



INTEGRATED PIPELINE PROJECT QUARTERLY EXECUTIVE SUMMARY

June 2024



LP1IN Aerial View of the Pump Station

IPL PROGRAM MANAGEMENT

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

ACCOMPLISHMENTS

through 06.30.2024

GENERAL IPL PROGRAM OPERATIONAL STATUS

With the completion of all construction in Phase 1 and Phase 2 of the IPL Program, TRWD has now added redundancy and flexibility, as well as a new independent water supply source from Cedar Creek Reservoir.

As a standalone system, the new JCC1 Pump Station, together with the new IPL pipelines, reservoirs, booster pump station, interconnect facilities and pressure reduction station, has added 210 mgd capacity to TRWD's water supply capability all the way to the Arlington Outlet.

In addition to acting independently, the water from JCC1 can connect to the existing Richland Chambers pipeline at the S5X15 Interconnect facility, and to both the Richland Chambers and Cedar Creek pipelines at the S2X12 Interconnect facility and the S1X10 Pressure Reduction facility.

The construction projects that are now complete and fully operational are:

- S5X15 Interconnect
- Pipeline Sections 15-1 and 15-2
- JB3R Suction Reservoir
- JB3 Booster Pump Station with Electrical Substation
- Pipeline Section 14
- Midlothian Balancing Reservoir
- Pipeline Sections 12 and 13
- S2X12 Interconnect Facility
- Pipeline Sections 10 and 11
- S1X10 Pressure Reduction Station
- JCC1 Pump Station with Electrical Substation
- Pipeline Sections 17 and 18
- Pipeline Section 17 Trinity River Tunnel

CURRENT PROJECT UPDATES

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

- Open Cut
 - Open Cut Pipe Installation – 26,455ft out of 31,070 complete – 85% complete
 - Continued welding joints, all welds have passed inspection – 87% complete
 - ROW Topsoil Replacement – 27,000LF out of 31,070LF complete – 87% complete
 - Grouting Joints – 27,001LF of 31,052LF – 87% complete
 - Continued receiving OC pipe – 27,851LF of 31,070LF delivered – 90% complete
- Cedar Creek Tunnel
 - Tunnel completed, 5,040ft total – 100% complete
 - Fiber Optic and Cathodic Protection conduits installed – 100% complete
 - Dewatering system installed and operated at BOV shaft, BOV excavation ongoing 90% complete
 - Successfully complete tunnel pipe installation mock up.
 - TBM and support equipment mobilized to Hollywood Lake Site
- Royal Blvd
 - Tunnel Completed, 787ft total – 100% Complete
 - Completed installation of the Fiber Optic and Cathodic Protection conduits
 - Completed installation of all tunnel pipe
 - Preparing to grout annular space
- Hollywood Lake Tunnel
 - Launched TBM on 3/11/2024 and mined 3,774ft of tunnel – 65% complete
 - Excavation of the retrieval shaft ongoing – 90% complete

- Completed installation of the dewatering system at the BOV and Retrieval Shaft
- Stream A
 - Tunnel Completed, 191ft total – 100% Complete
 - Completed installation of the Fiber Optic and Cathodic Protection conduits
 - Completed installation of all tunnel pipe
 - Completed annular grouting of the tunnel
- SH 155
 - Tunnel Completed, 810ft total – 100% Complete
 - Completed installation of the Fiber Optic and Cathodic Protection conduits
 - Began installation of tunnel pipe – 70% complete.

LP1 INTAKE (Intake Structure and Channel for Lake Palestine Pump Station)

- Began drilling piers at the Pump Station
- Completed drilling/setting/grouting all five pump can liners
- Began haul off of rock from Pump Station excavation
- Continuing to extend turbidity curtain as needed for dredging activities
- Continuing to marine dredge the Pump Station intake channel
 - Sediment Removal - 40,842 CY out of 55,620 CY – 73% complete
 - Rock Removal – 219 CY out of 10,845 CY – 2% complete
- Dredged material continues to be hauled to drying bed area where it is rotated to be dried out in preparation of being hauled off site.

PL192A (Section of 84" Pipe between Lake Palestine Pump Station and PL19TUN Project)

- BAR Constructors awarded the PL192A contract

DESIGN AND PROCUREMENT

- LP1 HV – Design Engineer submitted 90% Drawings and Specifications for review.
- LP1 PS – Design Engineer coordinating with major equipment manufacturers to finalize project specifications.
- PL192B – OPT Team coordinating with contractors for MTBM projects.
- PL191 – Design Engineer submitted pre-final Drawings for review.



PL19TUN Royal Blvd Tunnel Pipe Installation

PROJECT SCHEDULE

PROJECT COMPONENTS	2023				2024				2025				2026			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
PL19TUN CONSTRUCTION	[Gantt bar showing completion through Q4 2024]															
LP1 INTAKE CONSTRUCTION	[Gantt bar showing completion through Q3 2025]															
PL192A CONSTRUCTION	[Gantt bar showing completion through Q4 2025]															

FINANCIALS

through 06.30.2024

Projects	Contractors Prime	Contract Price	Materials Exclusions	M/WBE Available Contract Value	M/WBE Completed Value	Completed %
Construction: Active and Completed		\$1,061,583,457	\$368,361,690	\$693,221,768	\$174,181,931	25.13%
Active-Construction		\$275,381,132	\$65,528,680	\$209,852,452	\$30,386,069	14.48%
Section 19 Long Tunnel Crossings	TRAYLOR SUNDT JOINT VENTURE	\$221,404,672	\$63,735,680	\$157,668,992	\$23,126,928	14.67%
Lake Palestine PS LP1IN Package 1	BAR CONSTRUCTORS INC	\$53,976,460	\$1,793,000	\$52,183,460	\$7,259,141	13.91%
Section 192 Part A Open Cut Pipe Installation	BAR CONSTRUCTORS INC	\$73,894,961	\$28,000,000	\$45,894,961	-	0.00%
Lake Palestine PS HV 138 KV FEA / Transmission	ONCOR ELECTRIC DELIVERY COMPANY LLC	\$21,500,000	\$21,500,000	-	-	0%
Completed-Construction		\$674,037,629	\$246,031,510	\$428,006,119	\$141,307,353	33.02%
Design Active and Completed		\$223,922,181	-	\$223,922,181	\$52,191,861	23.31%
Active Design		\$26,807,121	-	\$26,807,121	\$3,434,989	12.81%
Section 19.01	BROWN & GAY ENGINEERS INC	\$3,943,153	-	\$3,943,153	\$603,490	15%
Section 19.02	HDR ENGINEERING INC	\$5,950,376	-	\$5,950,376	\$1,038,936	17%
Section 19.02	HDR ENGINEERING INC	\$3,411,148	-	\$3,411,148	-	0%
LP1 IN Package 1 & Package 2	CH2M HILL ENGINEERS INC	\$5,194,000	-	\$5,194,000	\$688,588	13%
Operation Manual	CH2M HILL ENGINEERS INC	\$3,044,922	-	\$3,044,922	\$486,259	16%
Operation Manual Phase 2	CH2M HILL ENGINEERS INC	\$3,434,922	-	\$3,434,922	\$475,700	14%
High Voltage	BURNS & MCDONNELL ENGINEERING	\$1,063,600	-	\$1,063,600	\$114,599	11%
Section 19 Transportation Management Plan	BURNS & MCDONNELL ENGINEERING	\$690,000	-	\$690,000	\$18,282	3%
Section 19 Long Tunnel	PARSONS WATER & INFRASTRUCTURE	\$75,000	-	\$75,000	\$9,135	12%
JRC1 SITE EVALUATION	CH2M HILL ENGINEERS INC	\$825,000	-	\$825,000	-	0%
JRC1 SURVEY	AECOM TECHNICAL SERVICES INC	\$100,000	-	\$100,000	-	0%
Completed Design		\$196,327,060	-	\$196,327,060	\$48,792,963	24.85%
Active and Completed: Rolling Owner Controlled Insurance Program		\$28,276,855	\$25,440,017	\$2,836,838	\$381,127	13.43%
Active-Rolling Owner Controlled Insurance Program		\$10,166,476	\$9,467,589	\$698,887	-	0.00%
ROCIP Ph 3 Admin Broker	WILLIS TOWERS WATSON INSURANCE	\$698,887	-	\$698,887	-	0%
Security Obligations		\$9,467,589	\$9,467,589	-	-	0%
Completed ROCIP-Rolling Owner Controlled Insurance Program		\$18,110,379	\$15,972,428	\$2,137,951	\$381,127	17.83%
Active and Completed : Construction and Program Management Support Service		\$114,918,171	-	\$114,918,171	\$36,407,826	31.68%
Active-Construction and Program Management Support Service		\$24,269,755	-	\$24,269,755	\$6,765,858	27.88%
Program Management Support	PLUS SIX ENGINEERING LLC	\$11,933,000	-	\$11,933,000	\$3,468,171	29%
Program Management Support	FREESE & NICHOLS, INC.	\$7,395,236	-	\$7,395,236	\$142,365	2%
Program Management Support	AECOM TECHNICAL SERVICES INC	\$1,839,244	-	\$1,839,244	-	0%
Resident Project Representation	CAS CONSULTING & SERVICES INC	\$3,102,275	-	\$3,102,275	\$3,155,322	101.71%
JRC1 Environmental	FREESE & NICHOLS, INC.	\$171,500	-	\$171,500	-	0%
JRC1 Program Management Support	PLUS SIX ENGINEERING LLC	\$90,000	-	\$90,000	-	0%
Completed-Construction and Program Management Support Service		\$97,639,413	-	\$97,639,413	\$36,883,770	37.78%
Construction Materials Inspection and Testing-CMIT		\$15,389,465	-	\$15,389,465	\$6,929,403	45.03%
Active-Construction Materials Inspection and Testing-CMIT		\$2,464,098	-	\$2,464,098	\$1,209,653	49.09%
PL19 Long Tunnel Crossings CMIT	ACCURATE INSPECTIONS INC	\$717,000	-	\$717,000	\$353,006	49%
PL19 Long Tunnel Crossings CMIT	STEEL INSPECTORS OF TEXAS INC	\$375,000	-	\$375,000	\$38,095	10%
PL19 Long Tunnel Crossings CMIT	ETTL ENGINEERS AND CONSULTANTS INC	\$800,000	-	\$800,000	\$377,436	47%
PL19 TXDOT CMIT	ACCURATE INSPECTIONS INC	\$196,420	-	\$196,420	\$187,776	96%
PL19 TXDOT CMIT	STEEL INSPECTORS OF TEXAS INC	\$144,760	-	\$144,760	\$39,186	27%
PL19 TXDOT CMIT	ETTL ENGINEERS AND CONSULTANTS INC	\$230,918	-	\$230,918	\$214,153	93%
LP1IN Package 1	ALLIANCE GEOTECHNICAL GROUP	\$879,703	-	\$879,703	\$104,764	12%
Completed-Construction Materials Inspection and Testing-CMIT		\$10,384,626	-	\$10,384,626	\$5,614,986	54.07%
Owner Furnished Equipment		\$37,687,293	\$37,687,293	-	\$0	0.00%
Study and Research		\$3,439,003	\$254,473	\$3,184,530	-	0.00%
Legal/Right of Entry/Land Acquisition/Administration		\$218,347,164	\$214,886,756	\$3,460,408	\$1,297,774	37.50%
GRAND TOTAL		\$1,710,953,087	\$646,630,229	\$1,064,322,858	\$278,667,815	26.18%

Note: Excludes costs for pipe, owner-furnished equipment, purchased materials, legal fees, land acquisition and appraisal, power utility, and administrative costs.

PROJECT COMPONENTS

PIPELINE SEGMENTS

- **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:

- **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 (S one 347 mgd station - JB3)

SUPPORT FACILITIES:

- **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 (S two substations)
- **Microwave Communications and SCADA System:** Provides remote operations capability and system monitoring



LP1IN Dredging Activities in the Intake Channel



PL19TUN Cedar Creek Tunnel Pipe Mock Up



LP1IN Dredging Sediment from Intake Channel

