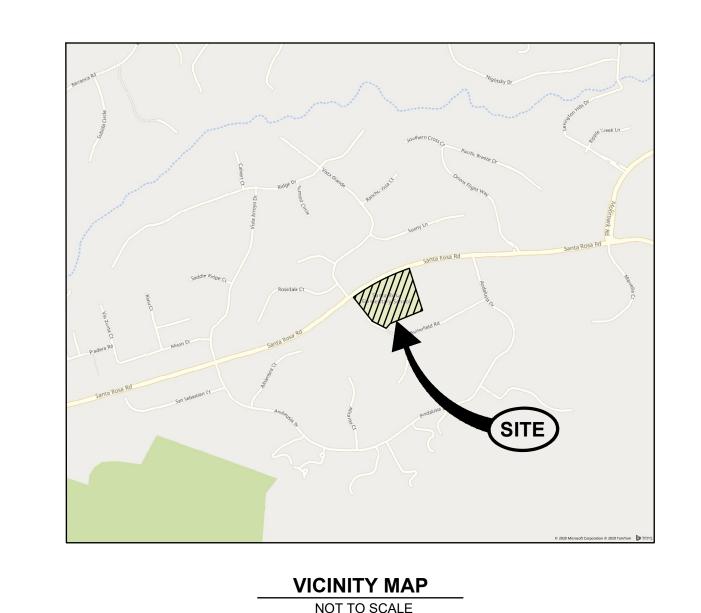
SITE IMPROVEMENT PLANS SANTA ROSA TECHNOLOGY MAGNET SCHOOL

CITY OF CAMARILLO, CALIFORNIA

LIST C	F SYMBOLS:	LEGEND:		
AC	ASPHALTIC CONCRETE	DESCRIPTION	EXISTING	PROPOSED
ACP AB	ASBESTOS CEMENT PIPE AGGREGATE BASE	<u> </u>		<u></u>
BC	BEGIN CURVE	CENTERLINE		
BCR	BEGIN CURB RETURN	EDGE OF A.C. PAVEMENT		
BD BFV	BASEMENT DRAIN BUTTERFLY VALVE	ELEVATION	100.00 OR (100.00)	100.00
BM	BENCHMARK	CONCRETE PAVEMENT	26.44.64.034.74.7.2.7.7.7	
BV BVC	BALL VALVE BEGIN VERTICAL CURVE	A.C. PAVEMENT		
BW	BACK OF WALK	PROPERTY LINE		
CIP	CAST IRON PIPE	RIGHT-OF-WAY LINE		
CJ	CRACK CONTROL JOINT	EASEMENT LINE		
CL CORC/I	CLASS CENTERLINE			10
CMP	CORRUGATED METAL PIPE	CONTOURS (MAJOR)		10
CLR	CLEAR	CONTOURS (MINOR)		<u> </u>
CMU CO	CONCRETE MASONRY UNIT CLEANOUT	BENCH MARK	•	~~~
CTV	CABLE TELEVISION	TREE CANOPY		
DIP	DUCTILE IRON PIPE	APPROX. SAW CUT LINE		
D E	DRAIN ELECTRICAL	LIMIT OF GRADING LINE		- ~~ ~~ ~~
DI	DROP INLET	GRADE BREAK LINE		
EC	END CURVE	FLOW LINE		
ECR EG	END CURB RETURN EXISTING GRADE	SLOPE LINE	Y Y Y	
EJ	EXPANSION JOINT	FENCE		
EL EP	ELEVATION EDGE OF PAVEMENT	RETAINING WALL	^ ^ ^	
EVC	END VERTICAL CURVE			W
EW	EACH WAY	WATER	· ·	
EX	EXISTING	SEWER		3-
FD FF	FLOOR DRAIN FINISH FLOOR	STORM DRAIN	SD	
FG	FINISH GRADE	POWER	E	E
FH	FIRE HYDRANT	GAS	G	——— G———
TLOR FL FLG	FLANGE	TELEPHONE	—— Т ———	T
FS	FINISH SURFACE	CABLE TV	CTV —	CTV ———
G	GAS	MANHOLE		()
GB	GRADE BREAK	CLEANOUT	OCO	oco
GM GSP	GAS METER GALVANIZED STEEL PIPE	WATER METER & LATERAL	WWM	—_w—_□ ^{WM}
GSV	GAS VALVE	FIRE HYDRANT	-⊗ }	-⊗
GV	GATE VALVE	THRUST BLOCK		
HB HP	HOSE BIB HIGH POINT	FITTING		
INV	INVERT	FITTING		7%
L	CURVE LENGTH	STREET LIGHT	\$	\$
LF MH	LINEAL FEET MANHOLE			
MJ	MECHANICAL JOINT			
NIC	NOT INCLUDED IN CONTRACT			
OC	ON CENTER	OWNERS RESPONS	IBILITIES:	
OCEW PCC	ON CENTER EACH WAY POINT OF COMPOUND CURVATURE			
PI	POINT OF INTERSECTION	A. PRIOR TO COMMENCING		
D	(OF CURVE TANGENTS)		A GEOTECHNICAL ENGINEER T AN SHALL ALSO ENGAGE THE	
PRC	PROPERTY LINE POINT OF REVERSE CURVATURE		ONSTRUCTION OBSERVATION	
PVC	POLY-VINYL CHLORIDE	APPROVED PLANS, SPEC	IFICATIONS AND AGENCY REC	QUIREMENTS. THE OWN
PV	PLUG VALVE		ED TO PROPERLY IMPLEMENT	
R	RADIUS		TAILS INCLUDING THOSE TAS PLAN DOCUMENT OR EROSION	
RCP RD	REINFORCED CONCRETE PIPE ROOF DRAIN	THESE PLANS.	2 3 3 3 MENT ON LINOON	JOILINGET LANGUILL
RG	RETAINING GLAND			
RSJ	ROUGH SURFACE JOINT	B. GEOTECHNICAL ENGINEE	R'S RESPONSIBILITIES:	

- CIFICATIONS AND DETAILS, THE CTION PHASE OBSERVATION OR ANOTHER QUALIFIED PARTY CONFORMANCE WITH THE IER SHALL ALSO ASSURE THAT CALLED FOR ON THESE PLANS, E PROJECT STORM WATER EETS ATTACHED AS PART OF
- B. GEOTECHNICAL ENGINEER'S RESPONSIBILITIES:
- 1. A GEOTECHNICAL ENGINEER SHALL REVIEW THESE PLANS WITH RESPECT TO GENERAL CONFORMANCE WITH THE INTENT OF THE RECOMMENDATIONS PRESENTED IN THE PROJECT SOILS ENGINEERING REPORT. THE PLAN REVIEW SHALL BE PERFORMED SPECIFICALLY WITH RESPECT TO GEOTECHNICAL FACTORS DISCUSSED IN THE REFERENCED REPORT. IN PERFORMING THE REVIEW, A GEOTECHNICAL ENGINEER SHALL ATTEMPT TO VERIFY THAT THE CONCEPTS AND RECOMMENDATIONS PRESENTED IN THE REPORT ARE GENERALLY INCORPORATED INTO THE PLANS. IN ACCORDANCE WITH THIS LEVEL REVIEW, THE PLANS ARE TO BE FOUND IN SUBSTANTIAL CONFORMANCE WITH THE CONCEPTS AND RECOMMENDATIONS PRESENTED IN THE NOTED REPORT.
- 2. UPON BEING RETAINED BY THE OWNER, PRIOR TO CONSTRUCTION THE GEOTECHNICAL, ENGINEER SHALL RECOMMEND TO THE OWNER AND THE CONTRACTOR THE LEVEL OF OBSERVATION AND TESTING THAT WILL BE PROVIDED DURING CONSTRUCTION. PROVIDED THAT THE CONTRACTOR FULFILLS HIS OR HER RESPONSIBILITY FOR TIMELY REQUESTS FOR THOSE SERVICES DURING CONSTRUCTION. THE GEOTECHNICAL ENGINEER SHALL PROVIDE OBSERVATION AND TESTING AT THE PROJECT WORK AREA OF EARTHWORK OPERATIONS, INCLUDING TRENCHING AND PAVEMENT SUBGRADE PREPARATION, AS NECESSARY TO HAVE REASONABLE CERTAINTY THAT THE EARTHWORK IS PERFORMED IN GENERAL COMPLIANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS, AND WITH THE REQUIREMENTS OF THE CITY OF CAMARILLO.
- 3. UPON COMPLETION OF EARTHWORK, THE GEOTECHNICAL ENGINEER SHALL, UPON REQUEST, PROVIDE A FINAL REPORT WITH RESULTS OF THEIR OBSERVATION AND TESTING DURING EARTHWORK OPERATIONS. PROVIDED THAT THE WORK IS PERFORMED IN CONFORMANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS, THE REPORT WILL STATE THEIR OPINION THAT THE GRADING WAS COMPLETED IN SUBSTANTIAL COMPLIANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
- C. CONTRACTORS STORM WATER POLLUTION CONTROL RESPONSIBILITIES:
- 1. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONSTRUCT AND MAINTAIN POLLUTION PREVENTION MEASURES, INCLUDING THOSE FOR EROSION AND SEDIMENT CONTROL, AS NECESSARY TO PREVENT ANY POLLUTANT AT ANY LEVEL FROM BEING CONVEYED OFF THE CONSTRUCTION SITE AND THAT THESE MEASURES MUST CONTINUE TO BE MAINTAINED UNTIL THE REQUIRED POST-CONSTRUCTION POLLUTION PREVENTION MEASURES ARE IN PLACE AND COMPLETELY FUNCTIONAL, INCLUDING PERMANENT LANDSCAPING.
- THE SPECIFIC MEASURES WHICH MAY BE CALLED FOR ON THE PROJECT STORM WATER POLLUTION PREVENTION PLAN CANNOT ADDRESS ALL SITE DEVELOPMENT AND STORM CHARACTERISTICS WHICH WILL EVOLVE OVER THE COURSE OF CONSTRUCTION AND THAT IT IS THE CONTRACTORS RESPONSIBILITY TO NOT ONLY IMPLEMENT THE PLAN, BUT TO MAKE ADJUSTMENTS AND EXPANSIONS IN THE IMPLEMENTATION AS NECESSARY TO ADAPT TO THE CONTRACTOR'S CONSTRUCTION OPERATIONS AND SCHEDULE AND ADDRESS EVOLVING SITE CONDITIONS AND ACTUAL WEATHER CONDITIONS.
- 3. IT IS THE CONTRACTOR'S RESPONSI9BILITY TO ENSURE EMPLOYEES AND SUBCONTRACTORS ARE TRAINED REGARDING THESE REQUIREMENTS AND TO MAINTAIN RECORDS OF THE INSTALLATION, MODIFICATION, INSPECTION, AND MAINTENANCE OF STORM WATER POLLUTION PREVENTION MEASURES INCLUDING, BUT NOT LIMITED TO: TRAINING, INSPECTION, MAINTENANCE LOG; RECORD DRAWINGS SHOWING LOCATIONS, LIMITS, AND DATES OF INSTALLATION FOR VARIOUS MEASURES; DATED PHOTOGRAPHERS AND FIELD SKETCHES.
- 4. THE CONTRACTOR SHALL BE FAMILIAR WITH AND AGREE TO IMPLEMENT THE MEASURES AND INSTALLATIONS DEPICTED ON THE PROJECT STORM WATER POLLUTION PREVENTION PLAN INCLUDING INSTALLATION, ROUTINE INSPECTION AND MAINTENANCE, ADJUSTMENTS AND EXPANSION DUE TO EVOLVING SITE CONDITIONS, EMERGENCY MAINTENANCE AND ADJUSTMENTS DUE TO ACTUAL STORM AND SITE CONDITIONS, AND DOCUMENTATION.



USE OF PLANS

THE DELIVERY OF THE ELECTRONIC FILE DOES NOT CONSTITUTE THE DELIVERY OF OUR PROFESSIONAL WORK PRODUCT. THE ANY NOTE OR DETAIL, FOR ANY UNAPPROVED OR REVISED PROJECT SCOPE, OR FOR ANY OTHER PROJECT AT THIS OR ANY

USE OF ELECTRONIC INFORMATION

AUTHORIZED BY THE ENGINEER FOR USE BY OTHERS. ELECTRONIC INFORMATION PROVIDED BY THE ENGINEER SHALL ONLY BE NOTES AND/OR DETAILS ON THE SIGNED AND SEALED CONTRACT DOCUMENTS.

IF DIGITAL FILES ARE OBTAINED WITH THE INTENT TO USE THEM FOR PROJECT STAKING, THEY SHALL ONLY BE USED BY A QUALIFIED ENGINEER OR LAND SURVEYOR REGISTERED IN THE STATE OF CALIFORNIA. DIGITAL INFORMATION SHALL ONLY BE USED FOR STAKING HORIZONTAL LOCATION OF PROPOSED IMPROVEMENTS AFTER IT HAS BEEN CONFIRMED WITH THE SIGNED AND SEALED CONSTRUCTION CONTRACT DOCUMENTS.

THE DIGITAL DRAWINGS ARE NOT INTENDED TO BE USED DIRECTLY FOR CONTROL OF CONTRACTOR'S GRADING OPERATIONS WITHOUT STAKING BY ENGINEER OR LAND SURVEYOR. THE INTERSECTION OF PROPOSED CUT AND FILL SLOPES WITH EXISTING GRADE IS APPROXIMATE WHERE SHOWN ON THE DRAWINGS AND SHALL BE CONFIRMED BY FIELD STAKING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONSTRUCT SLOPES IN CONFORMANCE WITH THE SPECIFIED AND DETAILED REQUIREMENTS CONTAINED IN THE CONTRACT DOCUMENTS.

BENCHMARK:

HORIZONTAL BASIS OF COORDINATES ARE NAD83 PER CAMARILLO HEIGHTS ELEMENTARY CONTROL POINTS 1, 2 3.

VERTICAL DATUM IS NAVD88 PER CAMARILLO HEIGHTS ELEMENTARY CONTROL POINT 1. SANTA ROSA ELEMENTARY LOCAL

<u>ELEVATION</u> = 270.05'

| CAUTION! CONFIRM BENCHMARK DATA AND CONDITION WITH PROJECT SURVEYOR (WATERS CARDENAS LAND

TOPOGRAPHY:

EXISTING TOPOGRAPHY COMPILED BY FIELD SURVEY(S) BY WATERS CARDENAS LAND SURVEYING DATED JANUARY, 2021.

SURVEY MONUMENT PROTECTION:

PROTECT AND PRESERVE, IN PLACE, ALL SURVEY MONUMENTS AND BENCHMARKS. <u>DO NOT</u> DISTURB, MOVE, OR RELOCATE MONUMENTS OR BENCHMARKS WITHOUT THE PRIOR REVIEW AND APPROVAL BY THE AGENCY HAVING JURISDICTION OVER THE MONUMENT OR BENCHMARK. THE CONTRACTOR SHALL CONTRACT WITH A LICENSED SURVEYOR FOR MONUMENTS REQUIRING DISTURBANCE OR REMOVAL, AND THE SURVEYOR SHALL RESET THE MONUMENTS OR PROVIDE PERMANENT WITNESS MONUMENTS AND FILE THE REQUIRED DOCUMENTATION WITH THE COUNTY SURVEYOR PURSUANT TO BUSINESS AND PROFESSIONAL CODE SECTION 8771.

SHEET INDEX								
SHEET NO. GENERAL DESCRIPTION								
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2	D-1 DEMOLITION PLAN							
3	C-1 SITE IMPROVEMENT PLAN							
4	CD-1 DETAILS							



PLEASANT VALLEY SCHOOL DISTRICT

600 TEMPLE AVENUE, CAMARILLO, CA 93010



115 W. CANON PERDIDO STREET

SANTA BARBARA, CA 93101

CONSULTANT'S STAMP



PROJECT TITLE AND ADDRESS PLEASANT VALLEY SCHOOL DISTRICT

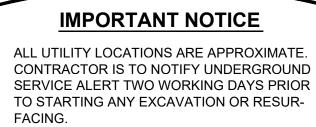
HVAC UPGRADE

SANTA ROSA **TECHNOLOGY MAGNET** 13282 SANTA ROSA RD, CAMARILLO, CA 93012

REVISIONS	3	
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TITLE SHEET



RIGHT-OF-WAY

STORM DRAIN

STREET LIGHT

TELEPHONE

THRUST BLOCK

TOP OF BERM

TOP OF CURB

TOP OF DIKE

TOP OF CONCRETE

TOP OF FOOTING

TOP OF GRATE

TRAFFIC INDEX

TRAFFIC LIGHT

TYPICAL TOP OF WALL

WATER

WALL DRAIN

PERCENT

LESS THAN

GREATER THAN

WATER METER WATER VALVE

APPROXIMATELY

WITH

TOP OF PAVEMENT

VITRIFIED CLAY PIPE

VERTICAL POINT OF INTERSECTION

(OF VERTICAL CURVE TANGENTS)

DELTA (CURVE CENTRAL ANGLE)

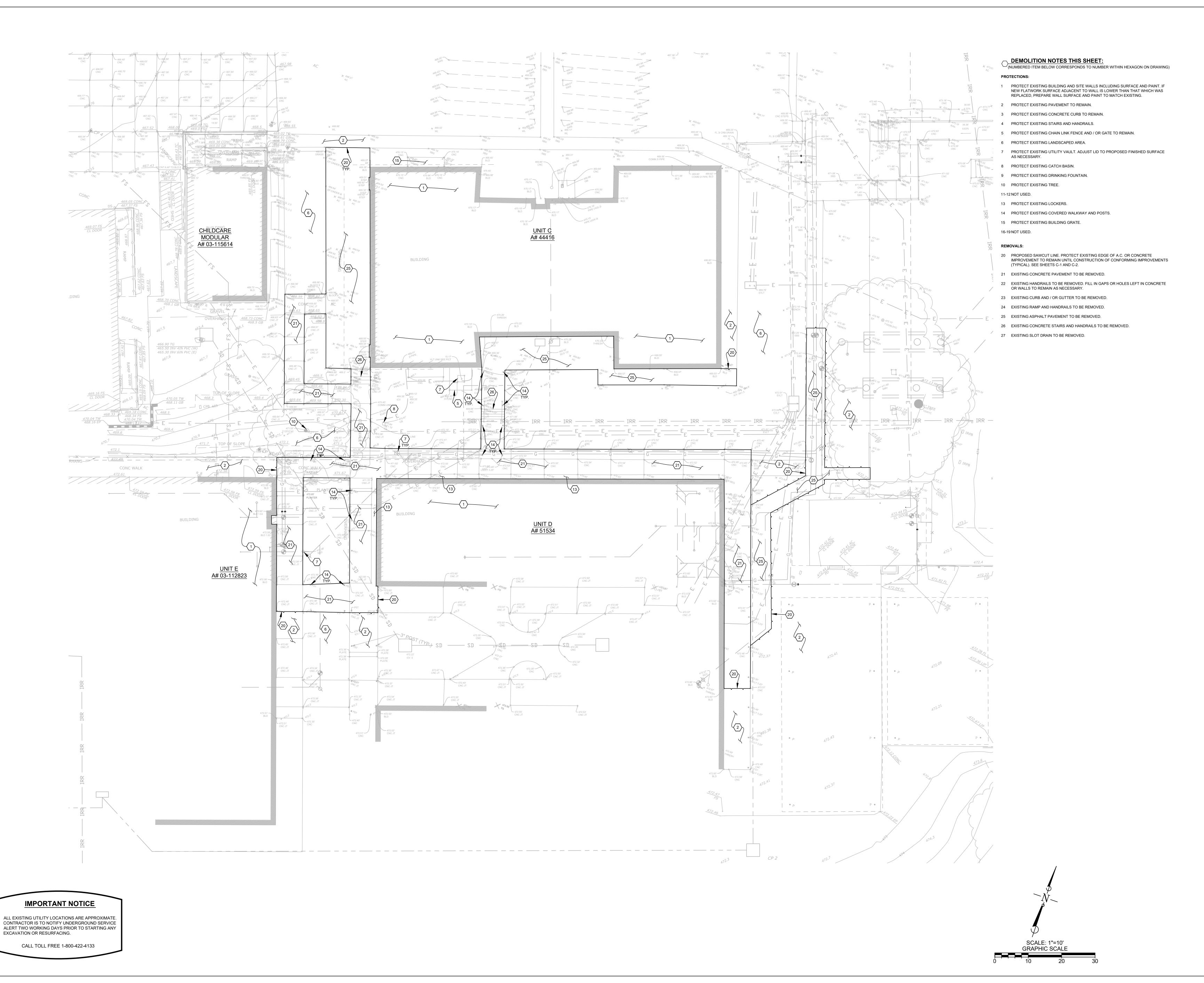
SEWER

ST STL STAINLESS STEEL

STATION

STD DTL STANDARD DETAIL

Call before you dig.





PLEASANT VALLEY SCHOOL DISTRICT

600 TEMPLE AVENUE, CAMARILLO, CA 93010

BUDLONG & ASSOCIATES, INC

M E P C O N S U L T I N G E N G I N E E R S

Job No.19-394

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400 W VENTURA BLVD, STE 240
CAMARILLO, CA 93010
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DOWNTOWN-LA OFFICE
633W, STH STREET 28TH FLOOR
LOS ANGELES, CA 90071
TEL. (805)887-4001

TEL. (816)838-8780

TEL. (816)838-8780

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CONCLUTANT



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PHONE: 805.966.2224

CONSULTANT'S STAMP



PROJECT TITLE AND ADDRESS

PLEASANT VALLEY

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HVAC UPGRADE

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TECHNOLOGY MAGNET
SCHOOL
13282 SANTA ROSA RD,
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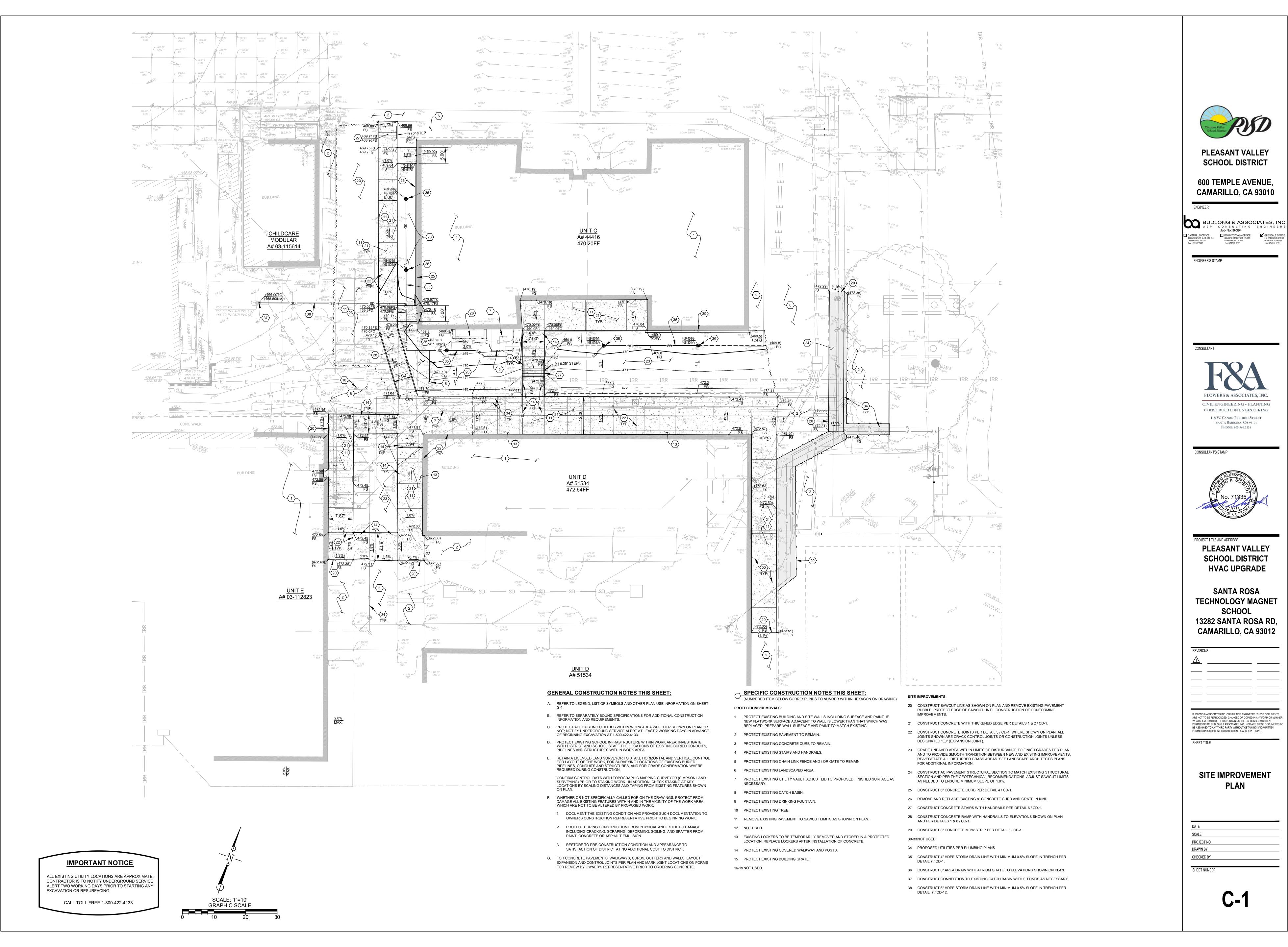
REVISIONS

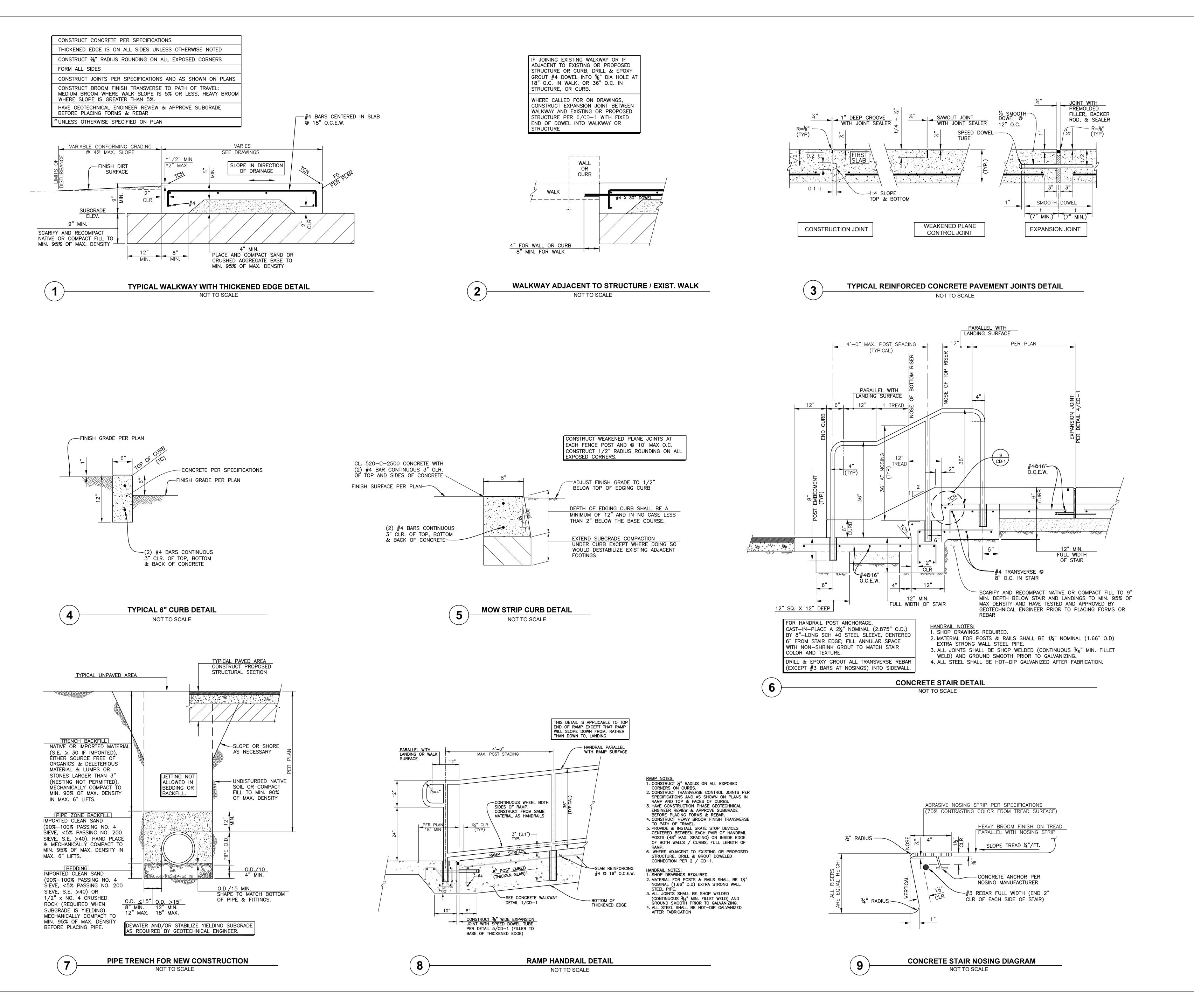
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DEMOLITION PLAN

DATE
SCALE
PROJECT NO.
DRAWN BY
CHECKED BY

D-1





Pleasant Valley School District

PLEASANT VALLEY SCHOOL DISTRICT

600 TEMPLE AVENUE, CAMARILLO, CA 93010

BUDLONG & ASSOCIATES, INC

MEP CONSULTING ENGINEERS

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SIN ERS

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SANTA BARBARA, CA 93101 PHONE: 805.966.2224

CONSULTANT'S STAMP



PROJECT TITLE AND ADDRESS

PLEASANT VALLEY

SCHOOL DISTRICT

HVAC UPGRADE

SANTA ROSA TECHNOLOGY MAGNET SCHOOL 13282 SANTA ROSA RD,

CAMARILLO, CA 93012

REVISIONS

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HEET TITLE

DETAILS

DATE
SCALE
PROJECT NO.
DRAWN BY

SHEET NUMBER

CD-

PLUMBING NOTES

1. SCOPE OF WORK: FURNISH AND INSTALL ALL PIPING SHOWN ON THE PLUMBING DRAWINGS AND DESCRIBED IN THESE NOTES AND THE BOOK SPECIFICATIONS. UNLESS OTHERWISE DIRECTED BY BUILDING OWNER, CONTRACTOR SHALL ARRANGE FOR AND PAY ALL FEES FOR CONNECTIONS TO UTILITIES. IN CONNECTION WITH THIS WORK, CONTRACTOR SHALL ALSO FURNISH AND INSTALL ALL NECESSARY LABOR, DEVICES, HARDWARE AND SYSTEMS REQUIRED TO MAKE SAID SYSTEMS PROPERLY AND SAFELY OPERABLE, INCLUDING, BUT NOT LIMITED TO, DRILLING, CONCRETE & ASPHALT SAW CUTTING, TRENCHING AND BACKFILL, MOUNTING AND SUPPORT HARDWARE, FRAMING, PIPING, ASPHALT, CONCRETE, VALVES, PATCHING & PAINTING.

2. EXAMINATION OF SITE AND CONTRACT DOCUMENTS. EACH BIDDER SHALL, AT ITS SOLE COST AND EXPENSE, INSPECT THE SITE OF THE PROPOSED WORK TO BECOME FULLY ACQUAINTED WITH CONDITIONS RELATING TO THE WORK AND TO FULLY UNDERSTAND THE FACILITIES, DIFFICULTIES AND RESTRICTIONS ATTENDING THE EXECUTION OF THE WORK UNDER THE CONTRACT DOCUMENTS AND COST THEREOF. BIDDERS SHALL THOROUGHLY REVIEW AND BE FAMILIAR WITH THE CONTRACT DOCUMENTS, INCLUDING WITHOUT LIMITATION, THE SPECIFICATIONS AND THE DRAWINGS. THE FAILURE OR OMISSION OF ANY BIDDER TO RECEIVE OR EXAMINE ANY OF THE CONTRACT DOCUMENTS, FORMS, INSTRUMENTS, ADDENDA, OR OTHER DOCUMENTS OR TO INSPECT THE SITE SHALL NOT RELIEVE SUCH BIDDER FROM ANY OBLIGATIONS WITH RESPECT TO THE BID PROPOSAL, THE CONTRACT OR THE WORK REQUIRED UNDER THE CONTRACT DOCUMENTS. THE OWNER ASSUMES NO RESPONSIBILITY OR LIABILITY TO ANY BIDDER FOR, NOR SHALL THE OWNER BE BOUND BY, ANY UNDERSTANDINGS, REPRESENTATIONS OR AGREEMENTS OF THE OWNER'S AGENTS, EMPLOYEES OR OFFICERS CONCERNING THE CONTRACT DOCUMENTS OR THE WORK MADE PRIOR TO EXECUTION OF THE CONTRACT. THE SUBMISSION OF A BID PROPOSAL SHALL BE DEEMED PRIMA FACIE EVIDENCE OF THE BIDDER'S FULL COMPLIANCE WITH THE REQUIREMENTS OF THIS SECTION.

3. INTERPRETATION OF DRAWINGS, SPECIFICATIONS OR CONTRACT DOCUMENTS. IF ANY BIDDER IS IN DOUBT AS TO THE TRUE MEANING OF ANY PART OF THE DRAWINGS, THE SPECIFICATIONS OR OTHER PORTIONS OF THE CONTRACT DOCUMENTS; FINDS DISCREPANCIES, ERRORS OR OMISSIONS THEREIN; OR FINDS VARIANCES IN ANY OF THE CONTRACT DOCUMENTS WITH APPLICABLE RULES, REGULATIONS, ORDINANCES AND/OR LAWS, A WRITTEN REQUEST FOR AN INTERPRETATION OR CORRECTION THEREOF MAY BE SUBMITTED TO THE ENGINEER. IT IS THE SOLE AND EXCLUSIVE RESPONSIBILITY OF THE BIDDER TO SUBMIT SUCH REQUEST IN SUFFICIENT TIME FOR THE PREPARATION OF A RESPONSE THERETO AND DELIVERY OF SUCH RESPONSE TO ALL BIDDERS PRIOR TO THE SCHEDULED CLOSING FOR RECEIPT OF BID PROPOSALS. ANY REQUEST OF ANY BIDDER PURSUANT TO THE FOREGOING SENTENCE THAT IS MADE LESS THAN SEVEN DAYS PRIOR TO THE SCHEDULED CLOSING DATE FOR THE RECEIPT OF BID PROPOSALS SHALL BE DEEMED UNTIMELY. ANY INTERPRETATION OR CORRECTION OF THE CONTRACT DOCUMENTS WILL BE MADE ONLY BY WRITTEN ADDENDUM DULY ISSUED BY THE OWNER OR THE ENGINEER. A COPY OF ANY SUCH ADDENDUM WILL BE MAILED OR OTHERWISE DELIVERED TO EACH BIDDER RECEIVING A SET OF THE CONTRACT DOCUMENTS. NO PERSON IS AUTHORIZED TO RENDER AN ORAL INTERPRETATION OR CORRECTION OF ANY PORTION OF THE CONTRACT DOCUMENTS TO ANY BIDDER, AND NO BIDDER IS AUTHORIZED TO RELY ON ANY SUCH ORAL INTERPRETATION OR CORRECTION. FAILURE TO REQUEST INTERPRETATION OR CLARIFICATION OF THE DRAWINGS, THE SPECIFICATIONS OR OTHER PORTIONS OF THE CONTRACT DOCUMENTS PURSUANT TO THE FOREGOING SHALL BE DEEMED TO BE A WAIVER OF ANY DISCREPANCY, DEFECT, OR CONFLICT THEREIN.

4. VERIFICATION OF EXISTING UTILITIES. EXISTING BURIED PIPELINES, CONDUITS AND STRUCTURES KNOWN TO THE PREPARER OF THE DRAWINGS ARE SHOWN ON THE DRAWINGS. HOWEVER, ALL SUCH PIPELINES AND STRUCTURES MAY NOT BE SHOWN AND THE LOCATIONS OF THOSE SHOWN ARE APPROXIMATE ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE PREPARER OF THE DRAWINGS. CONTRACTOR SHALL INDEPENDENTLY VERIFY OR DETERMINE THE PRESENCE OF EXISTING BURIED PIPELINES, CONDUITS, AND STRUCTURES WITHIN THE WORK AREA WITH THE UTILITY COMPANIES, THE WATER AND SANITARY AGENCIES, AND THE PROPERTY OWNER. BEFORE COMMENCING WORK, CONTRACTOR SHALL DETERMINE THE EXACT LOCATIONS INCLUDING DEPTHS OF ALL EXISTING UNDERGROUND PIPELINES, CONDUITS AND STRUCTURES, INCLUDING SERVICE CONNECTIONS, WHICH MAY AFFECT OR BE AFFECTED BY HIS OPERATIONS AND SHALL MARK THESE LOCATIONS WITH PAINT OR FLAGS. CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND PIPELINES, CONDUITS AND STRUCTURES. UPON BECOMING AWARE OF EXISTING BURIED PIPELINES, CONDUITS OR STRUCTURES NOT SHOWN OR LOCATED DIFFERENTLY THAN SHOWN ON THE DRAWINGS, CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE AND THE OWNER OF THE PIPELINE. CONDUIT OR STRUCTURE BY TELEPHONE AND IN WRITING. IF SUCH PIPELINE, CONDUIT OR STRUCTURE AFFECTS OR IS AFFECTED BY THE WORK, CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION AND DIRECTION BEFORE PROCEEDING WITH THE WORK, EXCEPTING THAT IN AN EMERGENCY AFFECTING SAFETY OF LIFE WORK OR ADJACENT PROPERTY, CONTRACTOR SHALL ACT AT ONCE WITHOUT INSTRUCTIONS TO PREVENT INJURY OR LOSS. SEE ARCHITECTURAL, ELECTRICAL, AND CIVIL PLANS FOR OTHER SITE UTILITIES.

5. DAMAGE / DEMOLITION REPAIR: IN THE EVENT THAT EXISTING UTILITIES OF ANY TYPE ARE DAMAGED BY CONTRACTOR, CONTRACTOR SHALL IMMEDIATELY REPAIR DAMAGE AND RESTORE SERVICES. IF REPAIRS ARE NOT ABLE TO BE MADE IMMEDIATELY, CONTRACTOR SHALL INSTALL TEMPORARY UTILITIES AS REQUIRED TO MAINTAIN UTILITY SERVICES TO ALL BUILDINGS AND FACILITIES. ALL CONCRETE CURB AND GUTTER, FLATWORK, AND LANDSCAPING REMOVED OR DAMAGED BY CONTRACTOR SHALL BE REPLACED IN-KIND BY CONTRACTOR. IT IS THE INTENT OF THIS SECTION THAT THE CONTRACTOR BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THESE NOTES.

6. DIMENSIONS. ALL DIMENSIONS SHALL HAVE PREFERENCE OVER SCALE. ALL DIMENSIONS SHALL BE VERIFIED IN THE FIELD. ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN ARCHITECTURAL AND ENGINEERING DRAWINGS BEFORE PROCEEDING WITH WORK. IN NO CASE SHALL WORKING DIMENSIONS BE SCALED FROM PLANS, SECTIONS, OR DETAILS ON WORKING DRAWINGS. ALL SIZES OF EQUIPMENT AND MATERIALS SHALL BE VERIFIED WITH EQUIPMENT MANUFACTURER. ALL PLUMBING FIXTURES SHALL BE INSTALLED PER THE DIMENSIONS ON THE ARCHITECTURAL DRAWINGS.

7. CODES AND STANDARDS: ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE 2022 CALIFORNIA PLUMBING CODE, THE 2022 CALIFORNIA MECHANICAL CODE, THE 2022 CALIFORNIA BUILDING CODE, THE STATE OF CALIFORNIA, THE LOCAL JURISDICTION, AND STANDARD CONSTRUCTION PRACTICES. ALL PLUMBING FIXTURES SHALL BE IN STRICT ACCORDANCE WITH THE FIXTURE SCHEDULE, AND SHALL BE NEW AND FREE FROM DEFECTS. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND FEES, AND SHALL OBTAIN APPROVED INSPECTIONS FOR ALL WORK AS REQUIRED BY OWNER, AND LOCAL JURISDICTION. CONTRACTOR SHALL MAINTAIN IN EFFECT ALL INSURANCE REQUIRED BY STATE LAWS, LOCAL JURISDICTION, AND GENERAL CONTRACTOR / OWNER. WHERE CONFLICT OR VARIATION EXISTS AMONGST CODES, STANDARDS SPECIFICATIONS, OR DRAWINGS, THE MOST STRINGENT SHALL GOVERN.

8. SUBMITTALS REQUIRED: PRIOR TO ORDERING FIXTURES AND MATERIALS, CONTRACTOR SHALL FURNISH SUBMITTALS OF ALL FIXTURES AND MATERIALS PROPOSED FOR USE IN THIS PROJECT. ALL FIXTURES AND MATERIALS SHALL BE INSTITUTIONAL GRADE HEAVY DUTY QUALITY. ORDERING OF FIXTURES AND MATERIALS SHALL ONLY PROCEED AFTER SATISFACTORY REVIEW OF ALL SUBMITTALS BY ENGINEER / OWNER. COPIES OF ALL OWNER'S MANUALS, WARRANTIES, AND OTHER WRITTEN INFORMATION REGARDING SYSTEMS SHALL BE SUBMITTED TO OWNER.

9. CONSTRUCTION OBSERVATION: IN ADDITION TO THE REQUIREMENT FOR OBTAINING INSPECTIONS BY THE LOCAL JURISDICTION, CONTRACTOR SHALL NOTIFY ENGINEER AT APPROPRIATE TIMES DURING THE CONSTRUCTION PROCESS SO THAT ENGINEER CAN VISIT SITE TO BECOME GENERALLY FAMILIAR WITH THE PROGRESS AND QUALITY OF CONTRACTOR'S WORK AND TO DETERMINE IF THE WORK IS PROCEEDING IN GENERAL ACCORDANCE WITH THE CONTRACT DOCUMENTS.

10. UNDERGROUND ALERT: CALL 811 BEFORE YOU DIG OR VISIT CALIFORNIA811.ORG TO REQUEST A

DO NOT START ANY EXCAVATION JOB WITHOUT FIRST OBTAINING A POSITIVE RESPONSE FROM SOCALGAS THAT YOUR LOCATION AND MARK REQUEST HAS BEEN ADDRESSED.

BEFORE LAYING OUT PIPING AND PERFORMING TRENCHING, CONTRACTOR SHALL DETERMINE LOCATIONS OF EXISTING UNDERGROUND UTILITIES. CONTACT "DIG ALERT / UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA" - 811 OR <u>CALIFORNIA811.ORG</u>. CONTRACTOR SHALL ALSO CONTACT OWNER'S REPRESENTATIVE TO ASCERTAIN LOCATIONS OF UNDERGROUND PIPING AND OTHER CONDITIONS AFFECTING TRENCHING, AND SHALL PERFORM TESTING AND SUBSURFACE EXPLORATION AS NECESSARY TO LOCATE UTILITIES.

11. TRENCHING: MATERIAL SHALL BE EXCAVATED FROM TRENCHES AND PILED ADJACENT TO THE TRENCH. MATERIAL SHALL BE PILED IN SUCH A MANNER THAT WILL CAUSE A MINIMUM OF INCONVENIENCE TO PUBLIC TRAVEL. STRIP GRASS/ ROOT MAT BEFORE EXCAVATING AND SEPARATE FROM EXCAVATION SPOILS STOCKPILE. ALL ROCK, BOULDERS, AND STONES SHALL BE REMOVED TO PROVIDE A MINIMUM CLEARANCE OF SIX (6) INCHES UNDER AND AROUND PIPES. EXCAVATIONS SHALL BE KEPT FREE OF WATER. TRENCHES SHALL BE DUG TO TRUE AND SMOOTH BOTTOM GRADES AND IN ACCORDANCE WITH THE LINES INDICATED ON DRAWINGS AND AS DIRECTED. TRENCH WIDTHS SHALL NOT EXCEED 30 INCHES OR 1.5 TIMES OUTSIDE DIAMETER OF THE PIPE PLUS 18 INCHES WHICHEVER IS GREATER. MINIMUM TRENCH WIDTH SHALL BE WIDE ENOUGH TO ENSURE CLEAN-OUT OF DISTURBED SOILS AND ACCOMMODATE MECHANICAL COMPACTING EQUIPMENT (APPLIES TO BOTH TRENCHES AND VAULT/ BOX EXCAVATIONS).

DEPTH OF TRENCHING FOR WATER AND GAS PIPING SHALL BE SUCH AS TO GIVE A MINIMUM COVER OF 18 INCHES OVER THE TOP OF THE PIPE. DEEPER EXCAVATION MAY BE REQUIRED DUE TO LOCALIZED BREAKS IN GRADE, OR TO INSTALL THE NEW PIPING UNDER EXISTING CULVERTS OR OTHER UTILITIES WHERE NECESSARY.

TRENCHING FOR SEWERS AND DRAINS SHALL BE OF SUFFICIENT WIDTH TO PERMIT PROPER JOINTING OF THE PIPE AND BACKFILLING OF MATERIAL ALONG THE SIDES OF THE PIPE. TRENCH WIDTH AT THE SURFACE OF THE GROUND SHALL BE KEPT TO THE MINIMUM AMOUNT NECESSARY TO INSTALL THE PIPE IN A SAFE MANNER. TRENCHES SHALL BE EXCAVATED BELOW THE BARREL OF THE PIPE A SUFFICIENT DISTANCE TO PROVIDE FOR BEDDING MATERIAL.

WHERE THE TRENCH BOTTOM IS IN A MATERIAL WHICH IS UNSUITABLE FOR FOUNDATION OR WHICH WILL MAKE IT DIFFICULT TO OBTAIN UNIFORM BEARING FOR THE PIPE, SUCH MATERIAL SHALL BE REMOVED AND A STABLE FOUNDATION PROVIDED. THIS SHALL INCLUDE THE PREPARATION OF THE NATIVE TRENCH BOTTOM AND/OR THE TOP OF THE FOUNDATION MATERIAL TO A UNIFORM GRADE SO THAT THE ENTIRE LENGTH OF PIPE RESTS FIRMLY ON A SUITABLE PROPERLY COMPACTED MATERIAL. CLEAN AGGREGATE BASE TO BE USED FOR FOUNDATION PURPOSES SHALL BE OF A TYPE AND GRADATION TO PROVIDE A SOLID COMPACT BEDDING IN THE TRENCH.

12. BACKFILL: CONTRACTOR SHALL COMPLETE 4" SAND (COMPACTED TO 95%) BEDDING AND THEN BACKFILL TO 6 INCHES OVER THE TOP OF THE PIPE WITH SAND BEFORE STARTING BACKFILLING OPERATIONS. UNSTABLE AND/ OR WET EXCAVATION BOTTOMS SHALL REQUIRE PLACEMENT OF AT LEAST 6" (COMPACTED THICKNESS) OF CLEAN AGGREGATE BASE UNDER PIPE IN LIEU OF BEDDING SAND. TAKE ALL PRECAUTIONS NECESSARY TO PROTECT THE PIPE FROM DAMAGE, MOVEMENT AND SHIFTING. COMPACTION EQUIPMENT USED ABOVE THE PIPE ZONE SHALL BE OF A TYPE THAT DOES NOT INJURE THE PIPE. WHERE ORIGINAL EXCAVATED MATERIAL IS UNSUITABLE FOR TRENCH BACKFILL, BACKFILL GRAVEL SHALL BE PLACED. UNSUITABLE MATERIAL SHALL BE REMOVED TO A DISPOSAL AREA. WHEREVER A TRENCH IS EXCAVATED IN A PAVED ROADWAY, SIDEWALK OR OTHER AREA WHERE MINOR SETTLEMENTS WOULD BE DETRIMENTAL AND WHERE NATIVE EXCAVATED MATERIAL IS NOT SUITABLE FOR COMPACTION AS BACKFILL, TRENCH SHALL BE BACKFILLED WITH BACKFILL GRAVEL. WARNING TAPE MARKERS AND TRACER WIRES SHALL BE INSTALLED DURING BACKFILL OPERATIONS.

THE METHOD OF COMPACTION SHALL BE AT CONTRACTOR'S OPTION, UNLESS EXCAVATION PERMIT REQUIRES A SPECIFIC TYPE. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE THE PROPER SIZE AND TYPE OF COMPACTION EQUIPMENT AND SELECT THE PROPER METHOD OF UTILIZING SAID EQUIPMENT TO ATTAIN THE REQUIRED COMPACTION DENSITY. COMPACTION BY WATER JETTING WILL NOT BE PERMITTED.

WHERE BACKFILL IS REQUIRED TO BE COMPACTED TO A SPECIFIED DENSITY, TESTS FOR COMPLIANCE SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE GOVERNING AUTHORITY. ALLOW TESTING SERVICE TO INSPECT AND APPROVE EACH SUBGRADE AND FILL LAYER BEFORE FURTHER FILL, BACKFILL OR CONSTRUCTION WORK IS PERFORMED.

13. PIPING LOCATIONS: PIPING LOCATIONS SHOWN ARE DIAGRAMMATIC ONLY. CONTRACTOR SHALL VERIFY DEPTHS AND LOCATIONS OF ALL LATERAL STUBS, OFFSETS, OBSTRUCTIONS, ETC REQUIRED IN THE FIELD. THE ACTUAL LOCATIONS OF LINES, CLEANOUTS AND CONNECTIONS MAY VARY PROVIDED THAT COMPLETE SYSTEMS ARE SIZED AND INSTALLED IN COMPLIANCE WITH CODES. ANY SIGNIFICANT DEVIATIONS FROM THE PLANS SHALL BE CALLED TO THE ATTENTION OF THE ENGINEER PRIOR TO INSTALLATION. VERIFY CONNECTIONS LOCATIONS AND RELOCATABLES. CUT & PATCH FINISHED SURFACES AS NEEDED FOR PIPE INSTALLATION. PATCH SHALL MATCH ADJACENT SURFACES. MINIMUM CONCRETE PATCH 5 FT. IN WALKWAYS.

14. NATURAL GAS PIPING: ALL ABOVE GROUND NATURAL GAS PIPING 2-1/2" AND SMALLER SHALL BE US MANUFACTURED BLACK (INTERIOR) OR GALVANIZED (EXTERIOR) SCH. 40 STEEL PIPE WITH 150 POUND BLACK OR GALVANIZED (EXTERIOR) THREADED FITTINGS. ALL ABOVE GROUND NATURAL GAS PIPING 3" AND LARGER SHALL BE US MANUFACTURED BLACK (INTERIOR) OR GALVANIZED (EXTERIOR) SCH. 40 STEEL PIPE WITH WELDED CONNECTIONS, PER AWS D10.12M/D10.12:2000. CONNECTIONS TO VALVES AND PRESSURE REGULATORS SHALL BE FLANGED FOR SIZES 2" & LARGER. ALL UNDERGROUND NATURAL GAS PIPING SHALL BE US MANUFACTURED (SDR 11.5) POLYETHYLENE PLASTIC APPROVED FOR NATURAL GAS SERVICE. INSTALL TRACER WIRES FOR UNDERGROUND PLASTIC PIPE.

TRANSITIONS FROM PLASTIC TO STEEL PIPE SHALL BE MADE WITH PRE-BENT ANODELESS LISTED STEEL TRANSITION FITTING. PROVIDE A CAPPED DIRT LEG IN EACH PIPE SERVING GAS BURNING EQUIPMENT. PROVIDE A NEW FLEXIBLE GAS SUPPLY & MCDONALD SERIES 10710 VALVE AT EACH APPLIANCE. FOR INDIVIDUAL GAS SHUTOFF VALVES AT BUILDINGS, McDONALD 10604 FOR 1-1/2" AND SMALLER & ROCKWELL SUPER NORDSTROM 200 CWP FLANGED FOR 2" AND LARGER.

15. WATER PIPING: ALL UNDERGROUND SITE PIPING SHALL BE US MANUFACTURED SCHEDULE 80 PVC WITH SOLVENT WELD JOINTS. EXCEPT SECTIONS UNDER CONCRETE PAVING, WHICH SHALL BE U.S. MANUFACTURED TYPE "K" COPPER WITH PE SLEEVE. DEPTH OF COVER 30" IN PAVED AREAS / 18" IN LANDSCAPING. UNDERGROUND JOINTS SHALL BE BRAZED. INSTALL TRACER WIRE FOR PVC PIPE. TRANSITIONS FROM UNDERGROUND PVC TO ABOVE GROUND COPPER SHALL BE MADE WITH U.S. MANUFACTURED TYPE "K" SOFT COPPER. COPPER SHALL BE SLEEVED WITH POLYETHYLENE. TRANSITIONS FROM PVC TO TYPE "K" COPPER SHALL BE MADE WITH MALE PVC TO FEMALE COPPER ADAPTERS. ALL ABOVEGROUND COPPER SHALL BE U.S. MANUFACTURED TYPE "L" HARD COPPER WITH (NON-LEAD) SOLDER SWEAT JOINTS. UNDERGROUND SHUTOFF VALVES SHALL BE NIBCO - S-595-Y-LF THREE PIECE BRONZE BALL VALVES WITH UNION IN CONCRETE YARD BOX WITH COVER AND THE WORD "WATER" MARKED ON COVER. WHERE PIPES PIERCE FINISHED SURFACES, CHROME PLATED CAST BRASS ESCUTCHEONS WITH SET SCREW (BRASSCRAFT CB SERIES OR EQUAL) SHALL BE INSTALLED OR STUCCO PATCH AND PAINT TO MATCH ADJACENT SURFACE. SINK STOPS SHALL BE LEAD-FREE HEAVY PATTERN, ANGLE, 1/2" FIP INLET, 1/2" COMP. OUTLET, WITH LOOSE KEY, CHROME PLATED BRASSCRAFT HSR87X C OR EQUAL. CONNECT STOPS WITH CHROME PLATED BRASS NIPPLES INTO FIP ADAPTERS BEHIND ESCUTCHEONS. SUPPLY TUBES SHALL BE BRAIDED STAINLESS STEEL WITH 1/2" FIP X COMP., FLUIDMASTER NO-BURST OR EQUAL. FINAL CONNECTION TO EXISTING STEEL PIPING SHALL BE MADE WITH SMITH BLAIR 400S REPAIR COUPLING. FINAL CONNECTION TO (E) UNDERGROUND COPPER SHALL BE BRAZED TYPE.

16. SEWER PIPING: SEWER SHALL BE U.S. MANUFACTURED SCHEDULE 40 PVC PLASTIC GRAVITY SEWER PIPE MEETING THE REQUIREMENTS OF ASTM D-2665.& D-1785& NSF LISTED. EXTENSIONS TO SERVE CLEANOUTS AT GRADE SHALL BE NO-HUB CAST IRON WITH STAINLESS STEEL BAND CLAMPS. ALL LINES SHALL BE SLOPED @ 1/4"/FT MIN OR IN COMPLIANCE WITH CODE. WHERE DRAINS PENETRATE WALLS, CHROME PLATED CAST BRASS ESCUTCHEONS WITH SET SCREWS. ALL UNDERGROUND CAST IRON SHALL BE WRAPPED WITH 10 MIL POLYETHYLENE PER THE DUCTILE IRON PIPE RESEARCH COUNCIL RECOMMENDATIONS.

17. CLEANOUTS: FLOOR CLEANOUTS SHALL BE CAST IRON BODY WITH BRONZE PLUG AND SQUARE ADJUSTABLE NON-SKID NICKEL-BRONZE TOP WITH VANDAL PROOF TOP FOR FINISHED FLOOR, J.R. SMITH 4043S-PB, ZURN ZN-1400-TVP, OR EQUAL. CLEANOUTS TO GRADE SHALL BE J.R. SMITH 4283S OR EQUAL WITH BRONZE PLUG. NON-TRAFFIC OR NON-SURFACED AREAS SHALL BE INSTALLED WITH CAST IRON CLEANOUT RISERS TERMINATING WITH BRONZE PLUG WITHIN CHRIST YARD BOX F08 WITH V01-71C LID AND THE WORDS "BUILDING SEWER CLEANOUT" MARKED ON COVER.

18. PIPING SUPPORT: ALL PIPING SHALL BE SUPPORTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2022 CALIFORNIA PLUMBING CODE. HORIZONTAL WATER PIPES AND CONDENSATE DRAINS SHALL BE HUNG WITH SUPERSTRUT C-727-F ADJUSTABLE FELT-LINED PIPE HANGERS, THREADED ROD, AND BEAM ATTACHMENT BRACKETS, LOCATED AT SIX FOOT MAXIMUM INTERVALS. VERTICAL WATER PIPES AND CONDENSATE DRAINS SHALL BE SUPPORTED AT THEIR BASES AND AT EACH STORY OR AT TEN FOOT MAXIMUM INTERVALS. TO PREVENT SWAYING, PROVIDE LATERAL BRACING AT SIX FOOT INTERVALS ANCHORED TO OVERHEAD FRAMING. HORIZONTAL NATURAL GAS PIPING SHALL BE SUSPENDED WITH THE SAME HARDWARE AS FOR WATER PIPING, EXCEPT WITHOUT FELT LINER, LOCATED EVERY TEN FEET FOR PIPES 3/4" AND SMALLER, AND TWELVE FEET MAXIMUM FOR PIPES 1" AND LARGER. VERTICAL NATURAL GAS PIPING SHALL BE SUPPORTED AT EACH STORY HEIGHT. TO PREVENT SWAYING, PROVIDE LATERAL BRACING AT TEN FOOT INTERVALS ANCHORED TO OVERHEAD FRAMING.

HORIZONTAL CAST IRON PIPING SHALL BE HUNG WITH SUPERSTRUT C-710 ADJUSTABLE CLEVIS HANGERS, THREADED ROD, AND BEAM ATTACHMENT BRACKETS, LOCATED AT FIVE FOOT MAXIMUM INTERVALS. TO PREVENT SWAYING, PROVIDE LATERAL BRACING AT FIVE FOOT INTERVALS ANCHORED TO OVERHEAD FRAMING. VERTICAL PIPING SHALL BE SUPPORTED AT EACH FLOOR WITH SUPERSTRUT C-720 RISER CLAMPS AND AT MIDSPAN WITH C-708 CLAMPS INTO SUPERSTRUT CHANNEL.

19. CAP UNDERGROUND GAS AND SEWER PIPING THAT WAS CUT AND NOT REMOVED. GAS PIPING THAT IS TO BE ABANDONED SERVING BUILDINGS, SHALL BE CAPPED WHEREVER GAS PIPE HAS BEEN CUT.

20. TESTING: ALL PIPING AND FIXTURES INSTALLED SHALL BE TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2022 CALIFORNIA PLUMBING CODE, THE LOCAL JURISDICTION, AND THE SCHOOL DISTRICT STANDARDS. UPON COMPLETION OF THE ENTIRE WATER SUPPLY SYSTEM, ADEQUATE TIME SHALL BE GIVEN FOR SOLVENT WELDED FITTINGS TO CURE PER MANUFACTURER'S RECOMMENDATIONS, AND THE SYSTEM SHALL BE TESTED WITH WATER. THE WATER TEST PRESSURE SHALL BE GREATER THAN OR EQUAL TO THE WORKING PRESSURE UNDER WHICH THE SYSTEM IS TO BE USED. THE PIPING SYSTEM SHALL WITHSTAND THE TEST PRESSURE WITHOUT SHOWING EVIDENCE OF LEAKAGE FOR A PERIOD OF NOT LESS THAN 2 HOURS. (PLASTIC PIPE SHALL NOT BE TESTED WITH AIR).

21. CORRECTION OF WORK: THE CONTRACTOR SHALL PROMPTLY CORRECT ALL WORK THE SCHOOL DISTRICT FINDS DEFECTIVE OR FAILING TO CONFORM TO THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BEAR ALL COSTS REQUIRED BY THE CONTRACT DOCUMENTS. IF ANY OF THE WORK IS FOUND TO BE DEFECTIVE OR NOT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL CORRECT IT PROMPTLY AFTER RECEIPT OF A WRITTEN NOTICE FROM THE SCHOOL DISTRICT TO DO SO.

22. WARRANTY: THE CONTRACTOR SHALL WARRANT THAT ALL SYSTEMS, SUBSYSTEMS, AND COMPONENT PARTS ARE FULLY FREE FROM DEFECTIVE DESIGN, MATERIALS, AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE SCHOOL DISTRICT.

23. AS-BUILT DRAWINGS SHALL BE GIVEN TO THE SCHOOL DISTRICT PRIOR TO ACCEPTANCE OF THE PROJECT. AS-BUILT DRAWINGS SHALL HAVE DIMENSIONS, DEPTHS, & INVERT FROM ADJACENT BUILDINGS AND INCLUDE ACTUAL LOCATIONS OF CLEAN-OUTS, VALVES, AND POINT OF CONNECTION TO EXISTING.

24. CLEANUP: CONTRACTOR SHALL THOROUGHLY CLEAN ENTIRE JOBSITE EVERY DAY OF ALL DEBRIS ASSOCIATED WITH PLUMBING INSTALLATION.

25. COORDINATION: CONTRACTOR SHALL COORDINATE WITH THE SCHOOL DISTRICT'S PROJECT MANAGER AND ALL RELATED TRADES.

26. CUTTING AND PATCHING. WORK INCLUDES CUTTING AND PATCHING (TO MATCH EXISTING) ALL SURFACES AND SYSTEMS DISTURBED BY THE PLUMBING WORK.

27. EXPOSED WATER & GAS PIPING IS TO BE CLEANED AND PRIMED WITH A RUST INHIBITIVE PRIMER, AND PAINTED. WATER SHALL BE BLUE AND GAS SHALL BE YELLOW (VERIFY COLORS WITH SCHOOL DISTRICT).

28. LANDSCAPE RESTORATION. CONTRACTOR SHALL REPAIR ANY BROKEN SPRINKLER LINES OR WIRING AND RESTORE TO WORKING ORDER. ALL LANDSCAPES AND PLANTS SHALL BE RESTORED TO MATCH ADJACENT SURFACES. INSTALL NEW SOD WHERE TRENCHES CROSS EXISTING LAWN AREAS, AND WATER UNTIL ESTABLISHED.

29. CONTACT GAS COMPANY TO RESTORE SERVICE, ONCE THE GAS SERVICE HAS BEEN RESTORED, PRESSURE TEST, PURGE LINES AT EACH APPLIANCE, THROUGHOUT CAMPUS. RE-LIGHT ANY PILOT LIGHTS.

30. DISINFECTION OF DOMESTIC WATER PIPING SYSTEM

- A. PRIOR TO STARTING WORK. VERIFY SYSTEM IS COMPLETE, FLUSHED AND CLEAN.
- B. ENSURE PH OF WATER TO BE TREATED IS BETWEEN 7.4 AND 7.6 BY ADDING ALKALI (CAUSTIC SODA OR SODA ASH) OR ACID (HYDROCHLORIC).
- C. INJECT DISINFECTANT, FREE CHLORINE IN LIQUID, POWDER, TABLET OR GAS FORM, THROUGHOUT SYSTEM TO OBTAIN 50 TO 80 mg/L RESIDUAL.
- D. BLEED WATER FROM OUTLETS TO ENSURE DISTRIBUTION AND TEST FOR DISINFECTANT RESIDUAL AT MINIMUM 15 PERCENT OF OUTLETS.
- E. MAINTAIN DISINFECTANT IN SYSTEM FOR 24 HOURS.
- F. IF FINAL DISINFECTANT RESIDUAL TESTS LESS THAN 25 mg/L, REPEAT TREATMENT.
- G. FLUSH DISINFECTANT FROM SYSTEM UNTIL RESIDUAL EQUAL TO THAT OF INCOMING WATER OR 1.0 mg/L.
- H. TAKE SAMPLES NO SOONER THAN 24 HOURS AFTER FLUSHING AND ANALYZE AT ACCREDITED LAB IN ACCORDANCE WITH AWWA C651. SAMPLES SHALL BE TAKEN AT EACH DRINKING FOUNTAIN AND THREE SINK/LAVATORIES PICKED BY ENGINEER. ALSO PROVIDE TEST INCOMING WATER.
- I. SEND TEST RESULTS PROMPTLY TO PROJECT MANAGER FOR REVIEW. TEST RESULTS SHALL CONFIRM THERE IS NO HARMFUL BACTERIA DETECTED AT ANY LOCATION. IF RESIDUAL CHLORINE IS LESS THAN .5 PPM PROVIDE TEST FOR HETEROTROPHIC PLATE COUNT (HPC). IF HARMFUL BACTERIA IS DETECTED OR HPC EXCEEDS 500 PPM SYSTEM SHALL BE RE-CHLORINATED AND RETESTED UNTIL SYSTEM PASSES. OBTAIN APPROVAL FROM PROJECT MANAGER PRIOR TO PLACING SYSTEM INTO SERVICE FOR HUMAN CONSUMPTION.

31. CONTRACTOR SHALL PREPARE AS-BUILT DRAWINGS DAILY AS WORK PROGRESSES. INCLUDE DIMENSIONS FROM PERMANENT STRUCTURES. PROVIDE SEWER INVERTS AT POINT OF CONNECTION AND CLEANOUTS. AT EACH PAY REQUEST PROVIDE PROGRESS SET TO PROJECT MANAGER.

32. AFTER SEWER PIPE INSTALLATION & SOIL COMPACTION ALL MAINS SHALL BE VIDEO SURVEYED WITH 1 GPM FLOWING. VIDEO SHALL DEMONSTRATE THAT THERE ARE NO DEFECTS, SAGS, OR BELLIES IN THE SEWER MAIN. PROVIDE VIDEO TO PROJECT MANAGER FOR REVIEW. IF DEFECTS, SAGS, OR BELLIES ARE FOUND CONTRACTOR SHALL RE-INSTALL AFFECTED SECTION AND VIDEO AGAIN.

Revisions



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OL DISTRICT
ENT
VET SCHOOL

TA ROSA RD. CAMARILLO. CA.

PLUMBING NOTES

Date: 1/31/25

Drawn: TP

P1 0

Sheet Number

f Sheets

PLUMBING EQUIPMENT SCHEDULE

SYMBOL WASTE VENT CW HW DESCRIPTION

/ HB \setminus

3/4"

HYDRANT, WITH ANTI-SIPHON, VACUUM BREAKER, LOOSE TEE KEY AND HOSE CONNECTION. WOODFORD Y24, OR EQUAL.

sov

/sov\

WATER SHUT OFF VALVE: THREE PIECE BALL VALVE: NIBCO S-595-Y-LF, W/ CHRISTY B03 PRE-CAST CONCRETE BOX W/ CAST IRON LID AT UNPAVED AREAS & ASPHALT AND CONCRETE LID AT SIDEWALKS. LABEL THE COVER "WATER". FOR SIZES THROUGH 2".

WATER SHUT OFF VALVE: TWO PIECE BALL VALVE: NIBCO S-FP-600A-LF, W/ CHRISTY B12 PRE-CAST CONCRETE BOX W/ CAST IRON LID AT UNPAVED AREAS & ASPHALT AND CONCRETE LID AT SIDEWALKS. LABEL THE COVER "WATER". FOR SIZES 2-1/2" & 3".

∕GSOV\ /EQV

/EQV

GAS SHUT OFF VALVE, FLANGED: ROCKWELL, SUPER NORDSTROM 200 CWP, CARBON STEEL BODY, FLANGED. INSTALL PER MANUFACTURERS RECOMMENDATIONS. FOR 2" & LARGER.

2" (FLANGED) VERTICAL - BOTTOM IN FLOW . PROVIDE MODEL SUITABLE FOR ORIENTATION OF INSTALLED UNIT.

SEISMIC SAFETY GAS VALVE: PACIFIC SEISMIC PRODUCTS MODEL VB-314F,

SEISMIC SAFETY GAS VALVE: PACIFIC SEISMIC PRODUCTS MODEL VB-315F, 3" (FLANGED) VERTICAL - BOTTOM IN FLOW . PROVIDE MODEL SUITABLE FOR ORIENTATION OF INSTALLED UNIT.

	BRANCH LINES								
SAI	SANTA ROSA NEW GAS PIPING PER CPC - CHAP. 12 TABLE 1215.2(1)								
ITEM	TOTAL CFH	T.D.L.	PIPE SIZE	MAX. CFH AT 550'					
BUILDING A	560	300'	2"	459					
BUILDING C	340	330'	2"	459					
BUILDING D	574	450'	3"	1290					
BUILDING E	354	535'	2"	459					

BUILDING A									
NEW	GAS F	PIPING	PER C	CPC - C	CHAP	. 12 TA	ABLE 1215.2(1)		
ITEM			ВТ	UH	(QTY	BTUH		
RTU			100,	000	2		200,000		
RTU		36		000		1	360,000		
TOTA	L						560,000		
CFH @	1,000 BT	UH/CF					560		
DISTAN	CE TO F	URTHES	ST APPLI	ANCE (3	00')		300'		
SIZE	3/4"	1"	1-1/4"	1-1/2"	2"				
CFH	57	108	221	331	638	·	·		

NEW	GAS F	PIPING	PER C	CPC - (CHAP.	12 TA	BLE 121	15.2(1)		NEW	GAS F	PIPING	PER (CPC -	CHAI	P. 12	TABLE	1215.2(1)
ITEM	1		ВТ	UH	Q.	TY	E	BTUH		ITEM			ВТ	UH		QTY		втин
RTU			100,	000	2	2	20	0,000		RTU			80,	000		4		320,000
RTU			360,	000	1		36	0,000		WALL	- FURNA	ACE	20,	000		1		20,000
TOTA	AL						560	0,000		TOTA	\L							340,000
CFH @	1,000 B1	ΓUH/CF						560		CFH @	1,000 B	ΓUH/CF						340
DISTAN	NCE TO F	URTHE	ST APPLI	ANCE (3	('00'			300'		DISTAN	CE TO F	URTHE	ST APPLI	ANCE (330')			350'
SIZE	3/4"	1"	1-1/4"	1-1/2"	2"					SIZE	3/4"	1"	1-1/4"	1-1/2"	2"	3"		
CFH	57	108	221	331	638					CFH	53	99	203	305	587	1650		
									_									

BUILDING D NEW GAS PIPING PER CPC - CHAP. 12 TABLE 1215.2(1)									
ITEM		ВТ	UH	Q.	TY		BTUH		
RTU		90,0	90,000 6		6	540,000			
WATER HEAT	ER	34,0	1,000			34,000			
TOTAL							574,000		
CFH @ 1,000 BTUH/CF 574									
DISTANCE TO FURTHEST APPLIANCE (450') 450'									
SIZE 3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"			
CFH 46	86	177	266	512	816	1440			

BUILDING E									
NEW GAS PIPING PER CPC - CHAP. 12 TABLE 1215.2(1)									
ITEM			ВТ	UH	QTY		BTUH		
RTU			80,0	80,000		4		320,000	
WATE	R HEAT	ER	34,0	34,000		1		34,000	
TOTA	L							354,000	
CFH @ 1	1,000 BT	UH/CF						354	
DISTANCE TO FURTHEST APPLIANCE (535') 550'									
SIZE	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	
CFH	41	78	159	239	459	732	1290	2640	

BUILDING C

ITEM	QTY	CW FU	DFU			WATER TOTAL	DFU TOTAL	
WATER CLOSETS	22	5.0	4.0			110	88	
JRINAL	8	4.0	2.0			32	16	
_AVATORIES	14	1.0	1.0			14	14	
SINKS	24	2.0	2.0			48	48	
MOP SINK	2	3.0	3.0			6	6	
DRINKING FOUNTAIN	8	0.5	0.5			4	4	
FLOOR DRAIN	8	-	2.0			-	16	
HOSE BIBB #1	1	2.5	-			2.5	-	
HOSE BIBB +1	8	0.5	-			4	-	
FUTURE FIXTURES								
WATER CLOSETS	6	5.0	4.0			30	24	
JRINAL	2	4.0	2.0			8	4	
AVATORIES	6	1.0	1.0			6	6	
LOOR DRAIN	2	-	2.0			-	4	
TOTAL FIXTURE UNITS						264.5	230	
			•	•		•	•	•
PRESSURE AT SCHOOL							80	PSI
DEMAND LOAD FROM CHART A-2.1							100	GPM
MAXIMUM DISTANCE TO FURTHEST FIX	TURE						470	FT
PLUS 50% FOR FITTINGS							235	FT
TOTAL							705	FT
							•	•
PRESSURE DROPS								
HEIGHT PRESSURE DROP	11 FT.	11 FT. X 0.43=						PSI
MIN PRESSURE AT FIXTURE							4.7 25	PSI
								1
PRESSURE AVAILABLE FOR FRICTION			80 PS	I - 29.7 PSI =	50.3 PSI		50.3	PSI
PRESSURE AVAILABLE PER HUNDRED F	FET OF COPPER			(50 3 PSI /70	5 FT) X 100 =	7.1 PSI/100 F		
THE SOURCE TO THE SECOND STATE OF THE SECOND S	LLI OI OOI I LIK			,55.5. 51770	, / . 100		-	
PIPE SIZE	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
CW (MAX GPM @ 7 FPS)	2.75 GPM	7.5 GPM	16 GPM	26 GPM	35 GPM	65 GPM	100 GPM	160 GPM
FANK TYPE FIXTURE UNITS	2.73 OF W	9	23	44	66	200	380	692
		-1	7.1		ı UU	. Z UU	1 300	1 032



Revisions

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Ren. 6/30/26

SYMBOL LEGEND

WALL CLEAN-OUT

YARD BOX

CLEAN-OUT TO GRADE

IN CONCRETE YARD BOX P.O.C. POINT OF CONNECTION P.O.D. POINT OF DISCONNECTION

IMPORTANT NOTICE ALL UTILITY LOCATIONS ARE APPROXIMATE.
CONTRACTOR IS TO NOTIFY UNDERGROUND
SERVICE ALERT TWO WORKING DAYS PRIOR TO STARTING ANY EXCAVATION OR RESUR-

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

MATERIAL SCHEDULE, ALL U.S. MANUFACTURED

DOMESTIC WATER PIPING, UNDER CONCRETE PAVING: DOMESTIC WATER PIPING, UNDER CONCRETE PAVING: DOMESTIC WATER PIPING, UNDERGROUND: DOMESTIC WATER PIPING, ABOVE GROUND: NATURAL GAS PIPING, UNDERGROUND:

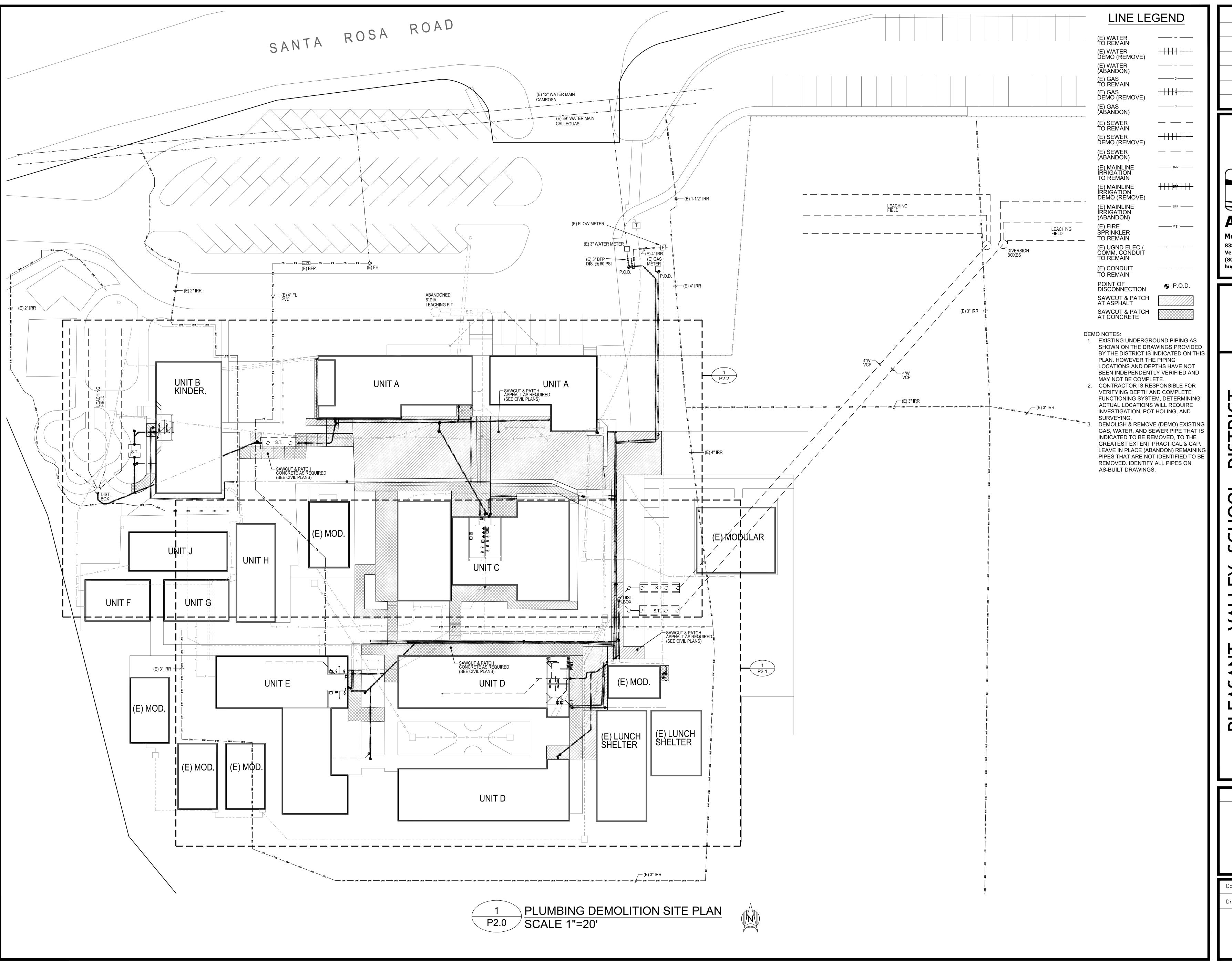
NATURAL GAS PIPING, ABOVE GROUND (INTERIOR): NATURAL GAS PIPING, ABOVE GROUND (EXTERIOR): SANITARY WASTE AND VENT PIPING (> 5 FT. OF BLDG.): SCHEDULE 40 PVC WITH DWV SOLVENT WELDED FITTINGS

SOFT COPPER TUBE:TYPE 'K' WATER TUBE, W/ PE SLEEVE HARD COPPER TUBE:TYPE 'K' WATER TUBE, W/ PE SLEEVE SCHEDULE 80 PVC WITH SOLVENT WELDED FITTINGS HARD COPPER TUBE:TYPE 'L' WATER TUBE POLYETHYLENE PIPE, SDR 11.5 STEEL PIPE: BLACK STEEL, SCHEDULE 40 STEEL PIPE: GALVANIZED STEEL, SCHEDULE 40 SANITARY WASTE AND VENT PIPING (< 5 FT. OF BLDG.): "NO-HUB" CAST-IRON PIPE, W/ POLYETHYLENE ENCASEMENT PLUMBING SCHEDULES & CALCULATIONS

Sheet Content

Date: 1/31/25 Drawn: TP

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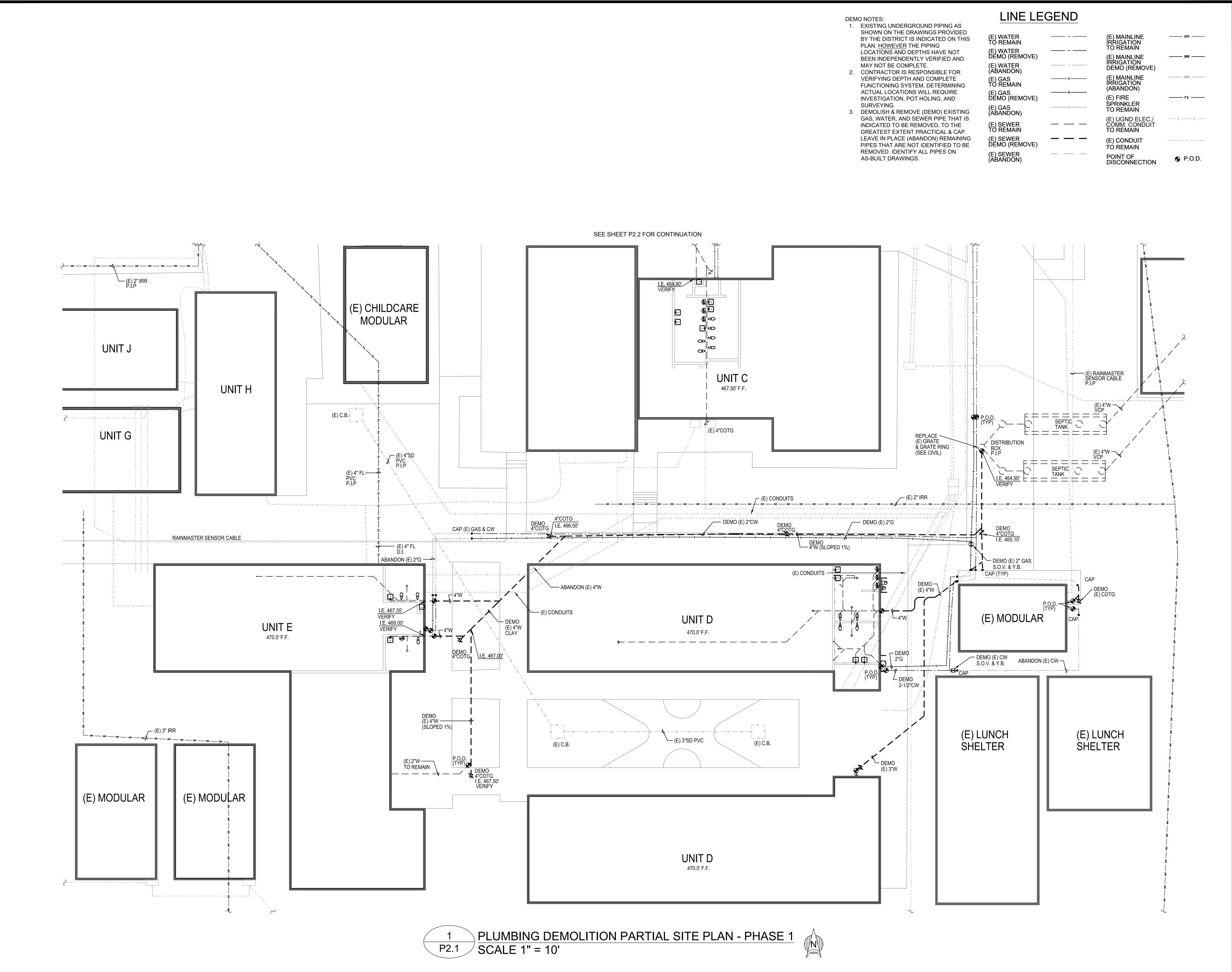


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SCHOOI A. 93012

Sheet Content **PLUMBING** SITE PLAN





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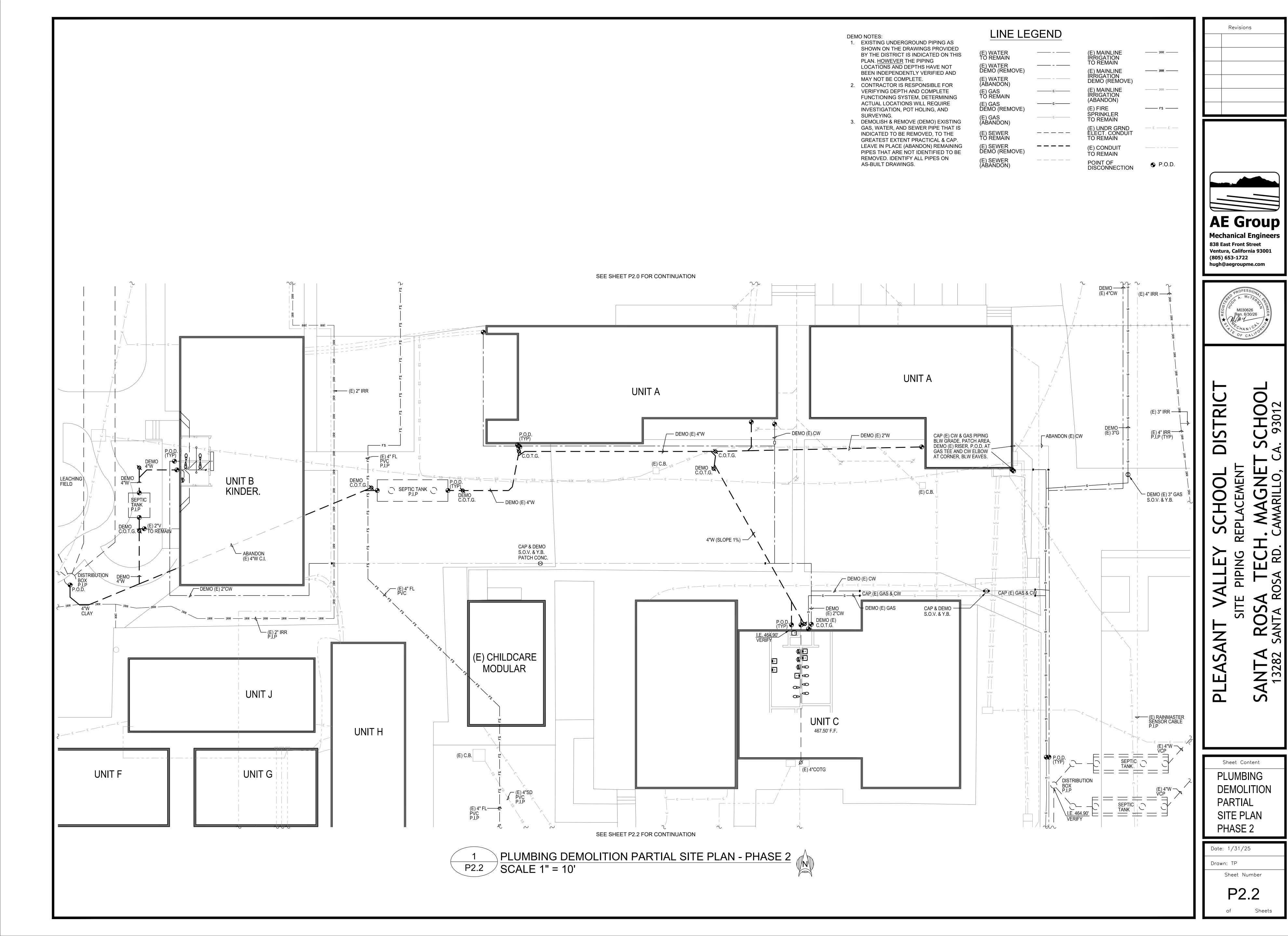
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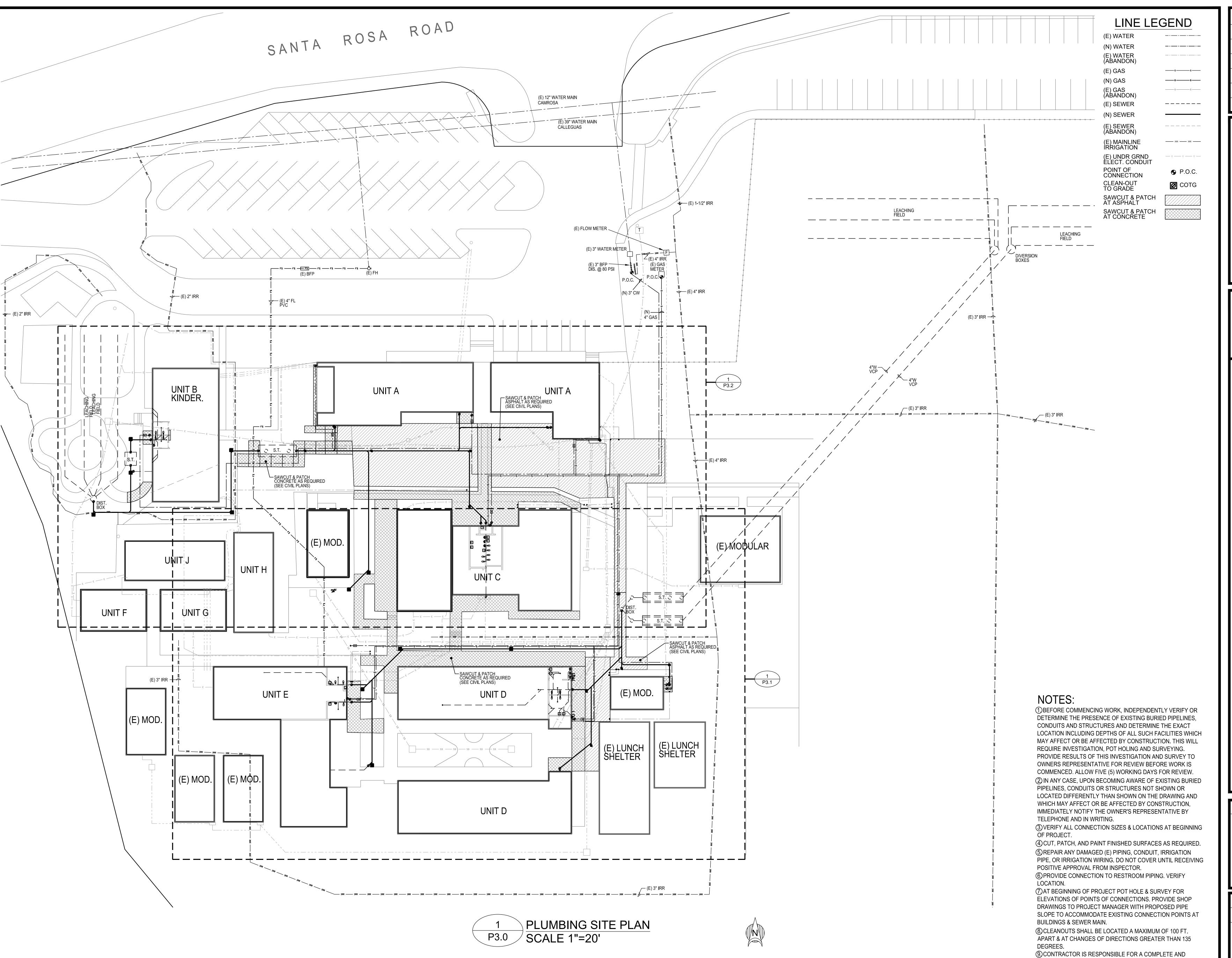
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DEMOLITION PARTIAL SITE PLAN PHASE 1

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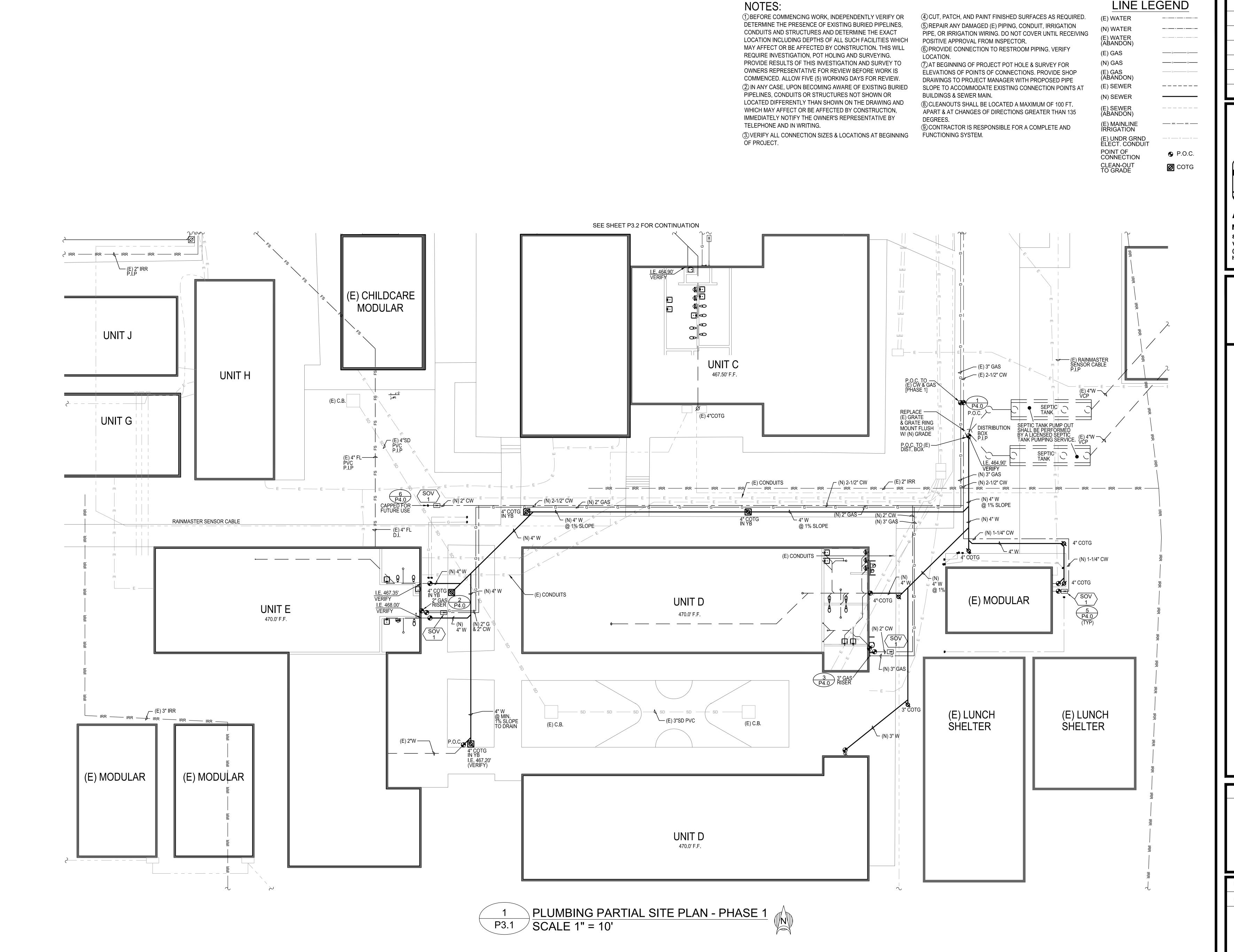
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Sheet Content PLUMBING SITE PLAN

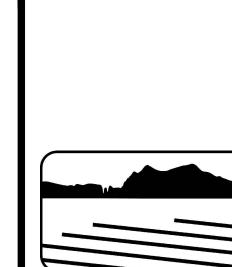
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Sheet Number

FUNCTIONING SYSTEM.



LINE LEGEND Revisions



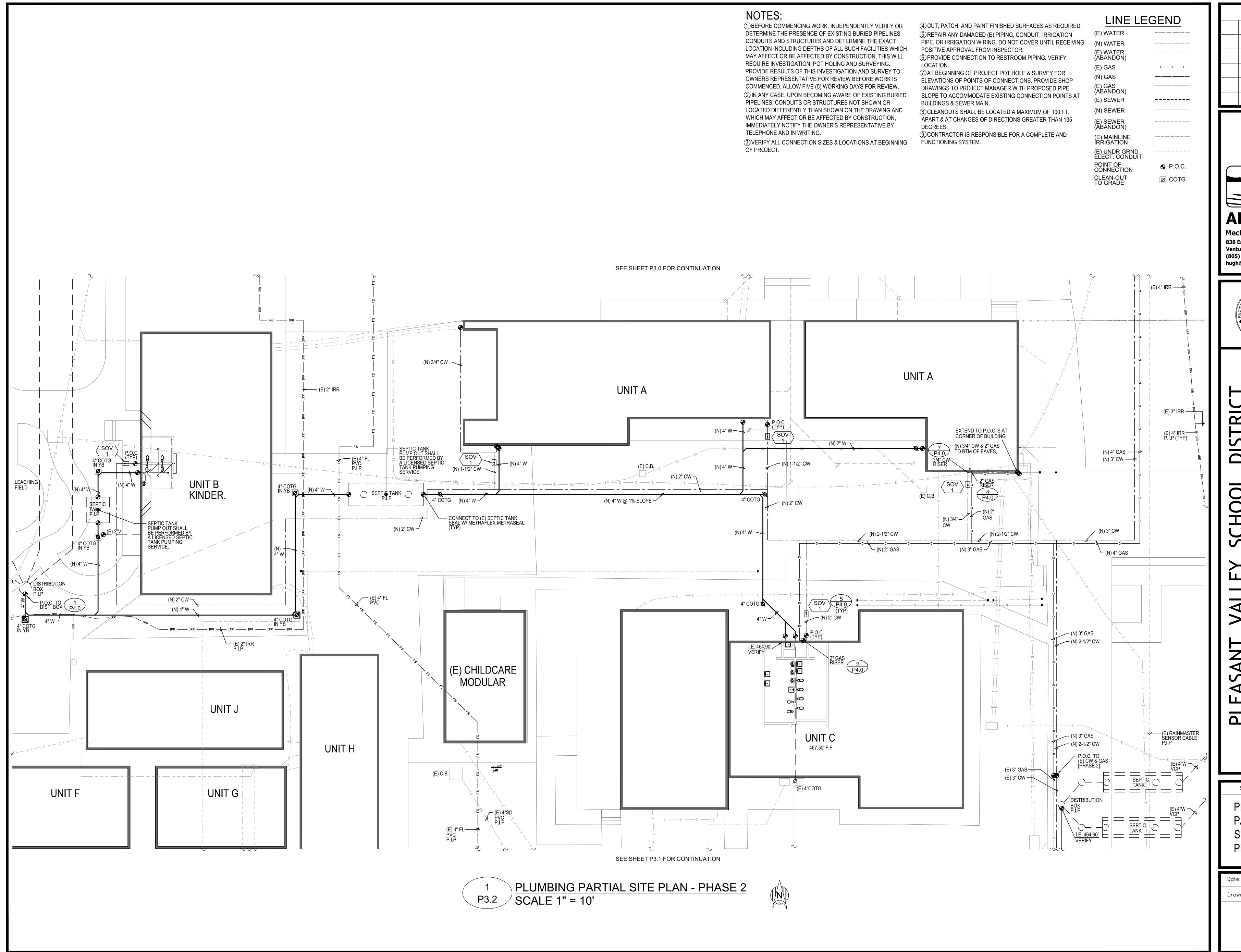
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SCH001 A. 93012

Sheet Content **PLUMBING** PARTIAL SITE PLAN PHASE 1

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PLUMBING PARTIAL SITE PLAN PHASE 2

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NOTES: 1) BEFORE COMMENCING WORK, INDEPENDENTLY VERIFY OR DETERMINE THE PRESENCE OF EXISTING BURIED PIPELINES, CONDUITS AND STRUCTURES AND DETERMINE THE EXACT LOCATION INCLUDING DEPTHS OF ALL SUCH FACILITIES WHICH MAY AFFECT OR BE AFFECTED BY CONSTRUCTION. THIS WILL REQUIRE INVESTIGATION, POT HOLING AND SURVEYING. PROVIDE RESULTS OF THIS INVESTIGATION AND SURVEY TO

OWNERS REPRESENTATIVE FOR REVIEW BEFORE WORK IS COMMENCED. ALLOW FIVE (5) WORKING DAYS FOR REVIEW. (2) IN ANY CASE, UPON BECOMING AWARE OF EXISTING BURIED PIPELINES, CONDUITS OR STRUCTURES NOT SHOWN OR LOCATED DIFFERENTLY THAN SHOWN ON THE DRAWING AND WHICH MAY AFFECT OR BE AFFECTED BY CONSTRUCTION, IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE BY TELEPHONE AND IN WRITING.

③VERIFY ALL CONNECTION SIZES & LOCATIONS AT BEGINNING OF PROJECT.

(4) CUT, PATCH, AND PAINT FINISHED SURFACES AS REQUIRED. (5) REPAIR ANY DAMAGED (E) PIPING, CONDUIT, IRRIGATION PIPE, OR IRRIGATION WIRING. DO NOT COVER UNTIL RECEIVING POSITIVE APPROVAL FROM INSPECTOR.

6 PROVIDE CONNECTION TO RESTROOM PIPING. VERIFY LOCATION.

(7) AT BEGINNING OF PROJECT POT HOLE & SURVEY FOR ELEVATIONS OF POINTS OF CONNECTIONS. PROVIDE SHOP DRAWINGS TO PROJECT MANAGER WITH PROPOSED PIPE SLOPE TO ACCOMMODATE EXISTING CONNECTION POINTS AT BUILDINGS & SEWER MAIN. ® CLEANOUTS SHALL BE LOCATED A MAXIMUM OF 100 FT. APART & AT CHANGES OF DIRECTIONS GREATER THAN 135

(9) CONTRACTOR IS RESPONSIBLE FOR A COMPLETE AND FUNCTIONING SYSTEM.

LINE LEGEND

(E) WATER (N) WATER -----(E) WATER (ABANDON) (E) GAS (N) GAS (E) GAS (ABANDON) (E) SEWER _____ ____

(N) SEWER (E) SEWER (ABANDON) _____ (E) MAINLINE IRRIGATION

(E) UNDR GRND ELECT. CONDUIT POINT OF CONNECTION ₱ P.O.C. CLEAN-OUT TO GRADE Ø COTG



Revisions



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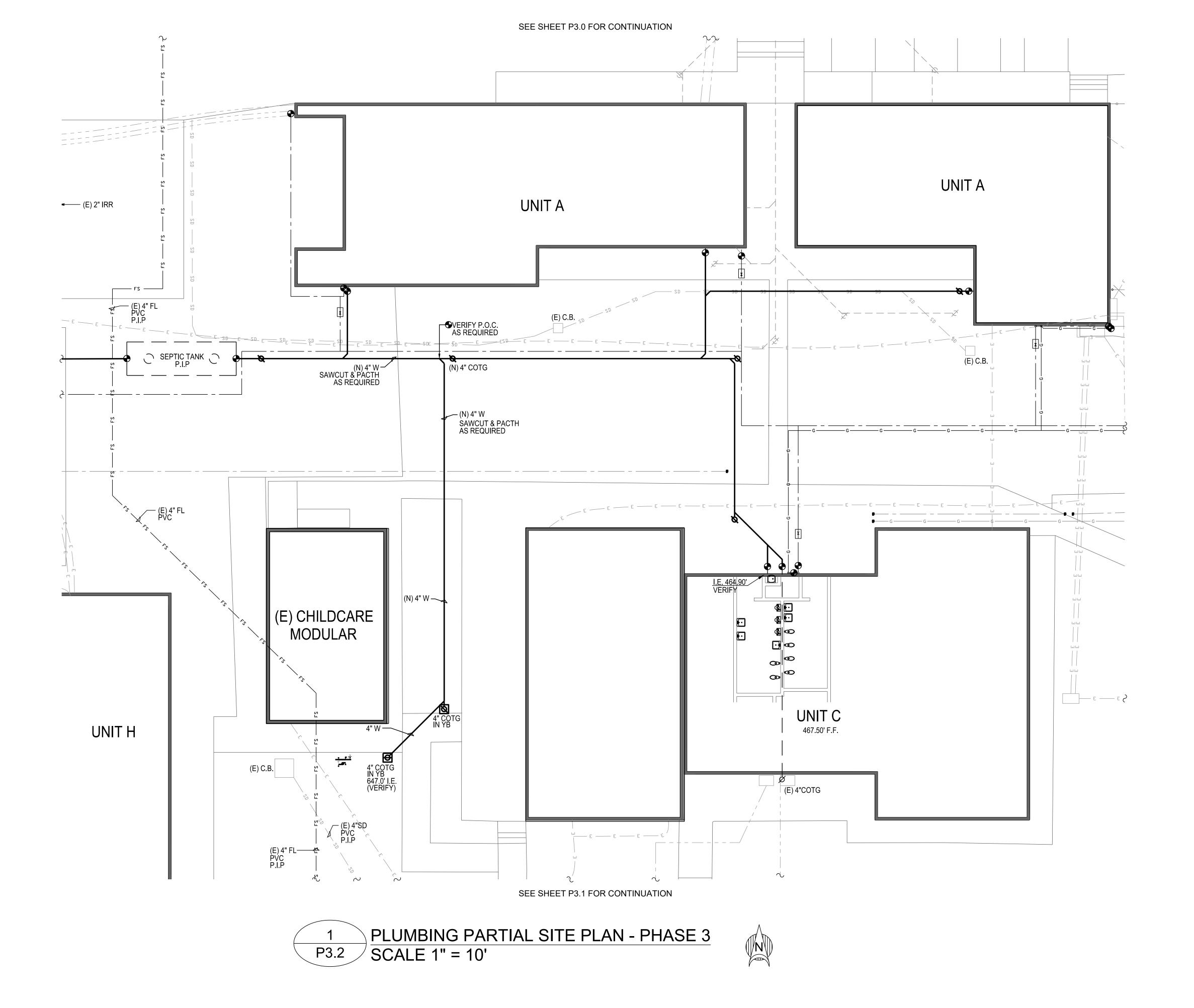


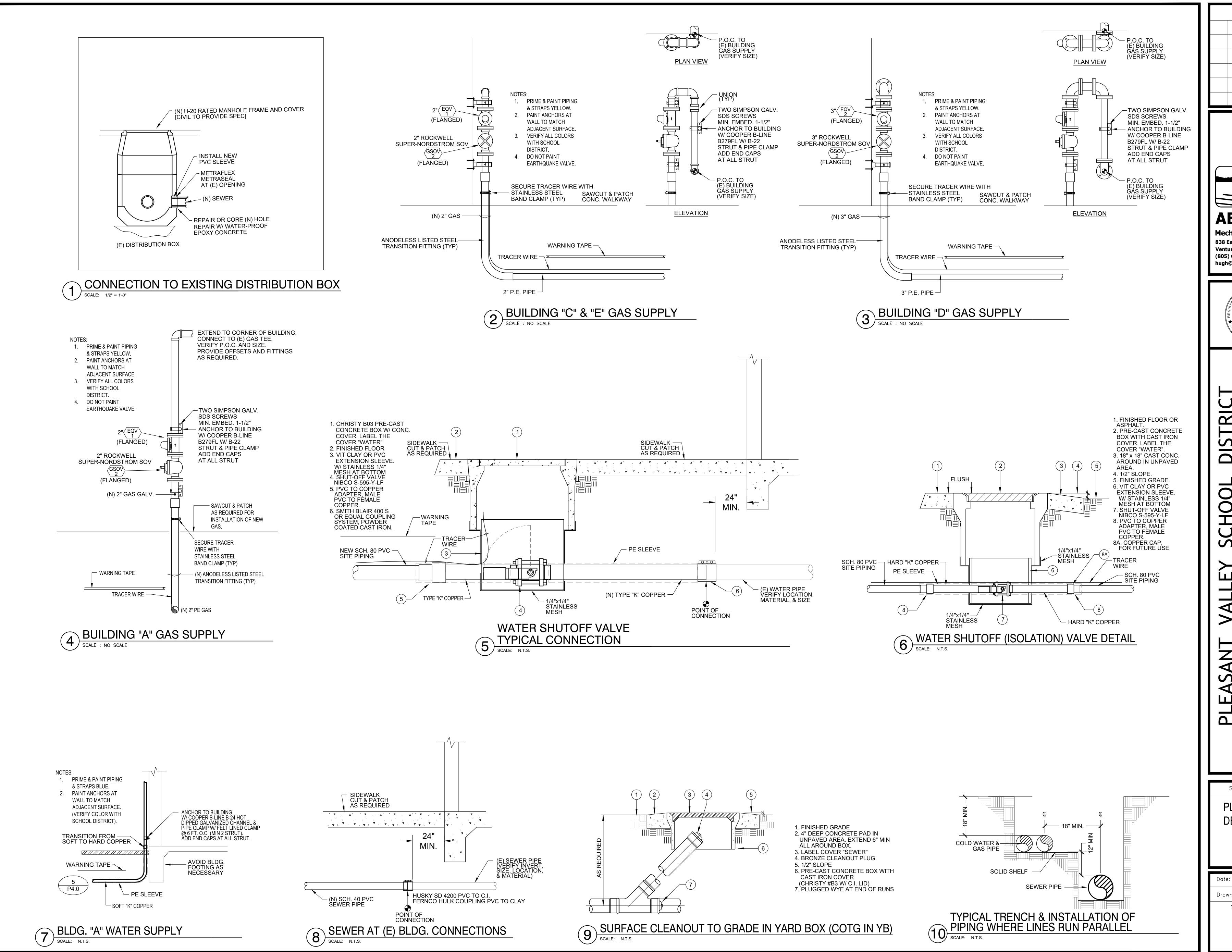


Sheet Content **PLUMBING** PARTIAL SITE PLAN PHASE 3

Date:	1/31/25
Drawn:	TP

Sheet Number











LEASANT VALLEY SCHOOL DISTRICT
SITE PIPING REPLACEMENT
ANTA ROSA TECH. MAGNET SCHOOL
13282 SANTA ROSA RD. CAMARILLO, CA. 93012

Sheet Content

PLUMBING

DETAILS

Date: 1/31/25

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P4.0

A. <u>GENERAL</u> THE DRAWINGS AND THESE GENERAL NOTES DESCRIBE THE SCOPE OF WORK AND SYSTEMS. THE MATERIAL REQUIRED FOR THE WORK SHALL BE CONTRACTOR FURNISHED AND CONTRACTOR INSTALLED, UNLESS SPECIFICALLY NOTED OTHERWISE. THE WORK INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING PRINCIPAL SYSTEMS AND EQUIPMENT. ALL ITEMS NOTED ON THE PLAN WHICH ARE NOT EXPLICITLY STATED AS EXISTING SHALL BE NEW. OBTAIN AND PAY FOR ALL NECESSARY CONSTRUCTION PERMITS, INSPECTION FEES, AND OTHER CHARGES BY AGENCIES HAVING JURISDICTION. PROVIDE AND INSTALL ALL MATERIALS IN CONFORMANCE WITH THE 2022 C.E.C., CALIFORNIA ADMINISTRATIVE CODE TITLE 8, AND OTHER CODES AND REGULATIONS HAVING JURISDICTION. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH THE REQUIREMENTS OF THE INSPECTING AUTHORITY AND THE MANUFACTURERS RECOMMENDATIONS. BEFORE SUBMITTING BID, BECOME THOROUGHLY FAMILIAR WITH ACTUAL EXISTING CONDITIONS AT THE BUILDING. THE INTENT OF THE WORK IS SHOWN ON THE DRAWINGS AND DESCRIBED HEREINAFTER. BY THE ACT OF SUBMITTING A BID PROPOSAL FOR THE WORK, THE CONTRACTOR SHALL BE DEEMED TO HAVE MADE SUCH STUDY AND EXAMINATION AND TO ACCEPT ALL CONDITIONS PRESENT AT THE SITE. NO REQUEST FOR ADDITIONAL PAYMENT WILL BE CONSIDERED AS VALID, DUE TO FAILURE TO ALLOW FOR CONDITIONS WHICH MAY EXIST. OTHER CONTRACTORS.

COORDINATE ALL WORK WITH OTHER TRADES. OBTAIN ALL DRAWINGS THAT WILL REQUIRE COORDINATION AND PROVIDE ALL ELECTRICAL CONNECTION REQUIRED WHETHER SHOWN ON ELECTRICAL DRAWINGS OR NOT. ELECTRICAL EQUIPMENT LOCATIONS INDICATED ARE SHOWN DIAGRAMMATICALLY, EXACT LOCATION SHALL BE VERIFIED. SCALING OFF OF DRAWINGS SHALL BE DONE AT CONTRACTORS RISK. DO NOT SCALE DEVICES, LIGHTING FIXTURES OR ANY EQUIPMENT FROM PLANS. LIGHTING FIXTURE QUANTITIES AND LENGTHS SHALL BE CONTRACTORS RESPONSIBILITY. FIXTURES ARE SHOWN FOR CIRCUITING ONLY. CONTRACTOR TO VERIFY SIZES & QUANTITIES PRIOR TO BID. UNINTERRUPTED EXISTING ELECTRICAL POWER SHALL BE MAINTAINED TO OTHER TRADES FOR TEMPORARY POWER AREAS OF THE SITE DURING CONSTRUCTION. PROVIDE ANY TEMPORARY SERVICES AS MAY BE REQUIRED. IDENTIFY AT BID TIME, ALL WORK TO BE DONE ON PREMIUM TIME AND THE TOTAL OVERTIME MAN-HOURS REQUIRED FOR COMPLETION. PROVIDE RECORD DRAWINGS IN ACAD TO THE OWNER WITH ALL CHANGES NOTED THEREON AT THE COMPLETION OF THE PROJECT. RECORD DRAWINGS SHALL BE SIGNED AND DATED BY CONTRACTOR PRIOR TO RELEASE OF FINAL RETENTION OF ALL MONIES. ALL CONDUIT SYSTEMS & PULL BOXES SHALL BE ACCURATE, SHOWN, & DIMENSION ORTHOGONALLY (X,Y,Z) WITH DEPTH FROM PERMANENT PHYSICAL STRUCTURE. CONTRACTOR SHALL UNCONDITIONALLY GUARANTEE ALL LABOR AND MATERIALS ON ALL WORK AGAINST DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE YEAR. SUBMIT SHOP DRAWINGS AND MATERIAL LIST FOR REVIEW PRIOR TO COMMENCING ANY WORK. ALL EQUIPMENT TO BEAR U.L LABEL OR THAT OF ANOTHER ACCEPTABLE TESTING LABORATORY. SHOP DRAWINGS MUST BE STAMPED BY THE CONTRACTOR FOR CONFORMANCE PRIOR TO SUBMITTAL. SUBMIT THREE HARD COPY SETS OF SHOP DRAWINGS FOR REVIEW PRIOR TO PURCHASING ALL BREAKER MOUNTING HARDWARE, DISCONNECT SWITCHES, FUSES, CONTROLLERS, LIGHTING FIXTURES, LIGHT SWITCHES, RECEPTACLES, ETC. CONTRACTOR'S BID SHALL BE BASED ON ALL WORK SHOWN ON THE PLANS AND AS SPECIFIED. IF CONTRACTOR PROPOSES TO SUBSTITUTE FOR EQUIPMENT SPECIFIED, HE SHALL SUBMIT HIS REQUEST FOR CONSIDERATION OF THE OWNER AND ENGINEER PRIOR TO BID IN WRITING. ALL SUBSTITUTIONS MUST BE REVIEWED BY THE ENGINEER IN WRITING. SUCH REVIEW SHALL NOT RELIEVE THE CONTRACTOR COMPLYING WITH THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS, AND THE CONTRACTOR SHALL BE RESPONSIBLE AT HIS OWN EXPENSE FOR ANY CHARGES RESULTING FROM HIS PROPOSED SUBSTITUTIONS WHICH AFFECT OTHER PARTS OF HIS OWN WORK, THE OWNER, ENGINEER OF RECORD OR THE WORK OF ALL WORK AND MATERIAL SHALL CONFORM TO THE LATEST RULES OF THE GOVERNING ELECTRICAL CODE AND INSTALLATION SHALL BE OF THE LATEST INDUSTRY STANDARDS OF WORKMANSHIP. ALL INSTALLED MATERIALS AND EQUIPMENT SHALL BE LISTED U.L., NRTL OR LISTED AND APPROVED BY AN APPROVED TESTING CONDUIT SHALL BE SCHEDULE 40 OR 80 PVC, AS NOTED ON PLANS, PVC, IMC, RIGID OR FLEXIBLE STEEL TYPE. BELL ENDS SHALL BE INSTALLED AT EACH PULL BOX ENTRY & EXIT POINT FLUSH WITH INSIDE OF PULL BOX. PROVIDE 3/16" METERED NYLON PULL CAREFULLY PROTECT ALL WALLS, TRIM, FLOORS, EQUIPMENT UTILITY LINES AND MATERIALS. WHEN WORKING ON FINISHED SURFACES, LIMIT DAMAGE TO THE CONFINES AS MUCH AS POSSIBLE AND RESTORE TO THE ORIGINAL CONDITION ALL SURFACES EQUIPMENT, MATERIALS AND SUPPLIES REMOVED FOR PROTECTION SHALL BE REPLACED IN ORIGINAL LOCATIONS. ANY MATERIALS DAMAGED SHALL BE REPLACED WITH NEW MATERIALS OF LIKE KIND AND QUALITY.

DO ALL DRILLING, CUTTING, CHANNELING AND PATCHING REQUIRED TO INSTALL ELECTRICAL WORK AS INDICATED OR HEREIN SPECIFIED. ALL HOLES, CURBS, ETC., IN FLOORS, CEILINGS AND WALLS SHALL BE PATCHED, UNLESS INDICATED OTHERWISE. PAINT ALL NEW ELECTRICAL RACEWAYS, CABINETS, ENCLOSURES AND FITTINGS PENETRATING INTO FIRE RATED ENVELOPES, SPACES, ETC.

EXISTING CONDITION SHOWN IS FROM AVAILABLE RECORD DRAWINGS AND VISUAL FIELD SURVEY AND SHOWN FOR REFERENCE ONLY.

ALL WORK SHOWN IS NEW UNLESS SPECIALLY INDICATED AS EXISTING (X). ALL ELECTRICAL EQUIPMENT MOUNTING AND ANCHORAGE

NECESSARY AND FURNISH AND INSTALL ALL APPARATUS, MATERIALS AND EQUIPMENT IN A FASHION COMPLYING WITH ALL

T IS THE INTENT OF THESE PLANS AND SPECIFICATIONS THAT A COMPLETE AND WORKABLE ELECTRICAL INSTALLATION BE PROVIDED FOR ALL THE EQUIPMENT DESCRIBED OR SHOWN AS BEING IN THIS CONTRACT. TOWARD THIS END FURNISH ALL LABOR AND TOOLS

APPLICABLE CODES, INCLUDING ITEMS REQUIRED BUT NOT NORMALLY SHOWN, SUCH AS LAMPS, COUPLINGS, HANGERS, BRACKETS, CLAMPS, BOXES, CONNECTORS AND HARDWARE. REFER ALSO TO WRITTEN SPECIFICATIONS FOR GENERAL, MECHANICAL AND

PROCURE ALL PERMITS FROM LEGALLY CONSTITUTED AUTHORITIES, ARRANGE FOR ALL INSPECTIONS AND PAY ALL COSTS FOR FEES AND TESTS IN CONNECTION THEREWITH. COMPLY WITH CODES: NOTHING IN THESE PLANS AUTHORIZES DEVIATION FROM

DETERMINE EXACT ROUTING OF CONCEALED FEEDERS AND BRANCH HOMERUNS IN COOPERATION WITH OTHER TRADES TO SIMPLIFY

INSTALLATION WHEREVER POSSIBLE BUT SUBJECT TO APPROVAL OF ARCHITECT FOR VISUAL AND STRUCTURAL REASONS.

DO NOT RUN ANY CONDUIT IN SLAB IF ITS OUTSIDE DIAMETER EXCEEDS 1/3 THE THICKNESS OF THE SLAB. LOCATE CONDUITS

WITHIN THE MIDDLE OF THE SLAB. WHERE CONDUITS ARE GROUPED IN PARALLEL RUNS, SPACE THEM 3" OR MORE APART. WHERE

ALL ELECTRICAL WORK SHALL BE INSTALLED SO AS TO BE READILY ACCESSIBLE FOR OPERATING, SERVICING, MAINTAINING AND

CONDUITS CROSS EACH OTHER, THICKEN SLAB PROPORTIONATELY OVER A HORIZONTAL AREA EQUAL TO TEN TIMES THE DIAMETER

REPAIRING. ALL CONDUIT SHALL BE CONCEALED WHERE POSSIBLE. EXPOSED CONDUIT SHALL BE IN STRAIGHT LINES PARALLEL WITH,

OR AT RIGHT ANGLES TO, COLUMN LINES OR BEAMS AND SEPARATED BY AT LEAST THREE (3) INCHES FROM WATER LINES WHENEVER

MARKING - UNDERGROUND SYSTEM SHALL BE LEGIBLY MARKED "UNDERGROUND SYSTEM" AT THE SOURCE OR FIRST DISCONNECTING

MEANS OF THE SYSTEM. THE MARKING SHALL BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED.

ALL CONDUIT RUNS SHALL BE CONCEALED, UNLESS SHOWN OTHERWISE.

CONTRACTOR SHALL VERIFY ACTUAL EXISTING CONDITION AT SITE.

OF THE LARGEST CONDUIT. REFER ALSO TO DETAILS SHOWN..

(250.21)(C)

GENERAL NOTES

SYMBOLS - — P — - POWER (U.G.) - — F — – POWER (U.G.) -- COM - - POWER (U.G.)PULLBOX (2' x 3") PULLBOX (2' x 3") PULLBOX (2' x 3") STUB UP & CAP ADJACENT STUB UP & CAP ADJACENT TO BUILDING TO BUILDING TO BUILDING — → STUB OUT & CAP -STUB OUT & CAP — → STUB OUT & CAP LIST OF APPLICABLE CODES LIST OF APPLICABLE CODES 2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR 2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR

2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR

2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR 2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR

2022 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 CCR

2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR

2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR

2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR

TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

APPLICABLE STANDARDS

FOR A LIST OF APPLICABLE STANDARDS, INCLUDING CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS, REFER TO CBC CHAPTER 35 AND CFC CHAPTER 80.

SCOPE OF WORK PROVIDE UNDERGROUND CONDUIT SYSTEMS & PULLBOXES FOR POWER, COM, & FIRE ALARM (FA).

LIST OF DRAWINGS

SHEET # | SHEET DESCRIPTION

E600 ELECTRICAL DETAILS

AIC

ATS

AWG

BKBD

BW

CKT

CLG

CO

COM

CTV

(CU)

CW

DIS

ECD

EOR

ETHYLENE PROPYLENE RUBBER

EVCS ELECTRIC VEHICLE CHARGING

ARCH

E100 GENERAL NOTES, ABBREVIATIONS, SYMBOLS & DRAWING LIST

E140 NEW SITE UTILITIES PLAN - MASTER PLAN

SHEET # | SHEET DESCRIPTION

ABBREVIATIONS

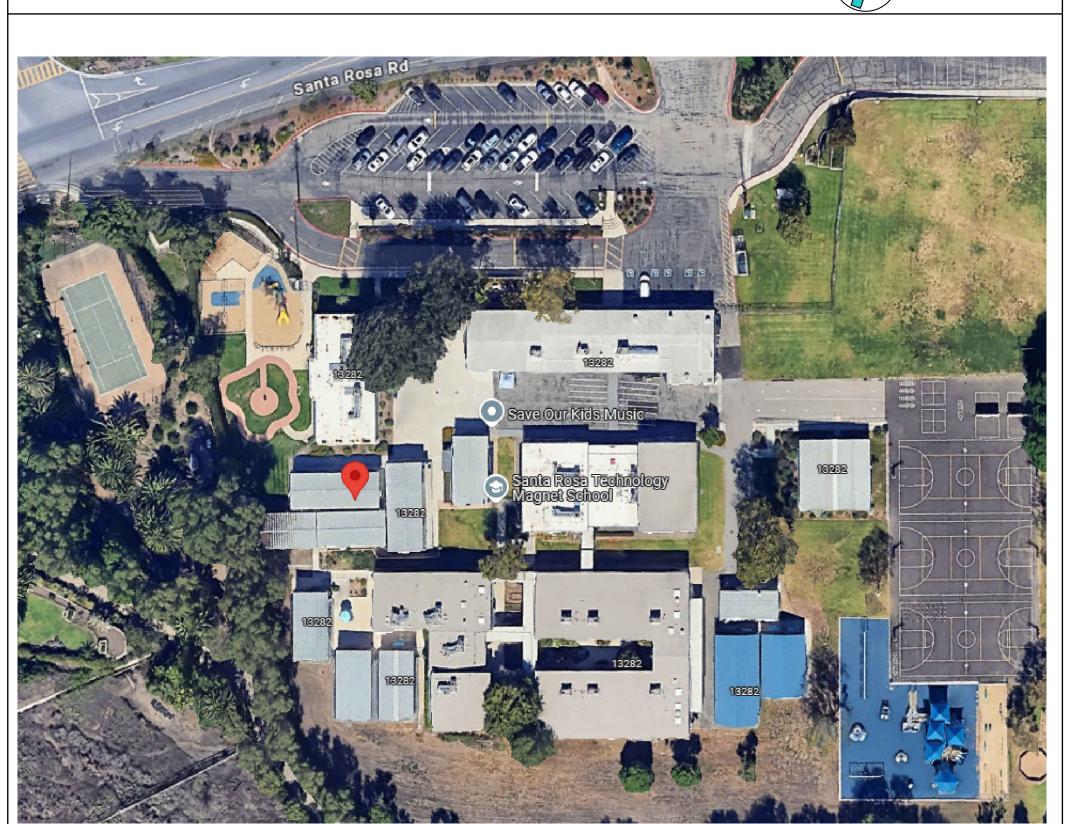
AMPERES STATION NORMALLY OPEN AMP FRAME/AMP FUSE FRONT NORMALLY CLOSED AVAILABLE FAULT CURRENT FIRE ALARM OVERHEAD ABOVE FINISHED FLOOR SHALLOW FLOOR BOX POWER OR POLE AMP INTERRUPTING CURRENT PROVIDED BY OTHERS ARCHITECT GENERAL CONTRACTOR PNL GROUND FAULT INTERRUPTER PHOTO VOLTAIC AMP SWITCH AMERICAN SOCIETY OF GROUND REMOVED **HORSEPOWER** RIGID GALVANIZED STEEL TESTING MATERIAL(S) IDENTIFICATION CONDUIT **AUTOMATIC TRANSFER SWITCH** INTERMEDIATE DISTRIBUTION ROOM AMERICAN WIRE GAGE SYSTEM NEUTRAL ISOLATED GROUND **BACKBOARD** SURGE PROTECTION DEVICE JUNCTION BOX TIME CLOCKS **BOTH WAYS** KILO TELEPHONE TERMINAL BOARD CONDUIT OR CEILING KILO VOLT AMPS=1000VA CIRCUIT BREAKER TELEPHONE TERMINAL CABINET CONTINUATION LIGHTING CONTACTOR TRANSFORMER CIRCUIT LONG CONTINUOUS LOAD TRANSIENT VOLTAGE SURGE CEILING LOW VOLTAGE SUPPRESSOR CONDUIT ONLY **METER** TYPICAL COMMUNICATIONS METAL CLAD UNDERGROUND MAIN DISTRIBUTION FRAME UNDERWRITERS LABORATORY CABLE TELEVISION **MINIMUM** UON UNLESS OTHERWISE NOTED COPPER COLD WATER PIPE **MOUNTED** UNSW UNSWITCHED VOLTS/VOLTAGE DISCONNECT DISCONNECT SWITCH MOUNTING MEDIUM VOLTAGE DRAWING VOLTAGE DROP MAN HOLE ELECTRICAL CONTRACTOR WATTS/WATTAGE OR WIRE **EMERGENCY LIGHT/FEEDER MANUFACTURER** WEATHERPROOF **ELECTRICAL METAL TUBING** NATIONAL ELECTRICAL CODE ENGINEER OF RECORD NEW **EXISTING**

SITE/AREA MAP

NOT IN CONTRACT

NIGHT LIGHT





REVISIONS

ムリひめし さ ふききりひんしてきき んとり CONSULTING ELECTRICAL ENGINEERS

3251 CORTE MALPASO, #511

REV DATE

CAMARILLO, CA 93012-8094 FAX (805) 389-6519 (805) 389-6520

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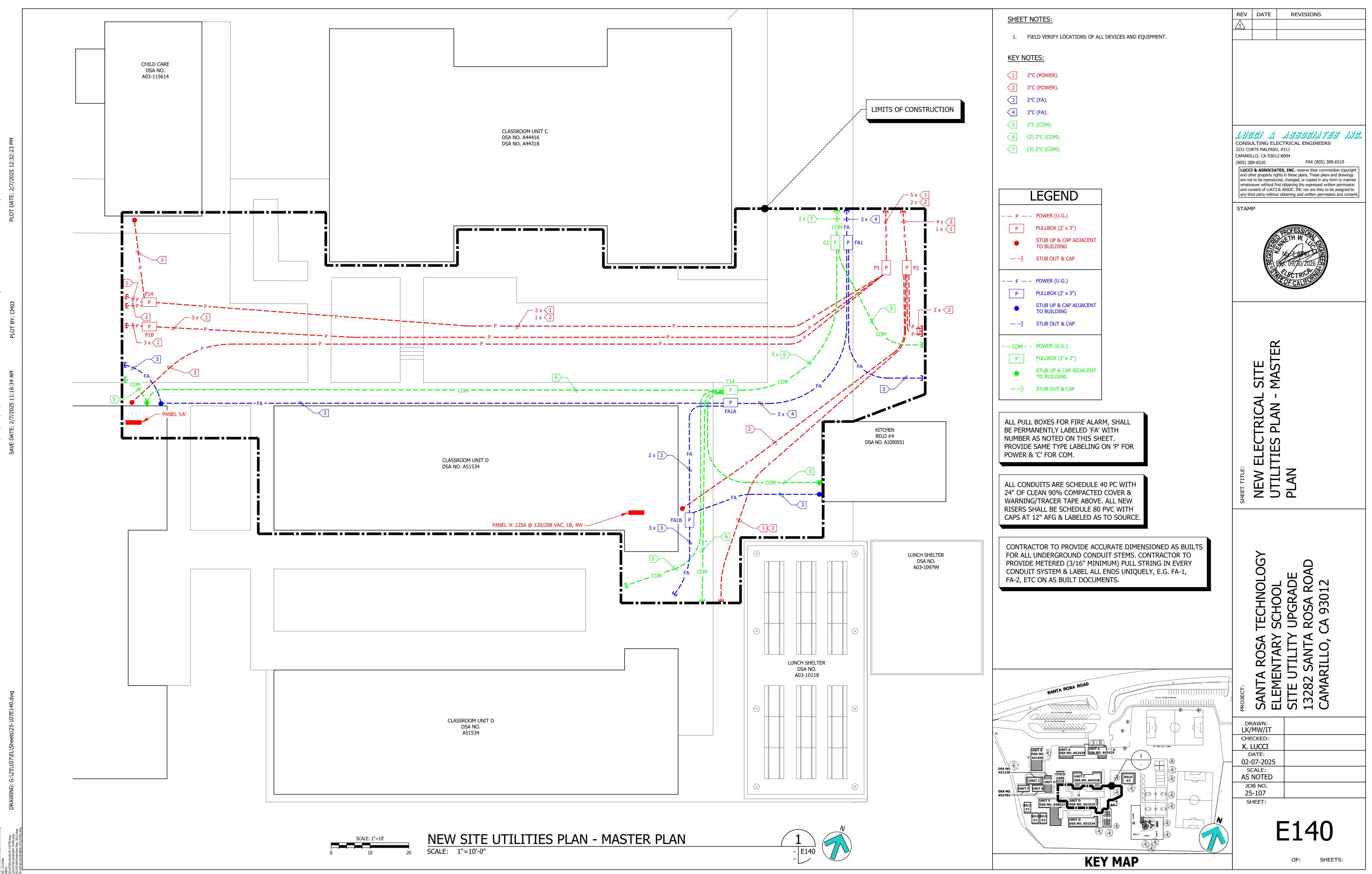


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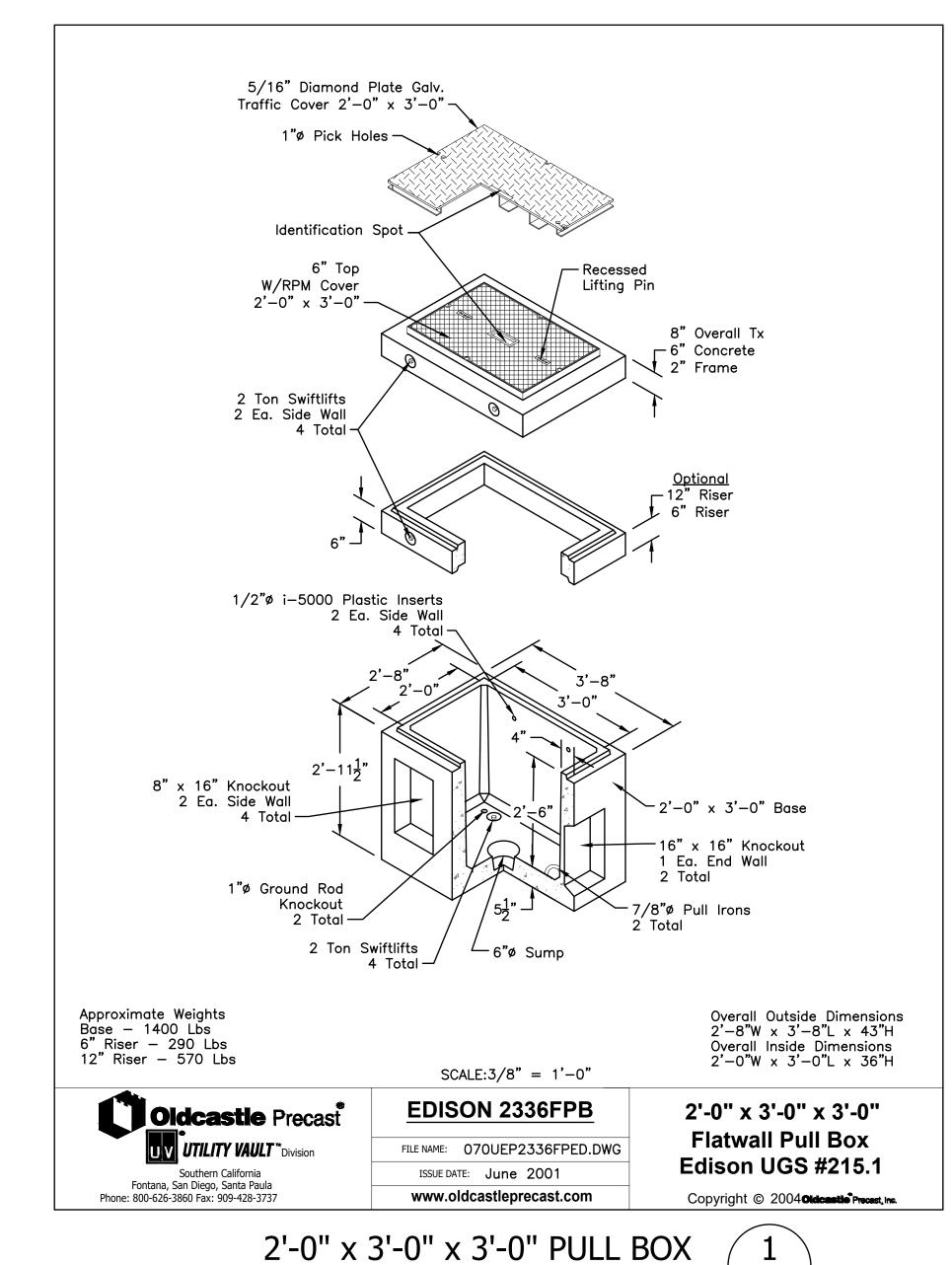
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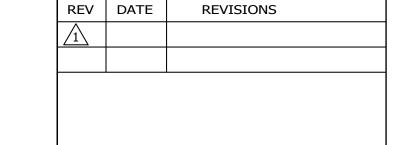
SHEET:

OF: SHEETS:



DETAIL NOTES: 1. ALL EMPTY CONDUITS TO BE PROVIDED WITH METERED PULLWIRES THEIR ENTIRE LENGTH. 2. ALL CONDUITS BENDS SHALL BE FACTORY BENDS WITH MINIMUM 12 TIMES DIAMETER FOR BEND RADIUS. RESTORE SURFACE TO MATCH EXISTING— —SAWCUT ALL ASPHALT/CONCRETE SURFACES TACK ALL CONNECTIONS— —EXISTING PAVED AREA AT GRADE —LOCATOR/WARNING TAPE —90% COMPACTED SOIL 24" MINIMUM —1 SACK OF SLURRY MIX CONDUIT TYPICAL— **DUCTBANK DETAIL** EACH SYSTEM (FA, POWER, COM) SHALL BE INSTALLED IN SEPERATE DUCTBANKS





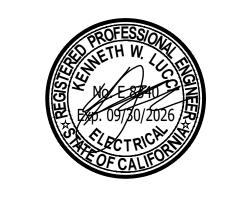
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