



CITY OF LOVELAND

WATER & POWER DEPARTMENT

200 North Wilson • Loveland, Colorado 80537

(970) 962-3000 • FAX (970) 962-3400 • TDD (970) 962-2620

AGENDA ITEM: 2

MEETING DATE: 11/19/2014

SUBMITTED BY: Tanner Randall, Civil Engineer II

TITLE: River Crossings Replacement Project Contract Approval

DESCRIPTION:

For the Water and Power Department when a construction bid exceeds \$500,000, by the City's Municipal Code a contract above this threshold can be approved by the LUC. The City Council can also approve construction contracts above \$500,000. When contract approval occurs by the LUC in most circumstances a recommendation is made for the City Manager to also sign the construction contract.

SUMMARY:

During the September 2013 flooding the City sustained substantial damage to its large diameter water transmission system. Included in this was damage and resultant vulnerability of four (4) crossings of the Big Thompson River.

At two river crossing locations the scour was so severe that it resulted in the 36" steel water transmission main being exposed to the bottom of the river. In these locations the pipe coating was removed, leaving vulnerable bare steel that we continue to corrode over time. When floodwaters subsided, these pipe crossings were left with minimal (~1') cover leaving them extremely vulnerable to future flooding events. Likewise, at two river crossing locations scour left minimal cover (~1') over the City's 20" cast iron water transmission main.

This project involves the lowering of the pipes at these four locations so that they will be deep enough to withstand future scour. The pipeline crossings will involve the installation of new pipe at each crossing. The pipe will be laid within a concrete encasement beneath the river and tied into the bedrock formation preventing any future movement or damage from flooding events. Associated with this construction are valve insertions and temporary water systems that will enable the construction to occur. Please see attached engineer opinion of probable cost and bid summary sheet.

RECOMMENDATION:

Adopt a motion awarding the River Crossings Replacement Project (FLW07C) construction contract to Layne Heavy Civil in the amount of \$1,351,836 and allow the City Manager to sign the construction contract.

REVIEWED BY DIRECTOR:

ATTACHMENTS:

- Attachment A: Opinion of Probable Cost
- Attachment B: Bid Summary Sheet

Attachment A

Loveland River Crossings Replacement Project Bid Documents - Opinion of Probable Cost

October 20, 2014

Item Number	Item Description	Estimated Quantity	Unit Measure	Unit Price	Extended Cost
1-1	Mobilization	1	LS	\$ 49,000	\$ 49,000
1-2	36-inch Welded Steel Pipe Waterline, $t_{min}=0.250$ Wall, Single Lap Welded Joints	610	LF	\$ 150	\$ 91,500
1-3	36-inch Buried Butterfly Valve	4	EA	\$ 15,000	\$ 60,000
1-4	Manway-Air Valve Vault on 36-inch Pipe	2	EA	\$ 50,000	\$ 100,000
1-5	36-inch Linestop	1	EA	\$ 30,000	\$ 30,000
1-6	20-inch Linestop	1	EA	\$ 30,000	\$ 30,000
1-7	20-inch Ductile Iron Pipe, Class 53 Waterline	532	LF	\$ 250	\$ 133,000
1-8	20-inch Butterfly Valve Vault	3	EA	\$ 25,000	\$ 75,000
1-9	All Riprap and Rip Rap Backing and Bedding	875	SY	\$ 200	\$ 175,000
1-10	Topsoils, Seeding and Restoration	1	LS	\$ 10,000	\$ 10,000
1-11	Erosion Control	1	LS	\$ 15,000	\$ 15,000
1-12	Assigned Steel Pipe Contract	1	LS	\$ 218,391	\$ 218,391
Materials	Owner-Furnished BFVs	1	LS	\$ 42,374	\$ 42,374
	Market Adjustment Factor	1	LS		\$ 143,900
Total of All Extended Bid Prices				\$	1,173,165
Contingency (5%)				\$	58,658
Estimated Total Construction Cost				\$	1,231,823

- All costs are based on Bid Documents, including changes to bank stabilization on COL comments.
- Recent bid prices from similar projects
- Excavation to be completed by traditional cut and cover methods, except rock excavation
- Pipe installation cost based on production of 100 LF per day, with a crew cost of \$10,000/day plus concrete encasement costs.
- Large diameter valve prices not included in installation costs. Cost carried in Owner-furnished BFV item.
- 5% contingency
- Costs are based on typical bidding environment; contractor, material, and equipment availability is unknown at this time. 20% market adjustment factor added to bid items 1-2 thru 1-12 to accommodate unknowns.
- AACE Class 1 Cost Estimate with an expected accuracy of -10% to +15%. Estimated cost range based on accuracy is \$1,108,600 to \$1,416,600.

BL. RECEIVED: Thursday, November 13, 2014 @ 2:00PM
 PROJECT NAME: City of Loveland River Crossings Replacement Project (FLW07C)
 BID NUMBER: 2014-82
 BIDS TABULATED BY: Tanner Randall
 BIDS CHECKED BY: Tanner Randall



Attachment B

NAME OF BIDDER		Connell Resources, Inc.		Garney Companies, Inc.		BT Construction, Inc.	
		Roald Tremble		Wayne O'Brien		Steve Tucker	
BIDDER'S CONTACT INFORMATION							
ITEM	DESCRIPTION	ESTIMATE QUANTITY	D UNIT	UNIT COST	EXTENDED COST	UNIT COST	EXTENDED COST
1-1	Mobilization	1	LS	\$85,000.00	\$85,000.00	\$120,000.00	\$120,000.00
1-2	36-inch Welded Steel Pipe Waterline, $t_{min}=0.250$ Wall, Single Lap Welded Joints	610	LF	\$880.00	\$536,800.00	\$512.320.00	\$271.00
1-3	36-inch Buried Butterfly Valve	4	EA	\$7,100.00	\$28,400.00	\$14,000.00	\$56,000.00
1-4	Manway-Air Valve Vault on 36-inch Pipe	2	EA	\$22,600.00	\$45,200.00	\$32,000.00	\$64,000.00
1-5	36-inch Linestop	1	EA	\$65,200.00	\$65,200.00	\$70,000.00	\$70,000.00
1-6	20-inch Linestop	1	EA	\$43,700.00	\$43,700.00	\$42,000.00	\$42,000.00
1-7	20-inch Ductile Iron Pipe, Class 350 Waterline	542	LF	\$779.00	\$422,218.00	\$530.00	\$287,260.00
1-8	20-inch Butterfly Valve Vault	3	EA	\$22,400.00	\$67,200.00	\$39,000.00	\$117,000.00
1-9	All Riprap and Rip Rap Backfill and Bedding	876	SY	\$199.00	\$174,125.00	\$196.00	\$171,500.00
1-10	Topsoils, Seeding and Restoration	1	LS	\$54,200.00	\$54,200.00	\$22,000.00	\$22,000.00
1-11	Erosion Control	1	LS	\$36,800.00	\$36,800.00	\$23,000.00	\$23,000.00
1-12	Assigned Steel Pipe Contract	1	LS	\$218,391.00	\$218,391.00	\$218,391.00	\$218,391.00
PROJECT TOTAL (\$):				\$1,777,234.00	\$1,503,471.00	\$2,272,591.00	\$1,351,836.00
MEET QUALIFICATIONS (Y/N)=		Yes		Yes		Yes	
NOTES:				On the bid schedule item 1-7 was inaccurately shown as \$261,960. This led to a "Total" error where it was listed as \$1,438,171.		1-3 Extended Cost on Bid was shown as \$78,200 which is not accurate. This led to a "Total" error where it was listed as \$2,270,991.	