

ENGINEER'S OPINION OF PROBABLE COSTS

Client/Owner: **County of Yolo / City of Davis**

Project: **North Davis Meadows Water System Consolidation**

Percent Complete: **Final PS&E**

Prepared By: **AJU/LCO**

Review By: **KLW**

Date: **3-Dec-2021**



ITEM	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL	SRF Eligible
1	Mobilization	1	LS	\$ 163,000	\$ 163,000	Yes
2	Sheeting, Shoring and Bracing	1	LS	\$ 77,000	\$ 77,000	Yes
3	Traffic Control	1	LS	\$ 70,000	\$ 70,000	Yes
4	Storm Water Pollution Prevention	1	LS	\$ 17,000	\$ 17,000	Yes
5	Construction Surveying and Staking	1	LS	\$ 46,000	\$ 46,000	Yes
6	Landscape and Site Restoration	1	LS	\$ 100,000	\$ 100,000	Yes
7	Obtain City of Davis Encroachment Permit for Metered Connection	102	EA	\$ 1,300	\$ 132,600	Yes
8	14-inch Diameter Water Main in County Road 99D R/W	5393	LF	\$ 310	\$ 1,671,830	Yes
9	14-inch Diameter Water Main in golf course property	1353	LF	\$ 250	\$ 338,250	Yes
10	14-inch Diameter Water Main in residential road/path	181	LF	\$ 280	\$ 50,680	Yes
11	12-inch Diameter Water Main in golf course and county property	1848	LF	\$ 190	\$ 351,120	Yes
12	12-inch Diameter water pipe in residential road/path	293	LF	\$ 220	\$ 64,460	Yes
13	8-inch Diameter water pipe in residential road/path	1451	LF	\$ 190	\$ 275,690	Yes
14	14-inch Diameter C900 PVC Water Main in 27-inch Bore-and-Jack Casing in County Road 99D ('CR99D' 301+53 TO 302+15) (62 LF)	1	LS	\$ 151,000	\$ 151,000	Yes
15	6-inch Diameter Bypass Pipe Installation with One (1) 6-inch Gate Valve complete with tees, taps and fittings	4	EA	\$ 9,300	\$ 37,200	Yes
16	Fire Hydrant assembly (not including gate valve) and lateral with hot tap connection	2	EA	\$ 11,600	\$ 23,200	Yes
17	Remove Existing Fire Hydrant assembly and cap lateral	2	EA	\$ 2,300	\$ 4,600	Yes
18	14-inch Butterfly Valve and Box	3	EA	\$ 9,200	\$ 27,600	Yes
19	12-inch Gate Valve and Box	3	EA	\$ 6,400	\$ 19,200	Yes
20	8-inch Gate Valve and Box	9	EA	\$ 3,700	\$ 33,300	Yes
21	6-inch Gate Valve and Box	5	EA	\$ 3,500	\$ 17,500	Yes
22	4-inch Low-point Blow-Off Valve Assembly with Box	1	EA	\$ 18,600	\$ 18,600	Yes
23	1-inch Combination Air Valve Assembly with Cover and bollards	3	EA	\$ 10,500	\$ 31,500	Yes
24	1.5-inch Service from Main Through Meter Valve	5	EA	\$ 5,300	\$ 26,500	Yes
25	2-inch Service from Main Through Meter Valve	5	EA	\$ 5,900	\$ 29,500	Yes
26	2-inch Irrigation Service From Main Through Meter Valve	3	EA	\$ 5,900	\$ 17,700	Yes
27	2-inch Meter with Anode, Valve, Box and Lid (Irrigation)	3	EA	\$ 3,500	\$ 10,500	Yes
28	1.5-inch Meter with Anode, Valve, Box and Lid (Irrigation)	5	EA	\$ 3,500	\$ 17,500	Yes
29	1.5-inch Meter with Anode, Valves, Box and Lid (Case 1) on Existing service	55	EA	\$ 3,600	\$ 198,000	Yes
30	1.5-inch Meter with Anode, Valve, Box and Lid (Case 2) on Existing service	39	EA	\$ 3,500	\$ 136,500	Yes
31	Locate and expose existing service valve	18	EA	\$ 700	\$ 12,600	Yes
32	2-inch backflow preventer assembly	1	EA	\$ 3,800	\$ 3,800	Yes
33	1-inch Water Service and Sampling Station	1	EA	\$ 7,000	\$ 7,000	Yes
34	Install 1-inch Service and Stub for Pressure Transducer/Sensor	1	EA	\$ 4,600	\$ 4,600	Yes
35	Transmission Main Tie-In County Road 99D	1	LS	\$ 11,600	\$ 11,600	Yes
36	Transmission Main Tie-Ins to Existing Mains in Fairway Drive and at STA 'GCSA' 104+69	1	LS	\$ 13,900	\$ 13,900	Yes
37	Water Main Tie-Ins for Upsize to 8-inch mains	1	LS	\$ 27,900	\$ 27,900	Yes
38	Disconnect and Cap Pipes from Existing Wells	1	LS	\$ 8,700	\$ 8,700	Yes

SUBTOTAL \$ 4,247,630

SRF ELIGIBLE SUBTOTAL \$ 4,247,630

PREMIUM FOR CONTRACTOR'S MARKET 15% \$ 637,145

CONTINGENCY 10% \$ 424,763

SRF ELIGIBLE CONTINGENCY \$ 1,061,908

TOTAL (rounded) \$ 5,310,000

SRF ELIGIBLE TOTAL (rounded) \$ 5,310,000

NON-ELIGIBLE TOTAL (rounded) \$ -

NOTES:

Premium for Contractor's Market set to zero due to recent lull in underground pipeline construction sector with the assumption that the County can advertise project for bids this Winter.

Required Equipment Installations by City of Davis

Aclara System Data Collector Unit Antenna for Automated Meter Reading System to be supplied, installed and activated by City of Davis
 Pressure sensor with SCADA/telemetry equipment to be supplied, installed and activated by City of Davis
 City of Davis Development Impact Fee for Residential 1.5" metered water service

SUBTOTAL (rounded) \$ 13,900

SUBTOTAL (rounded) \$ 23,200

SUBTOTAL (rounded) \$ 1,623,500

SRF ELIGIBLE TOTAL (rounded) \$ 1,660,600

NON-ELIGIBLE TOTAL (rounded) \$ -

ENGINEER'S OPINION OF PROBABLE COSTS

Client/Owner: **County of Yolo / City of Davis**



Project: **North Davis Meadows Water System Consolidation - Well Site Decommissioning**

Percent Complete: **Conceptual**

Prepared By: **AJU/LCO**

Review By: **KLW**

Date: **3-Dec-2021**

ITEM	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL	SRF Eligible
NDM1 Well DESTRUCTION, Tank Removal & Site Demo						
1	Mobilization	1	LS	\$ 8,000	\$ 8,000	Yes
2	Destroy NDM1 Well	1	LS	\$ 81,300	\$ 81,300	Yes
3	Remove Tank and Chlorination System	1	LS	\$ 58,100	\$ 58,100	Yes
4	Demo Site piping & booster pumps	1	LS	\$ 17,400	\$ 17,400	Yes
5	Demo Site pads, pavement and fencing	1	LS	\$ 11,600	\$ 11,600	Yes?
					\$ -	
SUBTOTAL					\$ 176,400	
NDM2 Well Capping & Site Demo						
1	Mobilization	1	LS	\$ 5,000	\$ 5,000	Yes
2	Destroy NDM2 Well	1	LS	\$ 81,300	\$ 81,300	Yes
4	Demo Site piping	1	LS	\$ 7,000	\$ 7,000	Yes
5	Demo Site pads and modify pavement and fencing	1	LS	\$ 8,100	\$ 8,100	Yes
					\$ -	
SUBTOTAL					\$ 101,400	

TOTAL	\$ 277,800
SRF ELIGIBLE SUBTOTAL	\$ 277,800
PREMIUM FOR CONTRACTOR'S MARKET 15%	\$ 41,670
CONTINGENCY 10%	\$ 27,780
SRF ELIGIBLE CONTINGENCY	\$ 69,450
TOTAL (rounded)	\$ 347,000
SRF ELIGIBLE TOTAL (rounded)	\$ 347,000
NON-ELIGIBLE TOTAL (rounded)	\$ -

NOTES:

The NDM2 site is assumed to be left as some form of enclosure with equipment for irrigation controls and the added pressure monitoring and SCADA equipment. Based on Joshua Reuhlig response to Nellie of Ponticello, site demolition and basic reconfiguration is assumed to be SRF eligible.

Client/Owner: **County of Yolo / City of Davis**

Project: **North Davis Meadows Water System Consolidation - Other Costs**

Percent Complete: **Final PS&E**

Prepared By: **AJU/LCO**

Review By: **KLW**

Date: **3-Dec-2021**



ITEM	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL	SRF Eligible
1	County Time	1	LS	\$ 45,000	\$ 45,000	Yes
2	Ponticello Contract Increase	1	LS	\$ 35,000	\$ 35,000	Yes
3	West Yost Contract Increase	1	LS	\$ 25,000	\$ 25,000	Yes
4	Source Integration Study	1	LS	\$ 40,000	\$ 40,000	Yes
5	Modeling Update	1	LS	\$ 25,000	\$ 25,000	Yes
6	Plat and Legal Description	1	LS	\$ 5,000	\$ 5,000	Yes
7	Biological Report	1	LS	\$ 2,000	\$ 2,000	Yes
8	Culture Resource/Section 106	1	LS	\$ 9,456	\$ 9,456	Yes
9	Construction Management	1	LS	\$ 532,000	\$ 532,000	Yes
10	City Costs	1	LS	\$ 25,000	\$ 25,000	Yes
SUBTOTAL					\$ 743,456	
SRF ELIGIBLE SUBTOTAL						\$ 743,456
PREMIUM FOR CONTRACTOR'S MARKET				0%	\$ -	
CONTINGENCY				10%	\$ 74,346	
SRF ELIGIBLE CONTINGENCY						\$ 74,346
TOTAL (rounded)					\$ 818,000	
SRF ELIGIBLE TOTAL (rounded)					\$ 818,000	
NON-ELIGIBLE TOTAL (rounded)						\$ -
Pipeline System						
See Page 1 for Details		TOTAL (rounded)			\$ 5,310,000	
		SRF ELIGIBLE TOTAL (rounded)			\$ 5,310,000	
		NON-ELIGIBLE TOTAL (rounded)				\$ -
Required Equipment Installations by City of Davis						
See Page 1 for Details		TOTAL (rounded)			\$ 1,660,600	
		SRF ELIGIBLE TOTAL (rounded)			\$ 1,660,600	
		NON-ELIGIBLE TOTAL (rounded)				\$ -
Well Site Decommissioning						
See Page 2 for Details		TOTAL (rounded)			\$ 347,000	
		SRF ELIGIBLE TOTAL (rounded)			\$ 347,000	
		NON-ELIGIBLE TOTAL (rounded)				\$ -
Total Project Costs						
TOTAL (rounded)					\$ 8,135,600	
SRF ELIGIBLE TOTAL (rounded)					\$ 8,135,600	
NON-ELIGIBLE TOTAL (rounded)						\$ -