

Staff Report

for the Regular Meeting of the Board of Directors, May 22, 2019

TO: Board of Directors

FROM: Gary D. King, PE, PhD, Engineering Manager
Adrian Schneider, PE, Senior Engineer

DATE: May 15, 2019

SUBJECT: Maben Canal Encasement Project – Phase III (FATR #8099-3)

ENGINEERING

RECOMMENDATION:

Award a construction contract to T&S Contractors for the Maben Canal Encasement Project Phase III in the amount of \$849,677, and authorize the General Manager to execute the necessary documents.

BACKGROUND:

The Maben Canal has been on a freeze for new services for 22 years. This is due to inability to provide robust maintenance due to poorly accessible reaches, sections at capacity, and repeated failing areas along the canal. In 2017, the first portion of the Maben Canal enhancement (Phase I) was completed with a piped section from Highway 49 to Lime Kiln Road. Phase II of this project was completed at the end of 2018 and included the canal from Lime Kiln Road to connection to the Kyler Canal. A District treated waterline was added to the project and extended the District's system by approximately 300 feet. This last phase (Phase III) of this project together with Phase I and II will increase the capacity of the canal and reduce its maintenance through these areas. The sections of unused canal will be abandoned in 2019 as part of Phase III work.

A public meeting was held on January 30, 2018 for the property owners and public related to the project area. The District discussed the project and future abandonment of the canal. Four property owners attended the meeting. A future pre-construction meeting will be offered to the property owners and will also include discussion of the canal abandonment.

The Phase III project includes installing an 18-inch diameter raw water pipe within County roadway and reconnecting existing services on the existing canal to this pipe. A treated waterline extension was included in the quote to be added to this work, but this cost is

above the District's budget for the Community Investment program (10151-52912). The District included this additional treated waterline work due to construction efficiencies and to limit traffic and public impacts to a one-time period.

On March 11, 2019, the District invited nine contractors to quote on the Project. The District received the four following quotes:

<u>Contractor</u>	<u>Base Quote</u>	<u>Additional Waterline Extension</u>
T&S Construction	\$849,677	\$296,950
C&D Contractors	\$858,975	\$270,600
Hansen Bros. Enterprises	\$914,990	\$418,499
McGuire and Hester	\$963,923	\$349,780

Bidding was done in compliance District Policy #3080 revised and approved by the Board on June 27, 2018. The contract documents were approved by the Board on July 25, 2018.

The project was filed as a categorical exemption per Section 15303 on May 10, 2018.

This project directly relates to Goal #3 of the District's Strategic Plan to strengthen reliability and redundancy of facilities.

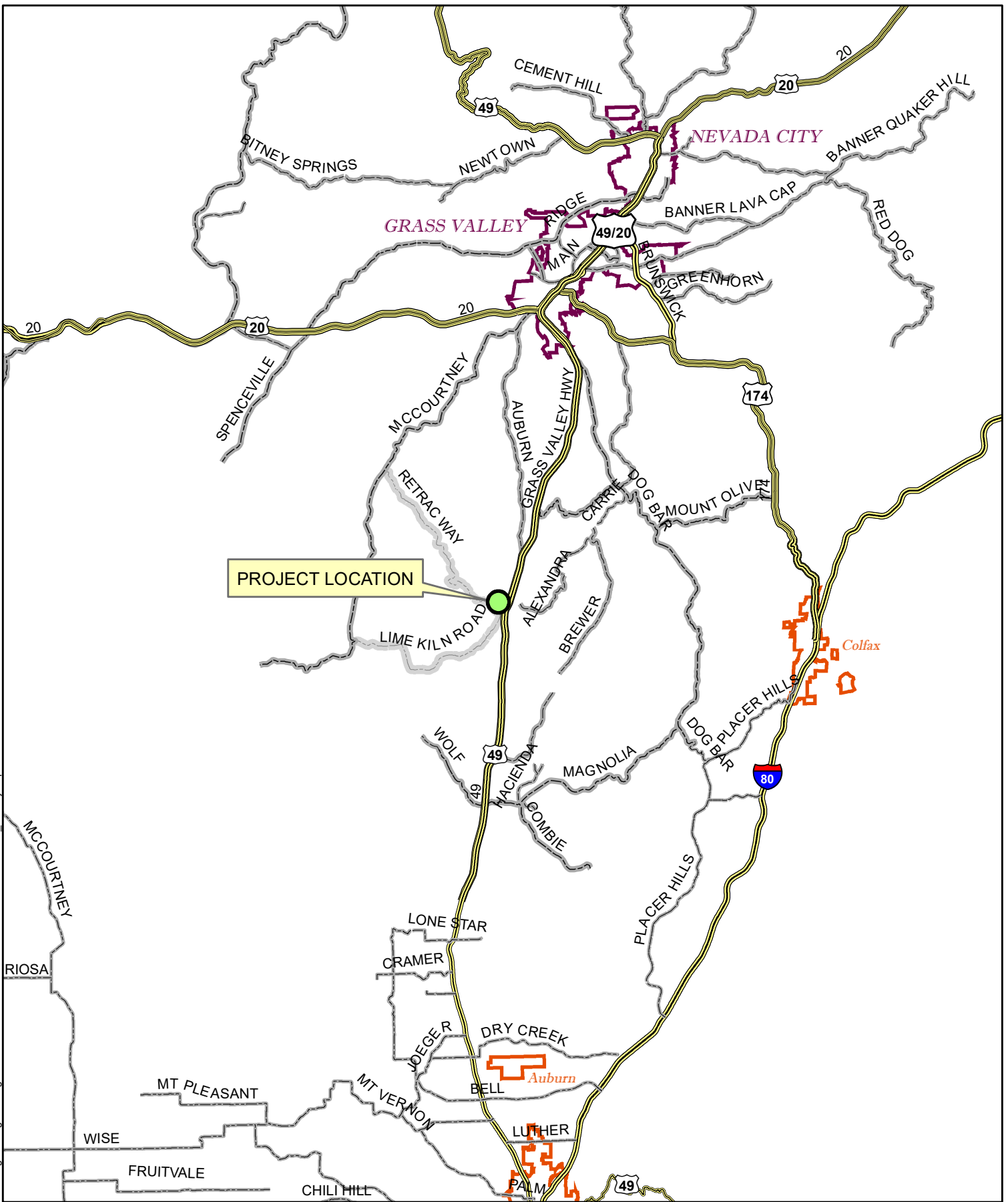
Staff recommends that the Board award the construction contract to T&S Construction in the amount of \$849,677 to install the raw water pipeline.

BUDGETARY IMPACT:

Funding for the project comes from the following:

- \$849,677 of the project funding comes from 2019 Raw Water System Improvements 10151-52910. The 2019 budget for this program is \$1,200,000. After this expenditure, there will be \$350,323 remaining in the budget.

Attachments: Maben Canal Encasement Project Vicinity Map
Maben Canal Encasement Project Site Plan
Quote Summary Detail



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MABEN CANAL ENCASEMENT - VICINITY MAP

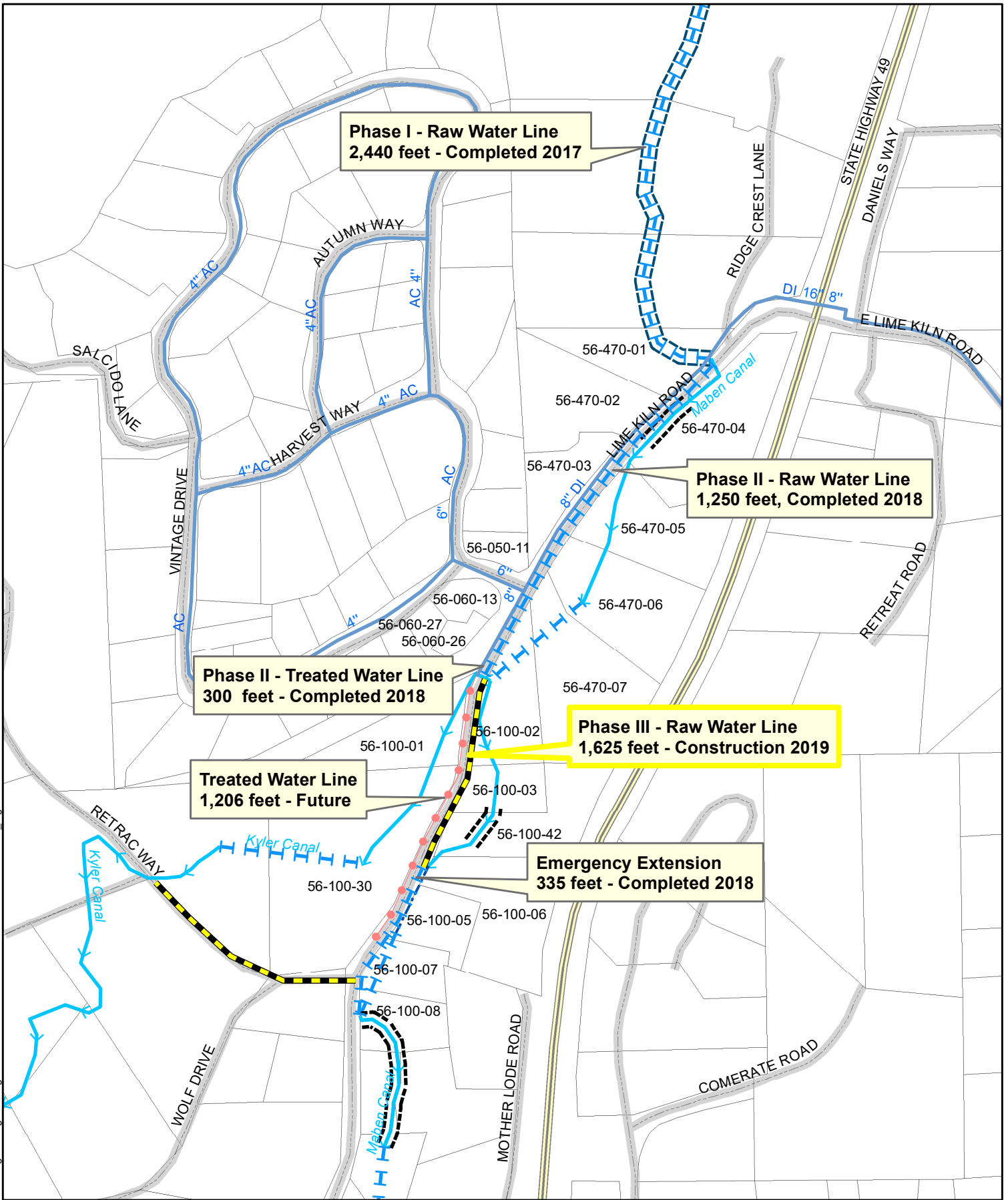
Date: 5/16/2019
 Drawn By: L. CANNON

NEVADA IRRIGATION DISTRICT

NEVADA COUNTY -- PLACER COUNTY
 GRASS VALLEY, CALIFORNIA

Scale: 1" = 3 mi. @ 8-1/2x11
 Sheet: 1 of 1

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MABEN CANAL ENCASUREMENT - SITE PLAN

NEVADA IRRIGATION DISTRICT

NEVADA COUNTY -- PLACER COUNTY
GRASS VALLEY, CALIFORNIA

Date: 5/16/2019
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Scale: 1" = 400' @ 8-1/2x11
Sheet: 1 of 1



NEVADA IRRIGATION DISTRICT

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**Summary of Bid Response(s)-FATR 8099-3
 Maben Canal Encasement Project-Phase III**

Item	Base Quote: 18 " RAW Water Pipe	T & S Construction	C & D Contractors	Hanson Bros Enterprises	McGuire and Hester
1	Mob/Demob*	\$55,000	\$52,500	\$6,830	\$170,000
2	Permits (Encroachment)*	\$8,500	\$18,720	\$5,375	\$350
3	SWPPP*	\$3,000	\$18,300	\$11,133	\$2,000
4	Construction Staking*	\$15,000	\$9,980	\$6,398	\$6,000
5	Clearing, Grubbing, Tree Removal*	\$5,000	\$6,240	\$4,585	\$25,000
6	BMP Mitigation Measures*	\$8,500	\$2,500	\$5,176	\$16,000
7	Type II micro surfacing	\$35,342	\$38,790	\$48,272	\$33,403
8	Restriping/Reflectors*	\$4,000	\$9,980	\$23,400	\$10,000
9	Furnish & Install 18" Pipe	\$375,560	\$341,120	\$497,412	\$396,880
10	Furnish & Install Access Vaults	\$90,000	\$83,700	\$59,330	\$53,750
11	Pressure Testing Pipe	\$7,000	\$6,680	\$7,693	\$14,000
12	Install Roadside Service Boxes	\$52,200	\$65,880	\$87,072	\$69,000
13	Extend 6" PVC Blowoff, 100 ft	\$5,500	\$6,240	\$7,150	\$11,500
14	Install Blowoff (STA 101+78)	\$7,500	\$8,430	\$13,249	\$9,750
15	Reconnect Seven Existing Services (Prvt Prop)	\$14,400	\$27,600	\$26,800	\$50,400
16	Outlet Install & Parshal Flume (STA 107+53)_	\$35,000	\$10,920	\$4,783	\$12,000
17	Abandon 15" diam Culvert Under Lime Kiln Road	\$7,500	\$5,250	\$4,212	\$2,000
18	Demolish/Remove Concrete Structure – Salvage Valve & Fittings, Abandon Culvert Under Road	\$3,500	\$4,780	\$7,287	\$5,250
19	Abandon 18" diameter Culvert Under Retrac Way	\$7,500	\$5,370	\$6,337	\$3,500
20	Abandon one 12" diameter Siphon with Grout	\$21,000	\$16,800	\$7,840	\$7,000
21	Abandon two 14" diameter Siphons with Grout	\$29,050	\$49,800	\$15,189	\$19,090
22	Reposition Access Cover/Pave – Nevada Cnty**	\$11,000	\$12,480	\$5,946	\$2,000
23	Rock Excavation - Unforseen	\$75	\$23,475	\$22,962	\$18,750
24	Remove & Dispose Canal Gunite/Concrete	\$4,000	\$3,740	\$6,799	\$6,500
25	Backfill Canal with Clean Dirt (Maben & Kyler)	\$44,550	\$29,700	\$23,760	\$19,800
Total Base Quote Price		\$849,677	\$858,975	\$914,990	\$963,923