

April 11, 2024

Addendum #1 - CR 3 & Emery Ave Culvert Extensions

TO: All prospective Bidders on project CR 3 & Emery Ave Culvert Extensions, scheduled for April 22, 2024 bid opening

The following revisions shall be made:

Request for Proposal Revisions:

1. Remove and replace the bid form of the proposal. Remove and replace sheet #2 of the plans. The bid item: Rip-Rap (18 inch Depth), quantity was changed from 7,010 CY to 260 CY.
2. Plan Sheet #2 note: Smooth Wall Steel Pipe Preparation: Add the following to the note: Contactor shall be aware that at one point the vertical height (inside diameter) measurement of existing 72-inch culvert is approximately 61-inches. The outside diameter of the 60-inch smooth steel culvert is approximately 61.5-inches. The contractor shall determine their means and methods of pushing in the proposed 60-inch smooth steel culvert. The contractor can remove approximately 20-feet on each end of the existing culvert to reduce the length inside the existing culvert. It is advised that the contractor conduct an in-person site visit.

This addendum shall be incorporated into the bidder's proposal for this project.

Nick West, PE - Grand Forks County Engineer

Item #	Description	Unit	Approx Quantity	Unit Price	Total Price
1	Furnish & Install 8ft x 8ft RCBC	LF	60		
2	Furnish & Install 8ft x 8ft RCBC End Section	EA	2		
3	Furnish & Install 5ft x 5ft RCBC	LF	60		
4	Furnish & Install 5ft x 5ft RCBC 45 Degree Bend	EA	1		
5	Furnish & Install 5ft x 5ft RCBC End Section	EA	2		
6	Furnish & Install 60 Inch Smooth Wall Steel Pipe Inside Existing 72 Inch CMP	LF	120		
7	Furnish & Install 60 Inch CMP Flared End Section	EA	2		
8	Removal of Existing Wooden Culvert Extensions	LS	1		
9	Strip, Stockpile and Replace Topsoil	LS	1		
10	Rip-Rap (18 inch Depth)	CY	260		
11	Rip-Rap Fabric (RR)	SF	4,640		
12	Borrow Material	CY	4,100		
13	Foundation Fill (2 feet Depth)	CY	133		
14	Clearing and Grubbing	LS	1		
15	R1 Fabric	SY	200		
16	Redi-Mix Concrete (Existing CR 3 Box Invert)	CY	14		
				Total Price	

GENERAL NOTES

Scope of Work: Project consists of removal/disposal of existing wood culvert extension, clearing and grubbing, the installation of two 5 feet x 5 feet precast concrete box culvert extensions, the installation of a 60" long smooth wall steel pipe inside existing 72" CMP, and the installation of two 8 feet x 8 feet precast concrete box culvert extensions, installation and compaction of foundation fill and incidentals. The Contractor shall coordinate with RCBC and smooth steel wall pipe supplier for delivery. Contractor shall be available to unload from delivery truck and shall be considered incidental to furnishing and installing culverts and aprons.

Bid Price: Contractor shall furnish Grand Forks County bid for all work required to complete the project as described in these notes and shown on these plans. Contractor is encouraged to visit site prior to bidding work. The quote shall include an expected schedule of work.

Completion Date: November 1, 2024 - The road shall be closed a maximum of 5 days, unless otherwise approved.

Utilities: The Contractor will be responsible for verifying utility locations, contacting the utility companies, and having utilities marked and flagged prior to construction. For the State of North Dakota, the locate number is 1-800-795-0555 or 811. If it becomes necessary, the Contractor shall coordinate, cooperate and assist any utility company in relocating their utilities during construction.

Utilities may exist. Actual locations shall be verified by the Contractor. The Contractor will be liable for any costs resulting from damage to utilities or pipelines.

Work by County Resources: Grand Forks County will be completing all traffic control, seeding of all finished earthwork construction and delineator installation. The Contractor shall coordinate with the County so that work may be completed as quickly as possible.

Disposal of Wood Culvert Extension: Waste material shall become property of the Contractor and be hauled to an approved inert disposal site.

Topsoil: All disturbed embankment areas shall require removal and replacement of the topsoil. Removed topsoil shall be stockpiled and respread prior to seeding.

Channel Excavation: Channel bottom excavation is required in the installation of the new concrete box culvert. All excess material shall be wasted onsite at direction of Engineer. No excavated material can be wasted into a designated wetland.

Box Culvert Foundation Preparation/Foundation Fill: The channel bed where the new culvert to be installed shall be excavated to an elevation of 17" below the culvert invert, type R1 Geotextile Fabric shall be placed under 2 feet of foundation fill. Foundation fill shall be Class 5, Class 13, or recycled crushed concrete material.

Smooth Wall Steel Pipe Preparation: A 1/4" rod shall be welded on each end of new culvert for installation of flared end sections. The new culvert shall be braced above and filled with controlled density fill to fill in any gaps between new smooth wall steep pipe and old CMP culvert and to keep new culvert from moving. Shall follow NDDOT Spec. No. 714 and 830, minimum wall thickness 0.719 inches. Contractor shall be aware that at one point the vertical height (inside diameter) measurement of existing 72 inch culvert is approximately 61 inches. The outside diameter of the 60 inch smooth steel culvert is approximately 61.5 inches. The contractor shall determine their means and methods of pushing in the proposed 60 inch smooth steel culvert. The contractor can remove approximately 20 feet on each end of the existing culvert to reduce the length inside the existing culvert. It is advised that the contractor conduct an in-person site visit.

Foundation Preparation: The bidders shall be aware of the possibility of inundated conditions at this site before the bid opening. The cost of any coffer dams and dewatering the excavation shall be included in the bid price.

Traffic Control: Traffic control shall be completed by County Resources. The Contractor shall coordinate timing of road closure with County Engineer.

Signs and Delineators: Any existing signs and delineator posts will be removed by contractor and reset by Grand Forks County Highway Department personnel.

Precast Concrete Box Culverts: The installation of the precast RCBCs shall satisfy the applicable portions of "AASHTO Standard Specifications for Highway Bridges", Division II, Section 27 and Section 2 along with Section 210 of the "North Dakota Standard Specifications for Road and Bridge Construction."

The end sections include two reinforced concrete cutoff walls below the floor on each side of the culvert. The cutoff walls shall be placed under the end sections of the box culvert and shall be a minimum of 12 inches thick, 3 feet deep, and three feet longer than the barrel section is wide. Holes shall be cast at 3' centers through the floor of each end section and into the cutoff walls to receive 3/4" diameter dowels. Then the void shall be filled with grout.

All the RCBC sections shall be tied together by an acceptable method. The ties should adequately hold the sections together under construction load and service load conditions. The sections shall be tied together. If U-bolts are used, the four u-bolts will be located at the third points of the outside walls. The hardware shall either be hot-dipped galvanized according to Section 854 of the "North Dakota Standard Specifications for Road and Bridge Construction" or mechanically galvanized according to ASTM B695. Steel cable ties shall be corrosion protected and their ends grouted.

All four sides of each barrel section joint shall be wrapped with a geotextile fabric that prevent soil from leaking through the joint. In addition, an approved water tight joint sealant shall be placed at each interior joint location. The water tight sealant shall extend across the bottom of each joint and extend up 1/3 of the box culvert height at each side. The geotextile fabric shall be a minimum of 24 inches wide and shall meet the requirements of geotextile separation fabric of Section 709 of the "North Dakota Supplemental Specifications." Geotextile fabric shall also be required at the outside of each cutoff wall vertical joint, if more than one unit is used. A groove should be made in the bedding 1" deep and 2" - 3" wide in front of each joint to prevent sand from being pushed into the joint during installation.

The box culvert shall be mechanically backfilled equally on both sides of the box to avoid uneven loading to one side of the culvert in maximum lifts of 8-inches.

The costs of providing and installing the ties, geotextile fabric and sealant shall be included in bid price.

The joint between existing Grand Forks County Road No. 3 10' x 10' box culvert and proposed box culvert shall be reinforced with 4" angle iron anchored to both boxes.

The joint between existing Emery Street 5' x 5' box culvert and proposed box culvert shall be reinforced with steel plates anchored to both boxes.

Riprap: Riprap fabric shall be installed by contractor under riprap.

Plan Quantities

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Furnish and Install 5 ft x 5 ft RCBC	LF	60
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Furnish and Install 5 ft x 5 ft RCBC End Section	EA	2
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