

## INTEGRATED PIPELINE PROJECT QUARTERLY EXECUTIVE SUMMARY

June 2021



#### **IPL PROGRAM MANAGEMENT**

Tarrant Regional Water District 804 East Northside Drive Fort Worth, TX 76102 817.720.4469 p 817.720.4397 f iplproject.com @IPL\_Project WATER UTILITIES (DWU) have partnered to finance, plan, design, construct and operate the Integrated Pipeline (IPL) Project. The IPL Project is an integrated water delivery transmission system connecting Lake Palestine to Lake Benbrook with connections to Cedar Creek and Richland-Chambers Reservoirs integrating TRWD's existing pipelines and creating flexibility in delivery as well as quick response to fluctuating customer water demands. The IPL Project consists of 150 miles of pipeline, three new lake pump stations, and three new booster pump stations delivering a required capacity of 350 million gallons per day (MGD) of raw water to North Central Texas. TRWD and DWU currently serve over 4.1 million residents and the IPL will allow these agencies to continue supporting regional community and economic growth.

TARRANT REGIONAL WATER DISTRICT (TRWD) and the CITY OF DALLAS

### **PROGRAM SUPPORT SERVICES**

through 06.30.2021

CONTRACT DESIGN AND CONSTRUCTION	DESCRIPTION	BUDGET	CONTRACTS ISSUED	TOTAL INVOICED
PROGRAM WIDE PROFESSIONAL SERVI	CES	\$133,062,000	\$87,563,707	\$85,550,404
Program Management	Overall program management services for implementation	\$45,000,000	\$35,124,711	\$35,124,711
Conceptual Design / Environmental /	of the IPL Project. (Extension of TRWD staff) Operations plan & Prepare 404 permit application,	\$13,551,000	\$13,248,701	\$13,248,699
Permitting Value Engineering	Envision Application Completion Expert review of design	\$640,000	\$472,248	\$13,240,053
Surveying and Mapping	Control, property survey, legal descriptions, and Provide	\$14,600,000	\$11,854,389	\$10,955,362
Geotechnical	SUE Level A Survey, GIS Initial Characterization of entire IPL Project	\$12,037,000	\$12,026,275	\$12,026,276
Corrosion Engineering Services	Engineering Corrosion Control	\$3,891,000	\$5,326,362	\$4,704,514
Land, Easement Acquisition, & Support	Right of Entry and Land Acquisition Support Services	\$33,993,000	\$3,464,526	\$3,433,832
Studies	hight of Entry and Eand Acquisition Support Scruces	\$3,500,000	\$3,683,743	\$3,587,585
SCADA System	Engineering of SCADA system	\$640,000	\$0	\$3,507,58
Microwave System	Engineering of Communications System	\$5,210,000	\$2,362,752	\$1,997,177
•				
DESIGN & CONSTRUCTION ADMINISTR		\$201,714,000	\$178,201,934	\$145,010,603
Completed		\$122,733,000	\$103,809,850	\$102,756,117
Active		\$23,326,000	\$52,722,524	\$41,084,375
CH2M Hill	Project Operational Information and Operations Manual		\$6,479,844	\$5,497,925
CH2M Hill	Final Conformance of Design of JCC1	\$728,000	\$9,288,681	\$7,778,10
MWH	Final Conformance of Design of Section 9/10/11	\$506,000	\$1,307,780	\$1,025,773
Black & Veatch	Engineering during Construction of Section 10/11		\$810,000	\$470,99
Black & Veatch	Final Design of Section 12/13/14	\$11,292,000	\$12,338,807	\$12,278,729
Parsons	Final Design of Sections 17/18/Tunnel		\$0	\$0
Brown & Gay	Final Design of Section 19-1	\$5,770,000	\$8,130,200	\$3,952,397
HDR	Final Design of Section 19-2	\$5,030,000	\$8,358,000	\$5,938,879
Burns & McDonnell Trans. Mgmt.	Development of Transportation Management Plan		\$905,203	\$866,643
Burns & McDonnell	High Voltage Design		\$2,578,809	\$2,494,934
Burns & McDonnell	Section 19 Transportation Management Planning		\$690,000	\$92,190
Burns & McDonnell	Final Design of LP1		\$1,063,600	\$6,188
Furgo Consultants, Inc.	Section 19 Tunnel Geotechnical Testing		\$771,600	\$681,621
IPL Partners	Section 19 Tunnel Crossing		\$21,033,560	\$764,060
CH2M Hill	Lake Palestine Interim Stage		\$636,000	\$406,051
Remaining		\$55,655,000		
CONSTRUCTION / OWNER FURNISHED	EQUIPMENT	\$1,729,540,000	\$715,327,756	\$701,754,870
Completed		\$346,119,000	\$212,008,947	\$211,833,088
Active		\$875,818,000	\$503,318,809	\$489,921,782
JB3		\$83,013,000		\$73,949,545
			\$75,779,477	
MWH Constructors	Construction of JB3 Pump Station	\$51,473,000	\$57,995,805	\$59,398,603
Oncor Electric	Installation of JB3 Substation Transmission Lines	\$1,066,000	\$957,119	\$923,119
Isolux Corsan	Construction of JB3 Substation	\$7,400,000	\$4,864,888	\$4,864,888
R E Monks	Construction of JB3R Restoration	\$0	\$675,782	\$675,782
Pentair Flow Technologies	Construction of JB3 Pumps, Motors, Drives	\$23,074,000	\$11,285,883	\$8,087,153
Pipeline Section 12/13/MBR/JB4 Bypass		\$167,992,000	\$153,555,744	\$153,532,318
Thalle Midlothian	Construction of Sections 12/13/MBR/JB4 Bypass	\$146,310,000	\$143,253,968	\$143,230,542
BAR Constructors	Construction of Richland-Chambers/Cedar Creek	\$21,682,000	\$10,177,546	\$10,177,546
	Interconnection Facility	<i>721,002,000</i>		
Hilco Electric	Relocation of Electrical Service Lines		\$0	\$(
Hilco Electric	MBR Radio Tower Power		\$33,312	\$33,312
Oncor Electric	Provide Power to IPL 2X12		\$90,918	\$90,918

#### CONTRACT DESIGN AND DESCRIPTION CONSTRUCTION Construction of Section 17 Tunnel Thalle Midlothian Construction of Sections 17/18/JB2 Byr **CAS** Consulting Design 17, 19 Tunnels Construction of JCC1 Intake **BAR Constructors BAR Constructors** Intake Facility & OFE Installation Packa Construction of JCC1 Pumps, Motors, D Lambda Construction High Voltage **Oncor Electric** Construction of JCC1 HV Transmission Shermco Industries. Inc. JCC1 and JCC1HV Electrical Testing Ser Construction of Section 10/11 Construction of KBR S1X10 HV Transm **BAR Constructors** Construction of KBR S1X10 Valve Package 1 - Section 15-1 Butterfly **Garney Construction** Valve Package 2 - Section 15-1 Intercor Valves Valve Package 3 - JB3, Section 15-2, ME **Blackhall Engineering** Valves Valve Package 4 - Section 12 RC/CC Interc **Crispin Valves** Bypass, MBR Yard Butterfly Valves **Crispin Valves** Valve Package 5 - JB3 Butterfly Valves Valve Package 6 - Section 12 RC/CC Inte Multi-Orifice Valves Valve Package 8 - Section 10 & 11 Bypa **Crispin Valves** Valves Blackhall Engineering Valve Package 11 - JCC1 Gate Valve CONSTRUCTION MANAGEMENT CONSTRUCTION MATERIALS TESTING

LAND COST	
PROGRAM LEVEL CONTING	ENCY
MISCELLANEOUS	
GRAND TOTAL	
REMAINING BOND FUNDS	
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IPL Partners

Ebara

IPL Partners

**Oncor Electric** 

**Rodney Hunt** 

**Ross Valves** 

Remaining

ROCIP

Note: Total Bonds issued to date \$1,500,000,000

# **PROGRAM SUPPORT SERVICES**

through 06.30.2021

	BUDGET	CONTRACTS ISSUED	TOTAL INVOICED
	\$109,944,000	\$94,295,830	\$92,017,720
	\$12,252,000	\$48,500,000	\$48,117,485
rpass	\$97,692,000	\$45,795,830	\$43,900,235
	4405 F02 000	\$3,341,651	\$138,365
	\$106,582,000	\$105,875,879	\$100,300,504
	\$21,564,000	\$18,960,214	\$18,960,214
age 2	\$63,900,000	\$63,690,600	\$59,431,455
Drives	\$17,775,000	\$12,694,890	\$11,680,768
		\$5,773,925	\$5,471,817
n Lines	\$3,343,000	\$4,756,250	\$4,756,250
rvices		\$618,000	\$480,593
	\$73,679,000	\$55,545,934	\$55,545,325
	\$72,362,000	\$42,022,945	\$42,022,337
nission Lines		\$17,452	\$17,452
	\$1,317,000	\$13,505,537	\$13,505,536
	\$15,166,000	\$14,306,294	\$13,957,412
ly Valves	\$518,000	\$0	\$0
nnection Facility	\$474,000	\$733,206	\$733,206
BR Yard Gate	\$5,500,000	\$6,278,388	\$6,228,595
connection, JB4	\$3,999,000	\$2,269,140	\$2,191,128
	\$1,249,000	\$1,249,222	\$1,175,870
terconnection	\$715,000	\$526,340	\$478,838
ass Butterfly	\$1,391,000	\$1,461,040	\$1,393,968
	\$1,320,000	\$1,788,958	\$1,755,807
	\$507,603,000		
	\$65,170,000	\$59,634,680	\$53,172,907
	\$15,777,000	\$15,747,552	\$15,747,553
	\$17,665,000	\$43,887,128	\$37,425,354
	\$31,728,000		
	\$17,296,000	\$13,075,847	\$10,576,071
	\$203,000	\$225,133	\$225,132
	\$7,791,000	\$12,850,714	\$10,350,939
	\$9,302,000		
	\$2,575,000	\$42,013,560	\$23,117,815
	\$2,373,000	\$42,013,580	\$78,532,928
			<del>,778,552,5</del> 28
	\$83,178,000	\$2.002.205	\$2.002.205
	\$2,000,000	\$3,903,305	\$3,903,305
	\$2,341,919,000	\$1,178,253,718	\$1,101,618,904
			\$131,000,000

## **ACCOMPLISHMENTS**

through 06.30.2021

#### IPL PROGRAM GENERAL OPERATIONAL STATUS

The IPL System is currently able to deliver water from Richland Chambers Reservoir to the cross-connections with the existing Richland Chambers and Cedar Creek pipelines at the S2X12 Interconnect Facility near Joe Pool Lake and the future DWU connection point. The IPL System is also able to deliver water to the Arlington Outlet via the S1X10 Pressure Reduction Station, the KBR Bypass pipeline and the Line J Pipeline. Water can be delivered via the IPL system and the existing pipelines to the Rolling Hills Water Treatment Plant and to Lake Benbrook.

The IPL pipelines and facilities that have been completed to accomplish this delivery are:

• S5X15 Interconnect • Pipeline Sections

15-1 and 15-2

- JB3R Suction Reservoir
- JB3 Booster Pump Station • Pipeline Section 14
- Midlothian Balancing Reservoir
- Pipeline Sections 12 and 13 S2X12 Interconnect Facility

CURRENT PROJECT UPDATES

#### PL12, 13, MBR (Pipeline Sections 12 and 13 combined with the Midlothian Balancing Reservoir)

Project is complete and operational pending contract closeout.

#### JB3 (250mgd Pump Station expandable to 350mgd)

Project is complete and operational pending contract closeout.

#### PL17TUN (Trinity River Tunnel on Pipeline Section 17)

- Completed connection of the east and west tunnel pipe inside the access portal shaft.
- Began cellular grout backfill of the tunnel pipe connection in the access shaft
- Installed all but 75' of the concrete-encased open-cut pipe to the east tunnel portal.

#### JCC1 (Cedar Creek Lake Pump Station)

- Completed all roof and soffit work.
- Filled wet well from the lake
- Installed blank panels and T-screens.
- Completed VFD final checks.
- Commissioned and started up water wells and potable water storage tank.
- Received shipment of sodium hypochlorite for treatment of well water and salt for Brine tanks
- Started up water treatment plant for on-site sodium hypochlorite generation system
- Tested chillers for flow and temperature for pump motor testing.
- Installed containment wall around Brine tanks.

- Installed drilled piers for site light poles.
- Startup and checkout of onsite electrical generator.
- Continue working on deficiency list items.

#### PL10, 11 (Pipeline Sections 10 and 11 from the JB4 Pump Station to the KBR Pressure Reduction Facility)

• Pipeline Sections 10 and 11

• S1X10 Pressure Reduction

Station

• Project is complete and operational pending contract closeout.

#### PL17-18 (Pipeline Sections 17 and 18 from east end of PL15-1 to JCC1 Pump Station)

• Completing punchlist work items for Substantial and Final Completion.

#### PL19TX (Tunnels at TxDOT Roadway Crossings for Pipeline Sections 19-1 & 19-2)

- Completed tunnel excavation, liner plate, conduit and carriers pipe installation at Crossroads Dr
- Completed grouting the tunnel annular space at FM 753 and Crossroads Dr.
- Completed installation and backfill of open cut pipe at FM 753.
- Completed launch and receiving shaft excavation and began tunneling at FM 59.

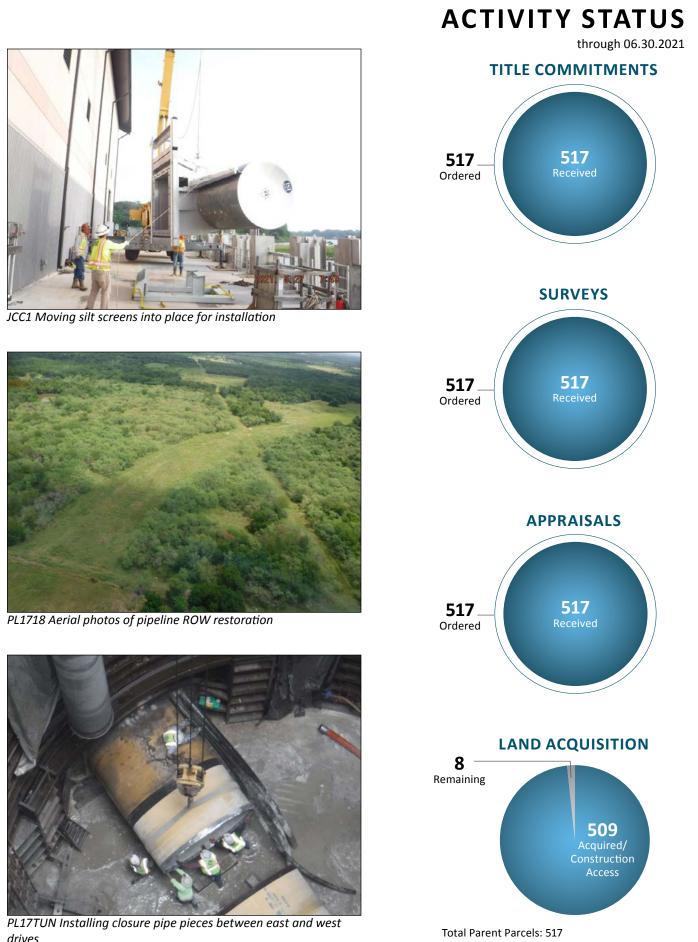
#### PL19TUN (Cedar Creek; SH 31; Hollywood Lake; SH 151/Frankston ISD Tunnels for Pipeline Sections 19-1 & 19-2)

- Finalized collaboration phase of prequalification procurement including review of various alternate technical concepts and contractor review of GDR / GBR
- Design team finalized Drawings, Specifications and Contract Documents.
- Advertised project for Competitive Sealed Proposals (IPL-CSP-21-001).

# **PROJECT SCHEDULE**

PROJECT COMPONENTS		2019			2020				2021			
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
SECTION 17 TUNNEL CONSTRUCTION												
JCC1 PUMP STATION INTAKE WET WELL CONSTRUCTION				SUBSTANTIALLY COMPLETE								
SECTION 17, 18 CONSTRUCTION				SUBSTAN								
				SUBSTAN								
JCC1 CONSTRUCTION												
PL19TX CONSTRUCTION												







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# M/WBE PARTICIPATION

through 06.30.2021

CONTRACT DESIGN	M/WBE & HUB SUB-	CONTRACT	ENT	M/WBE   HUB INVOICED TO DATE			TOTAL PROJECT COMPLETED TO DATE		
AND CONSTRUCTION	CONTRACTORS	\$	%	% \$ (PER COMMITMENT)	\$	%			
PROGRAM WIDE PROFESSIONAL S	ERVICES	\$20,396,220	23%	\$19,869,653	97%	\$85,550,404	98%		
Program Management		\$6,636,154	19%	\$6,636,689	100%	\$35,124,711	100%		
Conceptual Design / Environmental	/ Permitting	\$2,655,040	20%	\$2,827,565	106%	\$13,248,699	100%		
Value Engineering		\$23,187	5%	\$23,178	100%	\$472,248	100%		
Surveying and Mapping		\$3,939,250	33%	\$3,831,614	97%	\$10,955,362	92%		
Geotechnical		\$3,545,179	29%	\$3,545,034	100%	\$12,026,276	100%		
Corrosion Engineering Services		\$1,442,047	27%	\$764,939	53%	\$4,704,514	88%		
Land, Easement Acquisition, & Supp	port	\$1,294,859	37%	\$1,534,532	119%	\$3,433,832	99%		
Studies		\$41,738	1%	\$41,717	100%	\$3,587,585	97%		
SCADA System			#DIV/0!	\$0	0%	\$0	0%		
Microwave System		\$818,765	35%	\$664,385	81%	\$1,997,177	85%		
DESIGN		\$45,743,601	26%	\$38,374,947	84%	\$145,010,603	81%		
Completed		\$28,488,898	27%	\$28,481,341	100%	\$102,756,117	99%		
Active		\$10,946,375	21%	\$9,192,877	84%	\$40,304,376	76%		
CH2M Hill (Ops Manual)	NDM	\$1,063,512	16%	\$939,841	88%	\$5,497,925	85%		
CH2M Hill (JCC1)		\$2,322,170	25%		130%	\$7,778,101	84%		
	JQ, Gupta, APM, HVJ, XENCO			\$3,014,011					
MWH	Garzabury, Kevin Sloan	\$364,871	28%	\$221,636	61%	\$1,025,773	78%		
Black & Veatch	Texas Design	\$0	0%	\$2,100	0%	\$470,995	58%		
Black & Veatch	BDS, CAS, JQ, TME	\$3,056,716	25%	\$3,023,303	99%	\$12,278,729	100%		
Parsons	Criado, EPB, HVJ		#DIV/0!	\$0	0%	\$0	0%		
Brown & Gay	AZB, TME, Lamb-Star, NDM	\$2,032,550	25%	\$802,138	39%	\$3,952,397	49%		
HDR	AZB, Daltech, Word Wizards, Gupta	\$1,944,071	23%	\$1,068,350	55%	\$5,938,879	71%		
Burns & McDonnell Trans. Mgmt.	Lamb-Star Engineering	\$162,485	18%	\$121,498	75%	\$866,643	96%		
Burns & McDonnell	HVJ, JQ, Multatech	\$611,538	24%	\$542,454	89%	\$2,494,934	97%		
Burns & McDonnell	Lamb-Star Engineering, LLC, Transtec Group Inc.	\$172,500	25%	\$30,465	18%	\$92,190	13%		
Burns & McDonnell		\$265,900	25%	\$0	0%	\$6,188	1%		
Furgo Consultants, Inc.		\$0	0%	\$0	0%	\$681,621	88%		
IPL Partners	Section 19 Tunnel Crossing	\$5,258,390	25%	\$64,745	1%	\$764,060	4%		
CH2M Hill	Lake Palestine Interim Stage	\$0	0%	\$63,065	0%	\$406,051	64%		
Remaining	Ŭ	\$0	0%	\$0	0	\$0	0%		
CONSTRUCTION / OWNER FURNIS	HED FOUIPMENT	\$99,833,367	14%	\$176,846,168	177%	\$701,754,870	98%		
Completed		\$23,397,169	11%	\$38,680,042	165%	\$211,833,088	100%		
Active		\$76,436,198	33%	\$138,166,126	181%	\$489,921,782	97%		
JB3		\$15,258,538	26%	\$138,100,120	84%	\$489,921,782	98%		
MWH Constructors	Statewide, Cowboy, TX Enviro, Champion, Ram Tool, Rent-a-Fence, Soto Steel, A-Star, Ike, Greystone, LKT, Accurate, Green Scaping	\$13,808,801	27%	\$11,399,274	83%	\$59,398,603	102%		
Oncor Electric	Greystone, LKT, Atturate, Green Staping	\$1,449,737	2%	\$1,449,920	100%	\$4,864,888	8%		
Isolux Corsan	Dyna Grid	\$0	0%	\$0	0%	\$923,119	96%		
RE Monks		\$0	0%	\$0	0%	\$675,782	14%		
Pentair Flow Technologies		\$0 \$0	0%	\$0	0%	\$8,087,153	72%		

CONTRACT DESIGN	M/WBE & HUB SUB-	CONTRACT COMMITMI	ENT	M/WBE   H INVOICED 1		TOTAL PRO. COMPLETE DATE	
AND CONSTRUCTION	CONTRACTORS	\$	%	\$	% (PER COMMITMENT)	\$	%
Pipeline Section 12/13/MBR/JB4 Bypass		\$22,014,773	24%	\$22,270,126	101%	\$153,532,318	100%
Thalle Midlothian	LKT, Statewide, Granados, Desert Steel, ETTL, Glenko, A.N.A., Edwards, Buzz, Bradley- Douglas, Pinnacle	\$21,201,587	27%	\$16,449,588	78%	\$143,230,542	100%
BAR Constructors	Fraire's, DFW Aggregates, Ricochet, MMG, LKT, Brock, Garland Heating & Air, Texas Metal, Buzz, Rangel	\$813,186	8%	\$5,820,538	716%	\$10,177,546	100%
Hilco Electric		\$0	0%	\$0	0%	\$0	0%
Hilco Electric		\$0	0%	\$0	0%	\$33,312	100%
Oncor Electric		\$0	0%	\$0	0%	\$90,918	100%
Pipeline Section 17		\$15,151,597	23%	\$7,149,106	47%	\$92,017,720	98%
IPL Partners	LKT, Industry Junction, Eagle Aggregate, Suncoast Res, ATS Drilling, RECS, ANA, Alliance,Ram, JC Welding, Luis Moreno	\$9,733,950	23%	\$4,048,085	42%	\$48,117,485	99%
Thalle Midlothian	Fleet Lube, Rambo Controls, AE Trucking, MKI Construction, Stome Water Management, Industy Junction, Ortega Land Clearing	\$5,417,647	24%	\$3,101,021	57%	\$43,900,235	96%
CAS Consulting	Design 17, 19 Tunnels	\$0	0%	\$0	0%	\$138,365	4%
JCC1		\$17,080,697	19%	\$78,364,550	459%	\$100,300,504	95%
BAR Constructors	Industry Junction, K&A Steel, Ricochet Fuel, Ricochet Fuel, Tidy Toilets, Buzz Custom Fence	\$961,283	6%	\$18,008,980	1873%	\$18,960,214	100%
BAR Constructors	Industry Junction, K&A Steel, Ricochet Fuel, Ricochet Fuel, Tidy Toilets	\$14,011,932	23%	\$59,431,455	424%	\$59,431,455	93%
Ebara		\$0	0%	\$0	0%	\$11,680,768	202%
Lambda Construction	High Voltage	\$2,107,483	37%	\$924,115	44%	\$5,471,817	95%
Oncor Electric		\$0	0%	\$0	0%	\$4,756,250	100%
Shermco Industries, Inc.	JCC1 and JCC1HV Electrical Testing Services	\$0	0%	\$0	0%	\$480,593	78%
Pipeline Section 10/11		\$6,930,593	20%	\$17,533,150	253%	\$55,545,325	100%
IPL Partners	LKT, Industry Junction, Eagle Aggregate, Suncoast Res, ATS Drilling, RECS, ANA, Alliance,Ram, JC Welding, Luis Moreno	\$5,526,017	25%	\$4,027,614	73%	\$42,022,337	100%
Oncor Electric		\$0	0%	\$0	0%	\$17,452	100%
BAR Constructors	Industry Junction,VSG Trucking, Ricochet, MMG Disposal,Garland HVAC,CMC Rebar, Buzz Custum Fence, K&A Steel, Rangle Land Surveying	\$1,404,576	11%	\$13,505,536	962%	\$13,505,536	100%
Valve Packages		\$0	0%	\$0	0%	\$13,957,412	98%
CONSTRUCTION MANAGEMENT		\$18,034,362	30%	\$20,990,990	116%	\$53,172,907	89%
Completed		\$5,928,654	38%	\$5,954,412	100%	\$15,747,553	100%
Active		\$12,105,707	28%	\$15,036,578	124%	\$37,425,354	85%
CONSTRUCTION MATERIALS TEST	ING	\$6,610,909	51%	\$5,413,257	82%	\$10,576,071	81%
Completed Active		\$219,036 \$6,391,873	97% 50%	\$219,036 \$5,194,221	100% 81%	\$225,132 \$10,350,939	100% 81%
ROCIP		\$6,391,873	2%	\$5,194,221	41%	\$10,350,939	55%
TOTAL		\$191,519,171	23%	\$261,865,828	137%	\$1,019,182,670	93%
LAND COST		\$0	0%	\$61,892	0%	\$78,532,928	187%
MISCELLANEOUS		\$0	0%	\$0	0%	\$3,903,305	5%
GRAND TOTAL		\$191,519,171	23%*	\$261,927,720	137%	\$1,101,618,904	93%
* Denotes participation	percentage excluding cost of pip	e and owner		M/WBE/HUB Invo	iced	\$26	1,927,720
furnished equipment.	percentage excluding cost of pip			Grand Total Invoic	ed	\$1,101	1,618,904
jurnishcu equipment.				* Exclusions Invoid	ed	\$322	2,358,973
				MWBE %			33.6%

# M/WBE PARTICIPATION through 06.30.2021

## **PROJECT COMPONENTS**

PIPELINE SEGMENTS	DESCRIPTION	
Section 9	KBR Turn-Out Tee to existing Benbrook Connection Pipeline (10.6 mi. 84" dia. Pipe + 5 mi. 120" Tunnel)	
Section 10	KBR Turn-Out Tee to KBR (2.4 mi. 84" dia. Pipe)	
Section 11	JB4 to KBR Turn-Out Tee (10 mi. 84" dia. Pipe)	
Section 12	JB4 to existing CC and RC Pipelines (2.2 mi. 108" dia. Pipe)	
Section 13	MBR2 (Midlothian Balancing Reservoir) to JB4 (11 mi. 108" dia. Pipe)	
Section 14	JB3 to MBR2 (Midlothian Balancing Reservoir) (14.9 mi. 108" dia. Pipe)	
Section 15	JB2 to JB3 (28.5 mi 108" dia. Pipe)	
Section 16	JRC1 (Joint Richland Chambers Lake Pump Station) to JB2 (12.3 mi. 96" dia. Pipe)	
Section 17	Cedar Creek Connection to JB2 (11.2 mi. 108" dia. Pipe)	
Section 18	JCC1 (Joint Cedar Creek Lake Pump Station) to Cedar Creek Connection (0.2 mi. 108" dia. Pipe)	
Section 19	LP1 (Lake Palestine Pump Station) to Cedar Creek Connection (42.3 mi. 84" dia. Pipe)	

PUMP STATIONS	DESCRIPTION	
Palestine Pump Station	150 mgd with new intake	
Cedar Creek Pump Station	277 mgd with new intake	
Richland Chambers Pump Station	250 mgd Ultimate Design Capacity	
Booster Pump Stations	Two @ 347 mgd and one @ 197 mgd (♦ one 347 mgd station - JB3)	

SUPPORT FACILITIES	DESCRIPTION
Reservoirs	Three reservoirs ( $80 - 400 \text{ mgd}$ ) - two for booster pump stations and one for balancing. Two of the reservoirs are core projects – JB3R and MBR
Deep Tunnels	5 mi of 10' dia. tunnel @ Crowley (included in length of Section 9)
Substations & High Voltage Transmission Lines	Six substations and 4 mi. of high voltage transmission lines ( two substations)
Microwave Communications and SCADA System	Provides remote operations capability and system monitoring

