

Exhibit K



FORT BRADEN SCHOOL
WATER PRESSURE TANK REPLACEMENT

CONSTRUCTION DOCUMENTS
JANUARY 19, 2022

Asbestos Prohibited. The Federal Asbestos Hazard
Emergency Response Act (AHERA) 40 CFR, Part
763, as revised July 1, 1995, prohibits the use
of any asbestos containing materials on any
Public Education Construction Project.

To the best of my knowledge these drawings
and the project manual are complete, and
comply with the Florida Building Code 7th Edition
and all applicable codes

Jon M Barber, PE FL55427

McGinniss & Fleming
Engineering, Inc.

Mechanical • Electrical • Fire Protection • Plumbing

INDEX OF SHEETS

COVER

P-1 PLUMBING NOTES AND LEGEND

P-2 PLUMBING DEMOLITION AND NEW WORK PLANS

P-3 WELL TANK DATASHEET AND LAYOUT

E-1 ELECTRICAL LEGEND, NOTES, AND WORK PLAN

DEMOLITION NOTES - GENERAL

1. THE WATER SYSTEM WILL BE OUT OF SERVICE WHILE THE CORRODED PIPING FROM WELL PUMP #1 IS REPLACED. THIS REPAIR SHALL BE COMPLETED AS QUICKLY AS POSSIBLE IN ORDER TO PROVIDE POTABLE WATER TO THE SCHOOL.
2. SAW CUT THE CONCRETE SLAB AS REQUIRED FOR ACCESS TO REMOVE PIPING DOWNSTREAM OF THE 4" GATE VALVE.
3. EXPOSE BURIED PIPING FROM WELL PUMP #1 TO DETERMINE THE EXTENTS OF DEMOLITION AND NEW PIPING. THE TRENCH SHALL BE NEAT AND CLEAN TO PREVENT INFILTRATION OF SPOILAGE INTO THE POTABLE WATER PIPING.
4. TEMPORARILY SUPPORT PIPE FROM PUMP #1, AND REMOVE THE 2 EXISTING PIPE SUPPORTS. CUT AND GRIND SMOOTH TO THE SLAB. INSTALL NEW PIPE SUPPORTS.
5. AFTER NEW PIPING MATERIALS ARE FABRICATED AND DELIVERED TO THE PROJECT SITE, DE-ENERGIZE AND DRAIN THE PIPING SYSTEM. REMOVE PIPING. MAKE REPAIRS, TEST, AND RETURN WATER SYSTEM INTO SERVICE.
6. ISOLATE 1,000-GAL TANK AND DRAIN. REMOVE TANK FROM ITS FOUNDATION. THE 6" SUPPLY PIPING AND FOUNDATIONS WILL BE REUSED. IF REQUIRED, CUT AND GRIND SMOOTH THE EXISTING ANCHOR BOLTS.

KEY NOTES

1. REPLACEMENT PIPING CAN BE DUCTILE IRON TO MATCH EXISTING, or HDPE. HDPE SHALL BE DRISOPLEX 4000, OR EQUAL. ANY MATERIALS USED SHALL MEET AWWA C306 AND NSF/ANSI 61.
2. HDPE PIPING AND FITTINGS SHALL BE DR 17, RATED TO 125 PSIG @80°F. ALL JOINTS SHALL BE BUTT-FUSED. CHEMICAL INJECTION PORT SHALL BE VIA A SERVICE SADDLE WITH 1/2" OR 1" NPT CONNECTION.
3. AFTER START-UP OF THE PIPING, REPAIR CONCRETE SLAB.
4. 2 NEW ADJUSTABLE PIPE SADDLE SUPPORTS SHALL BE INSTALLED IN THE PIPING AT WELL PUMP #1. SUPPORTS CAN BE: ANVIL FIG. 63 TYPE T & FIG. 264, OR SIMILAR. CONTRACTOR TO VERIFY OVERALL HEIGHT & SIZE OF PIPING AT THE SUPPORT LOCATION.
5. 2 NEW ADJUSTABLE PIPE SADDLE SUPPORTS SHALL BE INSTALLED IN THE PIPING AT WELL PUMP #2. SUPPORTS CAN BE: ANVIL FIG. 63 TYPE T & FIG. 264, OR SIMILAR. CONTRACTOR TO VERIFY OVERALL HEIGHT & SIZE OF PIPING AT THE SUPPORT LOCATION.
6. PRIOR TO REMOVING THE EXISTING TANK, THE CONTRACTOR SHALL PROVIDE AND INSTALL A TEMPORARY WELL TANK NEAR PUMP #1. THE TEMPORARY TANK SHALL ALLOW THE CAMPUS TO MAINTAIN POTABLE WATER SERVICE FOR THE DURATION OF CONSTRUCTION AND TESTING. APPROXIMATELY 2 WEEKS. THE TEMPORARY TANK WILL CONNECT VIA HOSE TO THE SPARE 4" GATE VALVE AT PUMP #1. A PRESSURE SWITCH ON THE TEMPORARY TANK WILL BE CONNECTED TO THE PUMP CONTROLS TO MAINTAIN LEVEL. AFTER ACCEPTANCE OF THE NEW TANK, THE TEMPORARY TANK AND PIPING SHALL BE REMOVED.
7. THE NEW 1,000-GALLON TANK WILL BE INSTALLED ON THE EXISTING CONCRETE FOUNDATIONS.
8. FLANGES SHALL BE CONNECTED WITH NEW BOLTS, NUTS & WASHERS, AND RED RUBBER GASKETS.
9. INSTALL A NEW 2" DRAIN VALVE AND PIPING.
10. SECURE TANK TO FOUNDATIONS WITH ADHESIVE ANCHORS: HILTI HIT-HY 100, MIN. 4 LOCATIONS, Ø5/8", 6½" EMBEDMENT, OR EQUAL.
11. RECONNECT 1/4" PRESSURE SENSING TUBE TO THE TOP OF THE TANK.

WELL TANK ACCESSORIES

| TYPE | DESCRIPTION | MODEL | REMARKS | QTY. | |
|------|-----------------------|---------------------------|---|------|--|
| LG | WATER LEVEL GAUGE | APOLLO 20LF-104-00 | WATER LEVEL GAUGE; LEAD-FREE BRASS FOR POTABLE WATER USE; 1/2" NPT CONNECTIONS; LENGTH = 24"; GLASS TUBE = 5/8" x 22.75" | 1 | |
| PSV | PRESSURE SAFETY VALVE | CONBRACO 29501-K-100 | 1½" x 1½" BRONZE BODY; AIR SERVICE; ASME SEC VIII CERTIFIED; SET AT 100 PSIG. | 1 | |
| VB | VACUUM BREAKER | APOLLO 14-60S-V08 | 2" x 2" BRONZE BODY; AIR SERVICE; SET @ 8" Hg (-4 PSIG) | 1 | |
| PI | PRESSURE GAGE | ASHCROFT 451009SL 02B100# | 4½" Ø STAINLESS STEEL GAUGE; SS WETTED PARTS; GLYCERIN FILLED FOR WEATHER PROTECTION; 1/4" THRD BACK CONNECTION; 0-100 PSIG; ±1% ACCURACY | 2 | |
| AC | AIR COMPRESSOR | WHITEWATER MFG 610HP | OIL-LESS COMPRESSOR FOR HYDRO-PNEUMATIC TANKS; MAX PRESS 110PSIG; ADJ PRESSURE CONTROL; 2" NPT CONNECTION, SOLID STATE LEVEL SWITCH; 208/230V, 1Ph; | 1 | |
| | | | | | |
| | | | | | |

- NOTES:
1. ALL SPARE AND UNUSED NOZZLES SHALL HAVE AN NPT PLUG.
 2. PRESSURE GAUGES SHALL EACH HAVE A 1/4" BALL VALVE FOR ISOLATION.
 3. ADD A 3/4" HOSE VALVE TO NOZZLE N5

PLUMBING NOTES

GENERAL CONDITIONS

1. CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS REQUIRED TO COMPLETE ALL WORK SHOWN ON THE CONTRACT DRAWINGS.
2. ALL CONSTRUCTION SHALL CONFORM TO APPLICABLE CODE STANDARDS INCLUDING:

FLORIDA BUILDING CODE, BUILDING (FBC-B) 7TH EDITION (2020)
FLORIDA BUILDING CODE, PLUMBING (FBC-P) 7TH EDITION (2020)
STATE AND LOCAL CODES AND ORDINANCES
3. THE BIDDERS SHALL INSPECT THE PRESENT JOB SITE CONDITIONS BEFORE PREPARING A BID. THE SUBMISSION OF A BID WILL BE CONSIDERED EVIDENCE THAT SUCH A VISIT AND INSPECTION WAS PERFORMED BY THE BIDDER AND THAT HE TAKES FULL RESPONSIBILITY FOR ALL FACTORS GOVERNING HIS WORK.
4. THE CONTRACTOR IS EXPECTED TO PROVIDE PROFESSIONAL WORK PERFORMED IN ACCORDANCE WITH INDUSTRY STANDARDS AND GOOD PRACTICE. WORK SHALL CONFORM TO THE MANUFACTURER'S INSTRUCTIONS AND THE REQUIREMENTS OF THE LOCAL HEALTH DEPARTMENT.
5. THE CONTRACTORS ARE EXPECTED TO FIELD VERIFY ALL DIMENSIONS. CONTRACTORS ARE EXPECTED TO ACCOUNT FOR FIELD CONDITIONS. CONTRACTORS ARE EXPECTED TO COORDINATE IN ORDER TO AVOID INTERFERENCE BETWEEN TRADES. CONTRACTORS ARE EXPECTED TO INSTALL EQUIPMENT SUCH THAT PROPER MAINTENANCE CLEARANCES ARE MAINTAINED FOR EQUIPMENT OF ALL TRADES. IF CHANGES TO THE CONTRACT DOCUMENTS ARE NECESSARY TO AVOID CONFLICTS, THE CONTRACTOR IS RESPONSIBLE FOR REQUESTING CLARIFICATION IN A TIMELY FASHION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEFICIENCIES ASSOCIATED WITH WORK PERFORMED BEFORE OBTAINING CLARIFICATION.
6. UPON COMPLETION OF THE WORK THE CONTRACTOR SHALL CLEAN SPACES THAT WERE OCCUPIED BY TEMPORARY WORK AND TEMPORARY FACILITIES. REMOVE DEBRIS, RUBBISH AND EXCESS MATERIALS FROM THE SITES. REPAIR DAMAGES CAUSED BY INSTALLATION OR USE OF TEMPORARY FACILITIES.

GENERAL PLUMBING NOTES

1. PLUMBING PLANS ARE SCHEMATIC. LOCATE PIPING TO AVOID FIELD INTERFERENCES. CHANGES IN THE PIPING SCHEMATIC REQUIRE PRIOR APPROVAL OF THE ENGINEER.
2. THE CONTRACTOR IS EXPECTED TO VERIFY DIMENSIONS AND FIELD FABRICATE PIPING AS NECESSARY TO ACCOMMODATE CONDITIONS.
3. PRIOR TO ANY NEW WORK THE CONTRACTOR SHALL VERIFY BY ALL MEANS AVAILABLE THE DIRECTION OF FLOW OF ALL EXISTING PIPING THAT WILL BE TIED INTO FOR THE NEW WORK. REPORT TO THE ENGINEER ANY DIFFERENCES FROM WHAT THE CONTRACT DOCUMENTS SHOW.

MATERIALS AND DEVICES

1. ALL MATERIALS, EQUIPMENT AND APPARATUS COVERED BY THIS SPECIFICATION SHALL BE NEW, OF CURRENT MANUFACTURE.
2. CONNECTION JOINTS BETWEEN PLASTIC AND METALLIC PIPE SHALL BE MADE WITH TRANSITION FITTING FOR THE SPECIFIC PURPOSE

PIPING NOTES

1. INSTALL GRAVITY LINES AT UNIFORM GRADES.
2. INSTALL SLEEVES AT ALL PENETRATIONS WHERE CONCRETE MIGHT CONTACT COPPER PIPING. PROVIDE SLEEVES AND SEAL ALL PENETRATIONS OF FULL HEIGHT WALLS AIR TIGHT. PROVIDE SLEEVES AT ALL PENETRATIONS OF FLOOR. PROVIDE POLY PIPE COVER OR INSULATION WHERE COPPER PIPING IS ENCASED WITHIN CMU WALLS.
3. LOCATE ALL VALVES AND OTHER DEVICES WHICH REQUIRE MAINTENANCE IN ACCESSIBLE LOCATIONS. PROVIDE ACCESS PANELS IF NECESSARY.
4. PIPING INSTALLATIONS ARE EXPECTED TO BE RIGID. SUPPORT AND SECURE PIPING IN ACCORDANCE WITH GOOD PRACTICE.
5. LABEL ALL COLD DOMESTIC WATER SUPPLY & RETURN PIPING AT EACH VALVE LOCATION & NO LESS THAN 20' O.C.

CLOSEOUT, TESTING AND INSPECTIONS

1. COORDINATE INSPECTIONS WITH THE SPECIFICATIONS.
2. ALL DOMESTIC WATER PIPING SHALL BE STERILIZED IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN THE FBC, PLUMBING CODE.
3. ALL WATER SUPPLY PIPING SHALL BE LEAK TESTED IN ACCORDANCE WITH THE FBC, PLUMBING CODE BUT NOT LESS THAN 100 PSI.
4. NO PIPING SHALL BE COVERED OR CLOSED UP BEFORE INSPECTION AND APPROVAL. PROVIDE TEST TEES AT CONNECTION TO EXISTING AT EACH FLOOR & AS NEEDED FOR COMPLETE TESTING.

PLUMBING LEGEND

- 6" CW —

COLD WATER PIPING
- PLUMBING LINE AND EQUIPMENT TO BE DEMOLISHED
- - - - -

CAP
- — — — —

ELBOW TURNED UP
- — — — —

ELBOW TURNED DOWN
- — — — —

TEE, OUTLET UP
- — — — —

TEE, OUTLET DOWN
- — — — —

BALL VALVE
- — — — —

GATE VALVE
- — — — —

UNION
- — — — —

CHECK VALVE
- — — — —

WATER HAMMER ARRESTER
- — — — —

CONNECTION, NEW TO EXISTING
- — — — —

LIMIT OF DEMOLITION

ABBREVIATIONS

- AC

ABOVE CEILING
- AF

ABOVE FLOOR
- AFF

ABOVE FINISHED FLOOR
- AFG

ABOVE FINISED GRADE
- AS

ABOVE SLAB
- BFF

BELOW FINISHED FLOOR
- BFP

BACKFLOW PREVENTER
- BG

BELOW GRADE
- BS

BELOW SLAB
- CFH

CUBIC FEET PER HOUR
- CO

CLEANOUT
- CW

COLD WATER
- DN

DOWN
- EXIST

EXISTING
- ECO

EXTERIOR CLEANOUT
- FD

FLOOR DRAIN
- GPF

GALLONS PER FLUSH
- GPM

GALLONS PER MINUTE
- GPH

GALLONS PER HOUR
- G.V.

GATE VALVE
- H/C

HOT AND COLD WATER
- HW

HOT WATER
- INV EL

INVERT ELEVATION
- MBH

THOUSAND BTU PER HOUR
- NC

NORMALLY CLOSED
- NO

NORMALLY OPEN
- N/A

NOT APPLICABLE
- PDI

PLUMBING DRAINAGE INSTITUTE
- PH

PHASE
- SAN

SANITARY
- SK

SINK
- TP

TRAP PRIMER
- TYP

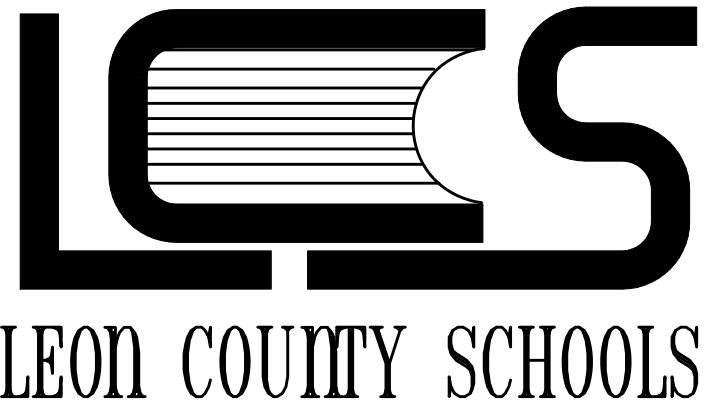
TYPICAL
- U.N.O.

UNLESS NOTED OTHERWISE
- V

VENT
- W

WASTE
- WCO

WALL CLEANOUT



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FORT BRADEN SCHOOL

WATER PRESSURE TANK
REPLACEMENT

LEON COUNTY SCHOOLS

Ft. Braden Community, Florida

DATE:

January 19, 2022

REVISED:

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- .
- .

DESIGNED BY:

JB

DRAWN BY:

TEP

SUBMITTAL:

CONSTRUCTION DOCUMENTS

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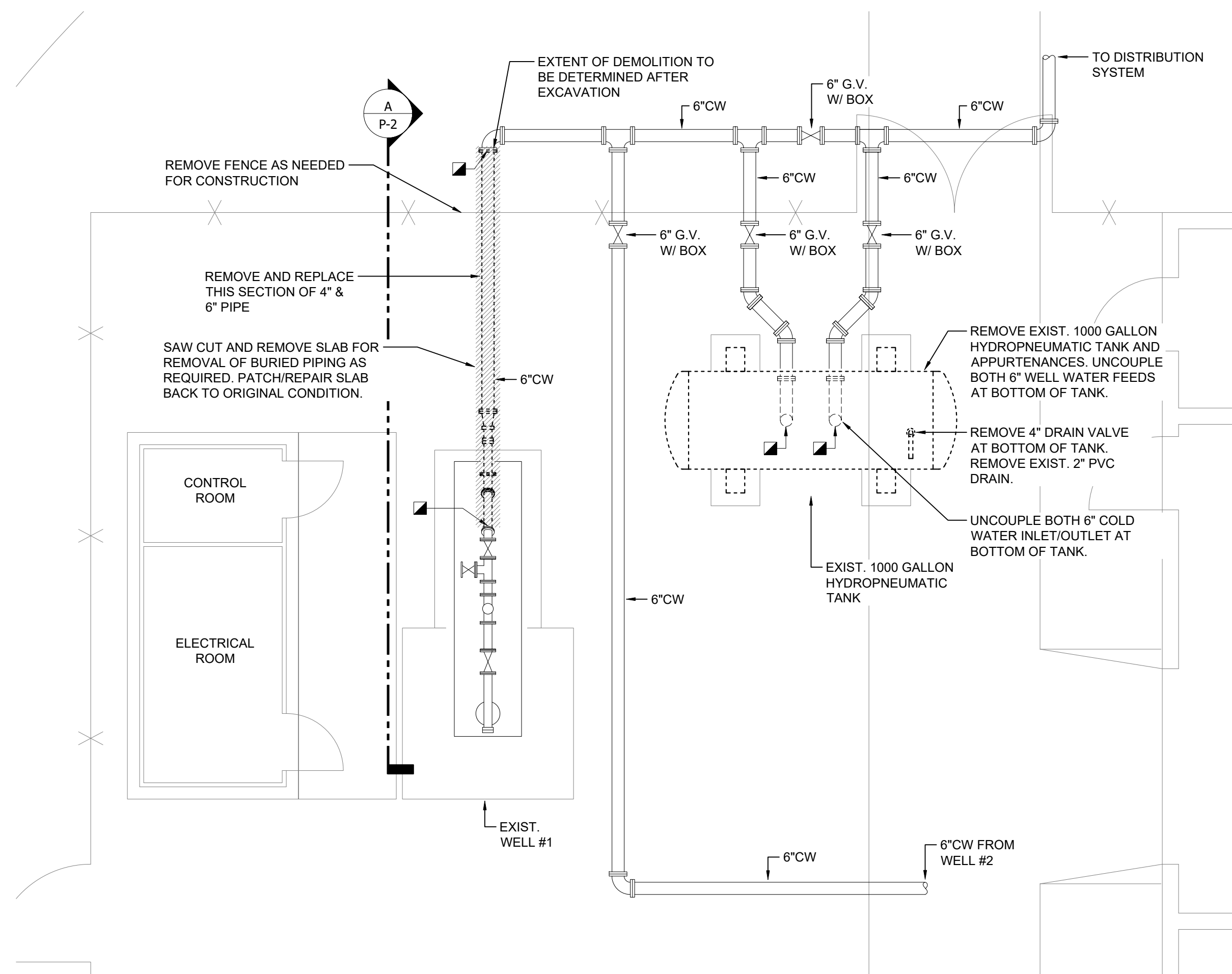
PLUMBING NOTES AND
LEGEND

SHEET:

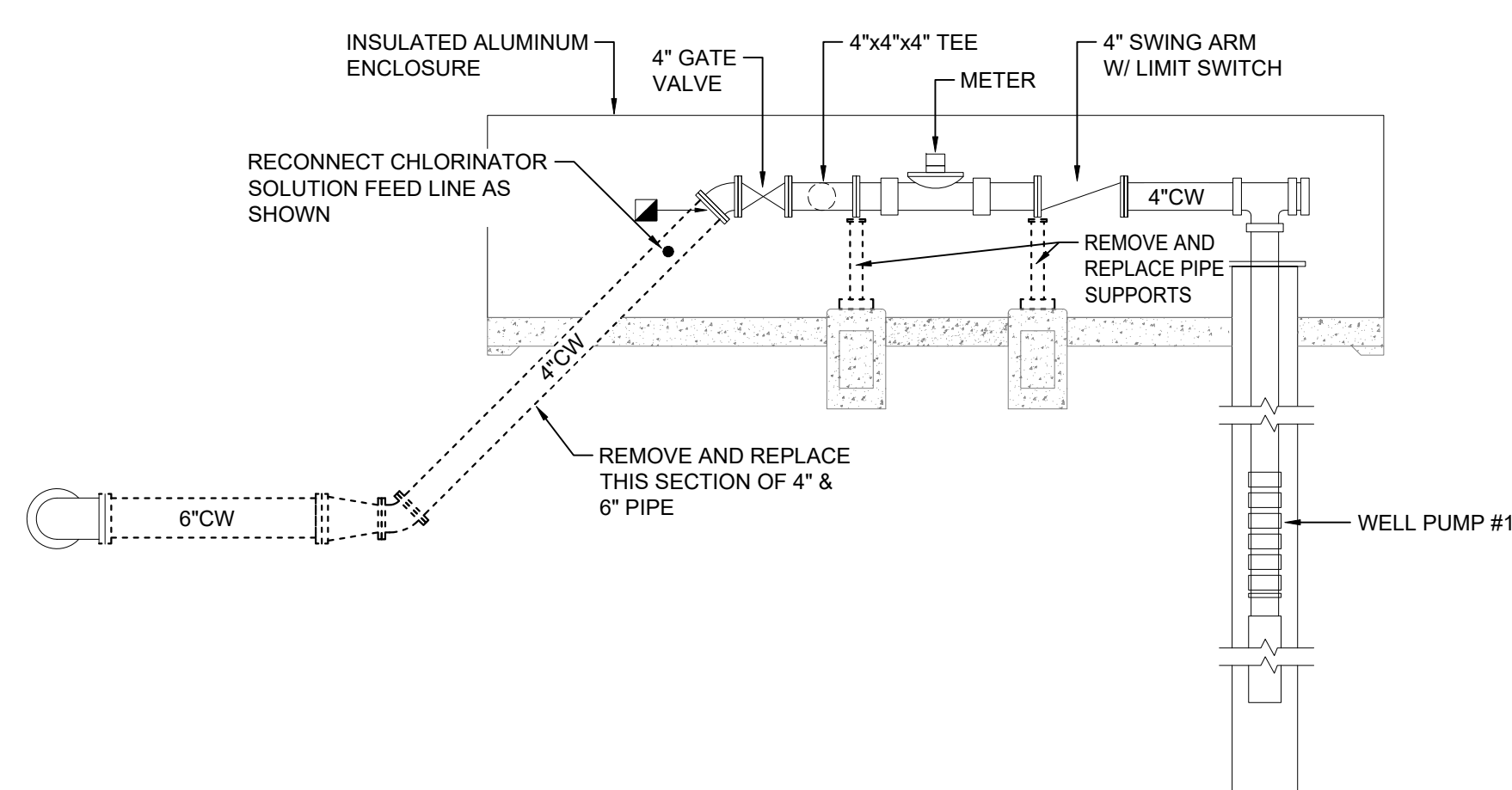
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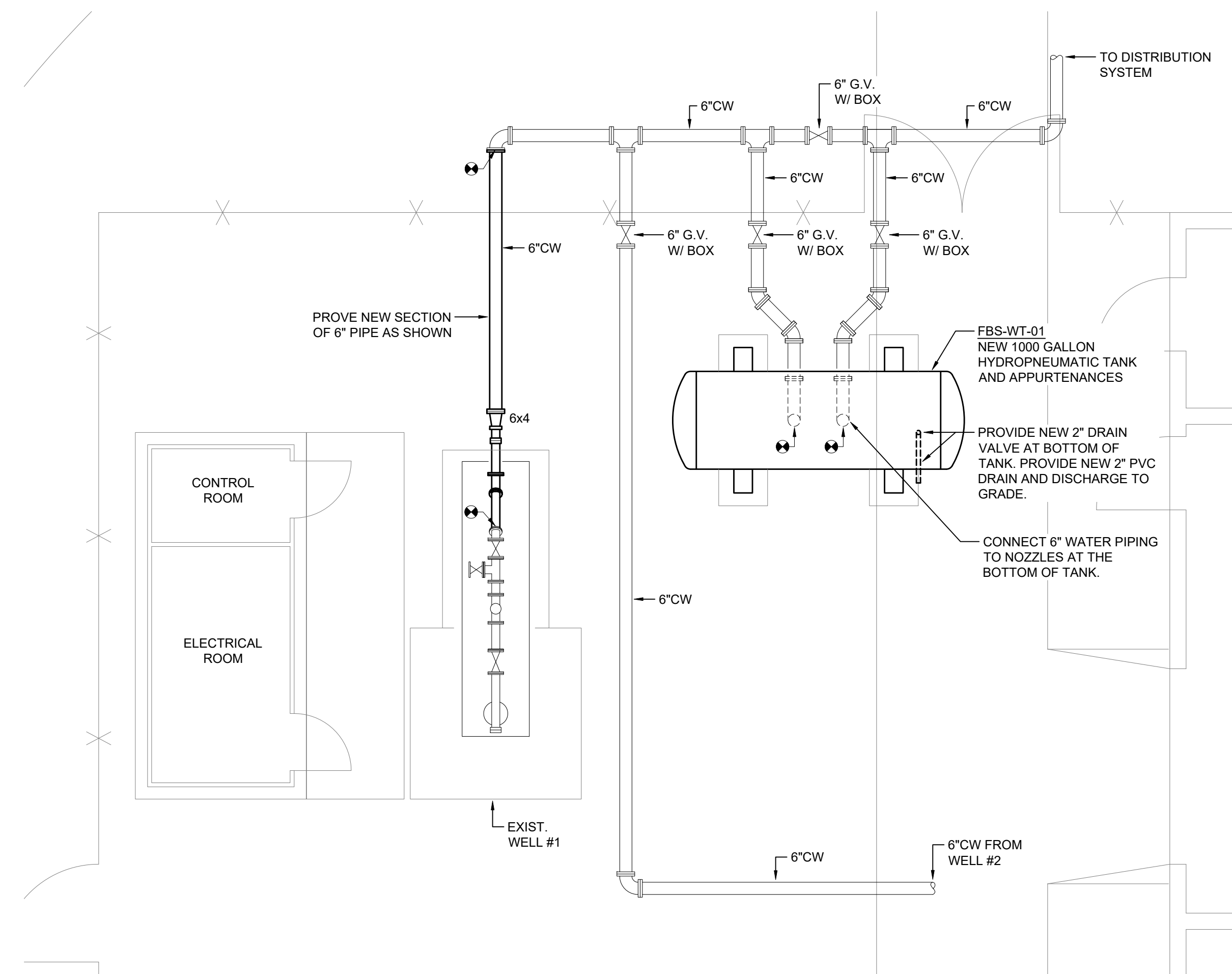
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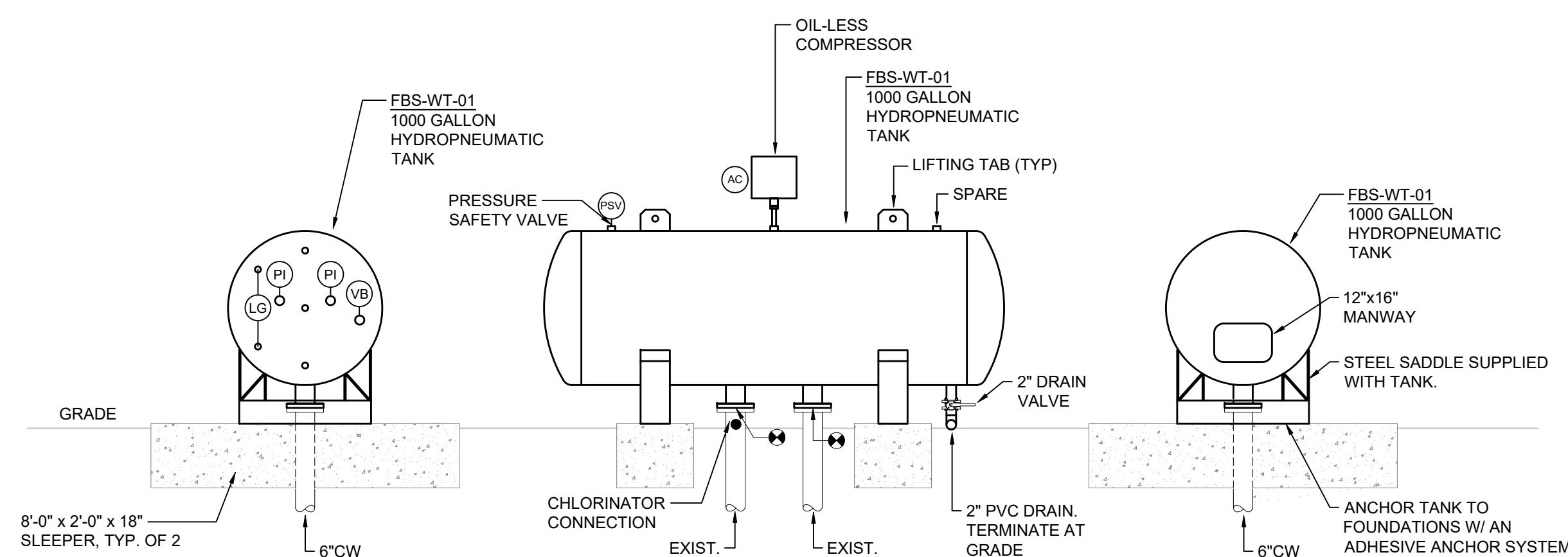
1 PLUMBING DEMOLITION WORK PLAN
 SCALE: 1/8"=1'-0"
 N



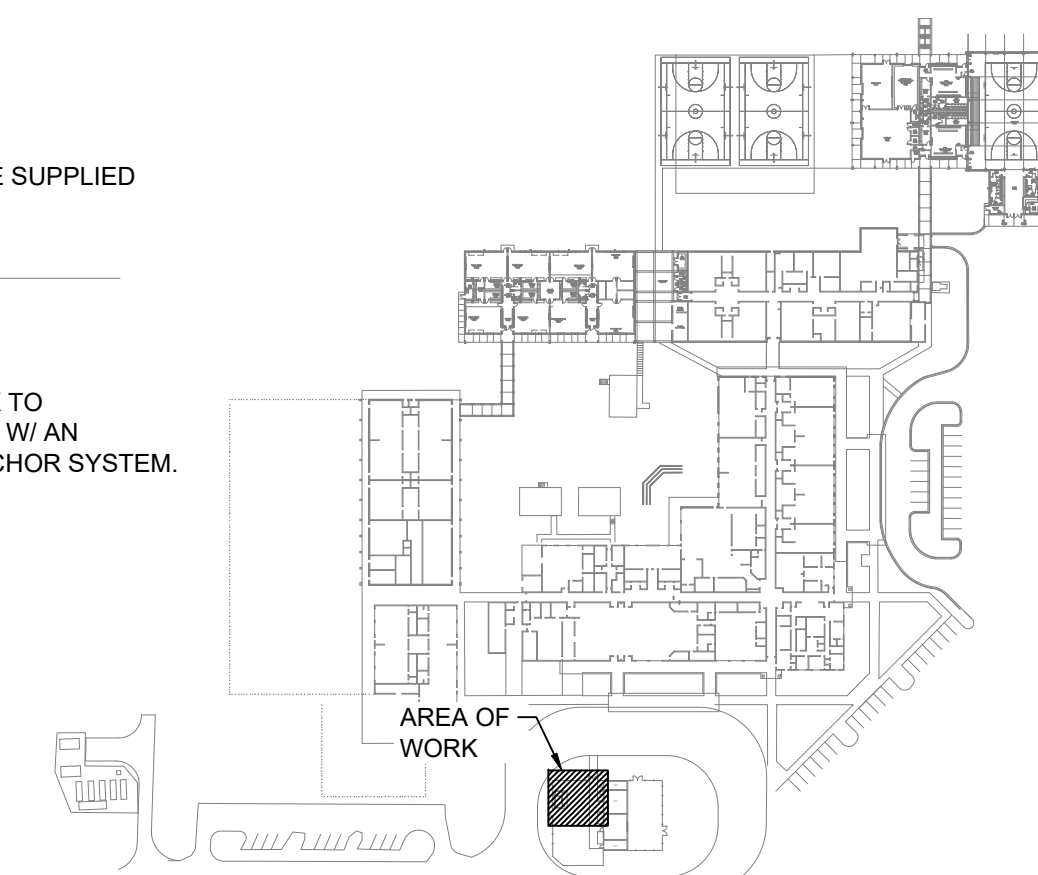
A SECTION 'A'
 NTS



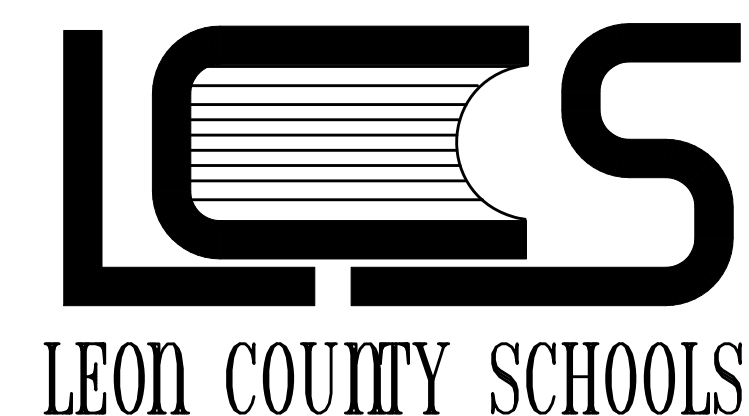
2 PLUMBING NEW WORK PLAN
 N



3 NEW 1000 GALLON HYDROPNEUMATIC TANK DETAIL
 NTS



KEY PLAN
 N



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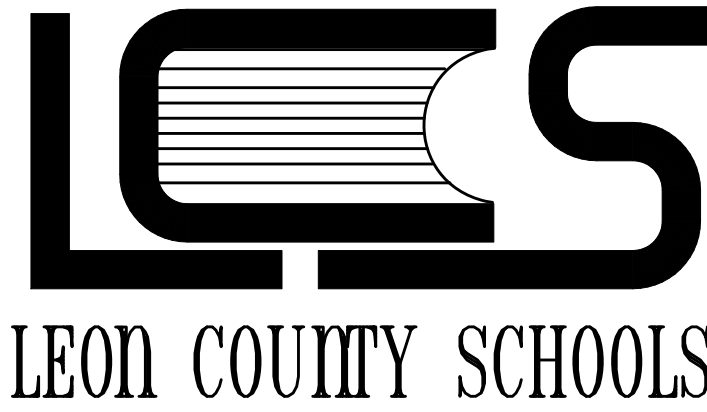
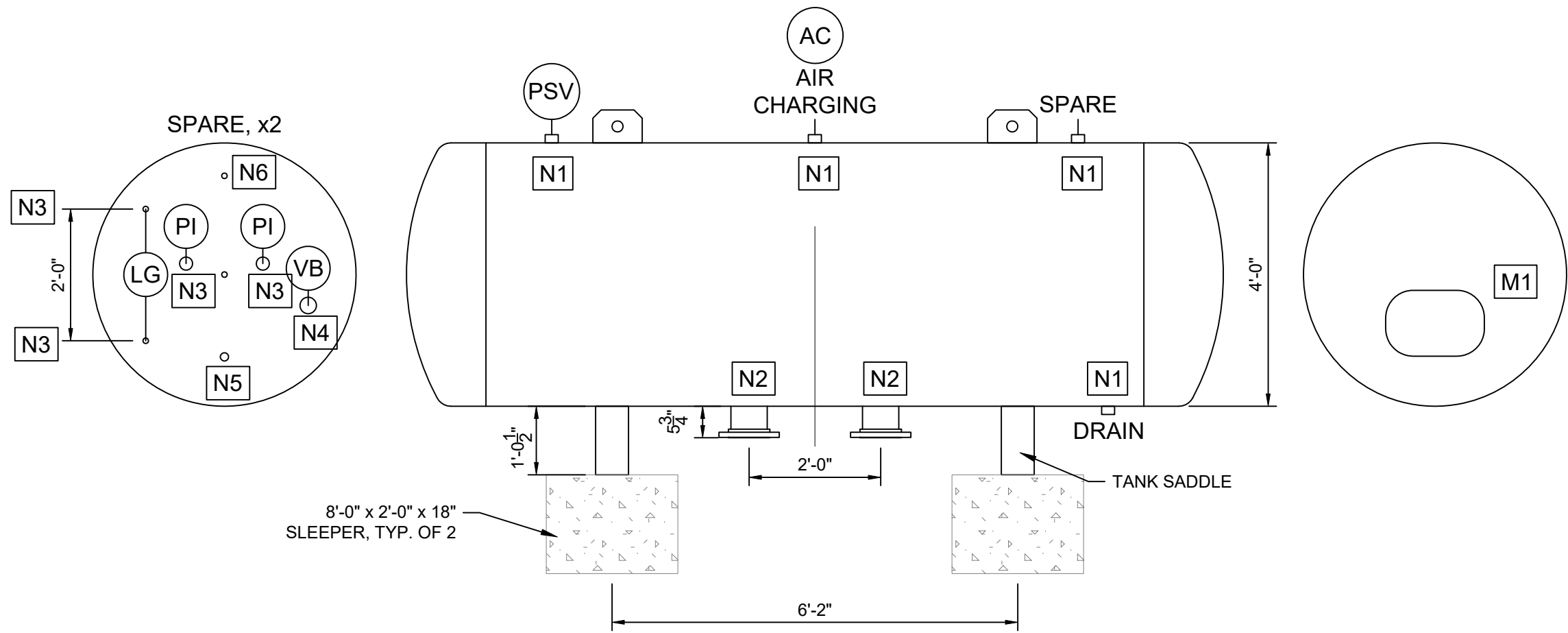
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SHEET TITLE:
 PLUMBING DEMOLITION AND
 NEW WORK PLANS

SHEET:
P-2

JOB NUMBER:
 2021-29

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|--|--|--|----------------|-----------------|----------------------------|------------|---------------|------------|-----------|-------|
| | | Equipment Data Sheet | | | Sheet 1 of 1 | | | | | |
| | | TANKS & VESSELS | | | by: JMB | | | | | |
| | | Project: WELL TANK REPLACEMENT | | | Rev: A | | | | | |
| | | Location: FT. BRADEN SCHOOL | | | Date: 1/5/22 | | | | | |
| | | | | | Client ID: TK-01 Datasheet | | | | | |
| Tag: FBS-WT-01 | | | | | Ref Dwg: | | | | | |
| Service: 1,000-GAL HORIZONTAL WELL TANK | | | | | P&ID: | | | | | |
| General/Design | Tank/Vessel Type | PRESSURE VESSEL | | | | | | | | |
| | Location | OUTDOORS (Indoors, Outdoors) | | | | | | | | |
| | Hazard Area Class | NONE | | | | | | | | |
| | Code | ASME SECTION VIII (API 620, API 650, ASME Sec VIII, None) | | | | | | | | |
| | Code Stamp | YES (Yes/No) | | | | | | | | |
| | Fluid | WATER | Fluid SG | 1.0 | | | | | | |
| | Pressure | 60 PSIG | Operating | -10 to 125 PSIG | Design | | | | | |
| | Temperature | 68°F | Operating | 110°F | Design | | | | | |
| | Corrosion Allowance | | | | | | | | | |
| | Radiographic Exam | | | | | | | | | |
| Dimensions | Joint Efficiency | | | | | | | | | |
| | Testing | | | | | | | | | |
| | Insulated | NO (Yes/No) | (Type) | (Thickness) | | | | | | |
| | Shell Diameter | 48" | | | | | | | | |
| | Shell Length (TL-TL) | **, APPROX. 10'-0" | | | | | | | | |
| | Head Type | | | | | | | | | |
| | Bottom Type | | | | | | | | | |
| | Ends (Horiz Tank/Vessel) | ** | | | | | | | | |
| | Capacity | 1,000 GALLON | | | | | | | | |
| | Materials | Shell | ** (Thickness) | CARBON STEEL | (Material) | | | | | |
| Head or Top | | ** (Thickness) | CARBON STEEL | (Material) | | | | | | |
| Bottom | | (Thickness) | CARBON STEEL | (Material) | | | | | | |
| Nozzle Flanges | | ANSI 150# (Rating) | A105 | (Material) | | | | | | |
| Pipe | | STD. WT. (Schedule) | A53B | (Material) | | | | | | |
| Supports | | C.S. (Material) | | | | | | | | |
| Gaskets | | N/A (Thickness) | (Material) | | | | | | | |
| Bolts & Nuts | | N/A (Material) | (Material) | | | | | | | |
| Baffles | | | | | | | | | | |
| Reinforcing Pads | | | | | | | | | | |
| Misc | Internal Finish | CLEANED, PRIMED, TOP COAT SUITABLE FOR POTABLE WATER - EPOXY THAT IS NSF APPROVED TO ANSI 61 | | | | | | | | |
| | External Finish | CLEANED, PRIMED AND PAINTED FOR OUTSIDE EXPOSURE. TOP COAT: WHITE | | | | | | | | |
| | Baffles | (Number) | (Width) | (Length) | | | | | | |
| | Baffle Spacing | (off bottom) | (Off Sides) | | | | | | | |
| | Insulation Supports | | | | | | | | | |
| | Agitator Support/Catwalk | | | | | | | | | |
| | Ladders | | | | | | | | | |
| | Support Type | SADDLE, TYP. OF 2 | | | | | | | | |
| | Nozzles | Nozzle # | Service | Number | Size | Rating | Flange/Facing | Projection | Neck Schd | Notes |
| | | N1 | PSV / DRAIN | 4 | 2" | 3000# CPLG | NPT | ** | | 1 |
| N2 | | INLET / OUTLET | 2 | 6" | 150# | RF | 5.75" | STD. WT. | 1 | |
| N3 | | PRESS / LEVEL | 4 | 1/2" | 3000# CPLG | NPT | ** | | 1 | |
| N4 | | VACUUM | 1 | 2" | 3000# CPLG | NPT | ** | | 1 | |
| N5 | | HOSE BIBB | 1 | 3/4" | 3000# CPLG | NPT | ** | | 1 | |
| N6 | | SPARE | 2 | 1" | 3000# CPLG | NPT | ** | | 1 | |
| M1 | | MANWAY | 1 | 12x16 | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| NOTES | 1. NOZZLES TO BE PROTECTED & COVERED PRIOR TO SHIPMENT | | | | | | | | | |
| | 2. FLANGE BOLT HOLES TO STRADDLE CENTERLINE | | | | | | | | | |
| | 3. TANK TO INCLUDE LIFTING LUGS | | | | | | | | | |
| | 4. PROVIDE HOLES IN THE SADDLE FOR ANCHOR BOLTS. BOLTS WILL BE DRILLED AND EPOXIED TO MATCH. | | | | | | | | | |
| | 3. SAFETY VALVE WILL BE SET AT 100 PSIG; VACUUM BREAKER WILL BE SET AT 8" Hg (-4 PSIG) | | | | | | | | | |
| ** - INDICATES DATA TO BE SUPPLIED BY VENDOR | | | | | | | | | | |



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| DESIGNED BY: JB | DRAWN BY: TEP |
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SUBMITTAL:
CONSTRUCTION DOCUMENTS

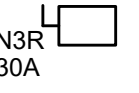






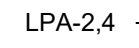
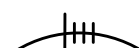

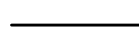
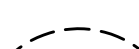

SHEET TITLE:
WELL TANK DATA SHEET
AND LAYOUT

SHEET:

P-3

JOB NUMBER:
2021-29

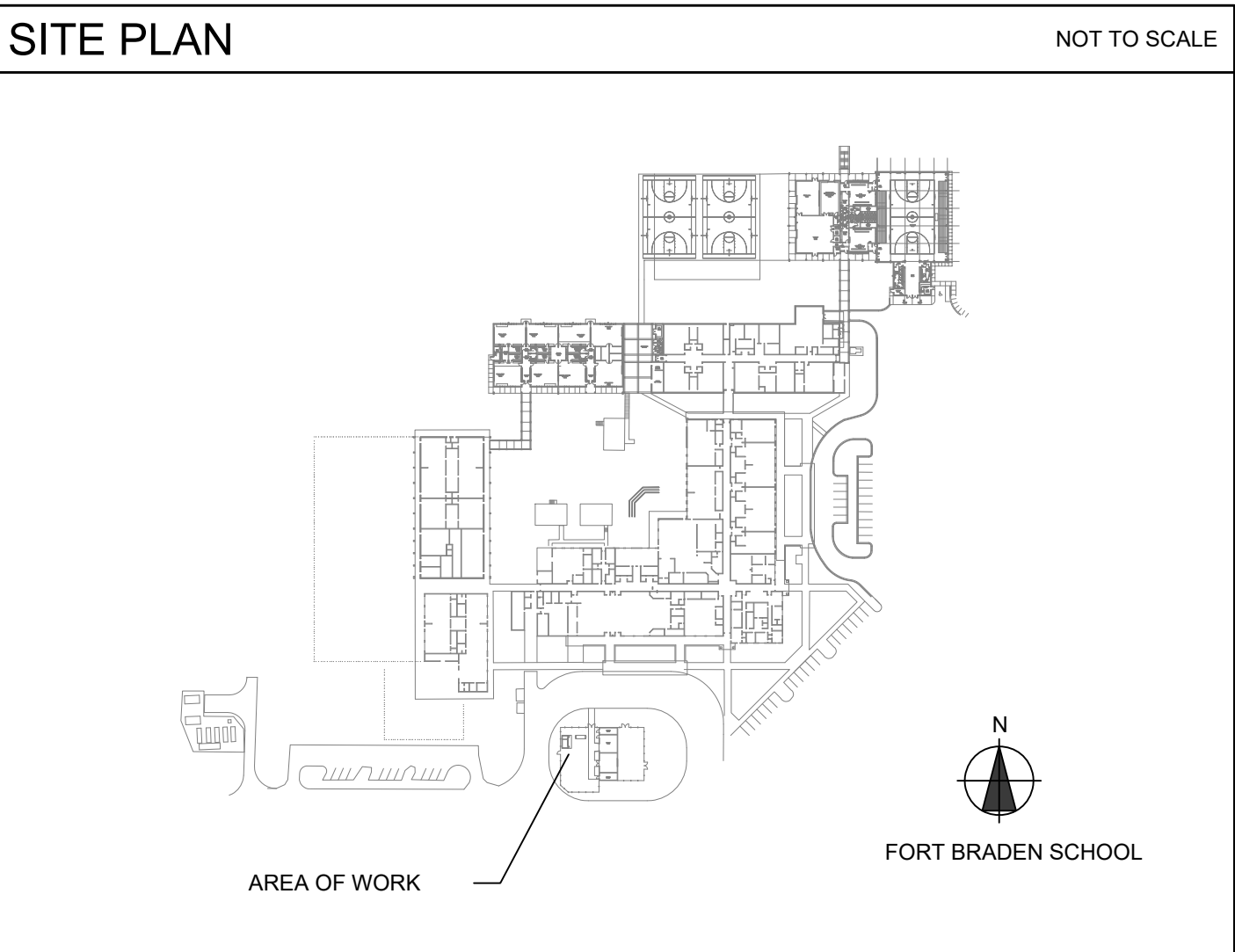
| ABBREVIATIONS | |
|---------------|---|
| A | AMPERE |
| AC | ABOVE CEILING, ABOVE COUNTERTOP, ALTERNATING CURRENT |
| AFF | MOUNTING HEIGHT ABOVE FINISHED FLOOR OR GRADE TO CENTERLINE |
| BFC | BELOW FINISHED CEILING |
| CKT | CIRCUIT |
| CLG | CEILING, CEILING MOUNTED |
| DC | DIRECT CURRENT |
| EC | EMPTY CONDUIT (3/4" MINIMUM) WITH NYLON PULLWIRE |
| EM | EMERGENCY |
| EX | EXISTING - RECONNECT AS REQUIRED AT EXISTING LOCATION. REMOVE AND REINSTALL IF REQUIRED |
| ETR | EXISTING TO REMAIN |
| FA | FIRE ALARM |
| GFI | GROUND FAULT INTERRUPTER |
| HP | HORSE POWER |
| J | JUNCTION |
| PNL | PANEL |
| R | RELAY |
| R/R | REMOVE / REPLACE |
| REF | REFRIGERATOR |
| T | TRANSFORMER, THERMOSTAT |
| V | VOLT |
| VA | VOLT-AMPS |
| VSD | VARIABLE SPEED DRIVE |
| W | WATT |
| WP | WEATHERPROOF (NEMA 3R) |

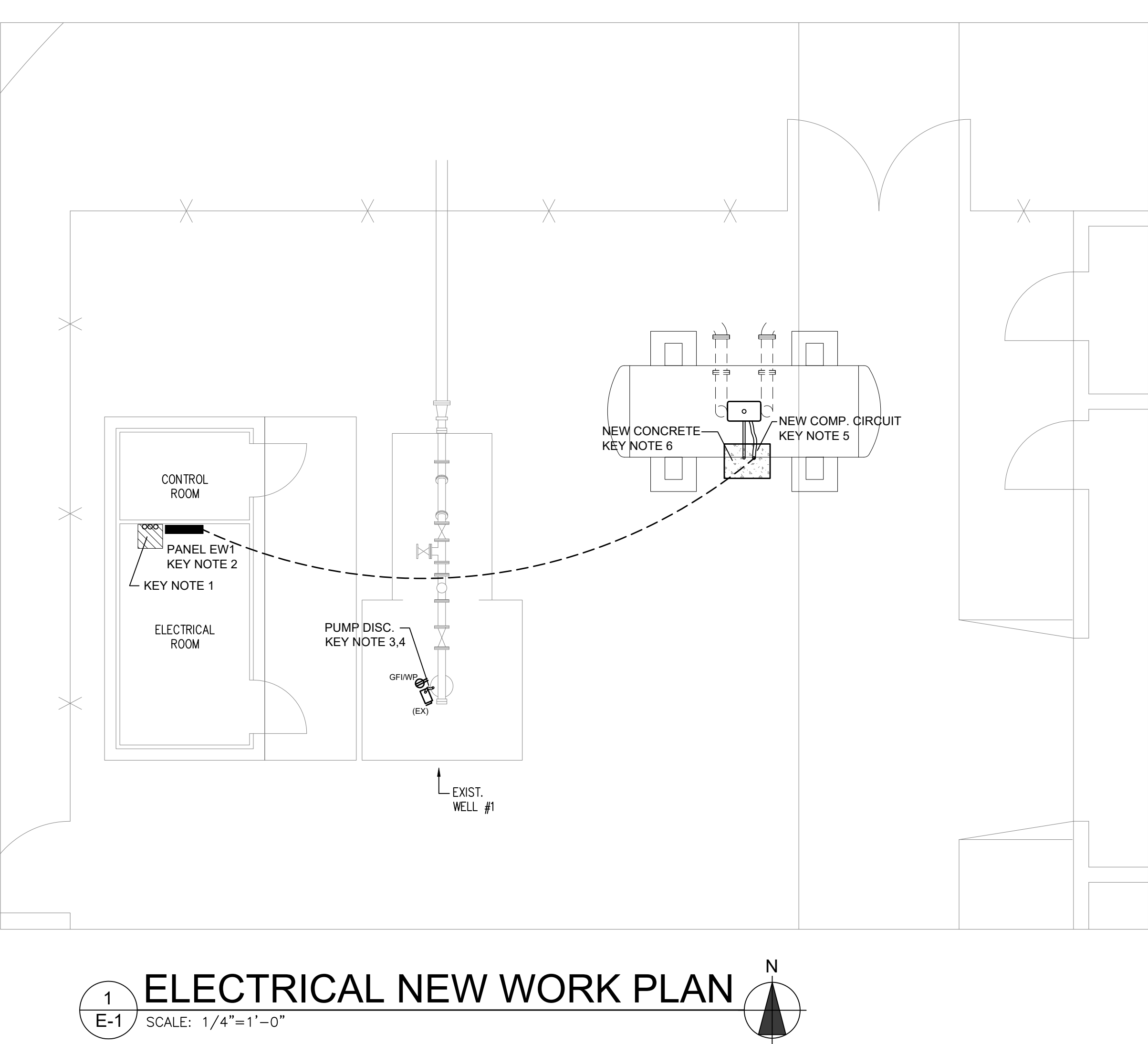
| LEGEND | |
|---|--|
|  | DISCONNECT SWITCH, NON-FUSIBLE, SIZE AND NEMA TYPE AS NOTED. |
|  | PANELBOARD 208/240 VOLT - SURFACE MOUNTED |
|  | DUPLEX RECEPTACLE, 20A, 125V, 2 POLE, 3 WIRE, WITH WEATHERPROOF-IN-USE COVER |
|  | DUPLEX RECEPTACLE, 20A, 125V, 2 POLE, 3 WIRE, WITH GROUND FAULT INTERRUPTER |
|  | JUNCTION BOX IN WALL - MOUNT 1'-6" UNLESS NOTED OTHERWISE. |
|  | JUNCTION BOX WITH FLEXIBLE CONNECTION TO EQUIPMENT |
|  | ARROW INDICATES CIRCUIT HOMERUNS IN CONDUIT |
|  | INDICATES HOMERUN TO CIRCUIT NUMBERS 2 & 4 IN PANEL "LPA" |
| NOTE: NUMBER OF HOMERUNS SHOWN ON THE PLANS ARE THE NUMBER OF HOMERUNS REQUIRED. DO NOT RUN MORE THAN THREE HOMERUNS IN ONE CONDUIT. DO NOT RUN 2 CIRCUITS ON THE SAME PHASE IN ONE CONDUIT. | |
|  | SHORTER TICKMARKS INDICATE 2 OR MORE PHASE CONDUCTORS, OR SWITCH LEGS |
|  | LONGER TICKMARKS INDICATE GROUNDED CONDUCTOR(S), QUANTITY AS SHOWN. |
| NEUTRALS SHALL NOT BE SMALLER SIZE THAN PHASE CONDUCTORS UNLESS SPECIFICALLY INDICATED OTHERWISE. PROVIDE THE APPROPRIATE NUMBER OF NEUTRALS IN ACCORDANCE WITH NEC. | |
| INSULATED GROUNDING CONDUCTORS SHALL BE USED IN ALL CIRCUITS, SIZED IN ACCORDANCE WITH NEC ARTICLE 250. | |
|  | EXPOSED SURFACE MOUNTED METAL RACEWAY. |
|  | DIRECT BURIED RACEWAY |
|  | FLEXIBLE CONDUIT TO EQUIPMENT |

| GENERAL NOTES | |
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| 1. | ALL WORK SHALL COMPLY WITH THE FLORIDA BUILDING CODE 7TH EDITION, INCLUDING THE NATIONAL ELELCTRICAL CODE, NFPA70-2017. |
| 2. | ALL CONDUCTORS SHALL BE INSTALLED IN CONDUIT OR TUBING. CONDUIT FOR BURIAL IN SOIL OR UNDER CONCRETE SHALL BE PLASTIC. FLEXIBLE CONDUIT INSTALLED OUT-OF-DOORS, IN ANY MECHANICAL EQUIPMENT ROOM, OR IN NORMALLY WET AREAS, SHALL BE LIQUID TIGHT FLEX WITH SUITABLE FITTINGS. CONDUIT INSTALLED IN CHEMICAL DISCHARGE OR STORAGE AREAS (CORROSIVE ENVIRONMENTS) SHALL BE PLASTIC. |
| 3. | FOR EXACT LOCATIONS OF MECHANICAL EQUIPMENT, SEE MECHANICAL PLANS. COORDINATE WITH SHOP DRAWINGS FOR TANK FEATURES AND ACCESSORIES. |
| 4. | ALL RECEPTACLES INSTALLED SHALL HAVE GFCI PROTECTIVE CIRCUITRY AND SHALL BE INSTALLED UNDER A WEATHERPROOF, IN-USE TYPE COVER. |
| 5. | CONDUIT SHALL PASS THROUGH WALLS AT 90 DEGREES AND SHALL BE RUN PARALLEL AND PERPENDICULAR TO WALLS. |
| 6. | BRANCH CIRCUITS AND HOMERUNS SHALL BE #12 WIRE AND 3/4" CONDUIT MINIMUM. EVERY CONDUIT SHALL HAVE A GREEN GROUND WIRE (#12 MINIMUM). |
| 7. | ALL CONDUCTORS SHALL BE COPPER WITH THHN/THWN INSULATION. CONDUCTORS SIZE # 8 AWG AND LARGER SHALL BE STRANDED. |
| 8. | NO MORE THAN 3 PHASE CONDUCTORS SHALL BE INSTALLED IN ONE CONDUIT UNLESS NOTED OTHERWISE. |
| 9. | ALL UNDERGROUND CONDUIT RUNS SHALL BE SEALED TO PREVENT THE ENTRANCE OF MOISTURE AND GASES. |
| 10. | ALL ITEMS ON PLANS ARE NEW UNLESS NOTED OTHERWISE. |
| 11. | WHERE RECEPTACLES ARE INDICATED TO BE EQUIPPED WITH GROUND FAULT INTERRUPTING CIRCUITRY, IT SHALL BE INTEGRAL TO THE DEVICE AND HAVE A TEST/RESET MECHANISM INTEGRAL WITH THE DEVICE. REMOTE TEST/RESET OR THE INTERWIRING OF ADDITIONAL RECEPTACLES UTILIZING GF SENSING OF A SINGLE RECEPTACLE IS NOT ACCEPTABLE. |

| DEMOLITION NOTES - GENERAL | |
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| 1. | REMOVE ROTTED CONDUIT STUB-UPS IN FLOOR. CUT OR CHIP FLOOR SLAB SUFFICIENTLY TO ATTACH TO SERVICEABLE RACEWAY. REPLACE WITH SCH40 PVC AND PATCH CONCRETE, BROOM FINISH. |
| 2. | ALL REMOVED ELECTRICAL EQUIPMENT, AND MATERIALS SHALL BE DISPOSED OF OFFSITE BY THE CONTRACTOR AT NO ADDITIONAL COST. |
| 3. | WHERE EXISTING CIRCUITS ARE REWORKED BY THE ADDITION OR REMOVAL OF CONDUCTORS, THE OLD WIRE SHALL BE REMOVED, THE CONDUIT SWABBED OUT, AND NEW THWN WIRES REPULLED UNLESS INDICATED OTHERWISE. |
| 4. | MOTORS AND WELL SYSTEM DEVICES SHALL BE REMOVED BY CRAFTSMEN SKILLED IN THE TRADE. REMOVE ELECTRICAL CONNECTIONS TO SAME. ALL LINE VOLTAGE WIRING SHALL BE DISCONNECTED AND REMOVED BY A QUALIFIED ELECTRICIAN. |
| 5. | RELOCATE EXISTING ELECTRICAL EQUIPMENT AS REQUIRED TO AVOID NEW CONSTRUCTION. ALL WORK REQUIRED SHALL BE PERFORMED IN ACCORDANCE WITH THE SPECIFICATIONS. |
| 6. | ABANDONED MATERIALS SHALL BE REMOVED WHERE POSSIBLE. |
| 7. | WHERE ITEMS ARE EXISTING TO REMAIN, THEY SHALL BE PROTECTED DURING DEMOLITION. REMOVE/REINSTALL AS REQUIRED. |

| KEY NOTES | |
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| 1. | R/R CONCRETE SLAB AND REPLACE CONDUIT WITH SCH40 PVC. CUT OR CHIP CONCRETE SLAB TO EXPOSE SERVICEABLE RACEWAY AND EXTEND AND REPLACE DETERIORATED RACEWAY WITH PLASTIC. REPAIR SLAB WITH BAG MIX, LEVEL AND BROOM FINISH. |
| 2. | REPLACE CIRCUIT BREAKERS IN EXISTING PANEL EW1 WITH NEW. PANEL IS SQUARE D TYPE NQOD, QTY (18), 20 AMP. (2) CIRCUIT BREAKERS ARE TO BE 20A/2P. |
| 3. | REPLACE PLASTIC TUBING WITH LTFM CONDUIT, BETWEEN DISCONNECT AND WELL CASING. REINSTALL AND TERMINATE PUMP LEADS AS REQUIRED. FITTINGS TO BE LISTED TYPE. |
| 4. | REPLACE DEVICE WITH NEW GFCI TYPE ON EXISTING OUTLET. PROVIDE WEATHERTIGHT, IN-USE TYPE COVER. |
| 5. | REPLACE CIRCUIT TO PRESSURE REGULATING AIR COMPRESSOR, 3-#10, IN EXISTING RACEWAY. AIR COMPRESSOR PROVIDED AND INSTALLED BY OTHERS. |
| 6. | PROVIDE SERVICE APRON (CONCRETE) AT ELECTRICAL AND PRESSURE LINE ENTRY, MINIMUM 24" SQUARE. EXCAVATE 2-3 INCHES AND FORM 4" THICK CONCRETE APRON. PROTECT METAL WITH PLASTIC TAPE OR BRUSH ON MASTIC. |

| SITE PLAN | |
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| NOT TO SCALE | |
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McGinniss & Fleming
Engineering, Inc.

Mechanical • Electrical • Fire Protection • Plumbing

FORT BRADEN SCHOOL
WATER PRESSURE TANK
REPLACEMENT

LEON COUNTY SCHOOLS
Ft. Braden Community, Florida

DATE:
January 19, 2022

REVISED:

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| DESIGNED BY: CKF | DRAWN BY: CKF |
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SUBMITTAL:
CONSTRUCTION DOCUMENTS

SHEET TITLE:
ELECTRICAL
LEGEND, NOTES AND
NEW WORK PLAN

SHEET:

E-1

JOB NUMBER:
2021-29