

## ADDENDUM NO. 1

### CITY OF COLUMBIA FALLS LIFT STATION NO. 2 IMPROVEMENTS PROJECT

HDR Engineering, Inc.  
700 SW Higgins Ave., Suite 200  
Missoula, MT 59803  
Phone: (406) 532-3928

#### PART 1 – GENERAL

##### 1.01 SCOPE

A. This addendum forms a part of the Bidding and Contract Documents and modifies the Project Manual as described below.

B. This Addendum consists of 5 pages and the following attachments:

1. Pre-Bid Meeting Agenda
2. Pre-Bid Meeting Question and Answer
3. Pre-Bid Conference Sign-In Sheet
4. Section 01010 – SUMMARY OF WORK
5. Section 13442 – PRIMARY ELEMENTS AND TRANSMITTERS
6. Current Plan Holders List - Dated March 14, 2019

##### 1.02 ACKNOWLEDGEMENT

A. All bidders are required to base their bid upon the information furnished in this Addendum, and acknowledge receipt of this Addendum by signing and dating in the space provided in the Bid Form.

#### PART 2 – PROJECT MANUAL

##### 2.01

A. Section 00100 – INVITATION TO BID

1. Modify bid opening date as follows:

Existing bid opening 2:00 p.m. local time on March 21, 2019.  
**NEW BID OPENING 2:00 p.m. local time on Tuesday March 26, 2019.**

##### 2.02

A. Section 00300 – BID FORM

1. Modify Bid Item No. 8 description under paragraph 5.01 to read:

“Measurement of sewer force main shall be made per lineal feet along the centerline of pipe from the valve vault at station 00+00 to manhole number 186A at station 4+75. Payment for the sewer force

main shall be made at the contract unit price bid per the lineal foot, which includes, furnishing and installing pipe, green sewer detectable underground marking tape, fittings, tools, materials, facility, labor, equipment, trench excavation, and backfill, **seeding, and imported topsoil (if any)**, furnishing and placing pipe embedment (bedding), **pipe encasement (flowable fill)**, **Trace wire**, compaction, quality control, surveying (Lines & Grades), cleaning, testing and all other work necessary or incidental for completion of the bid item. The work shall not be considered complete until all deficiency items are complete and the work has been completed in accordance with the plans and specifications. This Bid item also includes removal of any other construction debris that does not meet backfill specifications. The Contractor shall dispose of all materials in a legal manner.”

2. Modify Bid Item No. 14 description under paragraph 5.01 to read:

“This lump sum item includes installation of an 8-foot diameter precast manhole with hatch, 12-inch PVC interconnection with the existing wetwell, and modifications to the existing wetwell **including but not limited to rehabilitation of 8” sanitary sewer line on east side of wetwell** as shown and described on the contract drawings. **Payment for the Pre-cast Wetwell shall include furnishing and installing wetwell, fittings, tools, materials, facility, labor, equipment, excavation, and backfill, furnishing and placing wetwell embedment (bedding), compaction, quality control, surveying, cleaning, testing, and all other work necessary or incidental for completion of the bid item.**”

3. Modify Bid Item No. 15 description under paragraph 5.01 to read:

“This lump sum item includes installation of two owner furnished submersible sewage pumps and all associated **owner furnished and contractor furnished** appurtenances including pumps, motors, temperature and moisture monitoring system, lifting/removal guide system, pressure gages, **pressure transducer installation, floats installation** and HDPE discharge piping from the pumps through the wetwell and valve vault to station 00+00.”

4. Modify Bid Item No. 16 description under paragraph 5.01 to read:

“This lump sum item includes all electrical work required to provide a fully functional system including **local and state electrical permits**, conduit, wire, junction boxes, seals, float switches **electrical connection**, pressure transducer **electrical connection**, miscellaneous appurtenances and temporary power.”

5. Modify Bid Item No. 17 description under paragraph 5.01 to read:

“This lump sum item includes **construction dewatering permits**, design, installation, and operation of any required dewatering system to control groundwater and surface water runoff during the execution of the work. This lump sum item also includes providing, installing, and removing any shoring required to support existing or new structures and piping during the execution of the work.”

## 2.03

### A. Section 00813 – SPECIAL PROVISIONS

1. Insert new Part between 1.2.B.1 and 1.2.B.2 to read:

“Section 01500 – Construction Temporary Facilities:

- a. Add the following paragraphs:

- 1) Contractor may utilize city water for work required on this project at no cost. Should city water be used the Contractor shall obtain a temporary meter from the City of Columbia Falls water department to track use. And shall connect to city facilities at an approved location in an approved manner.
- 2) 1.1.A.1 For the use of owner provided potable water a \$2000.00 water meter rental deposit will be collected – Refundable upon undamaged return.”

2. Modify Part 1.2 B.6.b.A. to read:

“Place a minimum of 4IN of topsoil for Type 1 grass restoration. Import topsoil ONLY if sufficient topsoil is not available from excavated areas of the project. Coordinate and confirm with Engineer location where imported topsoil is necessary. Imported topsoil installation shall not be measured directly for payment, but shall be considered incidental to other work.”

## 2.04

### A. Section 01010 – SUMMARY OF WORK

1. Insert Section 01010 attached here, in its entirety, into the digital version (pdf version) only of the Project Manual that was distributed by plan centers and on the Columbia Falls website. Section 01010 was included in hard copies of the Project Manual distributed by HDR Engineering, Inc.
2. Modify 1.4 WORK SEQUENCE B.4.b. to read:

“The Contractor shall provide a ~~independent registered~~ surveyor for construction staking at the contractors expense.”

3. Modify 1.7 LINES AND GRADES A.3.c. to read:

“The Contractor shall pay all costs for a registered surveyor to replace all Federal, State, City, County and private land monuments that may be lost or destroyed:”

## 2.05

- A. Section 01011 – OWNER FURNISHED EQUIPMENT

1. Add 1.1 SCOPE OF WORK B.1.f to read:

“One (1) transducer with cable, 60-feet in length.”

2. Modify 1.1 SCOPE OF WORK B.1.b to read:

“Two (2) submersible power cables, 60-feet in length.”

3. Modify 1.1 SCOPE OF WORK B.1.c to read:

“Two (2) submersible control cables, 60-feet in length.”

## 2.06

- A. Section 13442 – PRIMARY ELEMENTS AND TRANSMITTERS

1. Insert Section 13442 attached here, in its entirety, into the digital version (pdf version) only of the Project Manual that was distributed by plan centers and on the Columbia Falls website. Section 13442 was included in hard copies of the Project Manual distributed by HDR Engineering, Inc.

## PART 3 – PROJECT DRAWINGS

### 3.01

- A. Drawing 00-C-01 – Force Main Plan and Profile

1. Change Key Note 1 to read:

“Contractor open cut and remove and replace asphalt from STA 4+60 to MH 186A. Install 45° elbow on end of new FM inside of MH to direct flow into gravity sewer pipe to west. Fill abandoned pipe w. non shrink grout 4’ from open end min. **Waterproof seal required at pipe entrance to MH see specification Section 01800.**”

2. Change Key Note 6 to read:

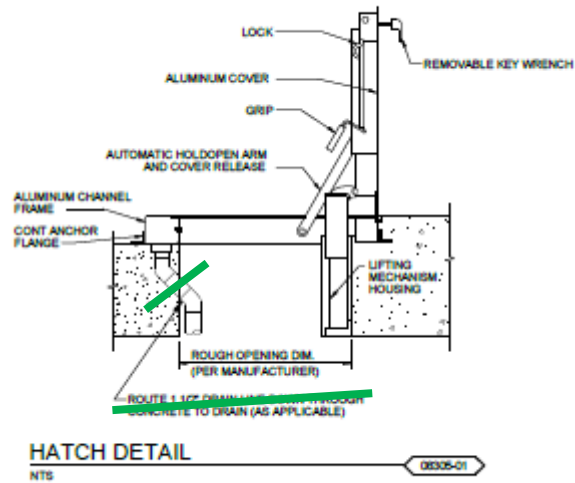
“Pothole and verify depth and location of existing 6”-W. **A minimum water main/force main clearance of 6” is required. Encase force main in 6” of flowable fill, 10’ on each side of water main/force main crossing.**”

3. Add General Note 8 to read:

“Contractor be cognizant of overhead power along east side of 1st Ave. E.”

B. Sheet 00-D-03

1. Delete the requirement for a hatch drain line from Hatch Detail 08305-01.



**END OF ADDENDUM NO. 1**

**CITY OF COLUMBIA FALLS**  
**LIFT STATION NO. 2 PROJECT**

**March 13, 2019**

**PRE-BID CONFERENCE AGENDA**

1. INTRODUCTIONS:

- HDR:
  - Rickey Schultz – Project Engineer  
(406) 532-2238  
[rickey.schultz@hdrinc.com](mailto:rickey.schultz@hdrinc.com)
  
  - Lizzy English – Resident Project Representative  
(406) 544-1845  
[lizzy.english@hdrinc.com](mailto:lizzy.english@hdrinc.com)
  
- City:
  - Tyler Bradshaw – Public Works Director  
(406) 892-4430  
[bradshawt@cityofcolumbiafalls.com](mailto:bradshawt@cityofcolumbiafalls.com)
  
  - Grady Jenkins – Operator  
(406) 892-4357  
[jenkinsg@cityofcolumbiafalls.com](mailto:jenkinsg@cityofcolumbiafalls.com)

2. ADDENDUM

- Addendum No. 1 will issue Section 01010 – Summary of Work

3. BID OPENING DATE AND TIME:

- Bids will be received no later than 2:00 P.M., Thursday, March 21, 2019.
- Bids will be opened at 2:00 P.M., Thursday, March 21, 2019 and read aloud in the Conference Room of City Hall, 130 6<sup>th</sup> Street West, Columbia Falls, Montana.

4. BID PROPOSAL:

- Section 00300 - Bid Form
  - Information Required of Bidders
    - General Information
- Section 00410 - Bid Bond
  - Bid security in the amount of 10% of the maximum Bid price

5. PROJECT FUNDING:

- City Funds
  - Section 00910 – Montana Prevailing Wage Rates.

6. DESCRIPTION OF WORK:

- **BASE BID**
  - Replacement of the Lift Station No. 2 dry pit pumps with owner furnished submersible pumps to be located within a new wet well with valve vault and the demolition/abandonment of the existing dry pit. Work further includes installation of HDPE force main pipe and valves and various quantities of demolition and disposal, clearing and grubbing, concrete, asphalt pavement, bollards, electrical and controls, bypass pumping traffic control, and other miscellaneous improvement and appurtenances as described in the contract documents.

Item No.	Description	Quantity	Unit	Unit Price	Total
1	Permits	1	L. SUM		
2	Mobilization/ Demobilization	1	L. SUM		
3	Lift Station No. 2 Demolition	1	L. SUM		
4	Traffic control	1	L. SUM		
5	Temporary Bypass Pumping/Shut down	1	L. SUM		
6	Asphalt Pavement Demolition and Replacement	1	L. SUM		
7	Clearing and Grubbing	1	L. SUM		
8	6-inch Sewer Force Main	475	L.F.		
9	4-inch Full Port Plug Valve	2	EA		
10	4-inch Swing Check Valve	2	EA		
11	6-inch Force Main Point of Connection to Existing Manhole 186A	1	L. SUM		
12	Pre-cast Valve Vault	1	L. SUM		
13	Pre-cast Wet well Cover	1	L. SUM		
14	Pre-cast Wet well	1	L. SUM		
15	Lift Station No. 2 Pumping Equipment	1	L. SUM		
16	Electrical	1	L. SUM		
17	Dewatering	1	L. SUM		
18	Bollards	4	EA		
19	Miscellaneous Work	\$10,000	N/A	N/A	\$10,000
20	Imported Backfill	50	C.Y.		

7. CONSTRUCTION SEQUENCE

- Mobilization/Demobilization:
  - May commence immediately after the Certificate of Commencement of On-Site Work.

- The Contractor shall notify the Engineer when full mobilization is completed for the Field Engineers review.
- Call for utility locates according to Montana State Law.
- Traffic Control:
  - The Contractor shall provide a Traffic Control Plan to the Engineer and Owner prior to starting construction.
- Montana Department of Environmental Quality Storm Water Discharge Permit:
  - The Contractor shall obtain all permits prior to construction.
  - Contractor shall obtain and pay for the permit. Payment for this item will be a lump sum amount as shown on the Bid Form.
- Force Main Piping:
  - Commence immediately after the Notice to Proceed.
  - The Contractor shall provide an independent registered surveyor for construction staking at the contractors expense.
  - The Contractor shall obtain the services of an independent testing laboratory prior to construction.
  - The Contractor shall submit a flow containment plan to the Engineer and Owner that specifies how the Contractor shall manage flows within the system during the installation of the Force Main. The new Force Main piping may be installed from the new wet well to Manhole 186A without disrupting the operation of the existing pumping station and force main.
    - Existing Lift Station No. 2 may be taken off line for up to 30 minutes during periods of low flow while the connection to Manhole 186A is made. Contractor shall coordinate shut down with the Owner.
  - Demolition of the existing force main and valve vault and grout sealing the ends of the existing pipe may only be completed once the new pumping system and force main have been placed in service and accepted by the Owner.
- Pumping Equipment:
  - Commence immediately after the Notice to Proceed.
  - Core drilling the existing wet well for installation of the 12-inch sewer will require temporarily plugging the three 8-inch influent sewers.
    - Influent sewers may be plugged for up to 30 minutes during periods of low flow. Contract shall coordinate plugging of existing sewers with the Owner. Contractor shall monitor upstream manholes during work to ensure services are not flooded.
  - Once the pipe is installed, it must be plugged and the existing influent sewers and pumping station placed back in service.
  - Once the new wet well and force main are ready to be placed in service, Contractor shall provide power and water for testing the equipment. The existing pumping equipment will need to



remain on line until the new pumping system has been tested and accepted. Once the new system has been tested, commissioned, and accepted by Owner, sewer may be directed to the new system and demolition of the existing pumping station and force main may commence.

- The Contractor may provide flow through plugs and temporary piping to route sewer flow through the existing wet well while demolition work and modifications to the existing wet well are completed.
- If the Contractor so chooses to bypass pump during any of the work, see Specification Section 02750 for requirements.
- This project will include notification to the City of Columbia Falls Department of Public Works to coordinate project piping and tie-ins that affect the City of Columbia Falls Collection System. This includes but is not necessarily limited to the force main points of connection.
- Demobilization
  - Will only occur when the project is complete, the system is fully functioning and all deficiency items have been addressed by the Contractor.

#### 8. OWNER FURNISHED EQUIPMENT

- Section 01011 – Owner Furnished Equipment
- Section 11076 – Pumping Equipment: Submersible Non-clog
- Provided by City of Columbia Falls
  - (2) – Flygt model NP 3102 SH 3 pumps with base elbows and mounting pedestals
  - (2) – Submersible power cables
  - (2) – Submersible control cables
  - (2) – Over temperature pump monitoring equipment
  - (2) – Pump seal failure monitoring equipment
- Provided by Contractor
  - Stainless steel guide bars
  - Mounting hardware and supports
  - Stainless steel lifting chains
  - Coordinate and pay for manufacturer's field services

#### 9. FACILITY START-UP

- Section 01650 – Facility Start-up
  - Temporary power as required to perform pre-demonstration operation of equipment
  - Pre-Demonstration Period
    - Completion of construction work
    - Equipment Start-up Personnel Training
    - Complete filing of all required submittals
    - Filing of Contractor's Notice of Substantial Completion and Request for Inspection of Project or PCS

- Demonstration Period
  - Demonstrate the functional integrity of the project
  - Duration of Demonstration Period: 120 consecutive hours
  - Contractor: performs equipment operation and maintenance until successful completion of demonstration period
  - Owner: provides process decisions, with the right to simulate various scenarios during demonstration period.

10. TIME OF COMPLETION

- Substantial Completion: 90 days after initiation of mobilization
- Final Completion: No later than December 6, 2019
- Liquidated Damages: \$1,000/day
- Regular working hours: 7:00 A.M. to 7:00 P.M.

11. STAGING AND STORAGE AREAS:

- Contractor parking/office
- Access/egress
- Storage

12. MISCELLANEOUS ITEMS/QUESTIONS

13. SITE TOUR

Pre-Bid Meeting Question and Answer:

Q – Please locate and include lab testing requirements in specifications.

A – See Section 01400-Quality Control, 00813-Special Provisions and Montana Public Works Standard Specifications

Q - Are the floats owner or contractor furnished?

A - Floats are to be contractor furnished, transducer will be owner furnished. See attached Specification 13442 – PRIMARY ELEMENTS AND TRANSMITTERS.

Q - Ask about water usage and billing? Especially for when Contractor fills FM with water for testing.

A – Contractor may use city water at no charge. Water use will be monitored via temporary meter connection. The contractor will pay the \$2000 deposit for the meter rental, but the contractor will not be responsible for water use charges or the meter rental charges for water used on the project.

Q - Seeding and imported top soil: location in specs and add to one of the bid items.

A - Section 00813-Special Provisions, see page 00813-5 Section 02910 – Seeding. Seeding is part of Bid Item No. 8.

Q - Encasing electrical and conduit see detail 4 sheet E-03. Is this necessary?

A – Encasement is not required if electrical is buried deeper than 4'.

Q - Survey, is an independent surveyor required or not? Separate bid item?

A – No, see 2.04 above.

# SIGN-IN SHEET

## COLUMBIA FALLS LIFT STATION 2 PROJECT

### PRE-BID CONFERENCE

MARCH 13, 2019

2:00 PM

	ATTENDEE	REPRESENTING	EMAIL/PHONE NO.
1	Tyler Bradshaw	City of Columbia Falls	<a href="mailto:bradshawt@cityofcolumbiafalls.com">bradshawt@cityofcolumbiafalls.com</a> direct: 406.892.4430
2	Rickey Schultz	HDR Engineering	<a href="mailto:rickey.schultz@hdrinc.com">rickey.schultz@hdrinc.com</a> direct: 406.532.2238
3	Lizzy English	HDR Engineering	<a href="mailto:lizzy.english@hdrinc.com">lizzy.english@hdrinc.com</a> cell: 406.544.1845
4	Aaron Guymon	AGC INC.	<a href="mailto:contact@agcincmt.com">contact@agcincmt.com</a> 406-270-0394
5	MARC BLANDEN	CUTTING EDGE EXCAVATION, LLC	<a href="mailto:cuttingedgemarc@gmail.com">cuttingedgemarc@gmail.com</a> 406-253-3730
6	Matt Carlstrom	Core and Main	<a href="mailto:Matt.Carlstrom@coreandmain.com">Matt.Carlstrom@coreandmain.com</a> 406-210-9977

# SIGN-IN SHEET

## COLUMBIA FALLS LIFT STATION 2 PROJECT

### PRE-BID CONFERENCE

MARCH 13, 2019

2:00 PM

	ATTENDEE	REPRESENTING	EMAIL/PHONE NO.
7	GRADY JENKINS	CITY OF COLUMBIA FALLS	892/4357 249-2088
8	Brandon McLaughlin	Downing Construction Inc.	909-648-6336 brandon@downingconstructioninc.com
9	JOHN REAR	NORTHWEST PIPE FITTINGS	406-752-6562 JREAR@NORTHWESTPIPE.COM
10	LARRY MATSON	LM Excavating Inc.	261-6442 lj@matson@marwanasky.net
11			
12			
13			

**SECTION 01010**  
**SUMMARY OF WORK**

**PART 1 - GENERAL**

**1.1 SUMMARY**

- A. General work included in this section:
  - 1. Furnish all labor, materials, and equipment required in accordance with provisions of the Contract Documents.
  - 2. Completely coordinate with work of all other trades.
  - 3. Although such work may not be specifically indicated, furnish and install all miscellaneous items incidental to or necessary.
  - 4. Coordination of pipe fittings with existing conditions.
- B. Related sections include but are not necessarily limited to:
  - 1. Division 0 – Bidding Requirements, Contract Forms and Conditions of the Contract.
  - 2. Division 1 – General Requirements.

**1.2 WORK COVERED BY CONTRACT**

- A. The Work of this Contract generally includes the following:
  - 1. Base Bid: The work associated with the Base Bid for this project includes the replacement of the Lift Station No. 2 dry pit pumps with submersible pumps to be located in the existing wetwell, the addition of a valve vault with isolation valves and appurtenances, the demolition/abandonment of the existing dry pit, and the replacement of the existing Force Main pipe.
  - 2. Bid Alternate A: The work associated with Bid Alternate A for this project includes the replacement of the Lift Station No. 2 dry pit pumps with submersible pumps to be located in a new 8-foot diameter precast wetwell, the addition of a valve vault with isolation valves and appurtenances, the demolition/abandonment of the existing dry pit, and the replacement of existing Force Main pipe.

**1.3 CONTRACTOR'S USE OF PREMISES**

- A. Contractor assumes full responsibility for the protection and safekeeping of products and materials that the Contractor has stored on or off of the site.
- B. Contractor shall move any stored products, or materials, under Contractor's responsibility, which interfere with operations of residential home owners, Owner or separate contractor/subcontractor.
- C. Contractor shall obtain and pay for the use of any additional storage or work areas if needed for Contractor operations.
- D. Contractor shall confine all materials storage, equipment storage and employee and subcontractor parking to the areas coordinated by Contractor per the Contract Documents. Contractor shall not store materials or equipment, nor shall employees of the Contractor or subcontractors park automobiles in a manner that hinders home owner or business access.
- E. Contractor shall restore any areas used for materials storage, trailers, offices, equipment storage, or employee and subcontractor parking to their original condition or better.
- F. Contractor shall request any Business Owner contact information from the Resident Project Representative, regarding any laydown areas on private property, once contract has been awarded.

## 1.4 WORK SEQUENCE

- A. Coordinate construction schedule and operations with the Owner and Engineer.
- B. Following are general work sequence constraints or time critical work elements for the construction of critical work items in each of the major areas of Work, specific schedule constraints are provided in **bold lettering**. Work elements shown are not necessarily on a critical path and may be done simultaneously. Critical work elements shown are not necessarily complete and others may occur as the Work proceeds. The Contractor shall submit a detailed work sequence schedule to accomplish the Work in accordance with the Special Provisions. Shutdown periods are consecutive 7-day weeks, 24-hour periods, workday hours, or otherwise shown. All other activities shall be performed by the Contractor as part of the approved work sequence schedule. Refer to Section 01060 – Special Conditions for detailed special conditions associated with each major area of work:
  1. Mobilization/Demobilization: Per bid award, the Mobilization may commence immediately after the **Notice to Proceed**. The following sequence of construction is anticipated:
    - a. The Contractor shall coordinate mobilization with the Engineer.
    - b. The Contractor shall notify the Engineer when full mobilization is completed for the Field Engineers review.
    - c. Demobilization will only occur when the project is complete, the system is fully functioning and all deficiency items have been addressed by the Contractor.
    - d. The Contractor shall call for utility locates according to Montana State Law.
  2. Traffic Control:
    - a. The Contractor shall provide a **Traffic Control Plan** to the Engineer and Owner prior to starting construction.
  3. Permits: Contractor shall obtain and pay for the permit. Payment for this item will be a lump sum amount as shown on the Bid Form:
    - a. **Montana Department of Environmental Quality Stormwater Discharge Permit**
  4. Force Main Piping: Per bid award, the replacement of the Force Main piping may commence immediately after the Notice to Proceed. The following sequence of construction is anticipated:
    - a. The Contractor shall call for utility locates according to Montana State Law.
    - b. The Contractor shall provide an independent registered surveyor for construction staking at the contractors expense.
    - c. **The Contractor shall obtain all permits prior to construction.**
    - d. The Contractor shall obtain the services of an independent testing laboratory prior to construction.
    - e. The Contractor shall install, operate and maintain a temporary bypass pumping system. The system shall be installed and operational prior to demolition activities. Interconnections and bypass pumping activities shall be coordinated with the City of Columbia Falls. See specification section 02750.
    - f. Replace the Force Main piping according to the plans and specification, including all special fittings, couplings, elbows and appurtenances so that the force main is complete and in full operation.
    - g. Place pipe embedment (bedding), back fill and compact according to the quality control specification.
  5. Pumping Equipment: If the Base Bid is awarded, Contractor must have bypass pumping facilities installed and operational prior to beginning demolition of existing pumping equipment and appurtenances. If Bid Alternate A is awarded, Contractor may commence construction of the new wetwell, pumping equipment and valve vault immediately upon notice to proceed. Contractor must have bypass pumping facilities installed and operational prior to making final electrical and piping connections and for start-up and commissioning of new equipment.

6. **This project will include notification to the City of Columbia Falls Department of Public Works to coordinate project piping and tie-ins that affect the City of Columbia Falls Collection System.** This includes but is not necessarily limited to the force main points of connection.

### 1.5 OWNER OCCUPANCY

- A. The property owners within the construction area will occupy their property. As a result, the Contractor shall arrange equipment and facilities so that the occupants are not interfered with by the Contractors Construction Operations.
- B. Contractor shall coordinate with private property owners and Engineer in all construction operations to minimize conflicts to the occupants. A schedule must be provided that clearly indicates phasing and timeline in the construction area, and provide specific detail about impacts to private property owners. A minimum of 48-hours for notice of any private property entrance closures and 48-hour notice to any other activities that will directly impact property owners is required.

### 1.6 SUBSTANTIAL COMPLETION

- A. For the purposes of establishing when the Project is substantially complete and suitable for its intended purpose, all components and work elements shall be complete on or before the dates provided in the Agreement (Section 00500). Additional requirements of Substantial Completion Include:
  1. Correction of all state, local, and other regulatory agencies defective Work lists.
  2. Submittals have been received and approved by the Engineer including, but not necessarily limited to, the following:
    - a. Record drawings and test documents.
    - b. Equipment, pipe and fitting submittals.
  3. All additional warranty or insurance coverage requirements have been provided.
- B. Final completion of total project: Additional work elements that shall be completed include:
  1. Any required repairs to Contractor staging and storage areas.
  2. Clean up.
  3. Deficiency List as provided by the Owner and Engineer.

### 1.7 LINES AND GRADES

- A. Construct all Work to the lines, grades and elevations indicated on the Drawings:
  1. Field verify elevations of existing grade and facilities, including but not limited to pipe, conduits, manholes, and structures near and at locations where new work connects or crosses. Notify Engineer if existing elevations differ from those shown on the Contract Drawings.
  2. The Contractor shall provide all surveying to stake and as built the project according to the plans and specifications. If additional surveying is required to replace staking, all costs shall be at the Contractors expense.
  3. The Contractor shall locate and protect control points and or bench marks prior to starting site work, and preserve all permanent reference points during construction:
    - a. Make no changes or relocations without prior written notice to Engineer.
    - b. Report to Engineer when any reference point is lost or destroyed, or requires relocation because of necessary changes in grades or locations.
    - c. The Contractor shall pay all costs for a registered surveyor to replace all Federal, State, City, County and private land monuments that may be lost or destroyed:
      - 1) Establish replacements based on original survey control.
      - 2) Comply with local and State requirements for monument replacement and restoration
  4. The Contractor shall maintain a complete, accurate log of all control and survey work as it progresses.



## **1.8 REGULATORY REQUIREMENTS**

- A. Comply with all Federal, State, and local laws, regulations, codes, and ordinance applicable to the Work.
- B. References in the Contract Documents to local codes shall mean State of Montana, City of Columbia Falls (Subdivision & Infrastructure Design Guide & Toolbox) and the Montana Public Works Standard Specifications.
- C. Other standards and codes that apply to the Work are designated in the Specifications.

## **1.9 ACCESS BY GOVERNMENT OFFICIALS**

- A. Authorized representatives of governmental agencies shall at all times have access to the Work where it is in preparation or progress. Contractor shall provide proper facilities for access and inspection.

## **1.10 EASEMENTS AND RIGHTS-OF-WAY**

- A. Confine construction operations to the immediate vicinity of the location indicated on Drawings and use due care in placing construction tools, equipment, excavated materials, and pipeline materials and supplies, so as to cause the least possible damage to property and interference with traffic.

## **1.11 FENCES**

- A. Remove and re-install all fences affected by the Work according to plan and specification. If a fence is down when you start the project, put it back up to its original condition.

## **1.12 PROTECTION OF PUBLIC AND PRIVATE PROPERTY**

- A. Protect, shore, brace, support, and maintain underground pipes, conduits, drains, and other underground construction uncovered or otherwise affected by construction operations.
- B. Restore to their original condition, pavement, surfacing, driveways, curbs, walks, buildings, utility poles, guy wires, fences, and other surface structures affected by construction operations, together with sod and shrubs, whether within or outside the easement or facility site.
- C. Use new materials for replacements of all items, unless shown or stated otherwise on drawings and specifications.
- D. Contractor shall be responsible for all damage to streets, roads, highways, shoulders, ditches, embankments, culverts, bridges, and other public or private property, regardless of location or character, that may be caused by transporting equipment, materials, or workers to or from the Work or any part or site thereof, whether by Contractor or Contractor's subcontractors or suppliers.
- E. Make satisfactory and acceptable arrangements with the owner of, or the agency or authority having jurisdiction over, any damaged property concerning its repair, replacement, or payment of costs incurred in connection with the damage.
- F. Keep fire hydrants and water control valves free from obstruction and available for use at all times.
- G. In areas where the Contractor's operations are adjacent to or near a utility and such operations may cause damage which might result in expense, loss, and inconvenience, the operation shall be suspended until all arrangements necessary for the protection thereof have been made by the Contractor.

- H. Notify all utility offices which may be affected by the construction operation at least 48 hours in advance. Before exposing any utility, the utility having jurisdiction shall grant permission and may oversee the operation. Should service of any utility be interrupted due to the Contractor's operation, the proper authority shall be notified immediately. Contractor shall cooperate with the said authority in restoring the service as promptly as possible and shall bear any costs incurred.

**1.13 MAINTENANCE OF TRAFFIC**

- A. Maintain neighborhood and facility access roads. Notify all Emergency services and provide adequate traffic control signage for any required closures.

**1.14 BARRICADES AND LIGHTS**

- A. Protect streets, roads, highways, and other public thoroughfares that are closed to traffic by effective barricades with acceptable warning signs as approved by the authority having jurisdiction.
- B. Locate barricades at the nearest intersecting public thoroughfare on each side of the blocked section.
- C. Provide suitable barriers, signs, and lights to the extent required to adequately protect the public.
- D. Provide similar warning signs and lights at obstructions, such as material piles and equipment.
- E. Illuminate barricades and obstructions with warning lights from sunset to sunrise.

**PART 2 - PRODUCTS (NOT USED)**

**END OF SECTION**

**SECTION 13442**  
**PRIMARY ELEMENTS AND TRANSMITTERS**

**PART 1 - GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. Level components.
- B. Related Specification Sections include but are not necessarily limited to:
  - 1. Division 0 - Bidding Requirements, Contract Forms, and Conditions of the Contract.
  - 2. Division 1 - General Requirements.

**1.2 QUALITY ASSURANCE**

- A. Referenced Standards:
  - 1. American Gas Association (AGA):
    - a. Gas Measurement Committee Report #3.
  - 2. American Iron and Steel Institute (AISI).
  - 3. American National Standards Institute (ANSI).
  - 4. American Society of Mechanical Engineers (ASME):
    - a. B16.5, Pipe Flanges and Flanged Fittings.
    - b. B31.1, Power Piping.
    - c. PTC 19.3, Instruments and Apparatus, Part 3 Temperature Measurement.
    - d. PTC 19.5, Application of Fluid Meters, Part 2.
    - e. Section II, Part A SA-182, Forged or Rolled Alloy Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High-Temperature Service.
    - f. Section II, Part A SA-479, Stainless Steel Bars and Shapes for Use in Boilers and Other Pressure Vessels.
  - 5. ASTM International (ASTM):
    - a. A106, Standard Specification for Seamless Carbon Steel Pipe for High-Temperature Service.
    - b. A126, Standard Specification for Gray Iron Castings for Valves, Flanges, and Pipe Fittings.
    - c. A182, Standard Specification for Forged or Rolled Alloy and Stainless Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High-Temperature Service.
    - d. {A234, Standard Specification for Piping Fittings of Wrought Carbon Steel and Alloy Steel for Moderate and High Temperature Service.}
    - e. {A240, Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications.}
    - f. A269, Standard Specification for Seamless and Welded Austenitic Stainless Steel Tubing for General Service.
    - g. A276, Standard Specification for Stainless Steel Bars and Shapes.
    - h. A479, Standard Specification for Stainless Steel Bars and Shapes for Use in Boilers and Other Pressure Vessels.
    - i. B16, Standard Specification for Free-Cutting Brass Rod, Bar and Shapes for Use in Screw Machines.
    - j. B75, Standard Specification for Seamless Copper Tube.
    - k. B124, Standard Specification for Copper and Copper Alloy Forging Rod, Bar, and Shapes.
    - l. B283, Standard Specification for Copper and Copper-Alloy Die Forgings (Hot-Pressed).

- m. B453, Standard Specification for Copper-Zinc-Lead Alloy (Leaded-Brass) Rod, Bar, and Shapes.
- n. {B626, Standard Specification for Welded Nickel and Nickel-Cobalt Alloy Tube.}
- 6. Federal Communications Commission (FCC)
  - a. 47 CFR 15, Radio Frequency Devices.
- 7. Instrumentation, Systems, and Automation Society (ISA):
  - a. MC96.1, Temperature Measurement Thermocouples.
- 8. National Electrical Manufacturers Association (NEMA):
  - a. 250, Enclosures for Electrical Equipment (1000 Volts Maximum).
- 9. US Department of Interior Bureau of Reclamation (USDIBR):
  - a. Water Measurement Manual.

### 1.3 SYSTEM DESCRIPTION

- A. The instruments specified in this Specification Section are the primary element components for the City of Columbia Falls sewage Lift Station No. 2..
  - 1. These instruments will be integrated with other control system components currently in operation at Lift Station No. 2.

### 1.4 SUBMITTALS

- A. Shop Drawings:
  - 1. See Specification Section 01340 for requirements for the mechanics and administration of the submittal process.
- B. Operation and Maintenance Manuals:
  - 1. See Specification Section 01340 for requirements for:
    - a. The mechanics and administration of the submittal process.
    - b. The content of Operation and Maintenance Manuals.

## PART 2 - PRODUCTS

### 2.1 ACCEPTABLE MANUFACTURERS

- A. Subject to compliance with the Contract Documents, the manufacturers listed in the Articles describing the elements are acceptable.
- B. Submit request for substitution in accordance with Specification Section 01640.

### 2.2 LEVEL ELEMENTS

- A. Float-Tilt Type Level Switches, Non-Mercury:
  - 1. Acceptable Manufacturers:
    - a. Flygt ENM-10
    - b. Or Equal
  - 2. Materials:
    - a. Float: Polypropylene or Teflon coated type 316 stainless steel.
    - b. Cable Jacket: PVC, neoprene or equal.
    - c. Cable Clamp: Polypropylene or 316 stainless steel.
  - 3. Design and fabrication:
    - a. Provide switch complete with flexible electrical cables of length as noted or as necessary per mounting requirements.
    - b. Cable type SOW, nitrile PVC jacket, 4-No. 14 AWG.
    - c. Float diameter of 5.5 inches.
    - d. SPDT contact rated at 4A continuous at 120 VAC.
    - e. Rolling ball type non-mercury switch.
    - f. Direct acting float switch:
      - 1) Switch actuates on rising level.

- 2) Switch deactuates when liquid falls 1 IN below actuation level.
  - 3) Differential: 1 IN maximum.
  - 4) Terminate cables in fiberglass junction box.
4. Schedule:

FUNCTION	APPLICATION	MOUNTING ELEVATION
Low-Low Level	Raw Wastewater	Field Verify
High-High Level	Raw Wastewater	Field Verify

**PART 3 - EXECUTION**

**3.1 INSTALLATION**

- A. Install products in accordance with manufacturer's instructions.

**END OF SECTION**

# City of Columbia Falls Lift Station No. 2 Improvements Project



## Plan Holders List

Thursday, March 14, 2019

CCF Project No. 1801

	Contact:	Phone:	Fax:
<b>Contractors - Prime</b>			
Thompson Contracting Inc., Libby, MT	Andy Evensen	406 885 4064	
LHC Inc., Kalispell, MT	David Steely	406 758 6437	406 758 6430
Cutting Edge Excavation, Columbia Falls, MT	Marc Blanden	406 755 0001	406 892 0740
Downing Construction Inc., Kalispell, MT	Randy Downing	406 755 0960	406 755 2875
Sandry Construction Inc., Big Fork, MT	Mark Sandry	406 752 2419	406 752 7263
AGC Inc., Kalispell, MT	Aaron Guymon	406 270 0394	
LM Excavating Inc., Columbia Falls, MT	Larry Matson	406 261 6442	
<b>Contractors - Sub</b>			
Extreme Coatings Inc., Pasco, WA	Sarah Wright	509 545 0570	509 545 0580
<b>Distributors</b>			
Northwest Pipe Fittings Core and Main	John Rippe Matt Carlstrom	406 752 6562 406 810 9977	
<b>Plan Centers</b>			
Mt Plans Exchange/Kalispell Copy Center	Sarah Hansen	406 755 5888	406 755 5896
<b>Consultants</b>			
HDR, Missoula Mt.	Craig Caprara, P.E.	406 532 2200	406 532 2241