

**GENERAL NOTES:**

1. CONTRACTOR TO CONTACT UTILITIES BEFORE STARTING EXCAVATION: IOWA ONE CALL 811
2. CONTRACTOR TO PROVIDE DOCUMENTATION OF MINIMUM 5 YEARS EXPERIENCE INCLUDING WORK ON SIMILAR PROJECTS. DOCUMENTATION OF EXPERIENCE REQUIRED PRIOR TO BID AWARD.
3. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL DIMENSIONS. IF THERE ARE DISCREPANCIES, CONTACT IOWA DOT - OFFICE OF SUPPORT SERVICES PRIOR TO BID
4. MAINTAIN AND PROTECT EXISTING BUILDINGS. REPAIR OR REPLACE DAMAGES AT GENERAL CONTRACTORS COST
5. PROVIDE 8" PVC VERTICAL CONNECTIONS 8" ABOVE SLAB TO DOWNSPOUTS W/ELBOWS TO CONNECT TO 10" - SDR-26 STORM SEWER PIPING
6. PROVIDE UNIVERSAL DOWNSPOUT CONNECTORS/COVERS TO CONNECT DOWNSPOUT TO PVC STORM WATER PIPING AT DOWNSPOUT LOCATIONS
7. PROVIDE METAL APRON END SECTION WITH ANIMAL GUARDS AT THE STORM WATER DAYLIGHTING TO CULVERT.
8. PROVIDE POSITIVE DRAINAGE TO CULVERT OF ABOUT 1%
9. PROVIDE CONTROL JOINTS IN SLAB AT 12' MAX SPACING. ALIGN WITH CORNERS. ALL JOINTS SHALL BE SEALED
10. CONNECT TO NEW WELL
11. CONNECT TO EXISTING SITE UTILITIES
12. ALL SITE WATER SERVICE PIPING MUST BE INSTALLED MINIMUM OF 60" BELOW GRADE TO TOP OF PIPE

**ALTERNATES:**

- #1 BRINE CONTAINMENT 2 FEET WIDER TO THE NORTH
- #2 ADDITIONAL PASSAGE DOOR ON THE NORTH SIDE OF BRINE BUILDING INCLUDING CONCRETE STOOP AND EXIT LIGHT
- #3 ADDITIONAL CONCRETE SLAB AND APPROACH (SHOWN IN GREY HATCH)

**LEGEND**

- ST - WATER PIPING
- ST - NEW STORM SEWER PIPING
- Point of connection, new work to existing
- E - ELECTRIC
- G - GAS PIPING
- - - - - EXISTING TO REMAIN
- - - - - ALTERNATE
- - - - - NEW
- - - - - DEMOLITION

**SITE PLAN**  
SCALE: 1/32" = 1'-0"

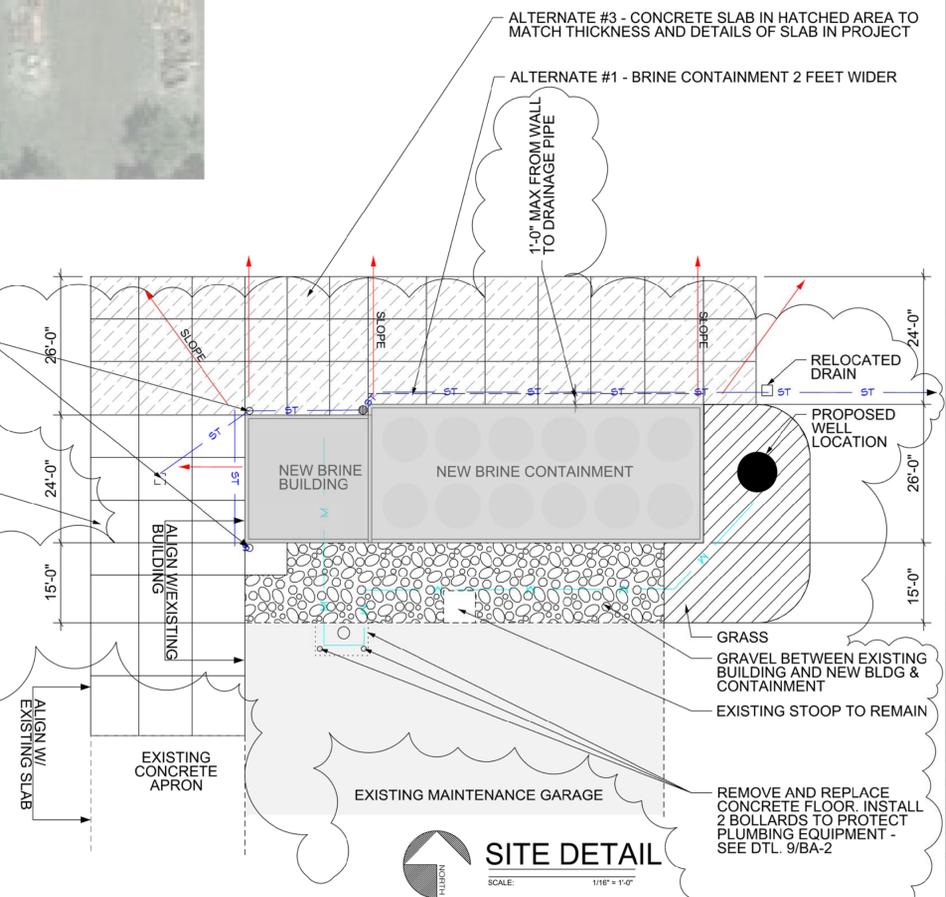


EXISTING DRAIN TO REMAIN. COORDINATE EXACT LOCATION W/NEW CONCRETE APRON

**DEMOLITION**  
SCALE: 1/32" = 1'-0"

STORM SEWER PIPING - 8" PVC VERTICALS & ELBOWS EXTEND 8" ABOVE SLAB PROVIDE COVERED UNIVERSAL CONNECTION TO DOWNSPOUT. CONNECT W/PVC ELBOWS TO 10" SDR-26 STORM SEWER PIPING. MAKE NEW CONNECTION TO EXISTING DRAIN AND EXTEND TO CULVERT ON WEST SIDE OF ROAD. CAP CONNECTION TO EXISTING DRAINAGE AND REMOVE PIPING

- EXISTING BRINE MAKING AND STORING EQUIPMENT TO BE REMOVED BY OWNER. REMOVE EXISTING BRINE CONTAINMENT AND BUILDING. DISPOSE OF ALL EXISTING MATERIALS OFFSITE. PREPARE SITE FOR NEW CONSTRUCTION. SEE SPECS FOR MORE DETAILED INFORMATION.
- REMOVE EXISTING DRAIN AND GRATE SAVE FOR REINSTALLATION IN DRIVE NORTH OF NEW CONTAINMENT WALL
- REMOVE CONCRETE SIDEWALK, SLAB AND ASPHALT IN FRONT OF EXISTING BRINE BUILDING AND BETWEEN EXISTING MAINTENANCE GARAGE AND BRINE BUILDING.
- EXISTING STOOP TO REMAIN
- REMOVE SECTION OF CONCRETE FLOOR IN EXISTING MAINTENANCE GARAGE AS REQUIRED TO MAKE PLUMBING CONNECTION TO BRINE BUILDING. COORDINATE EXACT LOCATION AND W/ OWNER



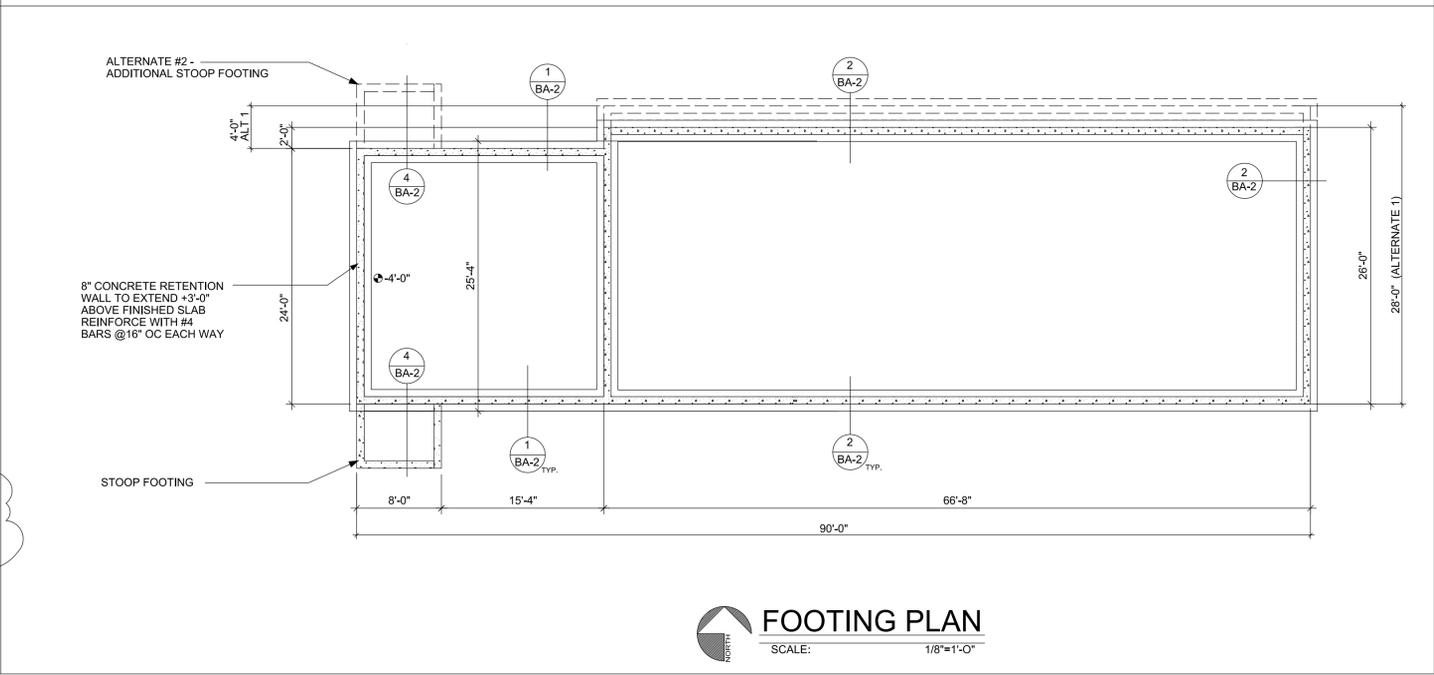
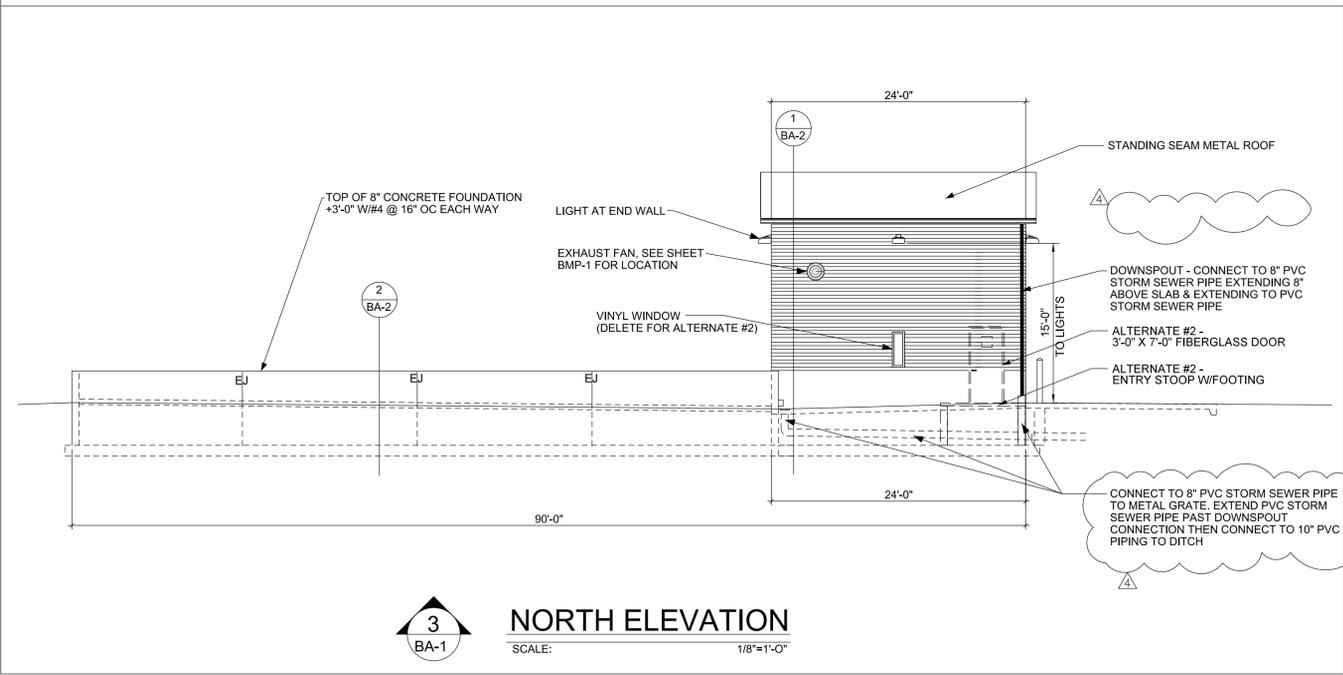
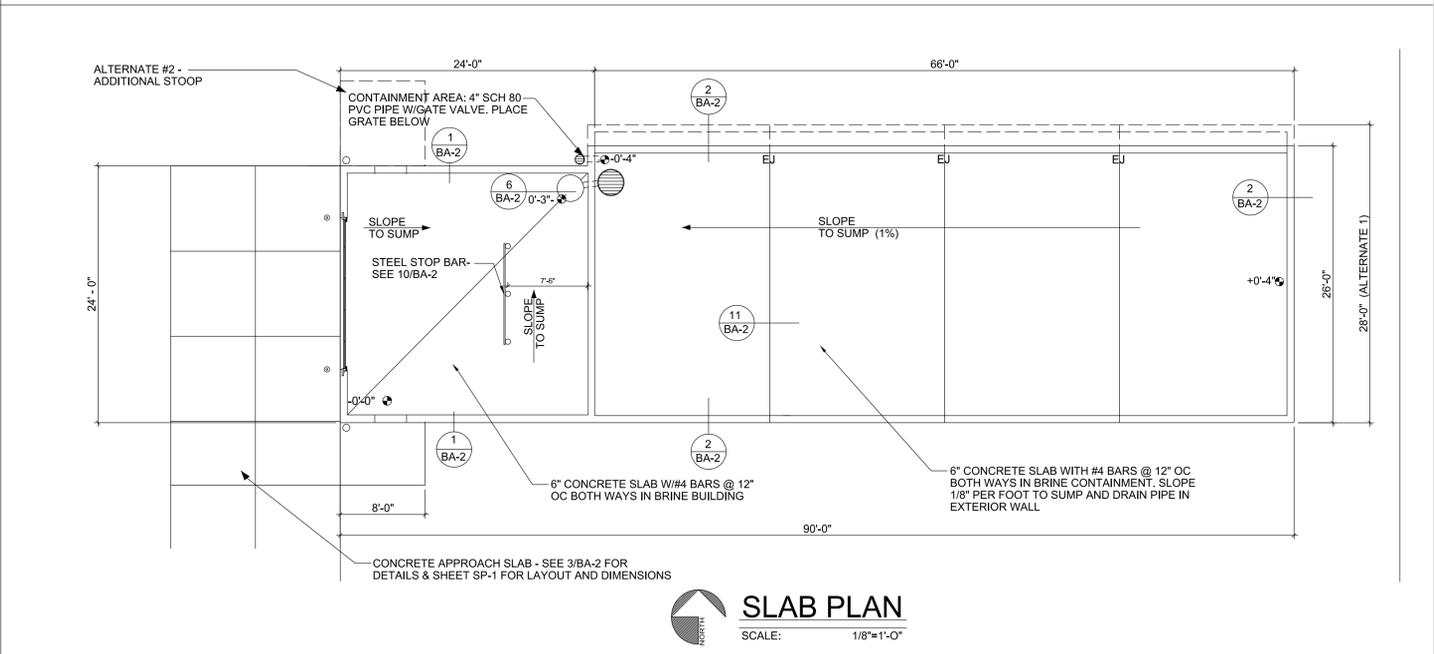
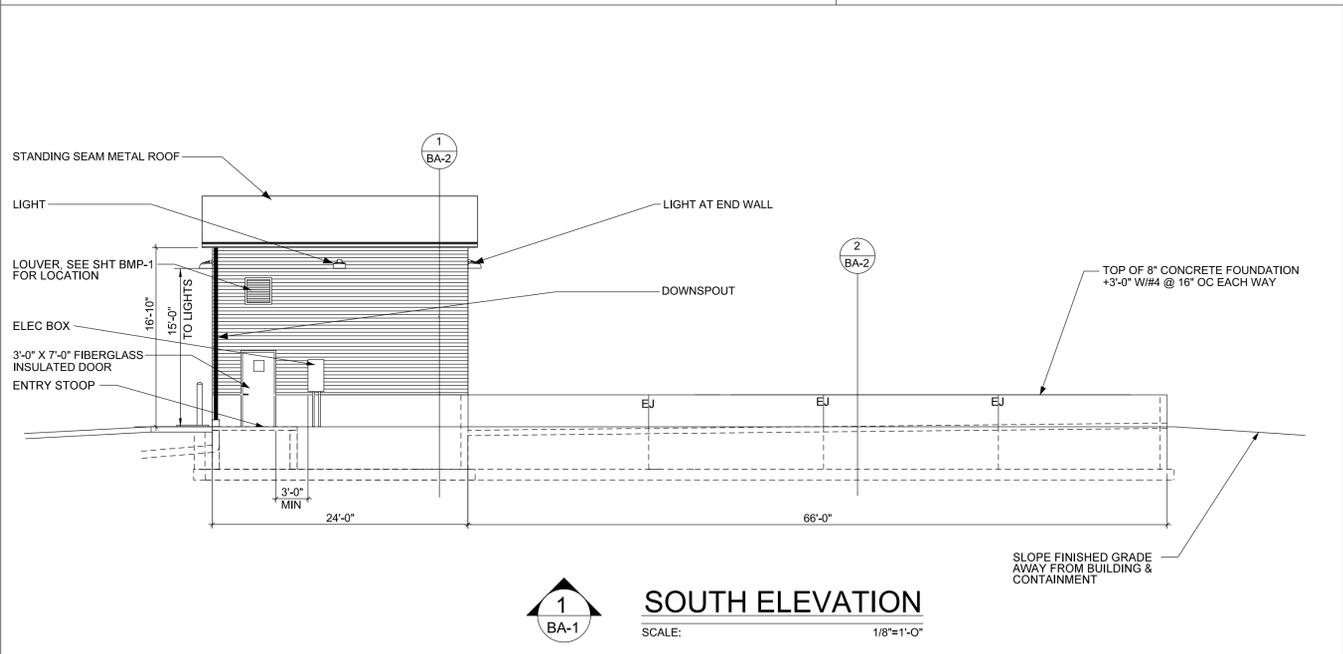
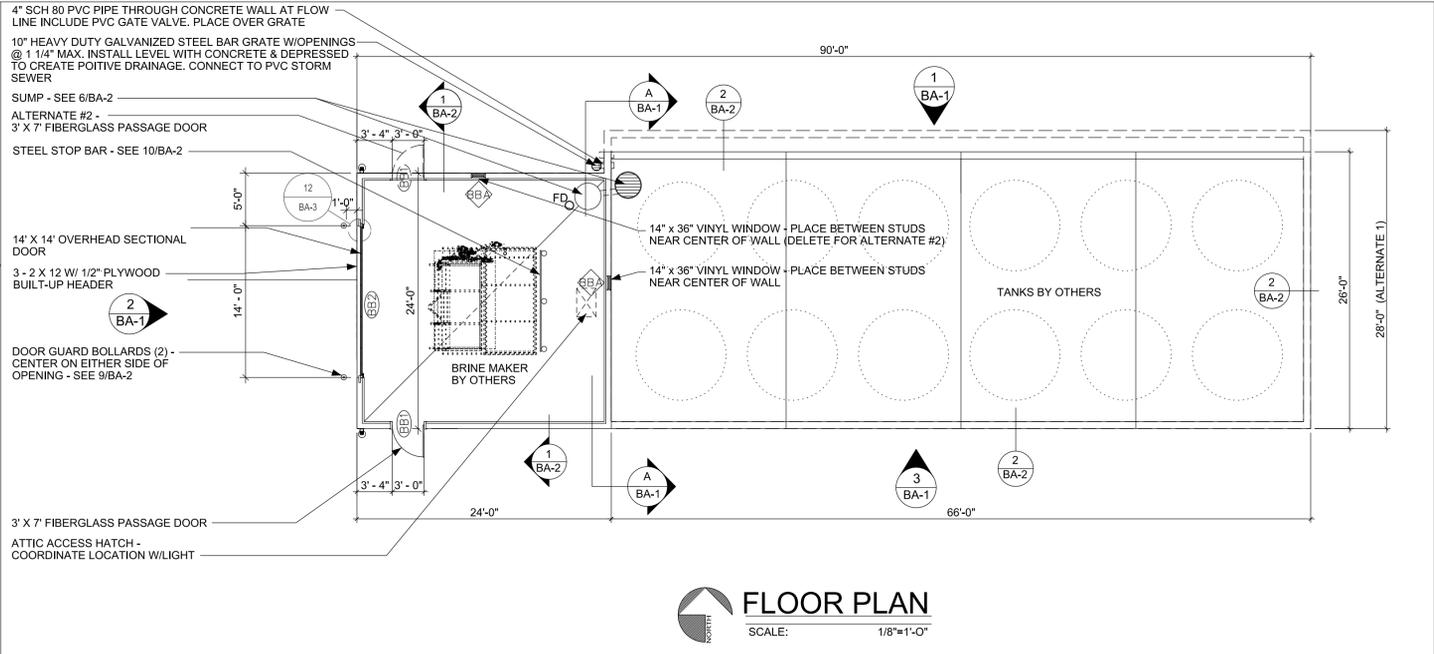
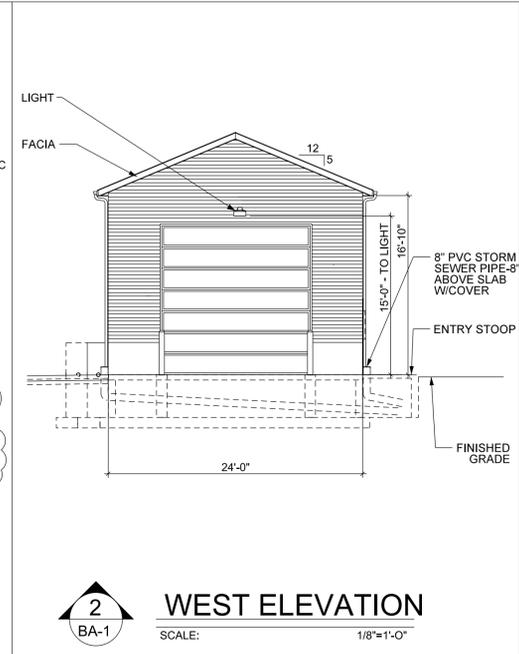
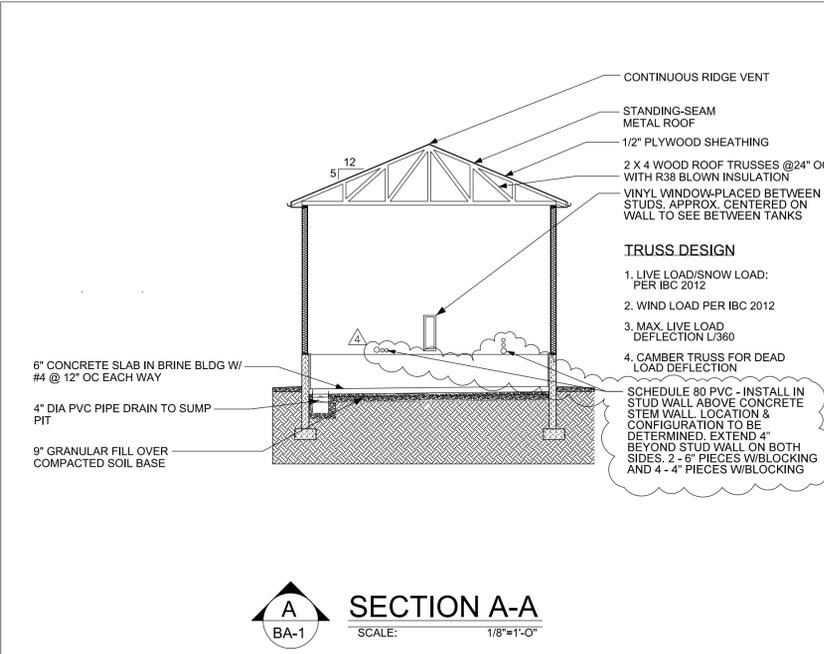
ALTERNATE #3 - CONCRETE SLAB IN HATCHED AREA TO MATCH THICKNESS AND DETAILS OF SLAB IN PROJECT

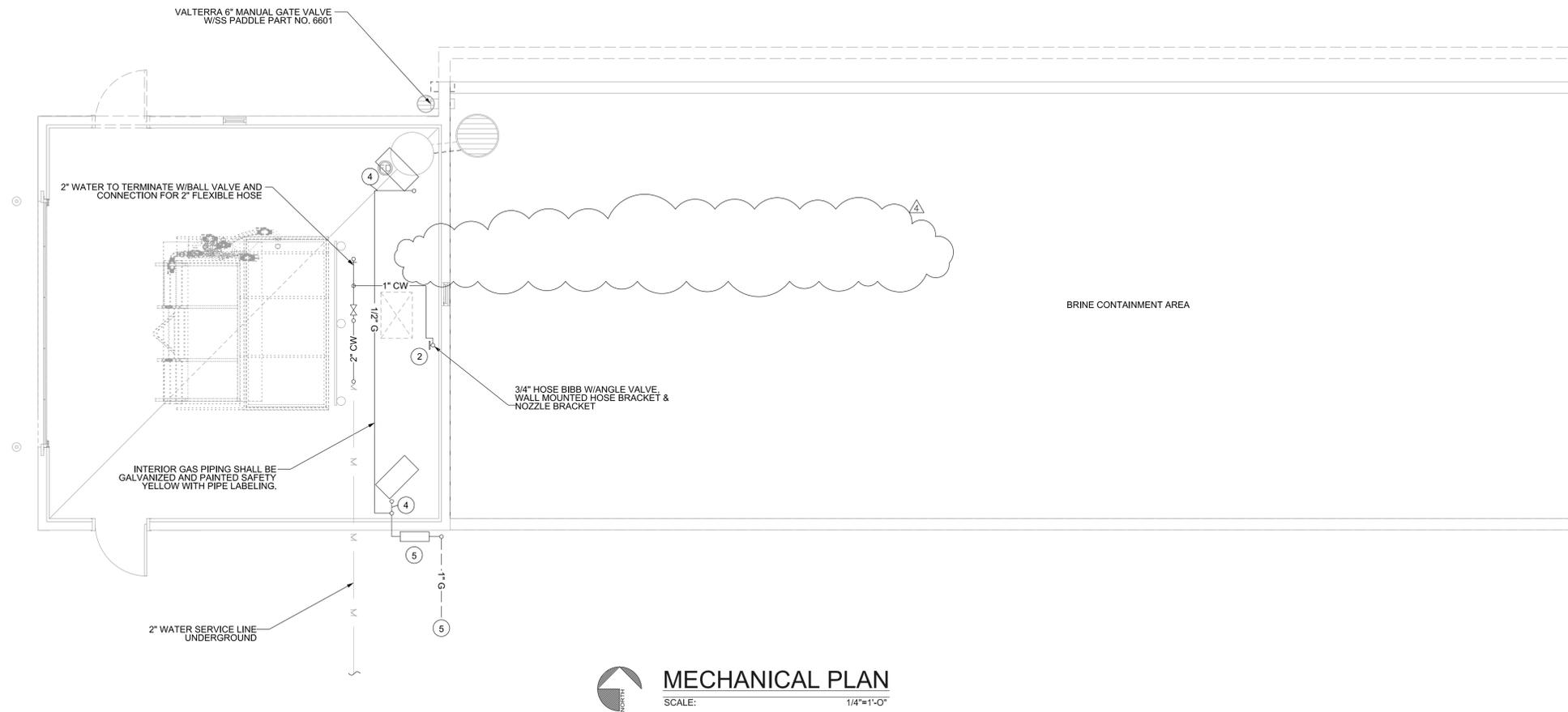
ALTERNATE #1 - BRINE CONTAINMENT 2 FEET WIDER

1'-0" MAX FROM WALL TO DRAINAGE PIPE

**SITE DETAIL**  
SCALE: 1/16" = 1'-0"

SHEET SIZE: 24" X 36"





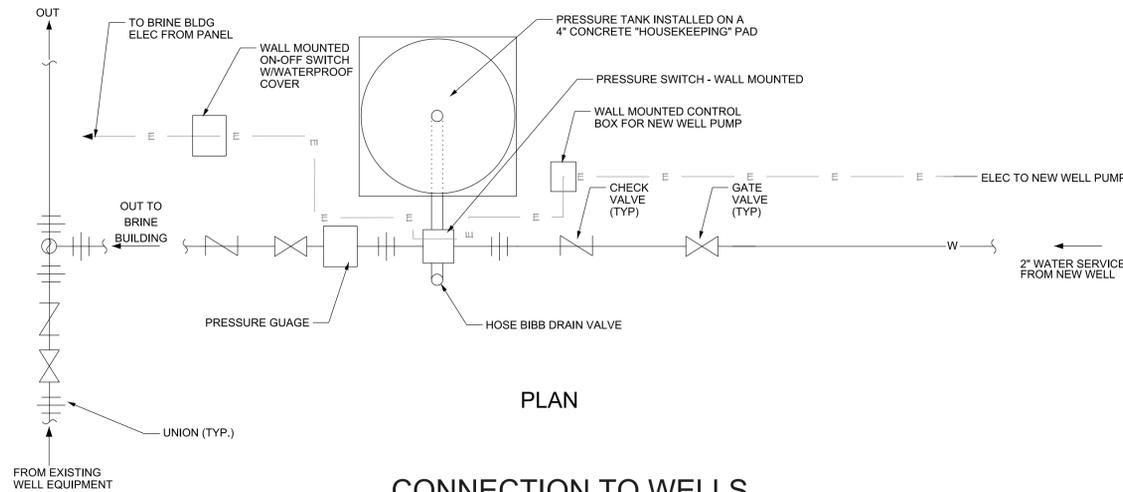
**MECHANICAL PLAN**  
SCALE: 1/4"=1'-0"

**MECHANICAL GENERAL NOTES:**

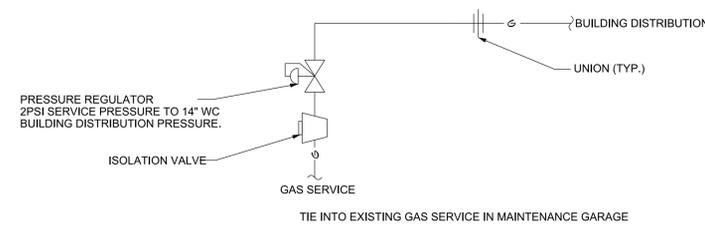
- DRAWINGS SHOWING LOCATION OF FIXTURES, EQUIPMENT, DUCTWORK, PIPING, ETC AND MAY NOT ALWAYS REFLECT ACTUAL INSTALLATION CONDITIONS. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL PIPING, DUCTWORK, EQUIPMENT, ETC. AND MAY NOT INCLUDE ALL OFFSETS AND FITTINGS AS REQUIRED. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND THE WORK OF OTHERS WILL PERMIT.
- VERIFY SIZE AND LOCATION OF EXISTING PIPING AND EQUIPMENT AS IT RELATES TO NEW WORK.
- PLUMBING CONTRACTOR SHALL COORDINATE ALL PLUMBING PIPING WITH ALL DUCTWORK AND OTHER TRADES PRIOR TO COMMENCEMENT OF WORK.
- FURNISH AND INSTALL MECHANICAL PRODUCTS IN COMPLIANCE WITH LOCAL BUILDING CODE AND THE AUTHORITY HAVING JURISDICTION, AND IN ACCORDANCE WITH GENERALLY ACCEPTED INDUSTRY STANDARDS AND PRACTICES AND MANUFACTURER'S RECOMMENDATIONS.
- VERIFY ACTUAL LOCATIONS OF FIXTURES AND DRAINS WITH ARCHITECTURAL.
- FIRE CAULK ALL MECHANICAL PENETRATIONS AT FIRE RATED WALLS.
- CONTRACTOR TO INSTALL ALL UTILITY CONNECTIONS TO NEW BRINE BUILDING. COORDINATE W/ EXISTING AVAILABLE SERVICES.
- CONTRACTOR TO PROVIDE AND INSTALL MAGNETIC STARTER SWITCHES FOR THREE 7-HP PUMPS. (PUMPS PROVIDED BY OWNER.)

**KEY NOTES:**

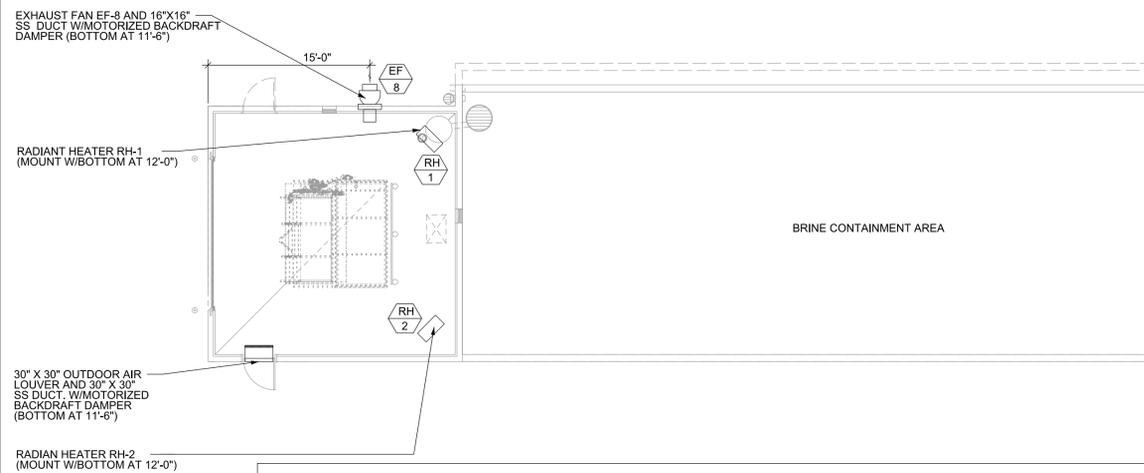
- WATER METER, PROVIDED BY UTILITY PROVIDER AND INSTALLED BY CONTRACTOR.
- 1" WATER PIPING UNDER FLOOR TO HOSE BIBB LOCATION. HOSE BIBB, CHICAGO 387 - LEFE 27
- BACKFLOW PREVENTOR, 2" WATTS 009QT, REDUCED PRESSURE ZONES
- 1/2" GAS TO UNIT HEATER
- NATURAL GAS CONNECTION INSTALLED BY CONTRACTOR.
- CONNECT TO NEW AND EXISTING WELL



**CONNECTION TO WELLS**  
N.T.S.



**NATURAL GAS SERVICE DETAIL**  
N.T.S.



**GAS FIRED RADIANT HEATER SCHEDULE**

| DESIGNATION | MANUFACTURER  | MODEL | LOCATION | OUTPUT (BTU/HR) | RADIANT SURFACE (IN <sup>2</sup> ) | VOLTAGE/PHASE | WATTS | REMARKS |
|-------------|---------------|-------|----------|-----------------|------------------------------------|---------------|-------|---------|
| RH-1        | RE-VERBER-RAY | DR-30 | BRINE    | 30,000          | 85                                 | 120/1         | 500   |         |
| RH-2        | RE-VERBER-RAY | DR-30 | BRINE    | 30,000          | 85                                 | 120/1         | 500   |         |

**FAN SCHEDULE**

| DESIGNATION | SERVES         | MANUFACTURER | MODEL     | CFM  | ESP   | RPM  | DRIVE | MOTOR HP | VOLTS | PHASE | REMARKS |
|-------------|----------------|--------------|-----------|------|-------|------|-------|----------|-------|-------|---------|
| EF-8        | BRINE BUILDING | GREENHECK    | CWB-121-4 | 1150 | 0.125 | 1750 | BELT  | 1/4      | 120   | 1     | 1, 2    |

- REMARKS
- PROVIDE NEMA 4X DISCONNECT
  - COATED WITH HI-PRO POLYESTER, DARK GRAY (041), STAINLESS STEEL SHAFT, GALVANIZED BIRD SCREEN, MOTOR WITH THERM OVERLOAD.

**MECH. HVAC PLAN**  
SCALE: 1/4"=1'-0"

DISTRICT: 06

COUNTY: IOWA

WILLIAMSBURG, IA

WILLIAMSBURG BRINE BUILDING  
BRINE BUILDING - MECHANICAL & PLUMBING

**IOWADOT**  
SMARTER SIMPLER CUSTOMER DRIVEN  
OFFICE OF SUPPORT SERVICES  
800 LINCOLN WAY  
AMES, IOWA 50010 (515)231-1299

DATE: MAR 17, 2016  
DRAWN BY: DESIGN TEAM  
APPROVED: J BURNES  
REVISIONS:  
4/29 APR 2016

5 SHEET OF 6  
BMP-1