

INTEGRATED PIPELINE PROJECT

MONTHLY EXECUTIVE SUMMARY

January 2018



IPL PROGRAM MANAGEMENT

Tarrant Regional Water District 804 East Northside Drive Fort Worth, TX 76102 817.720.4469 p 817.720.4397 f

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@IPL_Project

TARRANT REGIONAL WATER DISTRICT (TRWD) and the CITY OF DALLAS
WATER LITTLES (DWLI) have partnered to finance, plan, design, construct

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.

PROGRAM SUPPORT SERVICES

as of 01.31.18

CONTRACT DESIGN AND CONSTRUCTION	DESCRIPTION	BUDGET	CONTRACTS ISSUED	TOTAL INVOICED
PROGRAM WIDE PROFESSIONAL SERVI	CES	\$133,062,000	\$88,965,790	\$84,725,519
Program Management	Overall program management services for implementation of the IPL Project. (Extension of TRWD staff)	\$45,000,000	\$35,124,711	\$35,124,711
Conceptual Design / Environmental / Permitting	Operations plan & Prepare 404 permit application, Envision Application Completion	\$13,551,000	\$13,472,389	\$13,212,164
Value Engineering	Expert review of design	\$640,000	\$472,248	\$472,248
Surveying and Mapping	Control, property survey, legal descriptions, and Provide SUE Level A Survey, GIS	\$14,600,000	\$11,854,388	\$10,519,602
Geotechnical	Initial Characterization of entire IPL Project	\$12,037,000	\$12,336,425	\$12,191,092
Corrosion Engineering Services	Engineering Corrosion Control	\$3,891,000	\$5,326,362	\$4,178,425
Land, Easement Acquisition, & Support	Right of Entry and Land Acquisition Support Services	\$33,993,000	\$3,464,526	\$3,424,068
Studies		\$3,500,000	\$3,883,743	\$3,587,584
SCADA System	Engineering of SCADA system	\$640,000	\$1,508,213	\$547,016
Microwave System	Engineering of Communications System	\$5,210,000	\$1,522,785	\$1,468,609
DESIGN		\$152,837,000	\$129,918,312	\$117,003,593
Completed		\$101,901,000	\$97,470,103	\$95,462,719
Active		\$24,158,000	\$31,909,793	\$21,540,874
CH2M Hill	Project Operational Information and Operations Manual		\$3,044,922	\$2,830,975
CH2M Hill	Final Conformance of Design of JCC1	\$728,000	\$2,861,718	\$1,924,723
MWH	Final Conformance of Design of Section 9/10/11	\$506,000	\$812,562	\$535,921
Black & Veatch	Final Design of Section 12/13/14 - 28.1 miles of 84 - inch and 108 - inch pipeline	\$11,292,000	\$9,712,410	\$9,680,582
Parsons	Final Conformance of Design of Sections 17/18/Tunnel	\$832,000	\$579,379	\$681,545
Brown & Gay	Final Design of Section 19-1	\$5,770,000	\$7,003,722	\$1,881,534
HDR	Final Design of Section 19-2	\$5,030,000	\$6,989,876	\$3,163,053
Burns & McDonnell Trans. Mgmt.	Development of Transportation Management Plan		\$905,203	\$842,540
Remaining		\$26,778,000	\$538,417	
CONSTRUCTION ADMINISTRATION		\$48,877,000	\$18,550,960	\$11,888,060
CONSTRUCTION / OWNER FURNISHED	EQUIPMENT	\$1,729,540,000	\$639,402,605	\$528,162,988
Completed		\$26,677,000	\$20,593,942	\$20,377,238
Active		\$811,918,000	\$618,808,663	\$507,785,750
Pipeline Section 15-1		\$115,112,000	\$94,701,185	\$93,461,134
Garney Construction	Construction of Section 15-1	\$115,112,000	\$94,701,185	\$93,461,134
JB3		\$83,013,000	\$74,849,137	\$60,296,682
MWH Constructors	Construction of JB3 Pump Station	\$51,473,000	\$57,357,594	\$47,672,068
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	\$383,653	\$383,653
Pentair Flow Technologies	Construction of JB3 Pumps, Motors, Drives	\$23,074,000	\$11,285,883	\$6,452,954
Pipeline Section 12/13/MBR/JB4 Bypass		\$167,992,000	\$154,186,421	\$149,574,990
Thalle Midlothian	Construction of Sections 12/13/MBR/JB4 Bypass	\$146,310,000	\$143,456,762	\$139,500,126
BAR Constructors	Construction of Richland-Chambers/Cedar Creek Interconnection Facility	\$21,682,000	\$10,605,429	\$9,950,635
Hilco Electric	Relocation of Electrical Service Lines		\$0	\$0
Hilco Electric	MBR Radio Tower Power		\$33,312	\$33,312
Oncor Electric	Provide Power to IPL 2X12		\$90,918	\$90,918

PROGRAM SUPPORT SERVICES

as of 01.31.18

CONTRACT DESIGN AND CONSTRUCTION	DESCRIPTION	BUDGET	CONTRACTS ISSUED	TOTAL INVOICED
Pipeline Section 15-2		\$97,217,000	\$53,376,119	\$50,098,20
BAR Constructors	Construction of Section 15-2	\$97,217,000	\$53,376,119	\$50,098,20
Pipeline Section 14		\$107,113,000	\$48,352,594	\$44,796,59
Garney Construction	Construction of Section 14	\$107,113,000	\$48,352,594	\$44,796,59
Pipeline Section 17		\$109,944,000	\$78,579,258	\$46,271,59
IPL Partners	Construction of Section 17 Tunnel	\$12,252,000	\$33,067,943	\$18,273,11
Thalle Midlothian	Construction of Sections 17/18/JB2 Bypass	\$97,692,000	\$45,511,315	\$27,998,47
CC1		\$42,682,000	\$43,343,769	\$11,770,91
BAR Constructors	Construction of JCC1 Intake	\$21,564,000	\$19,901,946	\$11,080,23
Ebara	Construction of JCC1 Pumps, Motors, Drives	\$17,775,000	\$12,694,890	\$603,74
Lambda Construction	High Voltage		\$5,476,000	\$86,93
Oncor Electric	Construction of JCC1 HV Transmission Lines	\$3,343,000	\$5,270,933	\$
Pipeline Section 10/11		\$73,679,000	\$57,113,886	\$40,788,82
IPL Partners	Construction of Section 10/11	\$72,362,000	\$43,398,742	\$37,990,74
Oncor Electric	Construction of KBR S1X10 HV Transmission Lines		\$17,452	\$17,45
BAR Constructors	Construction of KBR S1X10	\$1,317,000	\$13,697,691	\$2,780,63
Valve Packages		\$15,166,000	\$14,306,294	\$10,726,81
Garney Construction	Valve Package 1 - Section 15-1 Butterfly Valves	\$518,000	\$0	\$
Rodney Hunt	Valve Package 2 - Section 15-1 Interconnection Facility Valves	\$474,000	\$733,206	\$733,20
Blackhall Engineering	Valve Package 3 - JB3, Section 15-2, MBR Yard Gate Valves	\$5,500,000	\$6,278,388	\$5,792,84
Crispin Valves	Valve Package 4 - Section 12 RC/CC Interconnection, JB4 Bypass, MBR Yard Butterfly Valves	\$3,999,000	\$2,269,140	\$1,928,95
Crispin Valves	Valve Package 5 - JB3 Butterfly Valves	\$1,249,000	\$1,249,222	\$870,35
Ross Valves	Valve Package 6 - Section 12 RC/CC Interconnection Multi-Orifice Valves	\$715,000	\$526,340	\$352,00
Crispin Valves	Valve Package 8 - Section 10 & 11 Bypass Butterfly Valves	\$1,391,000	\$1,461,040	\$310,26
Blackhall Engineering	Valve Package 11 - JCC1 Gate Valve	\$1,320,000	\$1,788,958	\$739,18
Remaining		\$890,945,000		
CONSTRUCTION MANAGEMENT		\$65,170,000	\$45,397,801	\$32,210,38
Completed		\$15,777,000	\$15,687,599	\$15,687,59
Active		\$17,665,000	\$29,710,201	\$16,522,78
Remaining		\$31,728,000		
CONSTRUCTION MATERIALS TESTING		\$17,296,000	\$12,013,590	\$6,622,03
Completed		\$203,000	\$225,133	\$225,13
Active		\$7,791,000	\$11,788,457	\$6,396,90
Remaining		\$9,302,000		
ROCIP		\$2,575,000	\$23,351,087	\$18,832,90
AND COST		\$107,384,000	\$62,368,928	\$62,368,92
PROGRAM LEVEL CONTINGENCY		\$83,178,000		
MISCELLANEOUS		\$2,000,000	\$2,253,758	\$2,253,75
GRAND TOTAL		\$2,341,919,000	\$1,022,222,832	\$864,068,16
REMAINING BOND FUNDS				\$385,931,83

Note: Total Bonds issued to date \$1,250,000,000

ACCOMPLISHMENTS

through 02.28.18

PL15-1 (Pipeline Section 15-1 including the S5X15 Richland-Chambers Pipeline Interconnect Facility)

- Completing installation of ROW fencing H-Braces added by change order. · Continue working on Punchlist items.
- Completed ADA compliance work on West entrance door at \$5X15.

JB3RR (Pump Suction Reservoir Grading and Grassing Project)

· No additional work this month.

JB3RC2 (Repair soil cement and HDPE liner damage in Cell 2 of JB3R)

Work completed, final payment and contract closeout pending.

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

- Completing security fencing at MBR and ROW fencing and gates.
- Continue electrical panels and equipment at MBR valve vaults.
- Completed roofing at Control Building.
- Installing ribbon-curb and roadway flexbase around MBR site.

JB3 (250mgd Pump Station expandable to 350mgd)

- Installed disc packs on pumps/motors 4 and 5.
- VFD Technician updated programming in VFD PLC's.
- Terminating cables in Marshalling Cabinet located in Control Room.
- Epoxy grouted Pump Control Valve bases.
- Continued wiring to pump termination cabinets.
- Continued installation of YP-3 from Pump 1 suction header to Reservoir 2 outlet.
- Installed Drilled Piers and Pier Caps for Suction Piping supports.
- Continued installation of Roadways A and C.
- Continued Fire Suppression work in Data Center

PL15-2 (Pipeline Section15-2 that feeds the JB3 Reservoir)

- Continue electrical work at 108" Gate Valve facility and completed security fencing at the vault site.
- Installing HPU and pressure tested hydraulic piping for 108" Gate Valve.
- Continue ROW fences and gates, cable mat installations and cathodic protection test stations
- Installed reinforced concrete trench cap at Waxahachie Creek
- Continue installing permanent access driveways from County and TxDOT roadways

S2X12 (Interconnection Facility of IPL Phase 1 to existing Cedar Creek and Richland Chambers Pipelines)

- Completing correction of punch list items is in progress.
- Completing sprinkler and landscaping installation.

PL14 (Pipeline Section 14 that delivers water from JB3 Pump Station to MBR)

- Continue ROW restoration, fencing and gates, cathodic protection anode beds and test stations and cable mats.
- Repairing County and TXDOT roadways used as construction haul roads and installing permanent access drives.

PL17TUN (Trinity River Tunnel on Pipeline Section 17)

- Additional geotech work has been completed and report is being prepared.
- Installing well-point dewatering system for open-cut piping on east side of the
- · Prepared for and monitored Trinity River flooding during the last week of

JCC1IN (Intake Structure and Wet Well for JCC1 Pump Station at Cedar Creek)

- Completed concrete for all second level walls and belt beams and second level of
- Continued tying rebar for walls, beams and slabs.
- · Began shoring installation for top deck.

JCC1HV (High Voltage Substation for the JCC1 Pump Station at Cedar Creek)

- Work on sub-station pad was completed.
- Began drilled piers for sub-station equipment foundations.

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

- Completed Installing pipe for Section 11.
- Clean-up crew continues spreading and grading topsoil, installing permanent fences and gates on ROW.
- Placing manholes and ARV's.

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

- Installed 1,600 l.f. of 108" pipe and continue ROW cleanup behind pipelaying operation.
- Completed Key Ranch Rd. bypass repair.
- Installing vaults at ARVs and blowoffs.

KBRPRS / S1X10 (Pressure Reduction Station at Kennedale Balancing Reservoir connecting Pipeline Section 10)

- Completed placing concrete for all grade beams.
- Backfilled and placed concrete for seal slab between grade beam cells.
- Started installing formwork for foundation.
- Backfilled perimeter of grade beams.

OFE03 (Owner-Furnished 108" Gate Valves) GV#5 continues being factory tested.

OFE04/05 (Owner-Furnished 54", 60" and 108" Butterfly Valves)

· All valves have been delivered.

OFE06 (Owner-Furnished Multi-Orifice Valves for S2X12) • Valves delivered and installed, awaiting facility start-up.

OFE07 (Owner-Furnished pumps, motors and variable frequency drives for JB3)

• Pentair and Siemens Field Service Technicians on-site for installation assistance.

OFE08 (Owner-Furnished 66", 84" and 108" Butterfly Valves)

• Valves are in production.

OFE09 (Owner Furnished pumps, motors and variable frequency drives for JCC1)

No additional factory witness testing this month.

OFE11 (Owner-Furnished 108" Gate Valve) · Approved submittals received from Blackhall.

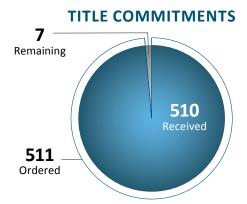
JB3 Pump Floor

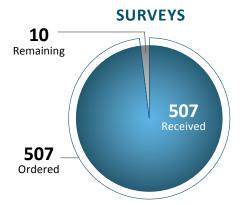


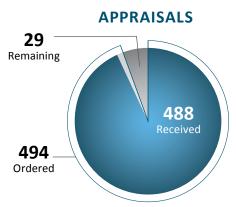
PL1213MBR Site Roads and 108-inch Gate Valve Silo

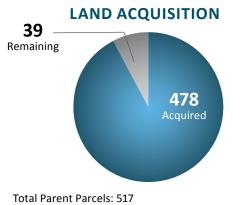
ACTIVITY STATUS

through 02.28.18









PROJECT SCHEDULE

PROJECT COMPONENTS		2014			2015			2016			2017				2018					
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
SECTION 15-1 CONSTRUCTION																				
SECTIONS 12, 13, MBR CONSTRUCTION																				
JB3 CONSTRUCTION																				
SECTION 15-2 CONSTRUCTION																				
SECTION 14 CONSTRUCTION												_		_	_					
S2X12 (INTERCONNECTION FACILITY) CONSTRUCTION																				
SECTION 17 TUNNEL CONSTRUCTION																				
JCC1 PUMP STATION INTAKE, WET WELL CONSTRUCTION																				
SECTION 10, 11 CONSTRUCTION																				
SECTION 17, 18 CONSTRUCTION																				
KBRPRS/S1X10 (PRESSURE REDUCTION STA.) CONSTRUCTION																				

M/WBE PARTICIPATION

as of 01.31.18

CONTRACT DESIGN	M/WBE & HUB SUB-	CONTRACT COMMITMI	ENT	M/WBE H INVOICED T		TOTAL PROJECT COMPLETED TO DATE		
AND CONSTRUCTION	CONTRACTORS	\$	%	\$	% (PER COMMITMENT)	\$	%	
PROGRAM WIDE PROFESSIONAL S	SERVICES	\$20,178,105	23%	\$19,672,044	97%	\$84,725,519	95%	
Program Management		\$6,636,687	19%	\$6,636,687	100%	\$35,124,711	100%	
Conceptual Design / Environmenta	I / Permitting	\$2,700,278	20%	\$2,824,753	105%	\$13,212,164	98%	
Value Engineering		\$23,178	5%	\$23,178	100%	\$472,248	100%	
Surveying and Mapping		\$3,939,403	33%	\$3,831,616	97%	\$10,519,602	89%	
Geotechnical		\$3,638,078	29%	\$3,545,033	97%	\$12,191,092	99%	
Corrosion Engineering Services		\$1,053,764	20%	\$761,434	72%	\$4,178,425	78%	
Land, Easement Acquisition, & Supp	port	\$1,294,837	37%	\$1,524,768	118%	\$3,424,068	99%	
Studies		\$41,717	1%	\$41,717	100%	\$3,587,584	92%	
SCADA System		\$384,444	25%	\$33,205	9%	\$547,016	36%	
Microwave System		\$465,719	31%	\$449,653	97%	\$1,468,609	96%	
DESIGN		\$34,217,533	26%	\$31,410,882	92%	\$117,003,593	90%	
Completed		\$26,558,396	27%	\$26,217,128	99%	\$95,462,719	98%	
Active		\$7,659,137	24%	\$5,193,754	68%	\$21,540,874	68%	
CH2M Hill (Ops Manual)	NDM	\$479,674	16%	\$486,259	101%	\$2,830,975	93%	
CH2M Hill (JCC1)	JQ, Gupta, APM, HVJ, XENCO	\$721,484	25%	\$642,459	89%	\$1,924,723	67%	
MWH	Garzabury, Kevin Sloan	\$226,705	28%	\$136,372	60%	\$535,921	66%	
Black & Veatch			25%	\$2,583,711	107%	\$9,680,582	100%	
Parsons	Criado, EPB, HVJ	\$144,845	25%	\$112,357	78%	\$681,545	118%	
Brown & Gay	AZB, TME, Lamb-Star, NDM	\$1,750,930	25%	\$477,623	27%	\$1,881,534	27%	
HDR	AZB, Daltech, Word Wizards, Gupta	\$1,747,469	25%	\$639,501	37%	\$3,163,053	45%	
Burns & McDonnell Trans. Mgmt.	Lamb-Star Engineering	\$162,500	18%	\$115,472	71%	\$842,540	93%	
Remaining					0			
CONSTRUCTION ADMINISTRATIO	N	\$4,533,900	24%	\$2,706,903	60%	\$11,888,060	64%	
CONSTRUCTION / OWNER FURNIS	SHED EQUIPMENT	\$83,230,117	13%	\$87,447,312	105%	\$528,162,988	83%	
Completed		\$4,217,818	21%	\$4,091,050	97%	\$20,377,238	99%	
Active		\$79,012,299	23%	\$83,356,262	105%	\$507,785,750	82%	
Pipeline Section 15-1		\$9,418,137	28%	\$6,649,736	71%	\$93,461,134	99%	
Garney Construction	Danridge, SYB, Ricochet, Glenko, Carrasco, Cowboy, Gorrondona, Custom Fence, LKT, Astro Johnny, Pam, Father & Son, Bowden's Erosion	\$9,418,137	28%	\$6,649,736	71%	\$93,461,134	99%	
JB3		\$15,108,772	26%	\$10,143,033	67%	\$60,296,682	81%	
MWH Constructors	Statewide, Cowboy, TX Enviro, Champion, Ram Tool, Rent-a-Fence, Soto Steel, A-Star, Ike, Greystone, LKT, Accurate, Green Scaping	\$13,658,852	27%	\$8,693,113	64%	\$47,672,068	83%	
Oncor Electric		\$1,449,920	3%	\$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%	\$383,653	8%	

\$0 0%

\$0

\$6,452,954 57%

M/WBE PARTICIPATION

CONTRACT DESIGN	M/WBE & HUB SUB-	CONTRACT COMMITME	ENT	M/WBE H INVOICED T		TOTAL PROJECT COMPLETED TO DATE		
AND CONSTRUCTION	CONTRACTORS	\$	%	\$	% (PER COMMITMENT)	\$	%	
Pipeline Section 12/13/MBR/JB4 By	\$22,084,670	24%	\$22,010,558	100%	\$149,574,990	979		
Thalle Midlothian	LKT, Statewide, Granados, Desert Steel, ETTL, Glenko, A.N.A., Edwards, Buzz, Bradley- Douglas, Pinnacle	\$21,237,366	27%	\$16,416,932	77%	\$139,500,126	97%	
BAR Constructors	Fraire's, DFW Aggregates, Ricochet, MMG, LKT, Brock, Garland Heating & Air, Texas Metal, Buzz, Rangel	\$847,304	8%	\$5,593,626	660%	\$9,950,635	94	
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 15-2		\$4,152,112	15%	\$20,335,950	490%	\$50,098,208	949	
BAR Constructors	Ricochet, Fraire's, DFW Aggregates, Brock, Tidy Toilets, KDAT, Juan Cantu, Buyer's, RAM, Rangel, LKT, Greenscaping, Environmental Safety	\$4,152,112	15%	\$20,335,950	490%	\$50,098,208	94%	
Pipeline Section 14	Salety	\$6,085,532	22%	\$6,823,492	112%	\$44,796,590	939	
Garney Construction	AEA, Gorrondona, JC Welding, LKT, Statewide, Bowdens	\$6,085,532	22%	\$6,823,492	112%	\$44,796,590	939	
Pipeline Section 17	Statewise, Bowdens	\$12,021,917	24%	\$1,935,786	16%	\$46,271,591	59	
IPL Partners	LKT, Industry Junction, Eagle Aggregate, Suncoast Res, ATS Drilling, RECS, ANA, Alliance,Ram, JC Welding, Luis Moreno	\$6,638,370	24%	\$1,625,741	24%	\$18,273,114	55	
Thalle Midlothian	Fleet Lube, Rambo Controls, AE Trucking, MKI Construction, Stome Water Management, Industy Junction, Ortega Land Clearing	\$5,383,547	25%	\$310,046	6%	\$27,998,477	62	
JCC1		\$3,008,511	11%	\$10,178,984	338%	\$11,770,917	27	
BAR Constructors	Industry Junction, K&A Steel, Ricochet Fuel, Ricochet Fuel, Tidy Toilets, Buzz Custom Fence	\$1,009,771	6%	\$10,164,673	1007%	\$11,080,236	56	
Ebara		\$0	0%	\$0	0%	\$603,745	119	
Lambda Construction	High Voltage	\$1,998,740	37%	\$14,311	1%	\$86,937	2	
Oncor Electric		\$0	0%	\$0	0%	\$0	0	
Pipeline Section 10/11		\$7,132,648	20%	\$5,278,722	74%	\$40,788,827	71	
IPL Partners	LKT, Industry Junction, Eagle Aggregate, Suncoast Res, ATS Drilling, RECS, ANA,	\$5,706,391	24%	\$2,498,090	44%	\$37,990,742	88	
Oncor Electric	Alliance,Ram, JC Welding, Luis Moreno	\$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	\$1,426,257	11%	\$2,780,632	195%	\$2,780,632	209	
Valve Packages	, ,	\$0	0%	\$0	0%	\$10,726,810	75	
CONSTRUCTION MANAGEMENT		\$18,613,185	41%	\$13,034,323	70%	\$32,210,381	71	
Completed		\$5,928,804	38%	\$5,954,412	100%	\$15,687,599	100	
Active		\$12,684,381	43%	\$7,079,911	56%	\$16,522,782	56	
CONSTRUCTION MATERIALS TEST	ING	\$7,226,826	60%	\$3,313,514	46%	\$6,622,036	5	
Completed		\$219,036	97%	\$219,036	100%	\$225,132	100	
Active		\$7,007,790	59%	\$3,094,478	44%	\$6,396,903	5	
ROCIP		\$1,499,307	6%	\$296,992	20%	\$18,832,904	8	
TOTAL		\$169,498,972	25%	\$157,881,969	93%	\$799,445,482	8	
LAND COST		\$0	0%	\$61,892	0%	\$62,368,928	26	
MISCELLANEOUS		\$0	0%	\$0	0%	\$2,253,758		
GRAND TOTAL		\$169,498,972	25%*	\$157,943,861	93%	\$864,068,168	8	
	percentage excluding cost of pip			M/WBE/HUB Invoi	iced	\$157	7,943,8	

furnished equipment.

Pentair Flow Technologies

PROJECT COMPONENTS

PIPELINE SEGMENTS	CORE PROJECT	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	CORE PROJECT	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	CORE PROJECT	DESCRIPTION
Reservoirs	•	Three reservoirs (80 – 400 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

