



MONTANA FISH, WILDLIFE & PARKS

ADDENDUM NO. 2

TO: ALL BIDDERS OF RECORD

PROJECT: Bannack State Park Visitor's Center Septic System Replacement

FWP PROJECT #: 7196148

DATE: March 17, 2023

FROM: Randi Rognlie, Project Manager

Acknowledge receipt of this addendum by inserting its number and date in the Proposal Form and on the Bid Envelope. Failure to do so may subject bidder to disqualification.

This Addendum forms a part of the Contract Documents. Clarification and/or modifications area as follows:

General:

1. Source power available at the site has been confirmed to be 240V, single-phase. Plans and Specification Section 02810 have been revised to reflect this.
2. The duplex dose pump control panel is to be supplied by the contractor and not "BY OTHERS" as noted on the plan sheets. Plans have been updated to reflect.
3. The duplex dose pump control panel (alternating) must be equipped with programable timers per the project specifications.
4. The electrical ground detail on Plan Sheet 2/5 has been revised.
5. Per the project specifications (specifically Section 02732), 95% minimum density is required for forcemain trench backfill in all areas. Although 95% minimum density is still required, this specification section has been revised to no longer require density testing.
6. Project submittals must include pipe bedding material.
7. Two (2) single-compartment tanks manifolded together below the timer ON float are an acceptable equal to the single 2,5000-gallon dose tank shown on the plans.
8. The existing 4" sewer line between the septic tank and visitor's center has experienced freezing this winter. The revised plans now require the contractor to replace the existing 4" sewer service line between the foundation wall and the existing septic tank. Rigid polystyrene (blueboard) insulation must be placed over the new sewer service line prior to backfill.
9. Per Specification Section 02221 the contractor is responsible for restoring any disturbed gravel surfacing material to its original condition. Contractor must include replacement

of any removed parking lot surfacing with a minimum 6" (depth) of ¾" minus crushed top surfacing material. Clean salvaged surfacing material can be part of all of the 6" required depth.

Project Specification Changes:

- Replace Specification Section 02732 (Force Mains) with the attached revised Section 02732.
- Replace Specification Section 02810 (Electrical) with the attached revised Section 02810.

Project Plan Sheet Changes:

The following changes were made to the project drawings.

- Replace Plan Sheet 2 of 5 with the attached revised Plan Sheet 2 (marked ADDENDUM 1).
- Replace Plan Sheet 5 of 5 with the attached revised Plan Sheet 2 (marked ADDENDUM 1).

END OF ADDENDUM NO. 2

Section 02732 Force Mains

1. General

Bannack is a unique cultural and historical landmark. No structure, regardless of appearance, can be moved or impacted while building the septic system replacement. If conflict with any structure is unavoidable, Contractor to stop work and notify Owner immediately. If any object other than expected soil, rock, and existing septic components is unearthed, Contractor to stop work and notify Owner immediately.

Contractor shall practice jobsite good housekeeping. All waste and trash shall be picked up and properly stored, daily. If odors arise, trash shall be removed immediately.

Two-inch (2") diameter force main shall be installed between the drainfield dose tank and the pressure-dosed drainfield as shown on the *Project Plans*.

2. Material

Two-inch (2") diameter SCH40 PVC pressure-rated pipe & fittings shall be used. All force main piping shall meet ASTM F714, ASTM 3035 and ASTM 3350 standards.

3. Depth

The lines shall have a minimum of five-feet (5.0') of cover. Blue board is required in areas where the depth cannot be maintained.

4. Installation

4.1 Protection of Existing Properties

Take precautions to protect all adjoining private and public property and facilities, including underground and overhead utilities, curbs, sidewalks, driveways, structures, and fences. Contact Montana One Call System for utility locates before starting work (1-800-424-5555 minimum of two days prior to excavation). Restore and replace all disturbed or damaged facilities to its original condition at Contractor's expense.

4.2 General

Trenching shall be done in accordance with Section 02221 of MPWSS, these specifications and applicable OSHA regulations. The forcemain shall be bedded with Type II Bedding as specified in Montana Public Works Standard Specifications. Compaction must be at least 95% of maximum dry density as determined by AASHTO T94 or ASTM D698. An installer holding a valid County Wastewater Treatment System Installer's License shall install the forcemain piping.

At least 6.0 feet of cover is required over all water mains and hydrant lines. Field Density Testing shall be performed in accordance with the Montana Public Works Standard Specifications (MPWSS), Seventh Edition, April 2021 and all Addenda thereto. Tests which fail the required compaction shall be recompacted and retested at no additional cost to the Owner. OSHA trenching requirements are

5. Testing

Hydrostatic and leakage testing shall be conducted in accordance with AWWA C605-94 Standards. Test pressure shall be at least 1.5 times the pump shut off pressure. Test duration shall be a minimum of two (2) hours.

Section 02738

Section 02810 General Electrical Requirements

1. General

Bannack is a unique cultural and historical landmark. No structure, regardless of appearance, can be moved or impacted while building the septic system replacement. If conflict with any structure is unavoidable, Contractor to stop work and notify Owner immediately. If any object other than expected soil, rock, and existing septic components is unearthed, Contractor to stop work and notify Owner immediately.

Contractor shall practice jobsite good housekeeping. All waste and trash shall be picked up and properly stored, daily. If odors arise, trash shall be removed immediately.

The Contractor shall provide the complete electrical system needed for proper operation of the wastewater treatment system described within the Plans and these Specifications. All electrical work shall be completed by a licensed electrician. ***This shall include an electrical source feed from the existing Visitor's Center Facility.*** The contractor is responsible for providing a separate service disconnect, to be mounted with the pump control panels where shown on the *Project Plans*.

The Contractor shall provide all labor, materials, tools, equipment and services required to complete the furnishing, installation, wiring, connection, calibration, adjustment, testing and operation of all electrical equipment and components necessary to complete the wastewater treatment system.

2. Source Power

Power supply will be single-phase, 240V. The electrical main disconnect at the WWTS area shall be a 30A NEMA 3R panel located near the pump control panels. The Panel board(s) shall be sized appropriately for the pump control panels and service disconnect equipment and shall be constructed as shown on the project plans. The panel board shall provide a power source and hook up points for the pump control panel(s).

Conduit and electrical lines shall be installed from the new service location or from the feed within the Visitor's Center building to the wastewater treatment system area. One or two panel boards and backboards shall be installed at the sewage treatment system area.

3. Electrical Equipment

It will be the Contractors responsibility to supply and install all required conduits, service disconnects/breakers, pump controller(s) for the dose tank pumps and control panel.

4. Junction Boxes & Wiring

All junction boxes shall be located outside of the tank risers and shall be housed within fiberglass irrigation control boxes. The splice boxes shall be UL listed and approved for wet locations. UL listed waterproof butt connectors shall also be used. Coat all connections with corrosion protection sealant and ensure box has a water and gas-tight seal at the cord grips and lid. The splice boxes shall be connected to the pumps, floats, and/or panels using individual 1” diameter PVC electrical conduits.

Septic & Dose Tank gasses must be sealed out of the splice boxes and conduit. Conduit shall be gas sealed in accordance with Engineer Representative’s instructions. All wire shall be color coded; tagging of wire is not an acceptable equal. The Contractor shall provide a wiring schematic for each tank upon project completion. This schematic will be integrated within the Operation & Maintenance Manual.

Entire electrical components shall comply with UL508. Adequate electrical cord length shall be provided so the floats can be removed from the tanks without breaking electrical connection with the splice box.

5. Standards and Codes

- A. Permits, licenses, approvals and other arrangements for work shall be obtained and paid for by the Contractor and included in the bid price.
- B. Electrical work shall be executed in strict accordance with the latest edition of the National Electrical Code and local ordinances and regulations.
- C. All electrical equipment, materials, construction methods, tests and definitions shall be in strict conformity with the established standards of the following in their latest adopted revision:
 - 1. Underwriters' Laboratories, Inc. (UL)
 - 2. National Electrical Manufacturers Association (NEMA)
 - 3. Canadian Standards Association (CSA)
 - 4. Electrical Testing Laboratories (ETL)

5. Factory Mutual (FM)

- D. All materials and equipment specified herein shall, within the scope of UL Examination Services, be approved by the Underwriter's Laboratories for the purpose for which they are used and shall bear the UL label.
- E. All materials shall be new, free from defects, of current manufacture, of quality specified or shown. Each type of material shall be of the same manufacturer throughout the work.

END OF SECTION 02810

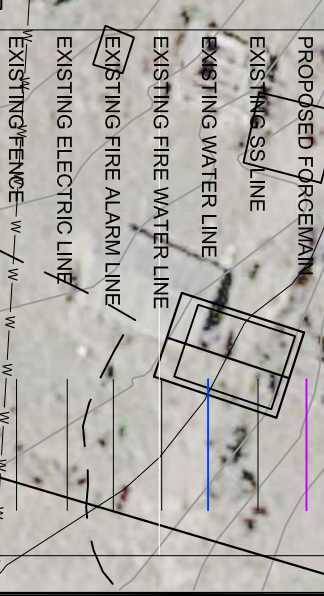
GENERAL WORK REQUIREMENTS:

BANNACK IS A UNIQUE CULTURAL AND HISTORICAL LANDMARK. NO STRUCTURE, REGARDLESS OF APPEARANCE, CAN BE MOVED OR IMPACTED WHILE BUILDING THE SEPTIC SYSTEM REPLACEMENT. IF CONFLICT WITH ANY STRUCTURE IS UNAVOIDABLE, CONTRACTOR TO STOP WORK AND NOTIFY OWNER IMMEDIATELY. IF ANY OBJECT OTHER THAN EXPECTED SOIL, ROCK AND EXISTING SEPTIC COMPONENTS IS UNIDENTIFIED, CONTRACTOR TO STOP WORK AND NOTIFY OWNER IMMEDIATELY. CONTRACTOR SHALL PRACTICE JOB SITE GOOD HOUSEKEEPING. ALL WASTE AND TRASH SHALL BE PICKED UP AND PROPERLY STORED DAILY. IF ODORS ARISE, TRASH SHALL BE REMOVED IMMEDIATELY.

UTILITY NOTES:

UNDERGROUND UTILITIES ARE SHOWN AS LOCATED BY THE SUPERVISOR. UTILITY COMPANY REPRESENTATIVES, VARIOUS RECORDS, AND/OR SURFACE MARKINGS PLACED BY THE UTILITY COMPANY REPRESENTATIVES, NOT ACTUAL PHYSICAL LOCATIONS. ACTUAL UTILITY DEPTHS VARY AND ARE UNKNOWN. UNDERGROUND AND OVERHEAD UTILITIES SHOWN ARE APPROXIMATE ONLY AND MUST NOT BE USED TO DETERMINE THEIR PHYSICAL LOCATION ON THE GROUND. THE SHOWING OF UTILITY LOCATIONS ON THIS DRAWING DOES NOT RELIEVE ANY PERSON OR COMPANY OF THEIR RESPONSIBILITY TO CONTACT ALL UTILITY COMPANIES PRIOR TO ANY EXCAVATION BY CALLING THE UTILITY NOTIFICATION CENTER AT 1-800-424-5555 (OR 811). IT MAY BE NECESSARY TO CALL A LOCATION SPECIFIC UTILITY LOCATOR. ITS EXIST AND WERE NOT MARKED BY ANY UTILITY COMPANY REPRESENTATIVE.

UTILITY LEGEND:



EXISTING DRAINFIELD LATERAL CONSISTS OF DRAINROCK & PERFORATED PVC PIPE. WHERE ENCOUNTERED CUT EXISTING LINES, REMOVE FROM TRENCHES, AND DISPOSE ALL WASTE FROM JOBSITE DAILY TO ATTENUATE ODORS.

EXISTING ABSORPTION TRENCH AND 90° 4" PERFORATED PVC (TYPICAL OF 5) ABANDON IN PLACE

APPROXIMATE LOCATION OF EXISTING PE WATER LINE - CUT & CAP WHERE ENCOUNTERED & MARK W/ BLUE PAINTED METAL FENCE POST

100% DRAINFIELD REPLACEMENT AREA

EXISTING HISTORIC OUTHOUSE (DO NOT DISTURB)

EXISTING 500 GALLON FIBERGLASS WET WELL W/ PUMP & CONTROLS. CONTRACTOR TO REMOVE FROM JOB SITE AND DISPOSE OF WITHIN 24 HOURS

NEW 2500 GALLON DOSE TANK W/ DUPLICATION PUMPS

TWO (2) NEW 2" SCH40 PVC FORCEMAINS

EXISTING 4" SCH40 PVC (TO REMAIN)

NEW C.O.T.G.

REPLACE EXIST 4" PVC S.S. SERVICE FROM NEW COTG TO EXIST SEPTIC TANK INSULATE ENTIRE LENGTH

EXISTING 2000 GALLON SEPTIC TANK (TO REMAIN) INSTALL RISERS & LIDS

500 GALLON SEPTIC TANK W/ EFFLUENT FILTER



CASNE & ASSOCIATES
 DRAWN BY: RC DATE: 10/24/2022
 CHECKED BY: RC DATE: 10/24/2022
 REVISED BY: RC DATE: 3/16/2023
 APPROVED BY: RC DATE: 3/16/2023

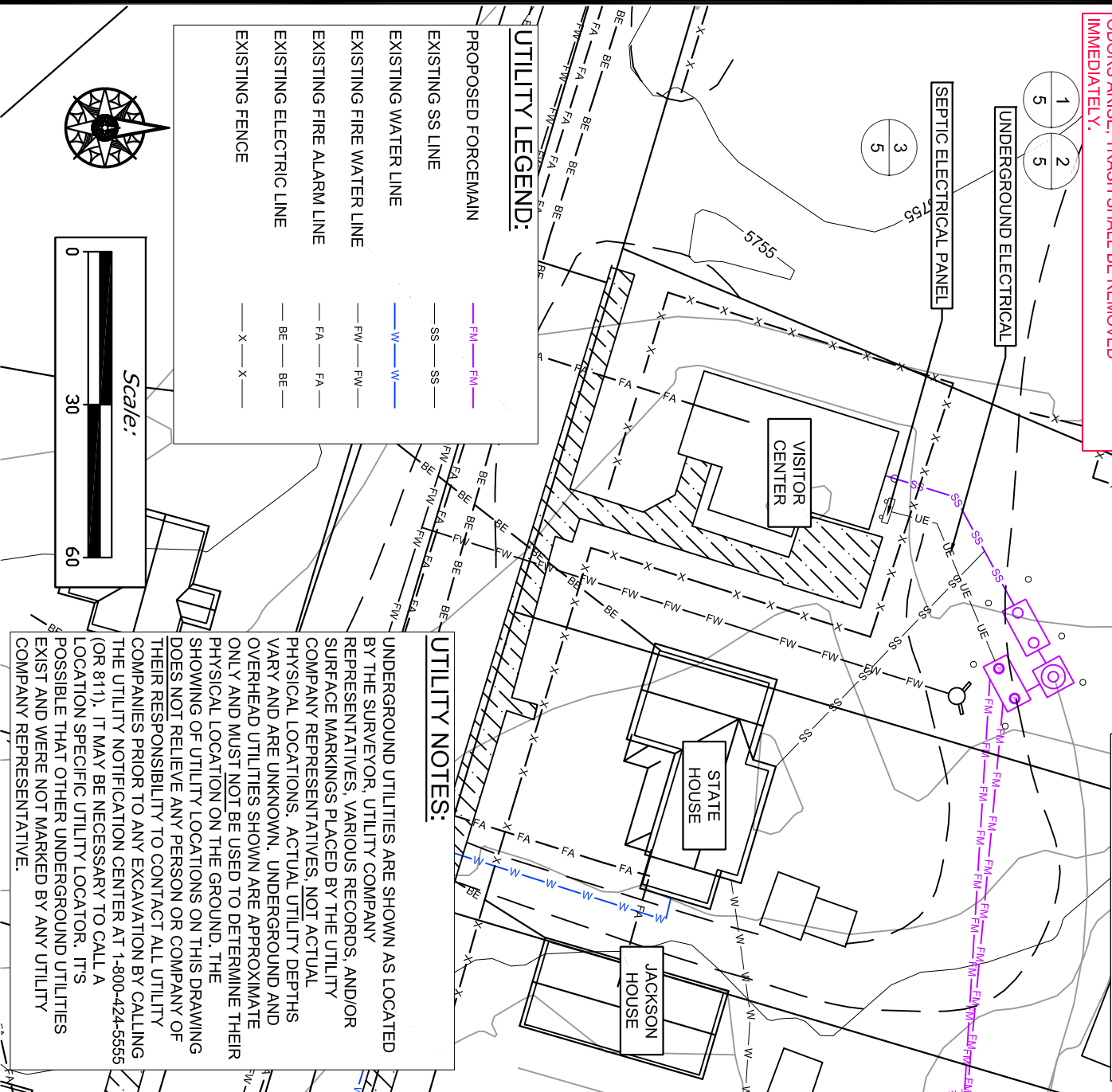


MONTANA FISH, WILDLIFE & PARKS
 SITE PLAN & OVERALL WASTEWATER IMPROVEMENTS
 BANNACK SP 4200 BANNACK ROAD, DILLON, 59725



GENERAL WORK REQUIREMENTS:

BANNACK IS A UNIQUE CULTURAL AND HISTORICAL LANDMARK. NO STRUCTURE, REGARDLESS OF APPEARANCE, CAN BE MOVED OR IMPACTED WHILE BUILDING THE SEPTIC SYSTEM REPLACEMENT. IF CONFLICT WITH ANY STRUCTURE IS UNAVOIDABLE, CONTRACTOR TO STOP WORK AND NOTIFY OWNER IMMEDIATELY. IF ANY OBJECT OTHER THAN EXPECTED SOIL, ROCK AND EXISTING SEPTIC COMPONENTS IS UNEARTHED, CONTRACTOR TO STOP WORK AND NOTIFY OWNER IMMEDIATELY. CONTRACTOR SHALL PRACTICE GOOD HOUSEKEEPING. ALL WASTE AND TRASH SHALL BE PICKED UP AND PROPERLY STORED. DAILY, IF ODORS ARISE, TRASH SHALL BE REMOVED IMMEDIATELY.

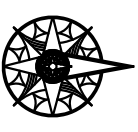


UTILITY LEGEND:

- PROPOSED FORCEMAIN — FM — FM
- EXISTING SS LINE — SS — SS
- EXISTING WATER LINE — W — W
- EXISTING FIRE WATER LINE — FW — FW
- EXISTING FIRE ALARM LINE — FA — FA
- EXISTING ELECTRIC LINE — BE — BE
- EXISTING FENCE — X — X

UTILITY NOTES:

UNDERGROUND UTILITIES ARE SHOWN AS LOCATED BY THE SURVEYOR, UTILITY COMPANY REPRESENTATIVES, VARIOUS RECORDS, AND/OR SURFACE MARKINGS PLACED BY THE UTILITY COMPANY REPRESENTATIVES. NOT ACTUAL PHYSICAL LOCATIONS. ACTUAL UTILITY DEPTHS VARY AND ARE UNKNOWN. UNDERGROUND AND OVERHEAD UTILITIES SHOWN ARE APPROXIMATE ONLY AND MUST NOT BE USED TO DETERMINE THEIR PHYSICAL LOCATION ON THE GROUND. THE SHOWING OF UTILITY LOCATIONS ON THIS DRAWING DOES NOT RELIEVE ANY PERSON OR COMPANY OF THEIR RESPONSIBILITY TO CONTACT ALL UTILITY COMPANIES PRIOR TO ANY EXCAVATION BY CALLING THE UTILITY NOTIFICATION CENTER AT 1-800-424-5555 (OR 811). IT MAY BE NECESSARY TO CALL A LOCATION SPECIFIC UTILITY LOCATOR. IT'S POSSIBLE THAT OTHER UNDERGROUND UTILITIES EXIST AND WERE NOT MARKED BY ANY UTILITY COMPANY REPRESENTATIVE.



CASNE & ASSOCIATES
 DRAWN BY: RC
 CHECKED BY: RC
 DATE: 10/24/2022

REVISID BY: RC
 DATE: 3/16/2023
 APPROVED BY: [Signature]
 DATE: [Blank]

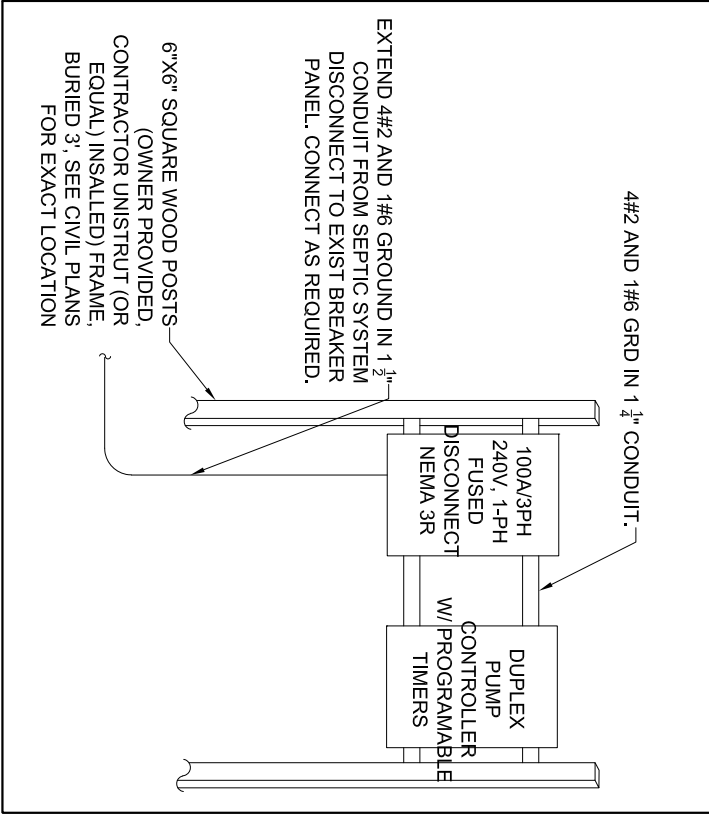
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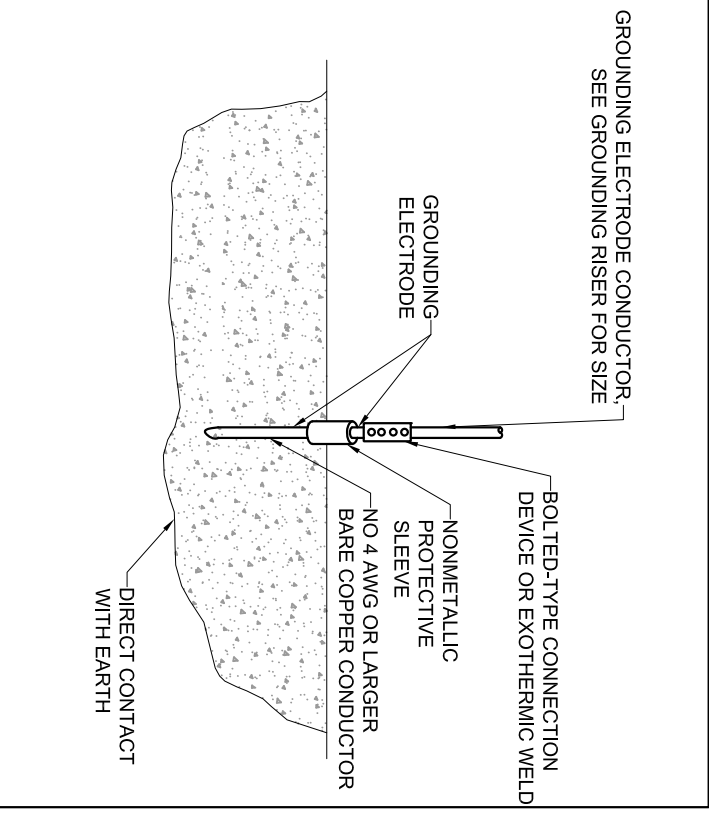
**MONTANA FISH,
 WILDLIFE & PARKS**

**ELECTRICAL REQUIREMENTS
 BANNACK SP 4200 BANNACK ROAD, DILLON, 59725**

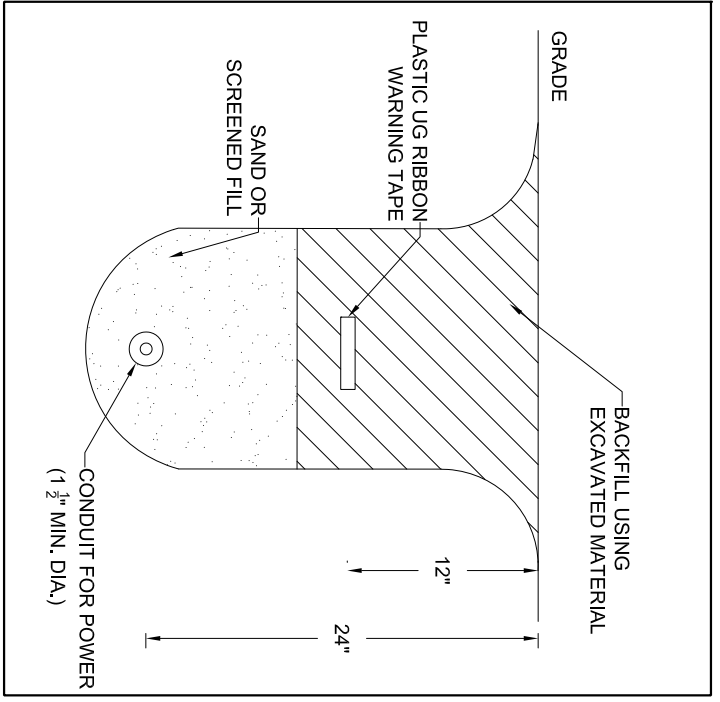
SHEET: 5 of 5



1 SEPTIC SYSTEM ELECTRICAL DETAIL
 N.T.S.



2 GROUNDING ELECTRODE DETAIL
 N.T.S.



3 ELECTRICAL TRENCH DETAIL
 N.T.S.

**ADDENDUM #1
 CONSTRUCTION
 PLAN SET**

1. **General**
 The Contractor shall provide the complete electrical system needed for proper operation of the wastewater treatment system described within the Plans and these Specifications. All electrical work shall be completed by a licensed electrician. Regardless of the service location, the contractor is responsible for providing a separate service disconnect, to be mounted with the pump control panels where shown on the Plan Sheets.
 The Contractor shall provide all labor, materials, tools, equipment and services required to complete the furnishing, installation, wiring, connection, calibration, adjustment, testing and operation of all electrical equipment and components necessary to complete the wastewater treatment system.
2. **Source Power**
 Power supply will be single-phase, 230V. The electrical meter/main disconnect at the WWTs area shall be a 100A NEMA 3R panel located near the pump control panels. The Panel board(s) shall be sized appropriately for the pump control panels and service disconnect equipment and shall be constructed of galvanized Unistrut® metal bracing and cast-in-place concrete pier supports. The panel board shall provide a power source and hook up points for the pump control panel(s).
3. **Electrical Equipment**
 Conduit and electrical lines shall be installed from the new service location or from the lead from the Visitor's Center to the wastewater treatment system area. One or two panel boards and backboards shall be installed at the sewage treatment system area.
 It will be the Contractors responsibility to supply and install all required conduits, meters, service disconnects/breakers, pump controller(s) for the recirculation tank and dose tank pumps, as well as the high water alarm panel for the septic tank.
4. **Junction Boxes & Wiring**
 All junction boxes shall be located outside of the tank risers and shall be housed within fiberglass infiltration control boxes. The splice boxes shall be UL listed and approved for wet locations. UL listed waterproof butt connectors shall also be used. Coat all connections with corrosion protection sealant and ensure box has a water and gas-tight seal at the cord grips and lid. The splice boxes shall be connected to the pumps, floats, and/or panels using individual 1" diameter PVC electrical conduits.
 Septic & Dose Tank gasses must be sealed out of the splice boxes and conduit. Conduit shall be gas sealed in accordance with Engineer Representative's instructions. All wire shall be color coded; tagging of wire is not an acceptable equal. The Contractor shall provide a wiring schematic for each tank upon project completion. This schematic will be integrated within the Operation & Maintenance Manual.
 Entire electrical components shall comply with UL508. Adequate electrical cord length shall be provided so the floats can be removed from the tanks without breaking electrical connection with the splice box.
5. **Standards and Codes**
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 3. Canadian Standards Association (CSA)
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- D. All materials and equipment specified herein shall, within the scope of UL Examination Services, be approved by the Underwriters Laboratories for the purpose for which they are used and shall bear the UL label.
- E. All materials shall be new, free from defects, of current manufacture, of quality specified or shown. Each type of material shall be of the same manufacturer throughout the work.