

# Staff Report

for the Regular Meeting of the Board of Directors, August 14, 2018

**TO:** Board of Directors

**FROM:** Gary D. King, P.E., PhD, Engineering Manager

**DATE:** August 6, 2019

**SUBJECT: Armstrong Road and Ironhorse Drive DFWLE Pipeline Installation Project (FATR#1019)**

***ENGINEERING***

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## **RECOMMENDATION:**

Award a construction contract to Hansen Brothers, Inc. for the installation of the Armstrong Road and Ironhorse Drive District Financed Waterline Extension (DFWLE) Pipeline Installation Project in the amount of \$1,070,776.00 and authorize the General Manager to execute the appropriate documents.

## **BACKGROUND:**

The funding agreement with the residents for Armstrong Road and Ironhorse Road DFWLE Project was approved by the Board on November 14, 2018, the funds were encumbered for this project by the Board on May 23, 2018, and it was placed on the DFWLE list by Engineering Committee on March 21, 2017. The project pipeline location is indicated on the attached map.

Quotes for the construction of the project were requested from 8 qualified contractors (C & D Contractors, Hansen Brothers Enterprises, McGuire & Hester Construction, T & S Construction, Western Engineering Contractors, Lorang Brothers Construction, Syblon Reid Contractors, and TCB Industrial, Inc.). After the mandatory pre-bid meeting on March 20, 2019, the list was reduced to five approved contractors (C & D Contractors, Hansen Brothers Enterprises, McGuire & Hester Construction, T & S Construction, and Western Engineering Contractors). Quotes were opened on April 11, 2019. Five quotes were received as shown below.

Quoter	Quote
Hansen Brothers Enterprises	\$1,070,776.00
T & S Construction	\$1,160,797.00
McGuire and Hester	\$1,233,207.00
Western Engineering Contractors	\$1,260,507.00
C & D Contractors	\$1,596,914.00

The current estimate for the construction portion of the project is \$1,177,640.00. Bidding was done in compliance with District Policy #3080, which was approved by the Board on June 27, 2018. The contract documents for this project were approved by the Board on July 25, 2018.

The project was filed as a categorical exemption per Section 15303 on January 30, 2019.

This project aligns with Strategic Goal 3 of the 2016-2018 Strategic Plan to strengthen reliability and redundancy of facilities as indicated on the Districts website at [https://nidwater.com/wp-content/uploads/2016/04/2016\\_2018-Strategic-Plan.pdf](https://nidwater.com/wp-content/uploads/2016/04/2016_2018-Strategic-Plan.pdf).

Staff is recommending that the Board award the contract with Hansen Brothers Enterprises in the amount of \$1,070,776.00.

**BUDGETARY IMPACT:**

The budget (10151-52912-1019) for this project is \$1,515,876 that was encumbered for this project by the Board on May 23, 2018.

**ATTACHMENTS: (3)**

- Armstrong Road and Ironhorse Drive Pipeline - Summary of Bid Responses
- Staff Report dated May 23, 2018
- Staff Report dated March 21, 2017

GK



**NEVADA IRRIGATION DISTRICT**

1036 W. Main Street, Grass Valley, CA 95945-5424  
 (530) 273-6185 ~ Fax: (530) 477-2646 ~ www.nidwater.com

**Summary of Bid Response(s)-FATR 1019  
 Armstrong RD and Iron Horse DR**

	Descriptions	Hansen Bros Enterprises	T & S Construction CO.	McGuire and Hester	Western Engineering Contractors	C & D Contractors
Item 1	8" PVC Pipeline	\$688,548	\$716,652	\$734,217	\$878,250	\$990,666
Item 2	2" Blow Off	\$15,540	\$27,000	\$24,000	\$13,200	\$24,432
Item 3	8" Valves	\$26,235	\$16,500	\$33,000	\$22,000	\$23,056
Item 4	Fire Hydrants	\$52,504	\$72,000	\$88,000	\$43,440	\$78,848
Item 5	Air Release Valve	\$10,347	\$15,600	\$15,000	\$8,100	\$13,497
Item 6	Water Meter (SDII)	\$36,806	\$44,000	\$38,500	\$34,100	\$45,507
Item 7	Water Meter (SDII) HP (Note 13)	\$43,536	\$50,400	\$42,000	\$45,900	\$51,192
Item 8	Reconnect to existing service (Note 13)	\$9,861	\$12,000	\$12,000	\$5,820	\$12,798
Item 9	1-1/2" Asphalt Overlay	\$34,620	\$49,045	\$40,390	\$31,735	\$23,080
Item 10	Double Chip Seal	\$88,200	\$119,000	\$140,000	\$92,512	\$140,000
Item 11	Rock excavation unforeseen	\$27,800	\$100	\$15,000	\$31,500	\$40,600
Item 12	Road Base in addition to trench as directed by inspector	\$4,560	\$3,400	\$10,000	\$22,000	\$4,440
Item 13	Abandon 1-Double service and 1-Single service near Station 1.0+00	\$2,156	\$5,000	\$2,000	\$920	\$3,385
Item 14	Bollards at FH near station 26+15, 60+00, 82+00	\$4,776	\$3,600	\$4,200	\$5,040	\$4,878
Item 15	Culvert Crossing Replacement	\$882	\$3,500	\$4,900	\$1,680	\$2,842
Item 16	SWPPP Permit, Implementation and closeout	\$10,750	\$8,000	\$10,000	\$7,910	\$129,570
Item 17	Seeding and storm water controls	\$13,655	\$15,000	\$20,000	\$16,400	\$8,123
<b>Total Base Quote Price</b>		<b>\$1,070,776</b>	<b>\$1,160,797</b>	<b>\$1,233,207</b>	<b>\$1,260,507</b>	<b>\$1,596,914</b>
		<b>Hansen Bros. Enterprises</b>	<b>T &amp; S Construction CO.</b>	<b>McGuire and Hester</b>	<b>Western Engineering Contractors</b>	<b>C &amp; D Contractors</b>

# Memorandum

for the Engineering Committee Meeting of March 21, 2017

**TO:** Engineering Committee Members

**FROM:** Chip Close, Operations Manager  
Shannon Wood, Business Services Technician

**DATE:** March 1, 2017

**SUBJECT:** Iron Horse/Brewer Road District Financed Waterline Extension

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## **OPERATIONS**

**RECOMMENDATION:** Review and evaluate the project using District Financed Waterline Extension policy criteria; advise staff as appropriate.

**BACKGROUND:** Originally, the District recognized a petition for this group and processed it on the following timeline:

- Engineering Committee – March 19, 2014
- Administrative Practices Committee – January 6, 2015
- Board of Directors encumbered funds – January 14, 2015
- Neighborhood kick-off meeting – February 5, 2015
- The project was closed due to lack of Good-Faith deposits – May 21, 2015
- A meeting to discuss the option of utilizing a State Revolving Fund loan for extending waterlines – August 26, 2015
- Engineering Committee encouraged the group to reapply for the DFWLE program if they desired – March 15, 2016

In the meantime, due to three Temporary Service Location parcels on Armstrong Road, the District has worked on a waterline extension on Armstrong Road terminating with a fire hydrant at the south end of Iron Horse Drive. This extension shortens the length of pipeline necessary to supply the Iron Horse/Brewer Road group by approximately 1,650lf.

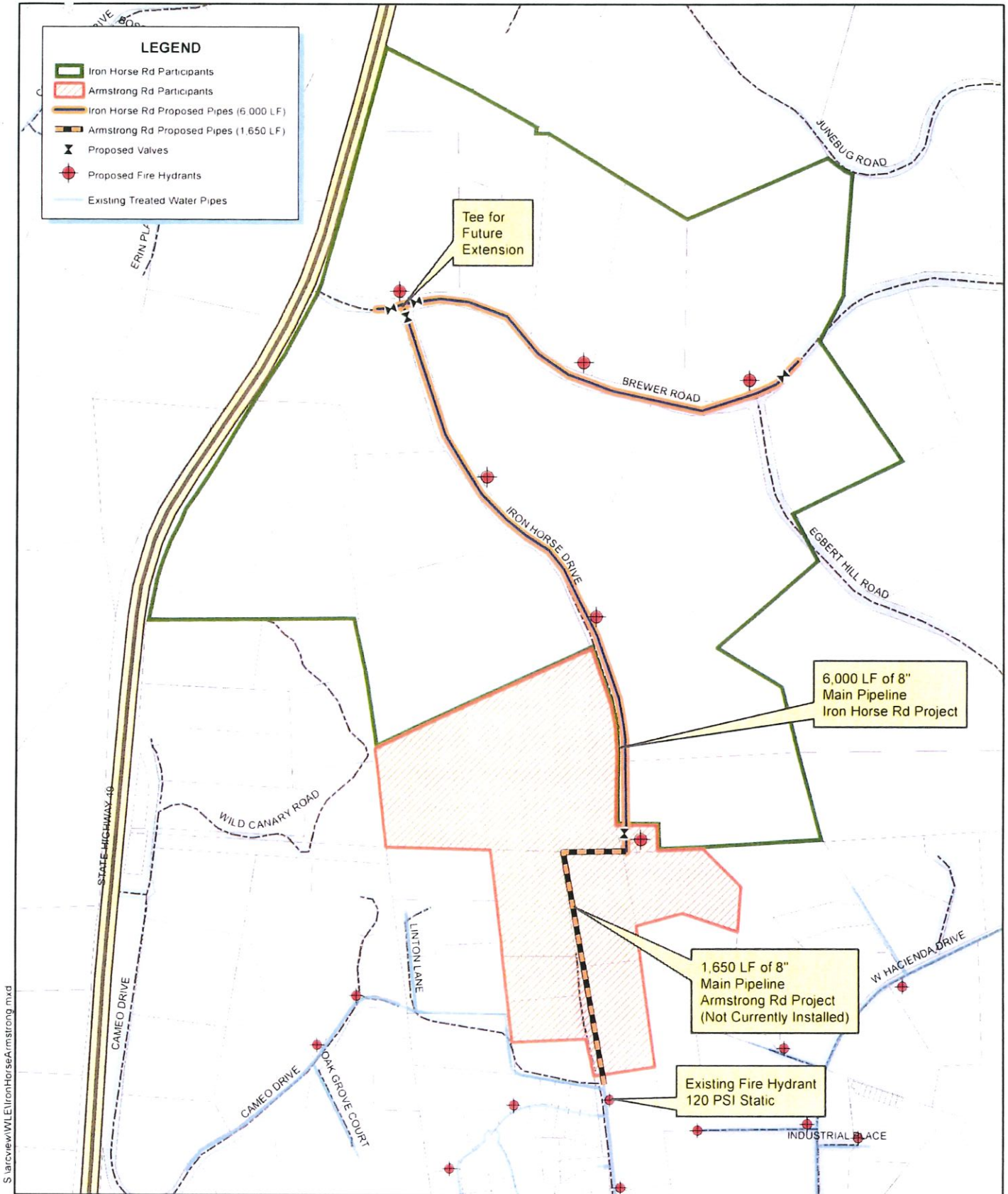
The District received a “renewed interest” petition representing interest by twelve (12) landowners. The newly proposed project would consist of extending a waterline from the south end of Iron Horse Drive and continuing east on Brewer Road. The area has been mapped using the current policy methods and proposes approximately 6,000lf of 8-inch pipe, potentially serving 18 parcels (60% is 11 parcels). There are 15 mainline connections and 3 variance connections. There appears to be 1 vacant parcel.

**BUDGETARY IMPACT:** To be determined.

Attachments (1):


- Area Map





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**IRON HORSE / ARMSTRONG ROAD WATERLINE PROJECTS**



Date 3/1/2017  
Drawn By D. HUNT

*NEVADA IRRIGATION DISTRICT*

NEVADA COUNTY -- PLACER COUNTY  
GRASS VALLEY, CALIFORNIA

Scale 1" = 700' @ 8-1/2x11

**FIGURE:**

# Staff Report

for the Board of Directors' Meeting of May 23, 2018

**TO:** Board of Directors

**FROM:** Chip Close, Water Operations Manager  
Shannon Wood, Business Services Technician

**DATE:** May 15, 2018

**SUBJECT:** Iron Horse/Brewer Road District Financed Waterline Extension

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## *OPERATIONS*

### **RECOMMENDATION:**

Encumber funds for the Iron Horse/Brewer Road District Financed Waterline Extension project, as recommended by the Administrative Practices Committee.

### **BACKGROUND:**

The District received a petition signed by twelve (12) landowners to extend treated water from Armstrong Road to Iron Horse Drive and continuing east on Brewer Road. The signed petition meets the 50 percent threshold and the area has been mapped using the current policy methods.

The Engineering Committee recognized this group March 21, 2017. The project proposes approximately 7,650 lf of 8-inch pipe, potentially serving 21 parcels of which 18 are mainline connections and 3 variance connections. It appears that there is one (1) vacant parcel. The total not-to-exceed cost per participant, including meter, is \$79,377.

The Administrative Practices Committee reviewed the project at the May 1, 2018 meeting. The committee unanimously agreed to advance to the Board of Directors to encumber funds as appropriate.

**BUDGETARY IMPACT:** The overall project estimate is \$1,515,876 of which \$55,210 will be District participation and \$26,249 collected from previous Temporary Service Location connections leaving the balance to be recovered through DFWLE Funding Agreements or future District Reimbursement as follows:

Total Project Estimate: \$1,515,876

Community Investment Stabilization Fund (District Participation): \$55,210

Temporary Service Location Funds (previously collected): \$26,249

Community Investment Stabilization Fund (Property Owner Participation): \$1,434,417

Reimbursement Potential:

Cash Deposit (Good Faith Deposit 11 @ \$7,938): \$87,318 – beginning of project

Deferred Revenue (minimum of 11 @ \$60,368): \$664,048 – over 30 years

Future Reimbursement (10 parcels @ \$68,306): \$683,060 – at request of meter(s)

CC/sm

Attachments (2):

- Project Estimate
- Area Map



## IRON HORSE-BREWER ROAD WATER LINE EXTENSION

### ADMINISTRATION

	Description	Quantity	Unit Cost	Total Cost	District Participation		Project Participant Costs	
					Transmission & Storage Facilities <sup>1</sup>	Community Investment Funds		
Up-Front	Preliminary engineering study (Labor)	1	ls	\$500	\$500	\$0	\$500	\$0
	Engineering administration (Labor)	1	ls	\$1,500	\$1,500	\$0	\$1,500	\$0
	Survey and Engineering (Consultant)	1	ls	\$10,000	\$2,500	\$0	\$2,500	\$0
	Right of way (Labor)	1	ls	\$1,000	\$1,000	\$0	\$1,000	\$0
	Engineering/Administration Subtotal				\$5,500	\$0	\$5,500	\$0
	Burden on Payroll (Labor only)	47	%		\$1,410	\$0	\$1,410	\$0
	<b>Subtotal</b>				<b>\$6,910</b>	<b>\$0</b>	<b>\$6,910</b>	<b>\$0</b>
After Agreement	Contract administration (Labor)	1	ls	\$3,000	\$3,000	\$0	\$0	\$3,000
	Engineering administration (Labor)	1	ls	\$10,000	\$10,000	\$0	\$0	\$10,000
	Engineering (Consulting fees)	1	ls	\$0	\$0	\$0	\$0	\$0
	Drafting (Labor)	1	ls	\$5,000	\$5,000	\$0	\$0	\$5,000
	Survey (Labor)	1	ls	\$10,000	\$10,000	\$0	\$0	\$10,000
	Inspection (Labor)	1	ls	\$10,000	\$10,000	\$0	\$0	\$10,000
	Right of way (Labor)	1	ls	\$5,000	\$5,000	\$0	\$0	\$5,000
	Right of way (Acquisition) <sup>2</sup>	1	ls	\$90,000	\$90,000	\$0	\$0	\$90,000
	Right of way (Consultant)	0	ls	\$0	\$0	\$0	\$0	\$0
	CEQA administration (Labor) <sup>3</sup>	1	ls	\$1,000	\$1,000	\$0	\$0	\$1,000
	Fish & Game, CEQA, & Recording Fees	0	ls	\$3,000	\$0	\$0	\$0	\$0
	Engineering/Administration Subtotal				\$134,000	\$0	\$0	\$134,000
		Burden on Payroll (Labor only)	47	%		\$20,680	\$0	\$0
	<b>Subtotal</b>				<b>\$154,680</b>	<b>\$0</b>	<b>\$0</b>	<b>\$154,680</b>
<b>Administration Subtotal</b>				<b>\$161,590</b>	<b>\$0</b>	<b>\$6,910</b>	<b>\$154,680</b>	

### CONSTRUCTION

	Description	Quantity	Unit Cost	Total Cost	District Participation		Project Participant Costs	
					Transmission & Storage Facilities <sup>1</sup>	Community Investment Funds		
	Clearing and grubbing/bonds/mob	1	ls	\$2,000	\$2,000	\$0	\$0	\$2,000
	8-inch pipe	7,650	ft	\$120	\$918,000	\$0	\$0	\$918,000
	2-inch blowoff	2	ea	\$2,000	\$4,000	\$0	\$0	\$4,000
	Air release assembly	2	ea	\$2,500	\$5,000	\$0	\$0	\$5,000
	8-inch valve	6	ea	\$2,000	\$12,000	\$0	\$0	\$12,000
	Fire hydrant	7	ea	\$6,000	\$42,000	\$0	\$42,000	\$0
	Main ending with blowoff	2	ls	\$2,000	\$4,000	\$0	\$0	\$4,000
	Stream Crossing	1	ls	\$20,000	\$20,000	\$0	\$0	\$20,000
	Single service assembly	24	ea	\$1,200	\$28,800	\$0	\$0	\$28,800
	Double service assembly	0	ea	\$2,000	\$0	\$0	\$0	\$0
	Roadway Restoration - Armstrong <sup>4</sup>	11,600	sf	\$2.40	\$27,840	\$0	\$0	\$27,840
	Roadway Restoration - Golden Oaks Double Chip seal <sup>5</sup>	140,000	SF	\$0.60	\$84,000	\$0	\$0	\$84,000
	Misc. - Roadway work per HOA Golden Oaks	1	ls	\$10,000	\$10,000	\$0	\$0	\$10,000
	Rock Removal	100	cy	\$200	\$20,000	\$0	\$0	\$20,000
	<b>Construction Subtotal</b>				<b>\$1,177,640</b>	<b>\$0</b>	<b>\$42,000</b>	<b>\$1,135,640</b>
	Contingency	15	%		\$176,646	\$0	\$6,300	\$170,346
<b>Construction Subtotal</b>				<b>\$1,354,286</b>	<b>\$0</b>	<b>\$48,300</b>	<b>\$1,305,986</b>	

**TOTAL ESTIMATED PROJECT COST      \$1,515,876      \$0      \$55,210      \$1,460,666**

**Payment from TSLs      -\$26,249**

**Total      \$1,434,417**

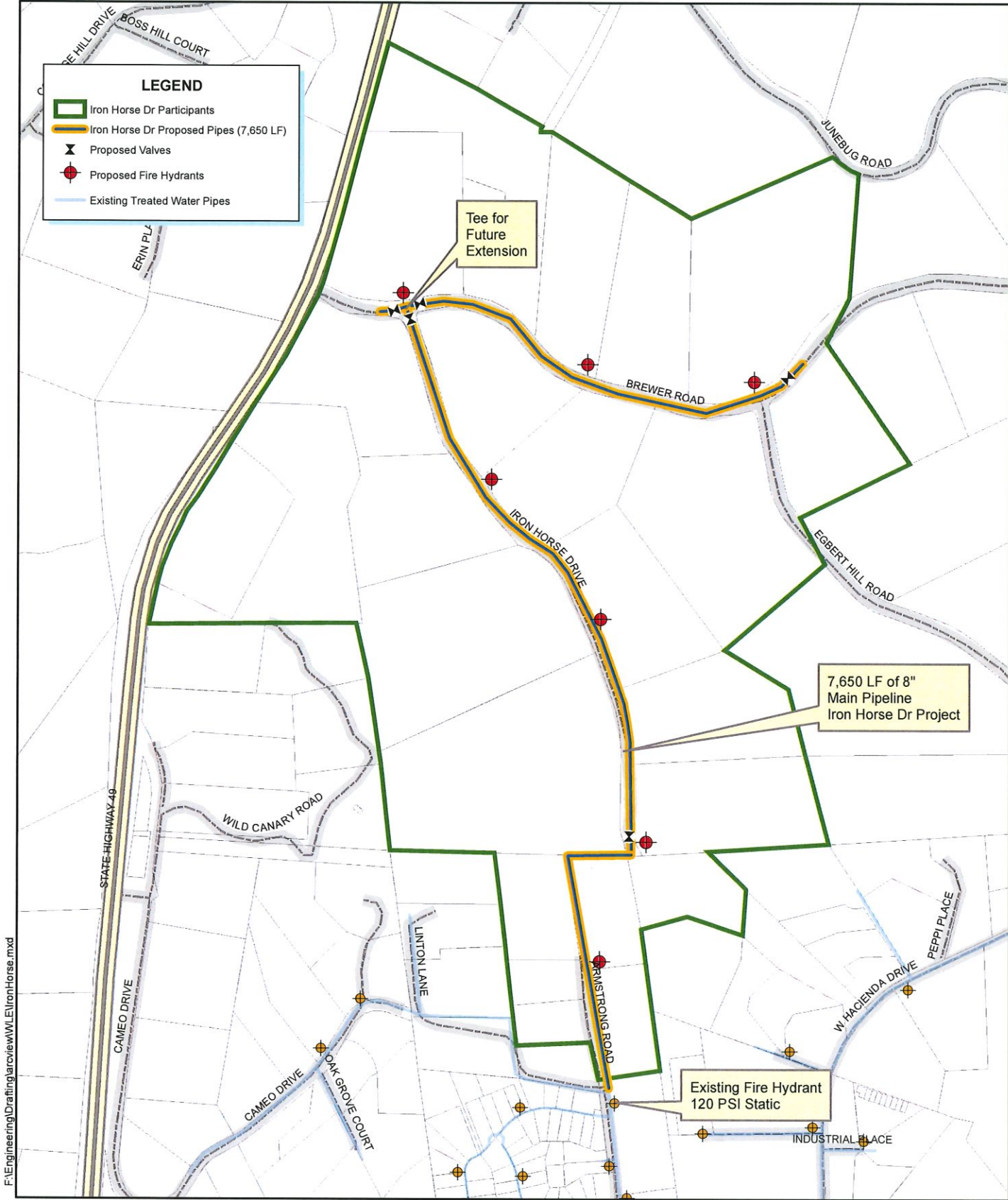
**LINEAR FEET PER PARCEL=      319**

**CONSTRUCTION COST PER PARCEL =      \$68,306**

- 18 Parcels fronting mainline
- 3 Parcel by variance
- 3 Parcel by TSLs ( not included in the cost per parcel, costs removed from total)
- 24 Total Parcels

1 Funding for Transmission & Storage Facilities from Capacity Fees.  
 2 There is a PUE on Brewer and not on Iron Horse, these funds are for the purchase of ROW on Iron Horse assumes purchase of 9  
 3 CEQA includes as a categorical exemption  
 4 Assume 2 inch overlay on Armstrong  
 5 Assumes Double Chip Seal per previous requirements on the Golden Oaks Homeowners Association  
 6 Miscellaneous repair on Brewer required by Golden Oaks Homeowners Association





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## IRON HORSE DRIVE WATERLINE EXTENSION

Date: 4/10/2018  
 Drawn By: D. HUNT

**NEVADA IRRIGATION DISTRICT**  
 NEVADA COUNTY – PLACER COUNTY  
 GRASS VALLEY, CALIFORNIA

Scale: 1" = 700' @ 8-1/2x11

FIGURE: