Staff Report

for the Board of Directors' Meeting of May 10, 2017

TO: Board of Directors

FROM: Gary D. King, Engineering Manager

Adrian Schneider, Senior Engineer

DATE: May 3, 2017

SUBJECT: Shale Ridge Tanks Transmission Line – Contractors Quotes

(WO# 1020)

ENGINEERING

RECOMMENDATION:

Approve a contract with C&D Construction in the amount of \$1,355,770 for construction of the final segments of Shale Ridge Tanks Transmission Line project, and authorize the General Manager to sign the appropriate documents.

BACKGROUND:

The inadequate connection between the water treatment plant and Shale Ridge tanks have caused water quality issues including poor tank circulation and inadequate chlorine contact time. These issues are major contributors to increased disinfection byproducts (DPB's) that are at times, approaching the maximum contaminant level allowed by the State. To reduce water age and DBP's, and to increase circulation, a 4,600-foot long dedicated 24-inch diameter transmission main is planned and being built to directly connect the Shale Ridge tanks with the North Auburn Water Treatment Plant.

Approximately 1,100 feet of the transmission line has already been installed as part of the Rock Creek Siphon project and a change order to that contract. This contract is the continuation and completion of this transmission line.

Construction plans and specifications were sent out for bidding to 12 contractors on March 14, 2017.

Quotes were received from the following five contractors on April 21, 2017:

C&D Construction	\$1,355,770
T & S Construction	\$1,473,050
Hansen Bros. Enterprises	\$1,647,349
Western Engineering	\$1,669,865
McGuire & Hester	\$2,525,400

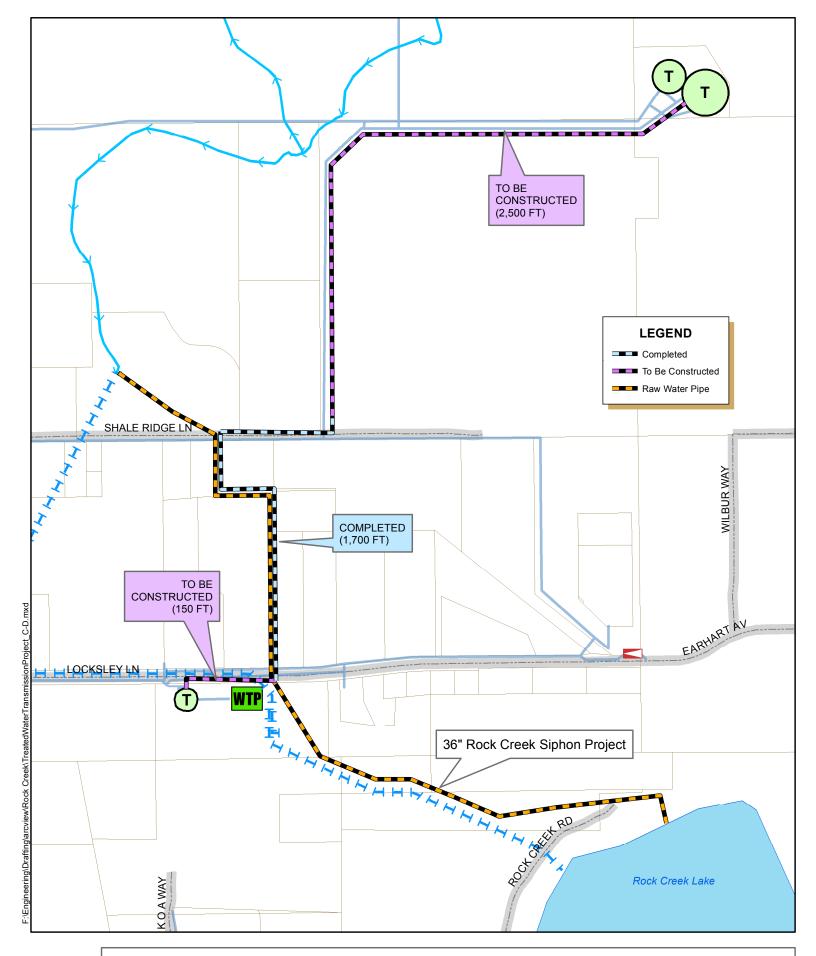
It is the recommendation of staff to award C&D Construction for this project.

BUDGET IMPACTS:

The Shale Ridge Tanks Transmission Line project is budgeted in the 2017 Pipe Replacement program at \$1,400,000 in the Project: Non programmatic.

Attachment: Figure

April 21, 2017 – Quote Summary





TREATED WATER TRANSMISSION PROJECT - C&D CONTRACT #1020

Date: 4/28/2017

Drawn By: <u>D. HUNT</u>

NEVADA IRRIGATION DISTRICT

NEVADA COUNTY -- PLACER COUNTY

GRASS VALLEY, CALIFORNIA

Scale: 1" = 400' @ 8-1/2x11 Sheet: 1 of 1

SHALE RIDGE TANKS TRANSMISSION LINE PROJECT - QUOTE RESULTS 4/21/2017

				C&D		T & S Constructors		Hansen Bros. Enterprises		Western Engineering		McGuire & Hester	
Item	Description	Qty.	Unit	Unit Cost	Ext Amount	Unit Cost	Ext Amount	Unit Cost	Ext Amount	Unit Cost	Ext Amount	Unit Cost	Ext Amount
1	Mob/Demob	1	LS		\$ 10,000		\$ 10,000		\$ 10,000		\$ 10,000		\$ 10,000
2	SWPPP & BMPs	1	LS	\$ 56,170	\$ 56,170	\$ 7,000	\$ 7,000	\$ 30,353	\$ 30,353	\$ 18,800	\$ 18,800	\$ 15,000	\$ 15,000
4	Rock Excavation	200	CY	\$ 412	\$ 82,400	\$ 480	\$ 96,000	\$ 675	\$ 135,000	\$ 333	\$ 66,600	\$ 250	\$ 50,000
5.3	Tie-in at Water Treatment Plant (WTP)	1	LS	\$ 44,210	\$ 44,210	\$ 125,000	\$ 125,000	\$ 104,279	\$ 104,279	\$ 72,100	\$ 72,100	\$ 160,000	\$ 160,000
6.3	24" DIP CL 250 – F&I (WTP+Phase III)	1	LS	\$ 22,230	\$ 22,230	\$ 55,000	\$ 55,000	\$ 72,112	\$ 72,112	\$ 127,000	\$ 127,000	\$ 100,000	\$ 100,000
7.3	24" Flanged Gate Valve (WTP)	3	each	\$ 25,500	\$ 76,500	\$ 23,000	\$ 69,000	\$ 16,690	\$ 50,070	\$ 20,150	\$ 60,450	\$ 30,000	\$ 90,000
8.3	24" DIP CL 250 w/restraints – F&I	640	ft	\$ 272	\$ 174,080	\$ 375	\$ 240,000	\$ 363	\$ 232,320	\$ 408	\$ 261,120	\$ 700	\$ 448,000
9.3	24" DIP CL 250 – F&I	410	ft	\$ 238	\$ 97,580	\$ 350	\$ 143,500	\$ 336.10	\$ 137,801	\$ 380	\$ 155,800	\$ 630	\$ 258,300
10.3	Trench Plugs	7	each	\$ 1,000	\$ 7,000	\$ 550	\$ 3,850	\$ 609	\$ 4,263	\$ 985	\$ 6,895	\$ 1,500	\$ 10,500
11.4	24" DIP CL 250 w/restraints - F&I	210	ft	\$ 312	\$ 65,520	\$ 300	\$ 63,000	\$ 380	\$ 79,800	\$ 410	\$ 86,100	\$ 700	\$ 147,000
12.4	12" Pipe Relocate Contingency STA 25+50 & STA 27+50	200	ft	\$ 188	\$ 37,600	\$ 100	\$ 20,000	\$ 148.34	\$ 29,668	\$ 196	\$ 39,200	\$ 150	\$ 30,000
13.4a*	24" C905 DR18 - F&I	1,250	ft	\$ 226	\$ 282,500	\$ -	\$ -	\$ 288	\$ 360,000	\$ 260	\$ 325,000	\$ -	\$ -
13.4b*	24" DIP CL 250 - F&I	1,250	ft	\$ -	\$ -	\$ 200	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ 660	\$ 825,000
14.5	Replace Storm Drain DI	1	LS	\$ 6,440	\$ 6,440	\$ 3,000	\$ 3,000	\$ 4,595	\$ 4,595	\$ 3,750	\$ 3,750	\$ 4,000	\$ 4,000
15.5	Pipe Abandonment & Site Restoration	1	LS	\$ 78,380	\$ 78,380	\$ 27,000	\$ 27,000	\$ 21,766	\$ 21,766	\$ 24,200	\$ 24,200	\$ 25,000	\$ 25,000
16.5a*	24" C905 DR 18 furnish & install	190	ft	\$ 397	\$ 75,430	\$ -	\$ -	\$ 782	\$ 148,580	\$ 750	\$ 142,500	\$ -	\$ -
16.5b*	24" DIP CL 250 furnish & install	190	ft	\$ -	\$ -	\$ 580	\$ 110,200	\$ -	\$ -	\$ -	\$ -	\$ 640	\$ 121,600
17.5	24" Flanged Gate Valve	3	each	\$ 26,040	\$ 78,120	\$ 22,000	\$ 66,000	\$ 23,733	\$ 71,199	\$ 20,400	\$ 61,200	\$ 30,000	\$ 90,000
18.5	Remove Check Valve	1	LS	\$ 6,440	\$ 6,440	\$ 5,000	\$ 5,000	\$ 4,362	\$ 4,362	\$ 4,500	\$ 4,500	\$ 4,000	\$ 4,000
19.5	Fire Hydrant Assembly	1	LS	\$ 10,960	\$ 10,960	\$ 9,000	\$ 9,000	\$ 10,096	\$ 10,096	\$ 8,750	\$ 8,750	\$ 15,000	\$ 15,000
20.2	County Encroachment Permit	1	LS	\$ 53,380	\$ 53,380	\$ 3,000	\$ 3,000	\$ 126	\$ 126	\$ 2,900	\$ 2,900	\$ 3,000	\$ 3,000
21.2	24" C905 DR 41 – F&I	150	ft	\$ 373	\$ 55,950	\$ 990	\$ 148,500	\$ 794.10	\$ 119,115	\$ 1,160	\$ 174,000	\$ 600	\$ 90,000
22.2	6" County Sewer Bypass	2	each	\$ 5,460	\$ 10,920	\$ 3,500	\$ 7,000	\$ 980	\$ 1,960	\$ 2,200	\$ 4,400	\$ 1,500	\$ 3,000
23.2	6" County Sewer Replacement – 18ft DI	2	each	\$ 9,400	\$ 18,800	\$ 3,500	\$ 7,000	\$ 8,751	\$ 17,502	\$ 5,500	\$ 11,000	\$ 10,000	\$ 20,000
24.2	10' County Sleeve Over 24"	2	each	\$ 2,580	\$ 5,160	\$ 2,500	\$ 5,000	\$ 1,191	\$ 2,382	\$ 1,800	\$ 3,600	\$ 3,000	\$ 6,000
				\$ 1,355,770		\$ 1,473,050		\$ 1,647,349		\$ 1,669,865		\$ 2,525,400	