22, APPENDIX ITEM 39 (IN-KIND REPLACEMENT OF WATER PIPING). THIS PROJECT IS CONSIDERED MAINTENANCE WORK.

DRAWING INDEX (6 Sheets)

DESCRIPTION G-0.0 COVER SHEET

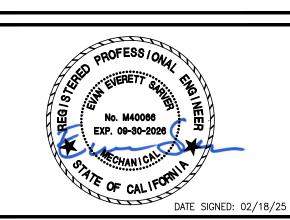
- M-0.1 MECHANICAL SYMBOLS & ABBREVIATIONS
- M-1.1 MECHANICAL SITE PLAN
- M-4.1 MECHANICAL ENLARGED SITE PLAN BUILDING 300 VAULT M-4.2 MECHANICAL ENLARGED SITE PLAN BUILDING 1200 VAULT
- M-5.1 MECHANICAL DETAILS

Salas

Engineered for Impact 305 South 11th Street San Jose, California 95112-2218 877.725.2755 | 877.925.1477 (f)

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National **Strength.** Local **Action.**



SOLANO COMMUNITY **COLLEGE DISTRICT**



COMMUNITY COLLEGE 4000 SUISUN VALLEY RD FAIRFIELD, CA 94534

BUILDING 300 & 1200 VAULT REPAIR

	MAR	(n	DATE	DESCRIPTION
			02/06/25	PROGRESS SET
			02/18/25	100% CD
			02/24/25	BID SET
I				

OBE PROJECT NO: 2510-0006 02/24/25 DRAWN BY: CHECKED BY: APPROVED BY:

SHEET TITLE **COVER SHEET**

THIS DRAWING IS 30" X 42" AT FULL SIZ

SHEET

G-0.0

		SYMBOLS				ABBREVIAT	IONS			
Ī		GENERAL	© AAV	AT AUTOMATIC AIR VENT	<f></f>	FUTURE FAHRENHEIT	P&ID PIV	PROCESS & INSTRUMENTATION DIAGRAM POST INDICATING VALVE	WC WP	WATER COLUMN WEATHER PROOF
	-	EXTENT OF DEMOLITION	ABD	ABANDONED	FA	FACE AREA	PLY or PLYWD	PLYWOOD	WPD	WATER PRESSURE
		NEW TO EXISTING CONNECTION	AC ACC	AIR CONDITIONING UNIT DESIGNATION AIR COOLED CONDENSER	FAF FC	FORCED AIR FURNACE FLEXIBLE CONNECTION	PM	POWER METER	WPS	DROP (FT WATER) WELDING PROCEDURE
	<u>/1</u> ①	REVISION NUMBER WORK ITEM (MECHANICAL)	ACM	ASBESTOS CONTAINING MATERIAL	FCO	FLOOR CLEAN OUT	POC PRS	POINT OF CONNECTION PRESSURE REDUCING STATION	WIS	SPECIFICATIONS
		DETAIL DETAIL NUMBER	ACP AD	ASBESTOS CEMENT PIPE ACCESS DOOR	FCU	FAN COIL UNIT	PRV	PRESSURE REDUCING VALVE	WT XFMR	WEIGHT TRANSFORMER
	$\frac{1}{M-5.1}$	DESIGNATION DRAWING NUMBER (IF BLANK, SAME SHEET)	AFF	ABOVE FINISHED FLOOR	FD FDC	FIRE DAMPER FIRE DEPARTMENTCONNECTION	PS PSI(G)	PRESSURE SWITCH POUNDS PER SQUARE INCH (GAUGE)	XMTR	TRANSMITTER
	CT 1	EQUIPMENT TYPE DESIGNATION • EQUIPMENT NUMBER	AH	AIR HANDLER	FDD	FLUE DISCHARGE DEFLECTOR	PS-N	PIPE SUPPORT DESIGNATION		
		SECTION NUMBER	AHU AHUC	AIR HANDLING UNIT AIR HANDLING UNIT CONTROLLER	FHC FLA	FIRE HOSE CABINET FULL LOAD AMPS	PTDF PVC	PRESSURE TREATED DOUGLAS FIR POLYVINYL CHLORIDE		
	1 M-5.1	DESIGNATION DRAWING NUMBER	Al	ANALOG INPUT	FLEX	FLEXIBLE	PW	POOL WATER		
		TO BE DEMOLISHED <pre></pre>	ALM ALT	ALARM ALTERNATE	FLR FM	FLOOR FLOW METER	R <re></re>	RELAY REMOVE EXISTING		
	****	TO BE DEMOLISHED (++++++++++++++++++++++++++++++++++++	ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	FMS	FACILITY MONITORING SYSTEM	<rr></rr>	REMOVE/RELOCATE		
		PIPNG ARROW INDICATES DIRECTION OF FLOW	AO APD	ANALOG OUTPUT AIR PRESSURE DROP (IN.W.G.)	FO(R)(S) FOV	FUEL OIL (RETURN)(SUPPLY) FUEL OIL VENT	<rrn> RA</rrn>	REMOVE & REPLACE WITH <n> RETURN AIR</n>		
		EXISTING PIPING (ABOVE GRADE OR FLOOR)	ARCH	ARCHITECTURAL	FPF	FINS PER FOOT	RAD	RETURN AIR DUCT		
		EXISTING PIPING (BELOW GRADE OR FLOOR)	AS ASJ	AIR SEPARATOR ALL SERVICE JACKET	FRP FPS	FIBER REINFORCED POLYMER FEET PER SECOND	RAG RA(T)	RETURN AIR GRILLE RETURN AIR (TEMPERATURE)		
		NEW PIPING (ABOVE GRADE OR FLOOR)	ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS	FS	FLOW SWITCH	RD	ROOF DRAIN		
		NEW PIPING (BELOW GRADE OR FLOOR)	ASME ASSY	ASME BOILER & PRESSURE VESSEL CODE ASSEMBLY	FSD FT	COMBINATION FIRE AND SMOKE DAMPER FLOW TRANSMITTER or FEET	REQ'D RF	REQUIRED RETURN AIR FAN		
		PIPE TO BE REMOVED (ABOVE GRADE OR FLOOR)	ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS	0		RFG	REFRIGERANT		
	* * * * * * -	PIPE TO BE REMOVED (BELOW GRADE OR FLOOR)	AWS AWWA	AMERICAN WELDING SOCIETY AMERICAN WATER WORKS ASSOCIATION	G GA	GAS GAUGE	RFI RH	REQUEST FOR INFORMATION RELATIVE HUMIDITY		
	0	PIPING SPECIALTIES	OWWA		GAL	GALLONS	RHC	REHEAT COIL		
	AAV	AUTOMATIC AIR VENT	BAS B	BOILER BUILDING AUTOMATION SYSTEM	GALV GF	GALVANIZED GAS FURNACE	RIM RIP	RIM ELEVATION RETIRED—IN—PLACE		
	— ∳ MAV	MANUAL AIR VENT	BAV	BALANCING VALVE	GPM	GALLONS PER MINUTE	RLA	RATED LOAD AMPS		
	<u> </u>	AIR SEPARATOR	BDD BFP	BACKDRAFT DAMPERS BACKFLOW PREVENTER	GSM GV	GALVANIZED SHEET METAL GATE VALVE	RO RPM	REVERSE OSMOSIS REVOLUTIONS PER MINUTE		
		ALIGNMENT GUIDE	BFV	BUTTERFLY VALVE	H	HUMIDIFIER	RV	RELIEF VALVE		
	——————————————————————————————————————	ANCHOR BACK FLOW RREVENTER	BG BHP	BELOW GRADE BRAKE HORSEPOWER	н HB	HUMIDIFIER HOSE BIBB	RW RWL	RECLAIMED WATER RAIN WATER LEADER		
		BACK FLOW PREVENTER BALL JOINT	BLDG	BUILDING	HC HDPE	HEATING COIL HIGH—DENSITY POLYETHYLENE PIPE	SAD	SUPPLY AIR DUCT		
		DIRT POCKET	BOD BOP	BOTTOM OF DUCT BOTTOM OF PIPE	HDPE	HEADER	S.A.D.	SUPPLY AIR DUCT SEE ARCHITECTURAL DRAWINGS		
	EJ−1		BTU	BRITISH THERMAL UNIT	HGR	HANGER	SAG	SUPPLY AIR GRILLE		
	<u>н</u> Х г	EXPANSION LOOP	BTUH BUR	BRITISH THERMAL UNIT PER HOUR BUILT-UP ROOFING	HHW(R)(S)(P)(T)	HEATING HOT WATER (RETURN)(SUPPLY)(PUMP) (TEMPERATURE)	SA(T) SCBA	SUPPLY AIR (TEMPERATURE) SELF—CONTAINED BREATHING APPARATUS		
	——————————————————————————————————————	FLEXIBLE CONNECTOR	BV	BALL VALVE	HP HPCR	HORSE POWER HIGH PRESSURE CONDENSATE RETURN	S.C.D.	SEE CIVIL DRAWINGS		
	-	FILTER DRYER	Ę.	CENTERLINE	HPS	HIGH PRESSURE STEAM	SCH. SCHW(R)(S)(T)	SCHEDULE SECONDARY CHW (RETURN)(SUPPLY)(TEMPERATURE)		
		FLOWMETER	CA	COMPRESSED AIR	HT	HEIGHT	SCHWP	SECONDARY CHW PUMP		
		HOSE CONNECTOR	CC, C/C CD	COOLING COIL CONDENSATE DRAIN	HVAC HWP	HEATING VENTILATING AND AIR CONDITIONING HOT WATER PUMP	SD SDCO	STORM DRAIN STORM DRAIN CLEAN—OUT		
	HB ¹ M	HOSE BIBB METER	CFF	CAP FOR FUTURE	HX	HEAT EXCHANGER	SDR	STANDARD DIMENSIONAL RATIO		
		POT FEEDER	CFM or ∲ CFT	CUBIC FEET PER MINUTE CHEMICAL FEED TANK	HZ	HERTZ; CYCLES PER SECOND	S.E.D. SEER	SEE ELECTRICAL DRAWINGS SEASONAL ENERGY EFFICIENCY RATIO		
	A		CHCP	CHILLER CONTROL PANEL	IA ICW	INSTRUMENT AIR INDUSTRIAL COLD WATER	SENS	SENSIBLE		
	(PI)	PRESSURE GAUGE AND COCK	CHW(R)(S)(T) CL	CHILLED WATER (RETURN)(SUPPLY)(TEMP) CENTER LINE	ID	INSIDE DIAMETER	SF	SUPPLY FAN		
	$-\bigcirc_{2} \bigcirc_{1}$	PUMP	CLG	CEILING	IE IN.	INVERT ELEVATION INCH	SHHW(R)(S)(T)	SECONDARY HEATING HOT WATER (RETURN)(SUPPLY) (TEMPERATURE)		
	-	STRAINER	CLR CO	CENTERLINE RADIUS CLEAN—OUT	IN.W.G.	INCHES WATER GAGE (PRESSURE)	SIM. S.L.D.	SIMILAR SEE LANDSCAPE DRAWINGS		
		STRAINER, W/BLOW OFF	COL	COLUMN	IRL	IRRIGATION LINE	SM	SHEET METAL		
		TEST PORT (PETE'S PLUG)	CONC	CONCRETE	KW	KILOWATT	SMD SMH	SMOKE DAMPER STEAM MANHOLE		
		THERMOMETER	CONN CONT	CONNECT OR CONNECTION CONTINUATION	LAT	LEAVING AIR TEMPERATURE	SOVL	SOLENOID VALVE		
		THERMOMETER, WELL	CONTR.	CONTRACTOR	LBS LPS	POUNDS LOW PRESSURE STEAM	SP SPD	STATIC PRESSURE SUMP PUMP DISCHARGE		
	ST	STEAM TRAP SUCTION DIFFUSER	CP CR	CONTROL PANEL CONDENSATE RETURN	LWCO	LOW WATER CUT OFF	S.P.D.	SEE PLUMBING DRAWINGS		
	<u>→</u> →	SOCHON BILLOSEN	CRAC	COMPUTER ROOM AIR CONDITIONER	LWT	LEAVING WATER TEMPERATURE	SPECS SRV	SPECIFICATIONS SAFETY RELIEF VALVE		
	l	<u>VALVES</u>	CT CTL	COOLING TOWER CONTROL	MA(T) MAV	MIXED AIR (TEMPERATURE) MANUAL AIR VENT	SS	SANITARY SEWER OR STAINLESS STEEL		
	——————————————————————————————————————	BALL	CU	COPPER	MAX	MAXIMUM	S/S S.S.D.	START/STOP SEE STRUCTURAL DRAWINGS		
		BUTTERFLY	CV CW	CONTROL VALVE CITY WATER	MBH MCA	1,000 BTU PER HOUR MINIMUM CIRCUIT AMPACITY	SST	STAINLESS STEEL		
		GATE ANOLE	CWP	CONDENSER WATER PUMP	MCC	MOTOR CONTROL CENTER	ST	SOUND TRAP		
		GATE, ANGLE GLOBE	CW(R)(S)(T)	CONDENSER WATER (RETURN)(SUPPLY)(TEMPERATURE)	MD MECH	MANUAL VOLUME DAMPER MECHANICAL	STD STM	STANDARD STEAM		
		GLOBE, ANGLE	DA	DRAIN DEAERATOR	MFR	MANUFACTURER	STRUCT	STRUCTURAL		
		THREE WAY	DB	DRY BULB	MH MIN	MANHOLE MINIMUM	STS SW	STATUS SWITCH		
	ı		DCW DDC	DOMESTIC CITY WATER DIRECT DIGITAL CONTROL	MMBTUH	MILLIONS BTU PER HOUR	SWPS	STANDARD WELDING PROCEDURE SPECIFICATIONS		
		CONTROL	DHW(R)	DOMESTIC HOT WATER (RETURN)	MOCP	MAXIMUM OVER CURRENT PROTECTION	SXR	SQUARE TO ROUND TRANSITION		
		IN PIT	DI DIA	DISCRETE INPUT DIAMETER	MOT MPG	MOTORIZED MEDIUM PRESSURE GAS	T TBA	THERMOSTAT OR TEMPERATURE SENSOR (DDC) TO BE ABANDONED		
		VALVES, SPECIAL DUTY	DISC	DISCONNECT	MR	MECHANICAL ROOM	TBR	TO BE REMOVED		
		CHECK, SWING GATE	DN DO	DOWN DISCRETE OUTPUT	MT, MTD, MTG MU	MOUNT, MOUNTED, MOUNTING MAKE-UP	TCHW(R)(S)(T) TCHWP	TERTIARY CHW (RETURN)(SUPPLY)(TEMPERATURE) TERTIARY CHW PUMP		
	→ ▼	CIRCUIT SETTER	DP	DIFFERENTIAL PRESSURE	<n></n>	NEW	TCP	TEMPERATURE CONTROL PANEL		
	——————————————————————————————————————	NEEDLE	DPS DPT	DIFFERENTIAL PRESSURE SWITCH DIFFERENTIAL PRESSURE TRANSDUCER	N.C.	NORMALLY CLOSED	TDH TDV	TOTAL DYNAMIC HEAD TRIPLE DUTY VALVE		
		PRESSURE REDUCING (NUMBER & SPECIFY)	DSA	DIVISION OF THE STATE ARCHITECT	NFPA NIC	NATIONAL FIRE PROTECTION ASSOCIATION NOT IN CONTRACT	TEMP	TEMPERATURE OR TEMPORARY		
	PRV-1		DWDI DWG	DOUBLE WIDTH, DOUBLE INLET DRAWING	NOX	NITROGEN OXIDE	TG	TRANSFER AIR GRILLE		
	1	PRESSURE REGULATOR RELIEF (R) OR SAFETY (S)	DWH	DOMESTIC WATER HEATER	N.O. NPSH(R)	NORMALLY OPEN NET POSITIVE SUCTION HEAD (REQUIRED)	T&G TH	TONGUE & GROOVE THERMOMETER		
	Ť	RELIEF (R) OR SAFETT (S)	DX	DIRECT EXPANSION	N.T.S.	NOT TO SCALE	TI	TEMPERATURE INDICATOR		
		SEISMIC VALVE	<e></e>	EXISTING	OA(G)	OUTSIDE AIR (GRILLE)	TOD TP	TOP OF DUCT TEST PLUG (PETE'S PLUG)		
	——MUA	MAKE UP WATER ASSEMBLY	EA(T) EAD	EXHAUST AIR (TEMPERATURE) EXHAUST AIR DUCT	OA(T)	OUTSIDE AIR (TEMPERATURE)	TR	THROUGH ROOF		
		BACK PRESSURE	EAT	ENTERING AIR TEMPERATURE	OAD OAI	OUTSIDE AIR DAMPER OUTSIDE AIR INTAKE	TRANS TS	TRANSITION TEMPERATURE SENSOR		
	—— \forall	PLUG VALVE	EER EF	ENERGY EFFICIENCY RATIO EXHAUST FAN	OBD	OPPOSED BLADE DAMPER	TSP	TOTAL STATIC PRESSURE (IN.W.G.)		
		TRIPLE DUTY VALVE (STOP CHECK &	EJ	EXPANSION JOINT	O.C. OD	ON CENTER OUTSIDE DIMENSION or OUTSIDE DIAMETER	TYP UH	TYPICAL UNIT HEATER		
		BALANCE W/PRESSURE TAPS)	EL ELEV	EXPANSION LOOP ELEVATION	OS&Y	OUTSIDE STEM & YOKE GATE VALVE	UH U.O.N.	UNIT HEATER UNLESS OTHERWISE NOTED		
	BFP	REDUCED PRESSURE BACKFLOW PREVENTER	ELEC	ELECTRICAL	OSHA OV	OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION OUTLET VELOCITY	V OR VT	VENT VACIJIM		
		FLOW CONTROL	EMCS FMS	ENERGY MANAGEMENT & CONTROL SYSTEM ENERGY MANAGEMENT SYSTEM	OX	OXYGEN	VAC VAV	VACUUM VARIABLE AIR VOLUME		
		AIR CONDITIONING	EMS EOD	EXTENT OF DEMOLITION	OWS P	OPERATOR'S WORK STATION PLATE	VB	VACCUM BREAKER		
		CONDENSER WATER (RETURN)(SUPPLY)	E/P	ELECTRO/PNEUMATIC TRANSDUCER	'L P	PLATE PUMP	VFD VSD	VARIABLE FREQUENCY DRIVE VARIABLE SPEED DRIVE		
	——CHW(R)(S)——	CHILLED WATER (RETURN)(SUPPLY)	EPDM EQ	ETHYLENE PROPYLENE DIENE MONOMER EQUAL	PCHW(R)(S)(T)	PRIMARY CHILLED WATER (RETURN)(SUPPLY) (TEMPERATURE)	VI	VIBRATION ISOLATOR		
		DRAIN	EQUIP.	EQUIPMENT	PCHWP	PRIMARY CHILLED WATER PUMP	V.I.F. VR	VERIFY IN FIELD VENT RISER		
	D			ELECTRIC RESISTANCE WELDED	DOD	PUMPED CONDENSATE RETURN				
	——HC(R)(S)——	HOT/CHILLED WATER (RETURN)(SUPPLY)	ERW ESP	EXTERNAL STATIC PRESSURE (IN.W.G.)	PCR PD		VT	VENT		
	——HC(R)(S)—— ——PCHW(R)(S)——	PRIMARY CHILLED WATER (RETURN)(SUPPLY)	ESP ET	EXTERNAL STATIC PRESSURE (IN.W.G.) EXPANSION TANK	PD PE	PRESSURE DROP PNEUMATIC TO ELECTRIC RELAY	VT VTR W	VENT THROUGH ROOF		
	——HC(R)(S)——		ESP	EXTERNAL STATIC PRESSURE (IN.W.G.)	PD	PRESSURE DROP	• 1			

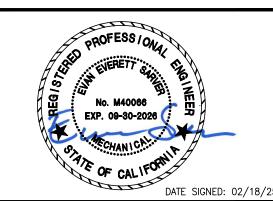


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SOLANO COMMUNITY COLLEGE

4000 SUISUN VALLEY RD FAIRFIELD, CA 94534

BUILDING 300 & 1200 VAULT REPAIR

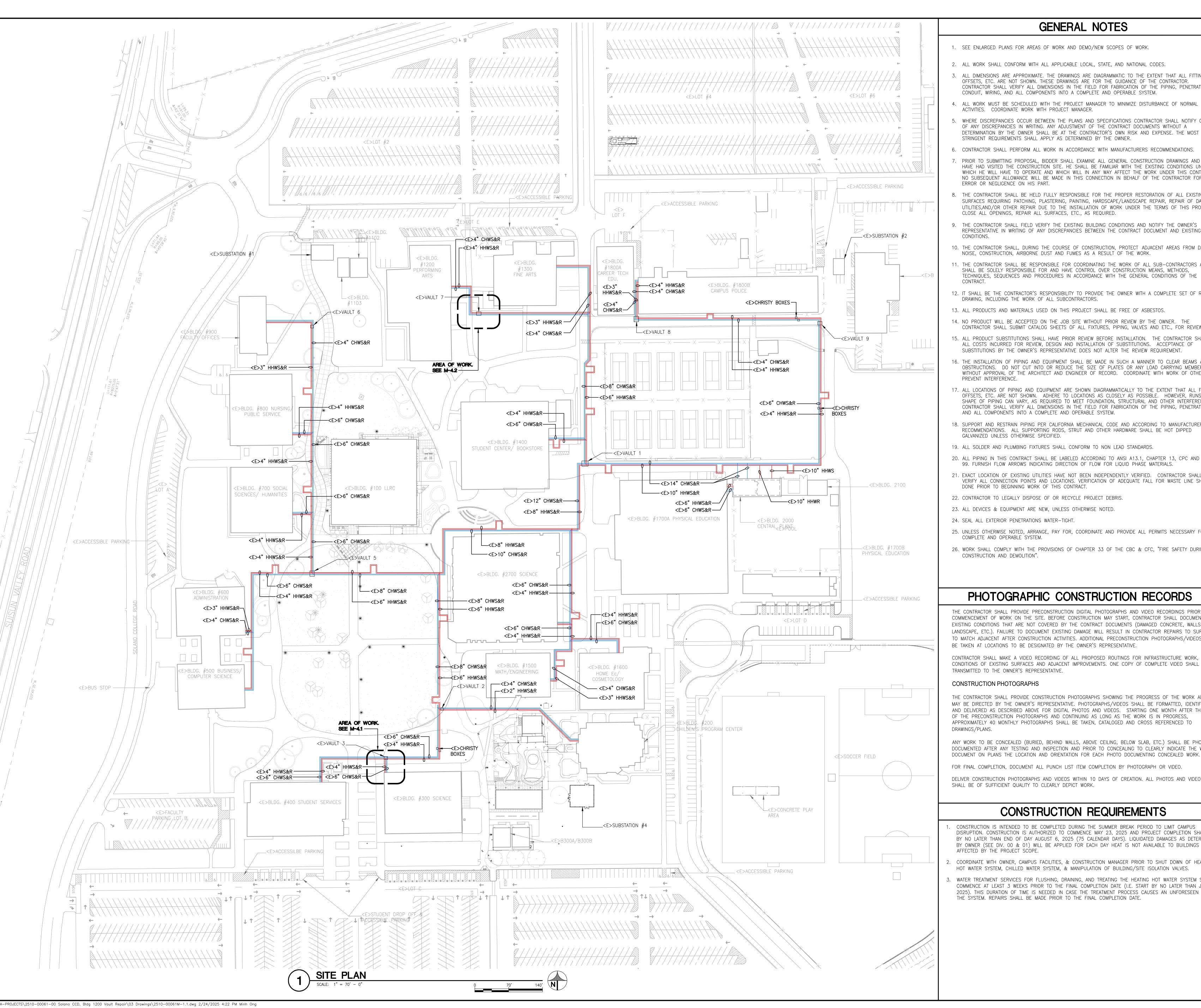
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MARK	DATE	DESCRIPTION
	02/06/25	PROGRESS SET
	02/18/25	100% CD
	02/24/25	BID SET
·		

SOBE PROJECT NO:	2510-00061
DATE:	02/24/25
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

SHEET	TITLE					
MECHA SYMB(L & ABB	REVIA	TION	S	
SCALE:					AS	NOTE

THIS DRAWING IS 30" X 42" AT FULL SIZ

M-0.1



GENERAL NOTES

- 1. SEE ENLARGED PLANS FOR AREAS OF WORK AND DEMO/NEW SCOPES OF WORK.
- 2. ALL WORK SHALL CONFORM WITH ALL APPLICABLE LOCAL, STATE, AND NATIONAL CODES.
- 3. ALL DIMENSIONS ARE APPROXIMATE. THE DRAWINGS ARE DIAGRAMMATIC TO THE EXTENT THAT ALL FITTINGS, OFFSETS, ETC. ARE NOT SHOWN. THESE DRAWINGS ARE FOR THE GUIDANCE OF THE CONTRACTOR. CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD FOR FABRICATION OF THE PIPING, PENETRATIONS,
- 4. ALL WORK MUST BE SCHEDULED WITH THE PROJECT MANAGER TO MINIMIZE DISTURBANCE OF NORMAL ACTIVITIES. COORDINATE WORK WITH PROJECT MANAGER.
- WHERE DISCREPANCIES OCCUR BETWEEN THE PLANS AND SPECIFICATIONS CONTRACTOR SHALL NOTIFY OWNER OF ANY DISCREPANCIES IN WRITING. ANY ADJUSTMENT OF THE CONTRACT DOCUMENTS WITHOUT A DETERMINATION BY THE OWNER SHALL BE AT THE CONTRACTOR'S OWN RISK AND EXPENSE. THE MOST
- 6. CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
- 7. PRIOR TO SUBMITTING PROPOSAL, BIDDER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND SHALL HAVE HAD VISITED THE CONSTRUCTION SITE. HE SHALL BE FAMILIAR WITH THE EXISTING CONDITIONS UNDER WHICH HE WILL HAVE TO OPERATE AND WHICH WILL IN ANY WAY AFFECT THE WORK UNDER THIS CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION IN BEHALF OF THE CONTRACTOR FOR ANY
- 8. THE CONTRACTOR SHALL BE HELD FULLY RESPONSIBLE FOR THE PROPER RESTORATION OF ALL EXISTING SURFACES REQUIRING PATCHING, PLASTERING, PAINTING, HARDSCAPE/LANDSCAPE REPAIR, REPAIR OF DAMAGED UTILITIES, AND/OR OTHER REPAIR DUE TO THE INSTALLATION OF WORK UNDER THE TERMS OF THIS PROJECT. CLOSE ALL OPENINGS, REPAIR ALL SURFACES, ETC., AS REQUIRED.
- 9. THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING BUILDING CONDITIONS AND NOTIFY THE OWNER'S REPRESENTATIVE IN WRITING OF ANY DISCREPANCIES BETWEEN THE CONTRACT DOCUMENT AND EXISTING
- 10. THE CONTRACTOR SHALL, DURING THE COURSE OF CONSTRUCTION, PROTECT ADJACENT AREAS FROM DAMAGE. NOISE, CONSTRUCTION, AIRBORNE DUST AND FUMES AS A RESULT OF THE WORK.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL SUB-CONTRACTORS AND SHALL BE SOLELY RESPONSIBLE FOR AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES IN ACCORDANCE WITH THE GENERAL CONDITIONS OF THE
- 12. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE OWNER WITH A COMPLETE SET OF RECORD DRAWING, INCLUDING THE WORK OF ALL SUBCONTRACTORS.
- 13. ALL PRODUCTS AND MATERIALS USED ON THIS PROJECT SHALL BE FREE OF ASBESTOS.
- 14. NO PRODUCT WILL BE ACCEPTED ON THE JOB SITE WITHOUT PRIOR REVIEW BY THE OWNER. THE CONTRACTOR SHALL SUBMIT CATALOG SHEETS OF ALL FIXTURES, PIPING, VALVES AND ETC., FOR REVIEW.
- 15. ALL PRODUCT SUBSTITUTIONS SHALL HAVE PRIOR REVIEW BEFORE INSTALLATION. THE CONTRACTOR SHALL PAY ALL COSTS INCURRED FOR REVIEW, DESIGN AND INSTALLATION OF SUBSTITUTIONS. ACCEPTANCE OF
- 16. THE INSTALLATION OF PIPING AND EQUIPMENT SHALL BE MADE IN SUCH A MANNER TO CLEAR BEAMS AND OBSTRUCTIONS. DO NOT CUT INTO OR REDUCE THE SIZE OF PLATES OR ANY LOAD CARRYING MEMBERS WITHOUT APPROVAL OF THE ARCHITECT AND ENGINEER OF RECORD. COORDINATE WITH WORK OF OTHERS TO
- 17. ALL LOCATIONS OF PIPING AND EQUIPMENT ARE SHOWN DIAGRAMMATICALLY TO THE EXTENT THAT ALL FITTINGS, OFFSETS, ETC. ARE NOT SHOWN. ADHERE TO LOCATIONS AS CLOSELY AS POSSIBLE. HOWEVER, RUNS OR SHAPE OF PIPING CAN VARY, AS REQUIRED TO MEET FOUNDATION, STRUCTURAL AND OTHER INTERFERENCES. CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD FOR FABRICATION OF THE PIPING, PENETRATIONS AND ALL COMPONENTS INTO A COMPLETE AND OPERABLE SYSTEM.
- 18. SUPPORT AND RESTRAIN PIPING PER CALIFORNIA MECHANICAL CODE AND ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. ALL SUPPORTING RODS, STRUT AND OTHER HARDWARE SHALL BE HOT DIPPED
- 19. ALL SOLDER AND PLUMBING FIXTURES SHALL CONFORM TO NON LEAD STANDARDS.
- 20. ALL PIPING IN THIS CONTRACT SHALL BE LABELED ACCORDING TO ANSI A13.1, CHAPTER 13, CPC AND NFPA 99. FURNISH FLOW ARROWS INDICATING DIRECTION OF FLOW FOR LIQUID PHASE MATERIALS.
- 21. EXACT LOCATION OF EXISTING UTILITIES HAVE NOT BEEN INDEPENDENTLY VERIFIED. CONTRACTOR SHALL FIELD VERIFY ALL CONNECTION POINTS AND LOCATIONS. VERIFICATION OF ADEQUATE FALL FOR WASTE LINE SHALL BE DONE PRIOR TO BEGINNING WORK OF THIS CONTRACT.
- 22. CONTRACTOR TO LEGALLY DISPOSE OF OR RECYCLE PROJECT DEBRIS
- 23. ALL DEVICES & EQUIPMENT ARE NEW, UNLESS OTHERWISE NOTED
- 24. SEAL ALL EXTERIOR PENETRATIONS WATER-TIGHT.
- 25. UNLESS OTHERWISE NOTED, ARRANGE, PAY FOR, COORDINATE AND PROVIDE ALL PERMITS NECESSARY FOR A COMPLETE AND OPERABLE SYSTEM.
- 26. WORK SHALL COMPLY WITH THE PROVISIONS OF CHAPTER 33 OF THE CBC & CFC, "FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION".

PHOTOGRAPHIC CONSTRUCTION RECORDS

THE CONTRACTOR SHALL PROVIDE PRECONSTRUCTION DIGITAL PHOTOGRAPHS AND VIDEO RECORDINGS PRIOR TO COMMENCEMENT OF WORK ON THE SITE. BEFORE CONSTRUCTION MAY START, CONTRACTOR SHALL DOCUMENT ANY EXISTING CONDITIONS THAT ARE NOT COVERED BY THE CONTRACT DOCUMENTS (DAMAGED CONCRETE, WALLS, LANDSCAPE, ETC.). FAILURE TO DOCUMENT EXISTING DAMAGE WILL RESULT IN CONTRACTOR REPAIRS TO SURFACE TO MATCH ADJACENT AFTER CONSTRUCTION ACTIVITIES. ADDITIONAL PRECONSTRUCTION PHOTOGRAPHS/VIDEOS SHALL BE TAKEN AT LOCATIONS TO BE DESIGNATED BY THE OWNER'S REPRESENTATIVE.

CONTRACTOR SHALL MAKE A VIDEO RECORDING OF ALL PROPOSED ROUTINGS FOR INFRASTRUCTURE WORK, NOTING CONDITIONS OF EXISTING SURFACES AND ADJACENT IMPROVEMENTS. ONE COPY OF COMPLETE VIDEO SHALL BE

CONSTRUCTION PHOTOGRAPHS

THE CONTRACTOR SHALL PROVIDE CONSTRUCTION PHOTOGRAPHS SHOWING THE PROGRESS OF THE WORK AND AS MAY BE DIRECTED BY THE OWNER'S REPRESENTATIVE. PHOTOGRAPHS/VIDEOS SHALL BE FORMATTED, IDENTIFIED, AND DELIVERED AS DESCRIBED ABOVE FOR DIGITAL PHOTOS AND VIDEOS. STARTING ONE MONTH AFTER THE DATE OF THE PRECONSTRUCTION PHOTOGRAPHS AND CONTINUING AS LONG AS THE WORK IS IN PROGRESS, APPROXIMATELY 40 MONTHLY PHOTOGRAPHS SHALL BE TAKEN, CATALOGED AND CROSS REFERENCED TO

ANY WORK TO BE CONCEALED (BURIED, BEHIND WALLS, ABOVE CEILING, BELOW SLAB, ETC.) SHALL BE PHOTO DOCUMENTED AFTER ANY TESTING AND INSPECTION AND PRIOR TO CONCEALING TO CLEARLY INDICATE THE WORK.

FOR FINAL COMPLETION, DOCUMENT ALL PUNCH LIST ITEM COMPLETION BY PHOTOGRAPH OR VIDEO.

DELIVER CONSTRUCTION PHOTOGRAPHS AND VIDEOS WITHIN 10 DAYS OF CREATION. ALL PHOTOS AND VIDEOS SHALL BE OF SUFFICIENT QUALITY TO CLEARLY DEPICT WORK.

CONSTRUCTION REQUIREMENTS

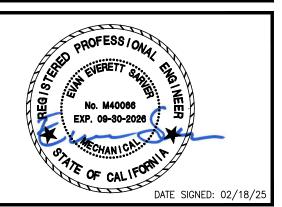
- CONSTRUCTION IS INTENDED TO BE COMPLETED DURING THE SUMMER BREAK PERIOD TO LIMIT CAMPUS DISRUPTION. CONSTRUCTION IS AUTHORIZED TO COMMENCE MAY 23, 2025 AND PROJECT COMPLETION SHALL BE BY NO LATER THAN END OF DAY AUGUST 6, 2025 (75 CALENDAR DAYS). LIQUIDATED DAMAGES AS DETERMINED BY OWNER (SEE DIV. 00 & 01) WILL BE APPLIED FOR EACH DAY HEAT IS NOT AVAILABLE TO BUILDINGS AFFECTED BY THE PROJECT SCOPE.
- COORDINATE WITH OWNER, CAMPUS FACILITIES, & CONSTRUCTION MANAGER PRIOR TO SHUT DOWN OF HEATING HOT WATER SYSTEM, CHILLED WATER SYSTEM, & MANIPULATION OF BUILDING/SITE ISOLATION VALVES.
- WATER TREATMENT SERVICES FOR FLUSHING, DRAINING, AND TREATING THE HEATING HOT WATER SYSTEM SHALL COMMENCE AT LEAST 3 WEEKS PRIOR TO THE FINAL COMPLETION DATE (I.E. START BY NO LATER THAN JULY 16, 2025). THIS DURATION OF TIME IS NEEDED IN CASE THE TREATMENT PROCESS CAUSES AN UNFORESEEN LEAK IN THE SYSTEM. REPAIRS SHALL BE MADE PRIOR TO THE FINAL COMPLETION DATE.



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BUILDING 300 & 1200 VAULT REPAIR

	02/06/25	PROGRESS SET
_	02/18/25	100% CD BID SET
	02/24/25	BID SET
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MARK DATE DESCRIPTION

SOBE PROJECT NO: 2510-0006 02/24/25 DRAWN BY: CHECKED BY: APPROVED BY:

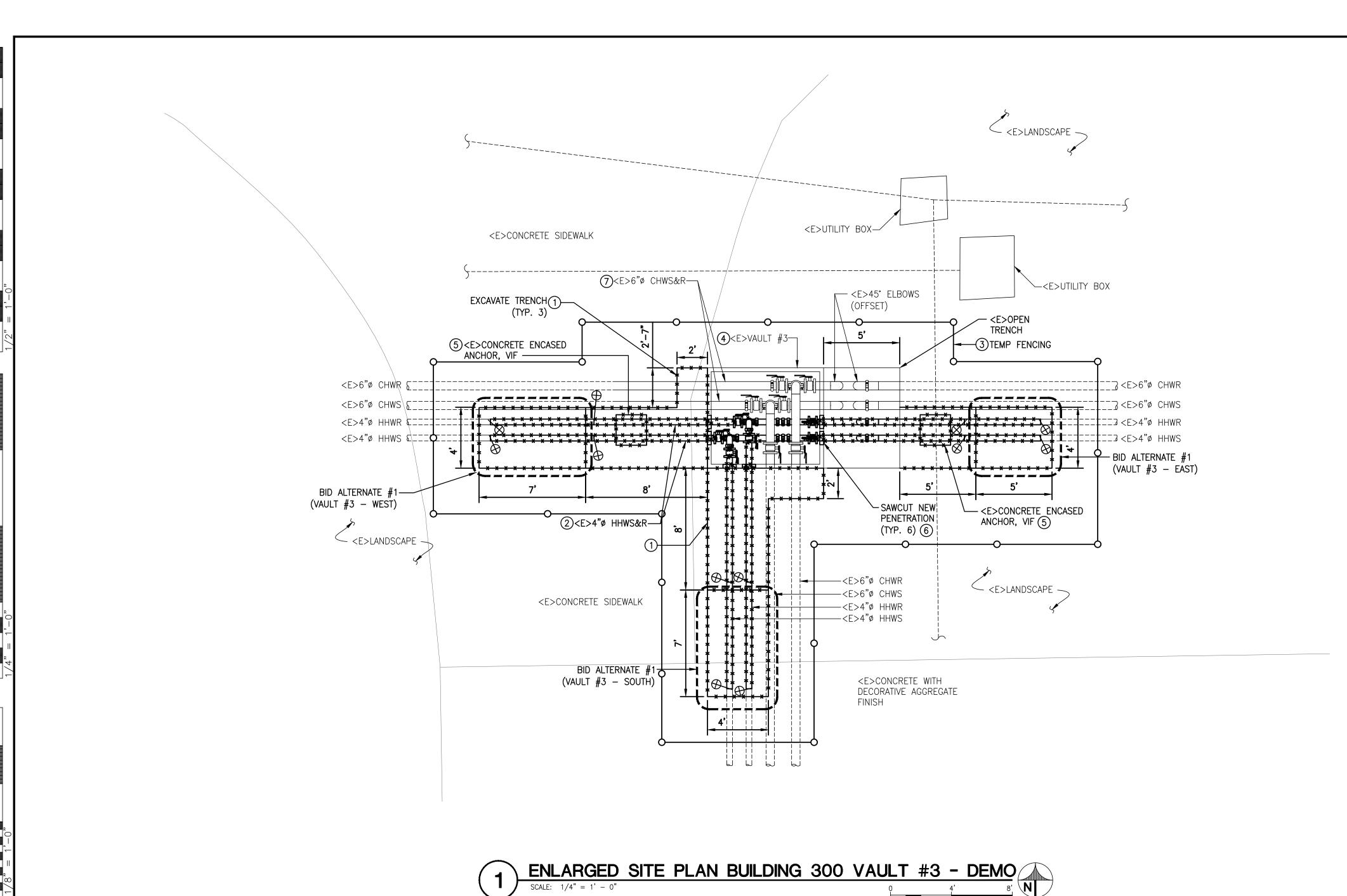
SHEET TITLE **MECHANICAL** SITE PLAN

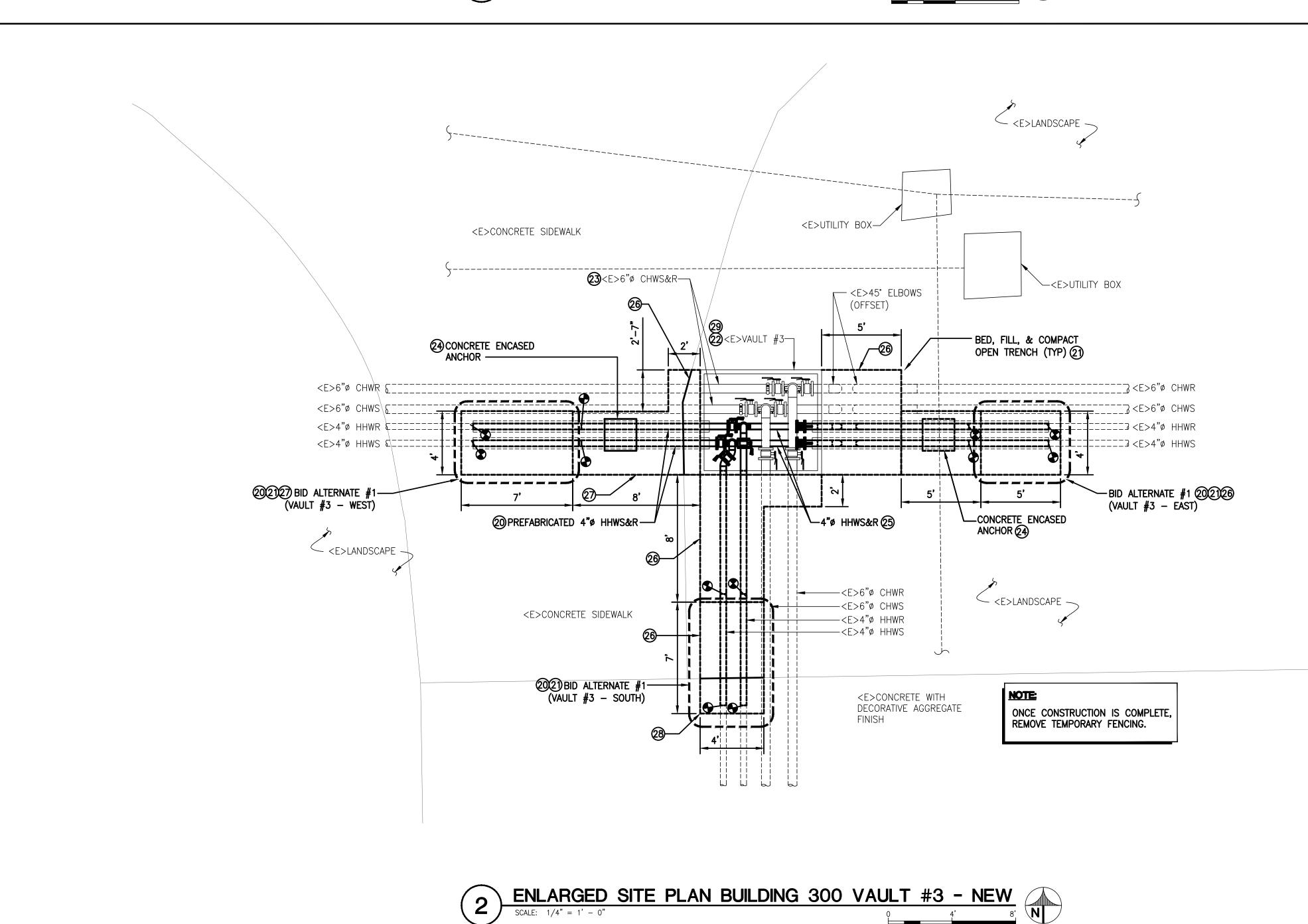
SHEET

AS NOT THIS DRAWING IS 30" X 42" AT FULL SIZ

M-1.1

M:\AA-PROJECTS\2510-00061-00 Solano CCD, Bldg 1200 Vault Repair\03 Drawings\2510-00061M-1.1.dwg 2/24/2025 4:22 PM Minh Ong





GENERAL SHEET NOTES

- A. ALL NEW FIELD INSTALLED PIPING INSIDE THE VAULT(S) SHALL BE SCHEDULE 40 PLAIN END BLACK STEEL PIPE. PREP & PAINT ALL PIPING PRIOR TO INSULATING. INSULATE WITH TITLE 24 REQUIRED THICKNESS OF CLOSED CELL AEROGEL INSULATION WITH ALL SERVICE JACKET AND PIPE LABELS INDICATING HHWS&R WITH FLOW ARROWS.
- B. CLOSE ISOLATION VALVES AT THE NEAREST CHW & HHW VAULT UPSTREAM & DOWNSTREAM OF THE AREAS OF WORK TO LIMIT VOLUME OF WATER TO DRAIN AND CONTROL FILL REQUIREMENTS. COORDINATE WITH OWNER &
- CONSTRUCTION MANAGER PRIOR TO CLOSING ISOLATION VALVES ON CAMPUS.

 EXCAVATE WITH CARE TO AVOID DAMAGING EXISTING UTILITIES. SEE SPECIAL REQUIREMENTS FOR TRENCHING, EXCAVATION AND BACKFILL. SEE ALSO M-5.1
- D. PRIOR TO CONSTRUCTION, ISOLATED SECTIONS ASSOCIATED WITH THE AREAS OF WORK SHALL BE DRAINED TO SEWER.

FOR DETAILS ASSOCIATED WITH BACKFILL REQUIREMENTS.

- SCAN FOR REBAR PRIOR TO SAWCUTTING CONCRETE AREAS. IF REBAR IS DETECTED DO NOT CUT OR DAMAGE EXISTING REBAR.
- F. PROVIDE TEMPORARY FENCING AROUND WORK AREA(S). TEMPORARY FENCING SHALL BE IN PLACE FROM THE START OF CONSTRUCTION UNTIL ACCEPTED COMPLETION OF THE PROJECT.
- G. FOR TRENCHES AT DEPTHS OF 5 FEET OR GREATER, SHORING SHALL BE INSTALLED PER OSHA REQUIREMENTS FOR WORKER SAFETEY.
- ANY DAMAGED UTILITIES OR SUSPECTED LEAKS SHALL BE REPORTED TO THE
- OWNER AND CONSTRUCTION MANAGER IMMEDIATELY.

 ALL NEW PIPING OUTSIDE THE HYDRONIC VAULT SHALL BE THERMACOR
- FERRO-THERM PRE-FABRICATED PIPING (OR APPROVED EQUAL) AND SHALL CONTINUE THROUGH THE PENETRATION TO THE INTERIOR OF THE VAULT. REFER TO DETAILS ON M-5.1.
- J. CONTRACTOR SHALL PRE—FABRICATE PIPING SECTIONS TO THE FURTHEST EXTENT POSSIBLE PRIOR TO THE ANTICIPATED START OF CONSTRUCTION (SEE CONSTRUCTION REQUIREMENTS ON G—0.0). THIS SHOULD FACILITATE A MORE STREAMLINED CONSTRUCTION EFFORT.
- K. FIELD INSULATION KITS FOR EXTERIOR FIELD JOINTS SHALL BE INSTALLED BY COMPANY AND INDIVIDUALS TRAINED ON INSTALLATION REQUIREMENTS OF THE

REFERENCE SHEET NOTES

DEMO:

- EXCAVATE TRENCH TO LENGTHS INDICATED TO EXPOSE <E>HHWS&R PIPING. SCAN FOR UTILITIES PRIOR TO BREAKING GROUND. SAWCUT ASPHALT/CONCRETE (AS NEEDED) PRIOR TO COMMENCING TRENCHING EFFORT. EXCAVATE WITH CARE TO AVOID DAMAGING EXISTING UTILITIES. PIPE DEPTHS BELOW GRADE (BG) AS <E>PIPES PENETRATE THROUGH THE VAULT #3 WALLS ARE AS FOLLOWS: SOUTH WALL 18" BG, WEST WALL 31" BG, EAST WALL 32" BG. OFFSETS TO LOWER DEPTHS OUTSIDE VAULT WALLS ARE LIKELY, ASSUME MAX DEPTH OF PIPING IS 6 FEET BG FOR EXCAVATION COSTS.
- 2. DEMO <E>HHWS&R PIPING INCLUDING: COUPLINGS, VALVES, SEALS AT PENETRATIONS, FITTINGS, INSULATION, JACKETING, ETC. DEMOLITION OF HHWS&R PIPING SHALL BE 7 FT. FROM VAULT FOR BASE BID.
- 3. PROVIDE TEMPORARY FENCING AROUND AREA OF WORK. TEMPORARY FENCING SHALL BE CLOSED AND LOCKED AT THE COMPLETION OF WORK EVERYDAY.
- 4. REMOVE <E>HINGED DOORS & FRAME FROM THE HYDRONIC VAULT TO FACILITATE PIPE REPLACEMENT. PROTECT FROM CORROSION AND DAMAGE DURING CONSTRUCTION ACTIVITIES.
- EXPOSE AND INSPECT <E>CONCRETE ENCASED ANCHOR(S). IF INSTALLED BEYOND 5 FEET FROM THE FACE OF THE VAULT AND/OR NOT INSTALLED PER STANDARD (SEE DETAIL 8/M-5.1), DEMOLISH <E>CONCRETE ENCASED ANCHOR (BASE BID). IF CLEARLY INSTALLED PER THERMACOR STANDARDS (REFER TO M-5.1 DETAILS), AND WITHIN 5 FEET OF THE FACE OF THE VAULT, REPORT FINDINGS TO ENGINEER IMMEDIATELY.
- 6. SAWCUT NEW PENETRATIONS FOR HHWS&R PIPING AT VAULT WALLS. SAWCUT SHALL BE OF A DIAMETER THAT ACCOMMODATES THE O.D. OF THE PRE-INSULATED PIPING SYSTEM PENETRATING THROUGH THE WALL AND THE THICKNESS OF THE LINK SEAL. IF DEPTH OF <E>VAULT PROHIBITS INSTALLATION IN THIS MANNER (VIF), SUBMIT RFI TO ENGINEER INDICATING THE MAX DIAMETER OF THE SAWCUT HOLE THAT CAN BE MADE WHILE NOT COMPRIMISING THE BASE/WALL OF THE VAULT AND MAINTAINING EQUAL CENTERLINE ELEVATION OF THE <E>PENETRATION.
- 7. DEMO AND REMOVE <E>INSULATION AND JACKETING FROM THE <E>CHILLED WATER SUPPLY & RETURN PIPING INSIDE VAULT #3 (SERVING BUILDING 300). WIRE BRUSH AND CLEAN CHILLED WATER PIPE SURFACE FROM SURFACE RUST AND <E>PAINT. REPORT SIGNIFICANT CORROSION AND/OR COMPRIMISED PIPING TO ENGINEER IMMEDIATELY IF DISCOVERED. CLEAN <E>PENETRATIONS FROM DEGRADED OR COMPRIMISED SEALANT (IF ANY) AT INTERIOR AND EXTERIOR OF THE VAULT.

DISCOVERED, OR IF AN ACTIVE LEAK IS DISCOVERED, CONTINUE TRENCHING TO LENGTHS INDICATED FOR BID. ALT. #1 (HARDSCAPE SAWCUT AND REMOVAL, AS NEEDED/DEPICTED). MAINTAIN ASSUMPTION THAT PIPING IS 6 FEET BELOW GRADE (BG). INCLUDE DEMO OF <E>HHWS&R PIPING FOR LENGTH OF TRENCH. IF EXISTING ANCHOR IS STILL NOT DISCOVERED, REPORT FINDINGS TO ENGINEER IMMEDIATELY. THE SCOPE AT EACH CARDINAL DIRECTION OF THE VAULT SHALL HAVE SEPARATE BID AMOUNTS, AND SHALL BE ACCEPTED OR REJECTED ON AN INDIVIDUAL BASIS IF/AS CONDITIONS NECESSITATE THE NEED FOR FURTHER DISCOVERY. BREAKDOWN IS AS FOLLOWS:

BID ALTERNATE #1: IF EXISTING CONCRETE ENCASED ANCHORS ARE NOT

- A. VAULT #3 EAST:
 B. VAULT #3 SOUTH:
 C. VAULT #3 WEST:
- IF ADDITIONAL DISCOVERY/DEMO BEYOND DIMENSIONS INDICATED ARE DEEMED NECESSARY, IT SHALL BE AT A \$ PER LINEAR FOOT (\$/LF) COST AS CALCULATED FROM THE SUBMITTED BID ALT. #1 COSTS AT EACH CARDINAL DIRECTION.

NEW:

- 20. PROVIDE NEW PRE-FABRICATED HHWS&R PIPING WITH WELDED JOINTS AND FLANGED/WELDED FITTINGS. ALL WELDS AND EXPOSED BARE PIPE SHALL BE PREPPED, PRIMED & PAINTED AFTER WELDING IS COMPLETE. EXTERIOR PIPING SHALL BE PRE-FABRICATED SYSTEM THROUGH PENETRATION OF THE VAULT WALL. PROVIDE PRESSURE TESTABLE JOINT CLOSURES AT FIELD JOINTS WITH POLYURETHANE INSULATION (LIQUID POUR) UPON COMPLETION OF WELDS. PROVIDE LINK SEAL AT HHWS&R PENETRATIONS, LINK SEALS SHALL BE SIZED FOR THE OD OF THE PRE-FABRICATED PIPING SYSTEM. REFER TO DETAIL 1 & 5B ON M-5.1.
- 21. PROVIDE BEDDING, BACKFILL, AND COMPACT PER SPECIAL REQUIREMENTS FOR TRENCHING, EXCAVATION, AND BACKFILL ON G-0.0. CONSULT WITH DISTRICT GEOTECHNICAL AGENCY FOR MOISTURE CONTENT AND COMPACTION LEVEL TESTING. REFER TO DETAIL 2 & 4 ON M-5.1.
- 22. INSTALL AND RE-SEAL <E>FRAME AND INSTALL <E>HINGED DOORS TO THE VAULT. APPLY SEALANT AT <E>GAPS, CRACKS, AND/OR SEAMS IN THE VAULT THAT DO NOT APPEAR WATERTIGHT WITH BITUMINOUS/CAULK/SEALANT.
- 23. CLEAN, PRIME & PAINT <E>CHILLED WATER SUPPLY & RETURN PIPING EXPOSED INSIDE AND OUTSIDE (IF ANY) THE VAULT, INCLUDING FLANGES, BOLTS, NUTS, VALVE BODIES, ETC.. PROVIDE SIKA—FLEX SEALANT/CAULK AT EXTERIOR AND INTERIOR OF THE <E>PENETRATION TO COMPLETE A WATERTIGHT SEAL BETWEEN THE FACE OF THE VAULT WALL AND THE PENETRATING PIPE(S) OUTER SURFACE. PROVIDE & INSTALL VAPOR BARRIER, INSULATION, JACKETING, AND PIPE MARKERS.
- 24. PROVIDE PRE-FABRICATED ANCHOR AND INSTALL PER PIPING MFR'S INSTALLATION INSTRUCTIONS. ANCHOR PLATES SHALL BE CONCRETE ENCASED, REFER TO DETAIL 8/M-5.1.
- 25. PROVIDE FIELD INSTALLED STEEL HHWS&R PIPING INSIDE THE VAULT WITH WELDED JOINTS AND WELDED/FLANGED FITTINGS. PROVIDE AIR VENT AT HIGH POINT OF PIPING AND DRAIN AT LOW POINT OF PIPING. PROVIDE PIPE SUPPORTS, INSULATION, AND JACKETING AS SPECIFIED (REFER TO G-0.0).
- 26. REPAIR SURFACE TO MATCH EXISTING ADJACENT LANDSCAPE SURFACE AND FEATURES (I.E. INCLUDING REPLACEMENT OF TURF, MULCH, DECORATIVE ROCK, SHRUBS, ETC.), AS APPLICABLE. REFER TO PRE—CONSTRUCTION PHOTO DOCUMENTATION AND DETAIL 4/M—5.1. COMPLY WITH DISTRICT STANDARDS, REFER TO G—0.0.
- 27. REPAIR SURFACE TO MATCH EXISTING ADJACENT CONCRETE SURFACE.
 REFER TO PRE-CONSTRUCTION PHOTO DOCUMENTATION, DETAIL 4/M-5.1,
 AND 6/M-5.1. COMPLY WITH DISTRICT STANDARDS, REFER TO G-0.0.
- 28. REPAIR SURFACE TO MATCH EXISTING ADJACENT CONCRETE WITH EXPOSED DECORATIVE AGGREGATE FINISH. REFER TO PRE—CONSTRUCTION PHOTO DOCUMENTATION, DETAIL 4/M—5.1, AND 6/M—5.1. COMPLY WITH DISTRICT STANDARDS, REFER TO G—0.0. COORDINATE WITH DISTRICT FOR EXACT MATCH OF DECORATIVE AGGREGATE FINISH.
- 29. PROVIDE AND INSTALL QUICK-CONNECT DRAIN PROVISIONS AT VAULT, INCLUDING STRAINER AT VAULT LOW POINT, 2" SCH. 80 PVC PIPING, AND MALE ADAPTER LAY DOWN QUICK CONNECT FITTING. REFER TO DETAIL 9/M-5.1. QUICK CONNECT MALE ADAPTER FITTING SHALL TERMINATE WITHIN REACH FROM GRADE AND SHALL NOT OBSTRUCT ACCESS TO/FROM THE VAULT INTERIOR.

BID ALTERNATE #1: IF ACCEPTED, CONTINUE BEDDING, BACKFILL, AND COMPACTION OF OPEN TRENCH(ES) INCLUDING HARDSCAPE/LANDSCAPE REPAIRS TO LENGTHS AND FINISHES AS INDICATED FOR BID. ALT. #1. INCLUDE NEW PREFABRICATED HHWS&R PIPING FOR LENGTH OF TRENCH, PROVIDE PRESSURE TESTABLE JOINT CLOSURE KITS AS NEEDED. THE SCOPE AT EACH CARDINAL DIRECTION OF THE VAULT SHALL HAVE SEPARATE BID AMOUNTS, AND SHALL BE ACCEPTED OR REJECTED ON AN INDIVIDUAL BASIS IF/AS CONDITIONS NECESSITATE THE NEED FOR FURTHER DISCOVERY. BREAKDOWN IS AS FOLLOWS:

A. VAULT #3 — EAST: B. VAULT #3 — SOUTH:

C. VAULT #3 — WEST:

IF ADDITIONAL DISCOVERY/DEMO BEYOND DIMENSIONS INDICATED WAS NEEDED, ADDITIONAL REPAIRS SHALL BE AT A \$ PER LINEAR FOOT (\$/LF) COST AS CALCULATED FROM THE SUBMITTED BID ALT. #1 COSTS AT EACH CARDINAL

SCALE: N.T.S.

COMPANY AND INDIVIDUALS TRAINED ON INSTALLATION REQUIREMENTS OF THE PRE-FABRICATED PIPING SYSTEM MFG. Soluth 11th Street San Jose, California 95112-2218

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SOLANO COMMUNITY COLLEGE DISTRICT



4000 SUISUN VALLEY RD FAIRFIELD, CA 94534

BUILDING 300 & 1200 VAULT REPAIR

MA	RK	DAIL	DESCRIPTION
		02/06/25	PROGRESS SET
		02/18/25	100% CD
		02/24/25	BID SET

AREA OF WORK

KEY PLAN

SOBE PROJECT NO: 2510-0006

DATE: 02/24/25

DRAWN BY:
CHECKED BY:
APPROVED BY:

MECHANICAL
ENLARGED SITE PLAN
BUILDING 300 VAULT

SCALE: AS NOTE THIS DRAWING IS 30" X 42" AT FULL SI

M-4.1SHEET OF

<E>BUILDING 300

