



GRAND PARKWAY H AND I PROJECT QUARTERLY CONSTRUCTION PROGRESS REPORT

June 1, 2019 - August 31, 2019

October 15, 2019

PREPARED FOR

Texas Department of
Transportation

Grand Parkway Transportation
Corporation



PREPARED BY

HNTB Corporation
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Mr. Benjamin H. Asher
Secretary/Treasurer
Grand Parkway Transportation Corporation
125 East 11th Street
Austin, TX 78701

Subject: Grand Parkway System – H and I Project
Quarterly Construction Progress Report for Fiscal Quarter Ended August 31, 2019

October 15, 2019

Dear Mr. Asher,

As the General Engineering Consultant to the Grand Parkway Transportation Corporation (GPTC) and in accordance with Section 407 of the Trust Agreement between GPTC and US Bank National Association, and Section 23 of the TIFIA Loan Agreement with the United States Department of Transportation dated February 21, 2019, HNTB is pleased to submit the Quarterly Construction Progress Report for Grand Parkway Segments H, I-1 and I-2, collectively an additional System Segment. This report covers quarterly construction progress through August 31, 2019.

On September 19, 2019, Texas Governor Greg Abbott declared a state of disaster for the counties impacted by Tropical Storm Imelda. Each of the four counties (Chambers, Harris, Liberty and Montgomery) traversed by the H and I Project were covered by the Governor's declaration. Since Tropical Storm Imelda occurred after the period covered in this progress report, any impact on the H and I Project will be discussed in the next Quarterly Construction Progress Report.

As described in the requirements set forth in the GPTC Trust Agreement Section 407, the General Engineering Consultant shall prepare a progress report at least quarterly during the acquisition and construction of any portion of the Grand Parkway System which is financed in whole or in part with Obligations, commencing within 120 days from the initial delivery of the initial Obligations or Obligations financing an additional System Segment. The quarters used for reporting is based on GPTC's fiscal year.

GPTC adheres to the requirements outlined in the Trust Agreement which governs the acquisition or construction of such System Segments financed with Obligations as well as the requirements of the TIFIA Loan Agreement. As required by the TIFIA Loan Agreement Section 23(b)(i), this progress report includes (A) the amount of Total Project Costs expended as of the last date of the quarter as well as during the preceding quarter, and the amount of Total Project Costs estimated to be required to complete the Project (Refer to Section 2.0); (B) availability of funds to complete the Project (Refer to Section 2.0); (C) an assessment of the overall construction progress since the date of the last report, together with an assessment of how such progress compares to the construction schedule (Refer to Section 3.0 through 5.0); (D) most recent projections for the Substantial Completion Date (Refer to Section 4.0); (E) a detailed description of all material problems encountered or anticipated and a detailed description of the proposed solutions (Refer to Section 5.0); (F) delivery status of major equipment (Refer to Section 6.0); (G) proposed or pending change orders (Refer to Section 7.0); (H) material changes or deviations from the Borrower's land procurement plans or schedule (Refer to Section 8.0).

Additionally, as specified in the Trust Agreement, this report also includes current estimates of: (i) the date on which such System Segment will be opened for traffic, unless such System Segment shall have been opened for traffic prior to such progress report (Refer to Section 4.0), (ii) the Estimated Date of Completion and an Estimated Date of Substantial Completion of such System Segment (Refer to Sections 4.0 and 5.0), (iii) the cost of such System Segment, but excluding any Obligation discount, and the interest during construction and for one year after completion of construction (Refer to Section 2.0), and (iv) the amount of funds required each six (6) months during the remaining estimated period of construction to meet the above described cost of such System Segment exclusive of funds provided for construction contingencies (Refer to Section 2.0), and accompanied by a progress schedule for such construction, and further including, as to construction, comparisons between the actual times elapsed and the actual costs, and the original estimates of such times and costs (Refer to Sections 3.0 through 5.0). This information, as well as other items relevant to each System Segment, is presented in greater detail within this report.

Best regards,

A handwritten signature in blue ink, appearing to read 'SAH', with a long horizontal flourish extending to the right.

Stephen A. Hrncir, P.E.

Program Manager

General Engineering Consultant

1.0 INTRODUCTION

This report describes the State Highway 99 Grand Parkway Segment H and I (H and I Project) construction for the fourth quarter of Fiscal Year 2019, covering a period from June 1, 2019 through August 31, 2019. H and I Project is an extension of the existing Grand Parkway System and is being constructed by the Grand Parkway Transportation Corporation (GPTC). GPTC is a non-profit Texas corporation authorized by the Texas Transportation Commission (Commission) to develop, finance, refinance, design, construct, reconstruct, expand, operate, and maintain the Grand Parkway System. GPTC, was created under the authority of the Commission and issued bonds to finance development and construction of the System. The project is funded entirely from toll revenue bonds and other obligations issued by GPTC.

1.1 Project Description

The H and I Project is a 52.3-mile section of the overall Grand Parkway Project, a planned 184-mile highway facility around greater Houston extending from State Highway 146 in Galveston County to State Highway 146 in Baytown. It is spread across the seven counties including Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty and Montgomery. When completed Grand Parkway will provide a third outer loop around the Houston metropolitan area. The Grand Parkway is divided into 11 Segments designated A through I-2 as depicted on the map in Figure 1.1. Segment I-2 is further divided into Segments I-2A and I-2B. The Commission has designated Segments D (Harris County portion), E, F-1, F-2 and G that achieved final acceptance in 2017 and are open to tolled traffic and Segments H, I-1 and I-2 that are under construction as part of the Grand Parkway System.



Figure 1.1: Map of State Highway 99 (Grand Parkway) Project

Segments H and I-1 together are approximately 37.5-mile long two-lane toll facility (one lane in each direction) with intermittent four-lane sections for passing in Montgomery, Liberty, Harris and Chambers Counties. Segment H includes H-West Option, which comprises construction of two additional tolled mainlanes for a total of four tolled mainlanes for the first 8 miles from its connection with Interstate Highway 69. Segment I-2B is approximately 6.1-mile four-lane toll facility in Chambers and Harris Counties. TxDOT is currently constructing improvements to the Segment I-2B non-tolled frontage roads as a separate construction project, which is separate and apart from the H and I Project and is being funded by TxDOT. Lastly, Segment I-2A is an existing 8.7-mile four-lane facility in Chambers County that was constructed by TxDOT in 2008. Segment I-2A will receive tolling equipment upgrades and other improvements as a part of H and I Project. Figure 1.2 shows the typical sections of H and I Project over its length.

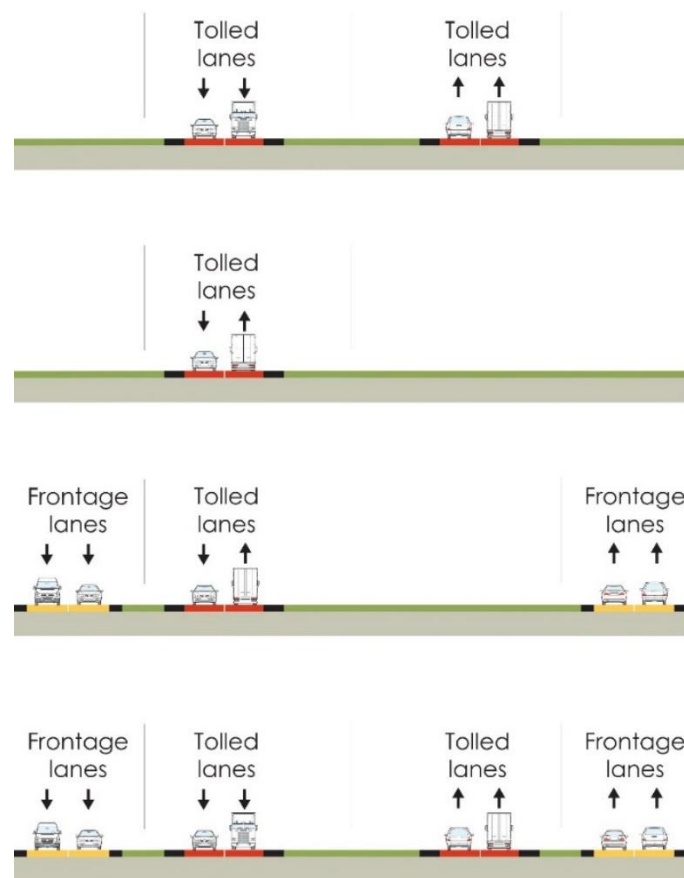


Figure 1.2: Typical Sections of H and I Project

The development and construction tasks for H and I Project principally include: design development; right of way acquisitions; utility relocations; excavation and embankment; concrete pavement; bridges; retaining walls; drill shafts; rip rap; drainage structures; barricades, signs, and traffic handling; illumination; overhead sign supports; traffic signals; toll facilities; and ITS ducts. H and I Project design, coordination, and construction activities are carried out by a DB Contractor under a Design Build Agreement (DBA) and toll zones are developed by a Toll System Integrator under a statewide Toll System Integration and Maintenance Agreement.

1.2 Design Build Agreement

On July 31, 2014 TxDOT issued a request for qualifications (RFQ) to design, construct, and potentially maintain Segments H, I-1 and I-2 pursuant to a DBA. TxDOT subsequently determined that three of the four teams submitting qualifications statements in response to the RFQ were qualified to be on the short list to submit detailed proposals.

On April 30, 2015 TxDOT issued a request for proposals (RFP) to the short-listed teams. In October 2015, TxDOT received three design build proposals. On January 24, 2017, proposal revisions were received from three short-listed teams following a request for proposal revisions process. The Commission then conditionally awarded the DBA to Grand Parkway Infrastructure (GPI), LLC on March 28, 2017.

Equity member firms for GPI include Ferrovial Agroman (40%), Granite Construction Company (30%), and DBW Construction–Webber (30%).

1.3 Project Milestones

- Conditional Award occurred March 28, 2017
- Contract fully executed on June 30, 2017
- NTP1 issued on July 10, 2017
- Limited NTP2 issued on October 13, 2017
- Option NTP issued for H-West Option on October 27, 2017
- NTP2 (full) issued on October 27, 2017
- GPTC Revenue Bond Financing closed on May 30, 2018
- Start of construction in July 2018
- TIFIA Loan Agreement closed on February 21, 2019
- Substantial Completion to occur within 1,693 days after NTP1
- Substantial Completion Deadline is February 27, 2022
- Projected Substantial Completion date is February 27, 2022
- Projected Open to Traffic date is February 27, 2022
- Expected Revenue Commencement date per GPTC System T&R forecast is May 22, 2022
- Final Acceptance to occur 120 days after Substantial Completion
- Final Acceptance Deadline is June 27, 2022
- Projected date of Final Acceptance is June 27, 2022

1.4 Purpose of the Report

GPTC Trust Agreement Section 407 states that General Engineering Consultant shall prepare a progress report at least quarterly during the acquisition and construction of any portion of the Grand Parkway System which is financed in whole or in part with Obligations, commencing within 120 days from the delivery of the initial Obligations or Obligations financing an additional System Segment. The H and I Project is considered an additional System Segment to the Grand Parkway System as defined by the GPTC Trust Agreement. Furthermore, Section 23(b)(i) of the TIFIA Loan Agreement requires that the GPTC furnish the TIFIA Lender a Quarterly Construction Progress Report at such time as required by the Trust Agreement to be filed with the Trustee.

This Quarterly Construction Progress Report complies with the reporting requirements of Section 407 of the Trust Agreement as well as the TIFIA Loan Agreement. This Quarterly Construction Progress Report provides the required information as of last calendar date of the GPTC Fiscal Year quarter preceding its submittal.

2.0 Project Costs

Table 2.1A provides: (a) a detailed breakdown of the GPTC bond proceeds available for H and I Project, (b) an adjusted budget showing an estimate of total project costs at completion, (c) actual costs-to-date as of previous quarter end, or May 2019, (d) actual costs-to-date as of end of current quarter, or August 2019, (e) total actual costs-to-date expended as of August 2019 and (f) a forecast comprising an estimate of costs-to-complete. Table 2.1B provides: (a) a detailed breakdown of the TxDOT budgets to cover portion of TxDOT's Agency Costs and Segment I-2B Frontage Road construction costs, (b) an adjusted budget showing an estimate of total project costs at completion, (c) actual costs-to-date as of previous quarter end, or May 2019, (d) actual costs-to-date as of end of current quarter, or August 2019, (e) total actual costs-to-date expended as of August 2019 and (f) a forecast comprising an estimate of costs-to-complete. Table 2.2 provides a forecast of cost for each six-month period over the remaining duration of construction and extends one-year beyond the completion of construction date to ensure all costs are captured.

Actual costs paid-to-date and an estimate of funds required for processing of DB Contractor's draw for the remaining duration of construction are shown in Table 2.3 on a semiannual and cumulative basis. Estimate of funds required is based on the approved maximum payment schedule, including the H-West Option from the DBA, revised as per TxDOT letter dated July 27, 2018, and further adjusted for approved change orders. Approved maximum payment curve is indicative of the DB Contractor's original estimates of costs over time at the time of the contract award, with subsequent adjustments for approved change orders. The DB Contractor's reported earned value for the work completed is as of the latest approved draw request received for the quarter. Cumulative earned value reported as of the most recent quarter is below the maximum payment indicating that the DB Contractor's progress is not constrained from cash flows. The DB Contractor added resources and updated project baseline schedule to improve performance, but earned value is expected to stay below the maximum payment. Refer to Section 5 of this report for a discussion on schedule progress against the latest approved baseline schedule. Paid-to-date represents the amount that has been disbursed and trails the cumulative earned value estimate of work completed and constraints (if any) from the maximum payment schedule included in the DBA. Difference in earned value and paid-to-date amounts also accounts for the time it takes for DB Contractor to assemble and submit the draw request after the cut-off date, address TxDOT review comments, resubmit as necessary, and for TxDOT to approve and process the payment.

Table 2.1A: GPTC H and I Project Budgets, Actuals, Forecasts and Total Estimated Costs (\$ Thousands)
(Paid by Bond Proceeds)

	GPTC Bond Proceeds Budget ⁵			Actuals ⁵			Forecast ⁴	Estimate at Completion (Actuals and Forecast)
Element	Original Proceeds	Adjustments Thru August' 19	Adjusted Total	Expended Thru May'19	Expended This Quarter	Expended Thru August' 19	Estimate to Complete	
Segments H, I-1, & I-2								
Design-Build Agreement ^{1,3}	894,702	5,723	900,424	178,174	41,727	219,901	680,524	900,424
Right of Way Acquisition ¹	330,000	-	330,000	74,770	15,277	90,047	239,953	330,000
Toll Equipment & Integration ¹	32,000	6,894	38,894	589	111	700	38,194	38,894
Environmental Mitigation ¹	24,000	(12,000) ¹	12,000	9,944	4	9,948	2,052	12,000
TxDOT Agency Costs ¹	53,737	7	53,744	22,416	1,265	23,681	30,063	53,744
Project Contingencies ¹	110,000	(624)	109,376	-	-	-	109,376	109,376
Subtotal Project Costs	\$1,444,438	-	\$1,444,438	\$285,893	\$58,383	\$344,276	\$1,100,162	\$1,444,438
Financing Costs								
Capitalized Interest (2018 Bonds/BANs) ¹	309,855	-	309,855	62,038	-	62,038	247,817	309,855
Cost of Issuance (2018 Bonds/BANs) ¹	11,537	-	11,537	11,198	96	11,294	243	11,537
Capitalized Interest (50% of Series 2013E) ²	29,639	-	29,639	29,639	-	29,639	-	29,639
Cost of Issuance (50% of Series 2013E) ²	958	-	958	958	-	958	-	958
Rate Stabilization Fund ¹	50,000	-	50,000	50,000	-	50,000	-	50,000
Subtotal Financing Costs	\$401,988	-	\$401,988	\$153,833	\$96	\$153,929	\$248,060	\$401,988
Total Project and Financing Costs	\$1,846,427	-	\$1,846,427	\$439,726	\$58,479	\$498,205	\$1,348,222	\$1,846,427

Figures shown may not add to totals due to rounding.

Notes:

1. Reflects information provided in the GPTC Annual FY 2019 Capital Construction Budget ("FY19 Budget") for Segments H&I, as adopted by the board on August 21, 2018, including budget adjustments, actual costs, and forecasted costs, updated to reflect results of the reporting period.
2. Reflects 50% of capitalized interest and cost of issuance for the Series 2013E Bonds.
3. Design Build Agreement Adjustments reflect only change orders that have been approved.
4. H&I Forecast—see Table 2.2 for allocation of forecast into six-month periods.
5. Table shows budgeted amounts and actual expenditures of the GPTC for the H and I project. It does not include expenditures by TxDOT for procurement, feasibility studies and District's frontage road project in Segment I-2B supported through other sources—see Table 2.1B for details.

Table 2.1B: TxDOT H and I Budgets, Actuals, Forecasts and Total Estimated Costs (\$ Thousands)
(Paid by Fund 0006)

	TxDOT Budget ¹			Actuals ¹			Forecast	Estimate at Completion (Actuals and Forecast)
Element	Original Budget	Adjustments Thru August'19	Adjusted Total	Expended Thru May'19	Expended This Quarter	Expended Thru August'19	Estimate to Complete	
TxDOT Agency Costs								
TxDOT Management	1,885	-	1,885	1,885	-	1,885	-	1,885
Engineering Feasibility Studies	8,840	-	8,840	8,840	-	8,840	-	8,840
Initial Traffic and Revenue Studies	1,126	(3)	1,123	1,126	(3) ³	1,123	-	1,123
Procurement - Tech, Legal & Fin Consultants	6,660	-	6,660	6,660	-	6,660	-	6,660
Subtotal TxDOT Agency Costs	\$18,511	(\$3)	\$18,508	\$18,511	(\$3)	\$18,508		\$18,508
TxDOT District Project								
District I-2B Construction Project ²	59,000	2,193	61,193	60,946	19	60,965	228	61,193
Subtotal TxDOT District Project	\$59,000	\$2,193	\$61,193	\$60,946	\$19	\$60,965	\$228	\$61,193
Total Project and Financing Costs	\$77,511	\$2,190	\$79,701	\$79,458	\$16	\$79,474	\$228	\$79,701

Figures shown may not add to totals due to rounding.

Notes:

1. Table shows budgeted amounts and actual expenditures incurred by TxDOT under Fund 6. It does not include expenditures supported through GPTC bond proceeds – see Table 2.1A for costs supported by GPTC bond proceeds.
2. District I-2B Frontage Road Construction Project is Substantially Complete with Final Acceptance pending completion of punch list items.
3. Reconciliation of audited expenditures for this task.

Table 2.2: H and I Project Forecast Costs (\$ Thousands)

Element	Forecast ²							Total Estimate to Complete
	Fiscal Year 2020		Fiscal Year 2021		Fiscal Year 2022		FY 2023	
	6-month	6-month	6-month	6-month	6-month	6-month		
Segments H, I-1, & I-2								
Design-Build Agreement Costs ¹	147,829	130,996	136,407	123,217	108,252	33,824	-	680,524
Right-of-Way Acquisition	97,203	97,204	19,661	19,661	2,750	2,750	724	239,953
Toll Equipment & Integration	6,572	6,572	5,714	5,714	6,812	6,812	-	38,194
Environmental Mitigation	925	925	81	81	20	20	-	2,052
TxDOT Agency Costs	10,359	10,359	3,000	3,000	1,673	1,673	-	30,063
Project Contingencies	-	-	-	-	-	-	109,376	109,376
Subtotal Project Costs	\$262,887	\$246,056	\$164,863	\$151,673	\$119,506	\$45,078	\$110,100	\$1,100,162
Financing Costs								
Capitalized Interest (2018 Bonds/BANs)	37,099	37,099	37,099	37,099	37,099	37,099	25,222	247,817
Cost of Issuance (2018 Bonds/BANs)	243	-	-	-	-	-	-	243
Capitalized Interest (50% of Series 2013E)	-	-	-	-	-	-	-	-
Cost of Issuance (50% of Series 2013E)	-	-	-	-	-	-	-	-
Rate Stabilization Fund	-	-	-	-	-	-	-	-
Subtotal Financing Costs	\$37,342	\$37,099	\$37,099	\$37,099	\$37,099	\$37,099	\$25,222	\$248,060
Total Project and Financing Costs	\$300,229	\$283,155	\$201,962	\$188,772	\$156,605	\$82,177	\$135,322	\$1,348,222

Figures shown may not add to totals due to rounding.

Note:

1. Design Build Agreement Adjustments reflect only change orders that have been approved.
2. Does not include TxDOT Fund 6 forecast for District I-2B Construction Project shown in Table 2.1B.

Table 2.3: H and I Project Design Build Agreement Construction Draw (\$ Thousands)

Period		Estimate of Construction Draw ^{1,4}		Earned Value ²		Cumulative Paid-to-Date ³
Begin	End	Period	Cumulative	Period	Cumulative	
NTP1	8/31/2017	12,403	12,403	12,403	12,403	12,403
9/1/2017	2/28/2018	25,125	37,528	40,711	53,114	37,528
3/1/2018	8/31/2018	42,806	80,334	32,605	85,719	80,334
9/1/2018	2/28/2019	140,566	220,900	92,455	178,174	178,174
3/1/2019	8/31/2019	209,027	429,927	68,923	247,097	219,901
9/1/2019	2/29/2020	163,629	593,556			
3/1/2020	8/31/2020	103,699	697,255			
9/1/2020	2/28/2021	127,673	824,928			
3/1/2021	8/31/2021	59,036	883,964			
9/1/2021	2/28/2022	16,460	900,424			

Notes:

1. Estimate of Construction Draw is based on the maximum payment schedule, including the H-West Option, revised as per TxDOT letter dated July 27, 2018 with adjustments for executed change orders.
2. Earned Value is based on construction work completed per the latest draw request as of the reporting period.
3. Paid-to-Date represents amounts that were disbursed as of this quarter end but are reported in the periods they were earned.
4. Estimate of Construction Draw reflects only change orders that have been approved.

3.0 Overall Progress of Construction

Construction activities started on the project in summer of 2018 and have continued to progress. Design submittals have been made to TxDOT for review and comment, leading to release-for-construction documents along the corridor. The DB Contractor continued to progress environmental coordination, permitting, right-of-way, utilities, and public outreach activities. A summary of progress for the quarter is summarized below and illustrated in construction photographs included with Appendix A.

3.1 Public Information & Communications by DB Contractor

Domain name www.sh99grandpkwy.com is maintained by the DB Contractor and continues to be a source of information for the project. Additionally, the DB Contractor is required to maintain a Public Information Office located at 7560 FM 1960, Dayton to serve walk-in customers.

Contact subscription list for the project stakeholders continues to grow. At closing of this quarter, 1,000 recipients (elected officials, TxDOT, corridor residents, business owners, and GPI staff) are signed up to receive project alerts, newsletters, etc.

Social media presence for the project continued to increase. At closing of this quarter, the project website had 301 followers on Twitter site and 1,766 followers on Facebook (FB). The number of people who had viewed any posts from the GPI FB page on their screen was 53,477

for the most recent month of the quarter ended August 2019. Figure 3.1 shows a snapshot of the project's official Twitter account.

DB Contractor participated in various coordination meetings, conducted outreach and made presentations at networking events regarding the project to various interested parties in this quarter. This included:

- City Council for the City of Roman Forest
- Cedar Bayou Navigation District

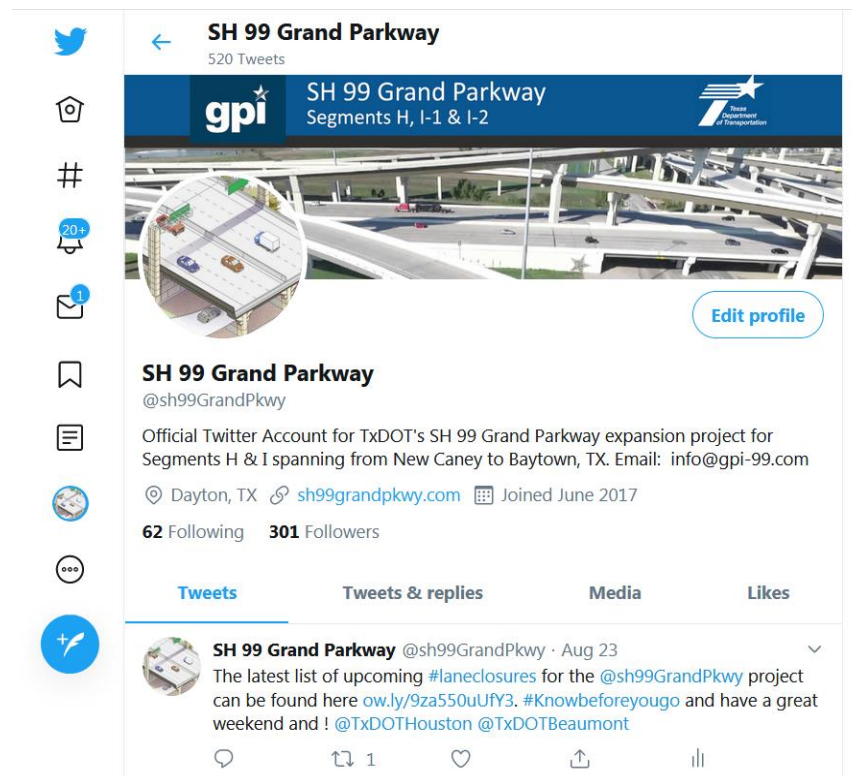


Figure 3.1: Grand Parkway Segments H, I-1 and I-2 - Official Twitter Account

3.2 Utilities

DB Contractor continues to negotiate PUAA'S with utility owners and has completed sending out the PUAA's to all known affected utility owners. Twenty five (25) PUAA's have been fully executed. One PUAA (Sunoco) was approved by TxDOT for execution. The remaining PUAA's are currently being reviewed by the utility owners. Overall status of the utility coordination is shown in the following table.

Table 3.1: Status of Utilities Work

Utility Status	
Anticipated Total Utility Adjustments	343
PAAA's	
Anticipated Total	39
Executed	25
Remaining	14
UAAA's	
Anticipated Total	62
Executed	19
Remaining	43

Anticipated total utility adjustments represents an estimate of conflict locations requiring adjustment based on the DB Contractor's design progress. As the roadway design progresses, conflicts may be avoided, or additional conflicts may be identified. The DB Contractor continues to progress pending PAAA's, UAAA's, and design for the remaining Owners. Additionally, the DB Contractor is verifying civil design impacts and working on completing AUA's with Utility Owners for utilities that are not in conflict and its right of way team is currently pursuing the required easement documents.

Status of DB Contractor managed design is as follows:

- Undine – 100% exhibits have been approved for waterline relocation.
- Mt. Belvieu – Original 100% design was changed, and updated plans were approved by the utility owner.
- DECON – Protective slab design is in progress.
- AT&T – 100% of relocations addressed and being designed.

Status of utility owner managed design is as follows:

- Entergy Transmission – Two crossings are in for review with Entergy. UAAA for site 1 & 2 have been approved and the Pre-Construction meeting is to be held in October. Designs for site 3&4 were commented on by GPI and have been returned to the owner for revision.
- Entergy Distribution – Is designing priority areas along FM 1485, US 90, FM 1960, & FM 1413. 100% Design anticipated in October.
- CenterPoint Electric – CenterPoint provided draft design to DB Contractor for review. Coordination efforts are in process to ensure priority areas are receiving the most attention. Major underground design has been completed and reviewed by the DB Contractor and sent back to CenterPoint.

- Comcast – Provided DB Contractor with record/reference drawings. Design and Coordination with electrical relocations is in process.

Utility coordination, design and field adjustment work is moving forward at a steady pace and the DB Contractor continues to make progress according to the schedule.

3.3 Permits/Environmental

NEPA reevaluation documentation is being coordinated within DB Contractor's design team and includes the following:

- Additional ROW at CR 491 – For Drainage
- Additional ROW N of US 90 – For Drainage
- Additional ROW for Ponds – Parcel 1169 and 1170
- Additional ROW for Ponds – Parcel 1156
- Additional ROW for Embankment Areas – Multiple Locations in Seg H2 and I1A
- Drainage Easement at Station 2100+00
- Corner Clips at FM 565
- Gum Grove Road Drainage Easement
- Revised Drainage Outfall into Hackberry Gully @ Langston Blvd

Asbestos containing material & lead based paint abatement activities include:

- Asbestos Containing Materials were abated on concrete rail coating for both Goose Lake Bridges.
- Lead Based Paint on Cedar Bayou RR Bridge: Abatement Plan has been approved by TxDOT. Coordination with USCG is ongoing and demo is scheduled for September.
- Structures Surveys –Parcels that have structures are continually being surveyed for Asbestos Containing Materials (ACM) and Lead Based Paint (LBP), with abatement scheduled on an ongoing basis.

For potential borrow source locations, DB Contractor continues to work on the necessary environmental field studies to satisfy Special Condition 2 and 4 of the USACE Individual Permit (IP) and Nation-Wide Permit (NWP). The DB Contractor will revise IP once all design changes have been completed.

Segment I2 – Wismer Road Pond; The DB Contractor has identified wetlands onsite and is studying to determine the impact and drainage solutions.

The DB Contractor is conducting continuous monitoring and protection of nesting sites, in compliance with the Migratory Bird Treaty Act, in all active construction locations.

3.4 Right of Way

In accordance with the terms of the DBA the DB Contractor is responsible for right of way surveys, appraisals, environmental phase I assessments, acquisition packages, title searches and

relocation packages. Overall the schedule of right of way acquisitions and associated costs are tracking against the DB Contractor's baseline schedule. The following table provides a detailed status of progress being made towards releasing parcels for construction through this reporting period. It is noted that the table individually accounts for parcels that sometimes are combined into a single parcel or are eliminated after ROW survey is completed because they did not reflect an affected parcel. An assessment of actual parcels acquired and released for construction against total to be acquired is discussed in Section 8 of this report.

Table 3.2: Status of Right of Way Work

Item	Activities Completed Previous Periods	Activities Completed Current Period	Total Completed Activities	Activities In-Progress
Pre-Acquisition (Title Searches, ROEs, etc.)	316	0	316	0
Appraisals (prep, approval for initial and ED update)	496	24	520	5
Surveys (prep, review, approval)	468	0	468	0
ESA Phase I's	244	0	244	0
Acquisition Packages (prep, review, approval)	449	13	462	0
Initial Offers Made	219	6	225	6
Final Offers Made	212	12	224	0
Closing Payment Packages (prep, approval, funding for PUA's and signed deeds)	316	69	385	14
Closings	92	17	109	10
Relocation, Relocation Payment Packages and 90-Day NTV's	169	40	209	6
ED Packages (prep, review, approval)	91	21	112	7
ED Proceedings (AAG approval and setting hearing)	35	31	66	30
ED Payment Packages (prep, approval, funding, deposit and 30-day NTV)	127	44	171	5
Released for Construction	96	38	134	0

Note: For a discussion of parcels released into construction against total number of parcels to be acquired, see Section 8 of this report

3.5 Design

DB Contractor is designing the project in priority areas as depicted in Figure 3.2. These areas represent the priority for construction based on availability of right of way. The subsegments that have top priority are marked with green circles and consist of Section H-1A; US-69 to East of LP 494 and Section I-2B2; SH 146 to Cedar Bayou. The subsequent priorities by subsegments are shown in yellow and orange respectively.

The progress up to end of the current quarter is as follows:

- Design has been progressing and is approximately 97% complete.

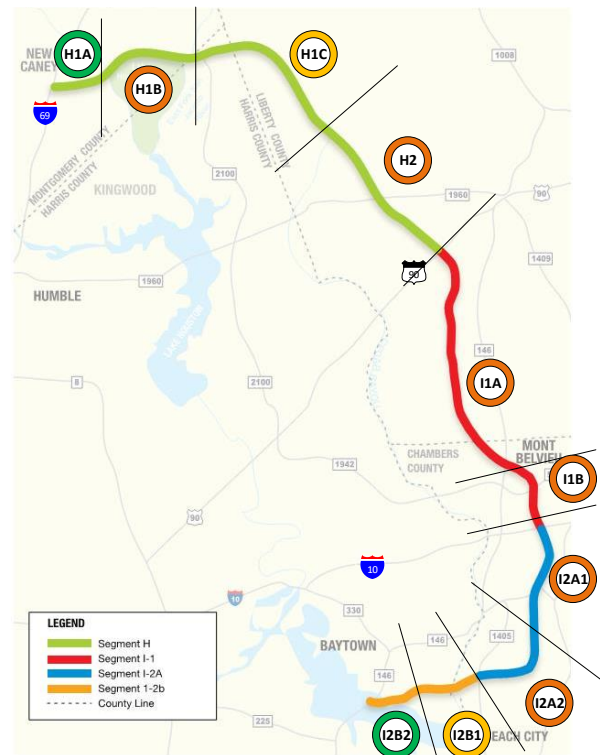


Figure 3.2: DB Contractor Priority Areas for Design Development

- DB Contractor continues to review and develop the design, both in terms of technical compliance and value-engineering opportunities.
- Regular DB Contractor meetings with the design consultants were ongoing to progress the design submittals.
- DB Contractor continues to coordinate design development with TxDOT through meetings and RFI submittals.
- Released-for-Construction submittals were made for Segments H-1A, H1C, I-1A, I-2A1, I-2A2, I-2B1 and I-2B2.
- Tracking notice of design changes and any revisions to the released drawings.
- DB Contractor continues to respond to TxDOT submittal comments.

3.6 Tolling Systems

Coordination is on-going between the DB Contractor and TxDOT Toll Operations Division for design at tolling locations. TxDOT Toll Operations Division with support from design consultant Atkins and System Integrator, TransCore, is responsible for design and construction of tolling infrastructure in the toll zones. According to the DBA, the DB Contractor is required to complete work in toll zones 180 days prior to Substantial Completion Deadline, and handover to the Toll System Integrator. The latest progressed schedule from the DB contractor complies with this requirement.

3.7 Quality

DB Contractor has mobilized its quality control staff as well as Independent Quality Firm staff to perform inspection and testing. Construction quality control and hold point inspections for drilled shaft construction were performed. DB Contractor has instituted a process for reporting non-conforming work and is maintaining a log of non-conformance reports and of Construction Deficiencies. Status of quality related actions as of the closing of this quarter:

- Total NCRs issued as of closing of current quarter: 51 (18 open)
- Observation Reports issued as of closing of current quarter: 16 (6 open)
- Engineering Judgements: 73
- Construction Deficiencies: 51 (20 open)

3.8 Maintenance During Construction

With the issuance of full NTP2, the DB Contractor is responsible for maintaining all existing roadways within the project right of way of Segments H and I-1 and is responsible for elements modified or constructed by the DB Contractor in Segment I-2. The DB Contractor has developed procedures under its Maintenance Management Plan to inspect and repair facilities on an ongoing basis. Debris removal and sign straightening have been the main items of maintenance work in this quarter. Activities carried out by the DB Contractor include:

- Weekly Inspections Completed: 9
- Monthly Inspections Completed: 3
- Special Inspections Completed: 0
- Incident Responses Attended: 0
- Defects Identified this Period: 4
- Defects Resolved this Period: 3
- Defects Total to Date: 55
- Defects Resolved to Date: 51
- Defects Currently Unresolved: 4

3.9 Construction

The DB Contractor is constructing the project in three segments. Figure 3.3 shows the correlation of design priority subsegments to the three construction segments.

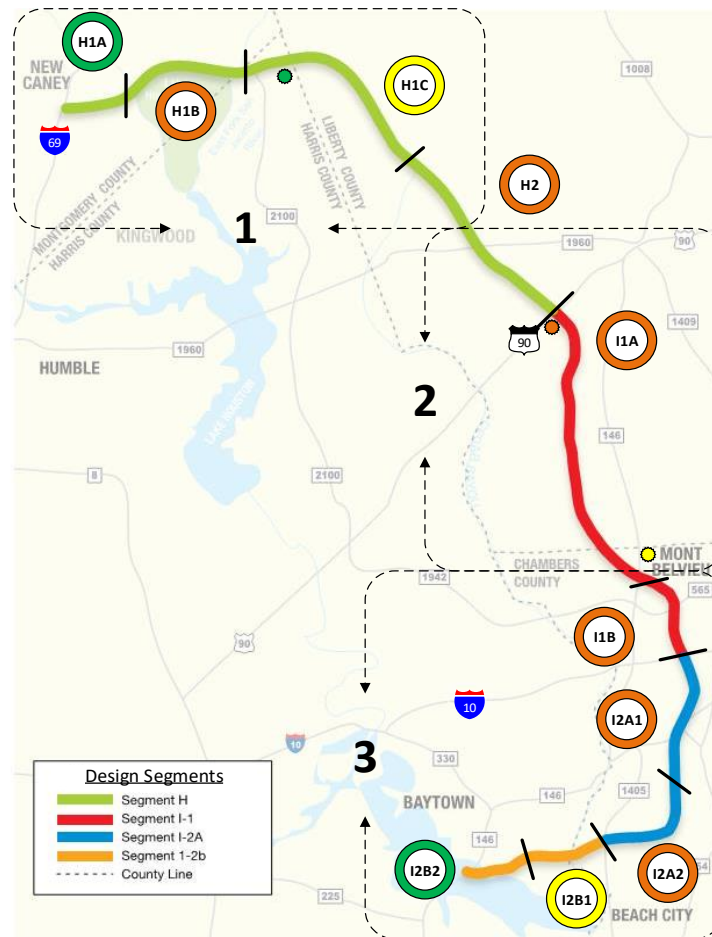


Figure 3.3: Construction Segments and Priority Design Areas

For the reporting period, the DB Contractor construction operations in each of the three construction segments broken out by priority area where applicable is as follows:

Segment 1:

Activities in H-1A included:

- Continued cement treatment West of US-59
- Continued embankment construction from US-59 to Loop 494
- Continued to establish proof rolling from US-59 to Loop 494
- Installed RCP and inlets from US-59 to Loop 494
- Continued with level up, coping and flumes for retaining walls 6B, 4, 3, 7 and 8 from US-59 to Loop 494
- Established drainage ditches and proof rolled access East of Loop 494
- Continued to establish embankment East of Loop 494
- Installed RCP and inlets East of 494

- Installed retaining wall panels for retaining walls 9 and 12 East of 494
- Continued with ROW ditch excavation material for borrow pit sampling
- Continued organics and sulfates sampling
- Continued to deliver and tie rebar cages for caps, footings and columns. Also, continued to form, pour and strip bridge columns and caps for Bridges 203 and 204, Bent 1-12 West of US- 59
- Continued to form, pour and strip bridge columns. Also, continued to deliver, tie rebar cages for caps, columns and footings for Bridges 203 and 204 Bents 13-14, West of US- 59
- Continued to drill and pour drilled shaft foundations for Bridges 205 and 206

Activities in H-1B included:

- Continued with ROW ditch excavation material for borrow pit sampling
- Initiated ROW inspection
- Continued tree cutting and grubbing
- Initiated Organics and Sulfates sampling

Activities in H-1C included:

- ROW inspections West of Luce Bayou
- Tree cutting and grubbing
- Continued construction of Luce Bayou Siphon structure
- Continued installation of RCP and inlets
- Continued to excavate ditch material for borrow pit sampling
- Continued embankment construction (day and night)
- Carried out foundation improvement for retaining walls 8, 9, 10, 11, 12 and 13
- Installed level pad and underdrain for retaining walls 8, 9, 10, 11, 12 and 13
- Installed retaining wall panels for retaining walls 8, 9, 10, 11 and 12
- Continued to form, pour and strip drilled shafts extensions and abutments. Also continued to deliver and tie rebar cages for extensions, columns and abutments for Bridge 238
- Continued to deliver and tie rebar cages for extensions, abutments and columns, Also, form, pour and strip drilled shafts extensions and abutments for Bridges 232 and 233
- Continued to drill and pour drilled shaft foundations. Also, deliver and tie rebar cages for drill shafts, footings and columns for Bridge 234
- Continued to deliver and tie rebar cages for drill shafts, footings and columns, as well as drill, pour shaft foundations for Bridges 228, 229 and 236
- Started to deliver and tie rebar cages for drill shafts, footings, columns, as well as drill and pour shaft foundations for Bridges 207 and 208

Segment 2:

Activities in I-1A included:

- Started embankment construction from STA 2507+00 to 2488+00
- Continued stripping top soil from STA 2510+00 going North and South
- Continued excavating ditch 38-1 to build haul road and initiated excavating ditches 38-2 and 40-2 for material at Bridge 5
- Continued building haul road and stabilizing with lime
- Cleared trees at STA 2435+00, 2456+00, 2545+00, 2575+00, and 2592+00
- Completed Bridge 5A/5B drill shafts
- Continued Bridge 7A drill shafts and completed up to Bent 6
- Completed Bridge 6 drill shafts
- Began substructure on Bridge 4B, 5A/5B and 5
- Began substructure on Bridge 5
- Completed crossing comprising reinforced concrete box at 41C, 35 and 39B
- Completed culvert 1, 20 and 21
- Started retaining walls 13, 14 and 15
- Completed construction of hazmat containment area at field office

Segment 3:

Activities in I-2A1 included:

- Placed columns at Bridge 15 at Bents 20, 10, 9, and 8
- Striped topsoil North and South of Kilgore
- Excavated and installed wick drains at Kilgore
- Cleared and mulched trees

Activities in I2-A2 included:

- Excavated for wick drains at Fisher Rd
- Installed wick drains at Fisher Rd
- Installed Culvert 1 West of Fisher Rd
- Installed Pipes 5, 6, 7 and 15, 16, 17 and 18 including laterals 2, 3, 4, 5

Activities in I2-B1 included:

- Continued retaining wall operations at retaining walls 1, 2, 3, 4, 5 and 6
- Continued embankment and lime operations along the Eastbound Frontage Road
- Began embankment and lime operations along the Westbound Frontage Road
- Began placing cement treated base at Ramp 6 and Ramp 11
- Continued embankment operations East and West of 1405
- Installed inlets/laterals East of FM 1405

Activities in I2-B2 included:

- Continue stripping and preparing for embankment Eastbound and Westbound at Cedar Bayou

- Installed Pipes 17 through 27
- Installed interceptor inlets on Inlets E5, E9 and E14
- Installed pipes 12 and 103
- Installed inlets at retaining walls 22 and 23
- Constructed Eastbound and Westbound mainlane embankment from Cedar Bayou Bridge to Tri Cities Beach Rd
- Constructed columns at Bridge 21, Bent 2
- Placed caps at Bridge 21, Bent 2
- Constructed embankment for MSE footings at Bridge 21

4.0 Substantial Completion

Substantial Completion and opening to traffic is anticipated to occur concurrently in February 2022. According to the most recent progressed schedule submitted by the DB Contractor in this reporting period, Substantial Completion of H and I Project is indicated to be within the 1,693 days that are available to the DB Contractor after accounting for approved change orders. The DB Contractor has taken steps to recover the 46-day delay to Substantial Completion that was projected in the progress report submitted for the second quarter of 2019. Substantial Completion is therefore expected to occur on February 27, 2022. Project completion through Final Acceptance is projected to be 120 days after Substantial Completion on June 27, 2022.

DB Contractor has an interim milestone requirement to complete work in Toll Zones 180 days prior to Substantial Completion Deadline and handover to Toll System Integrator. Latest schedule from the DB Contractor indicates this to be August 23, 2021 which is within the requirements indicated in the DBA. TxDOT continues to monitor the schedule for turning over the Toll Zones to the System Integrator.

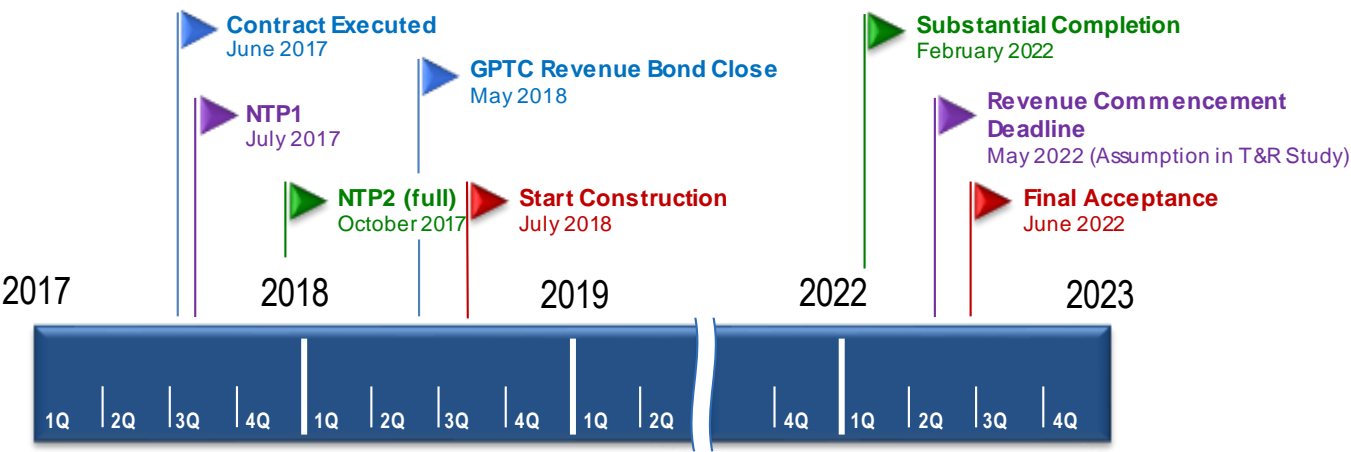
5.0 Material Problems Encountered

There were no material problems encountered this quarter. As of August 20, 2019, when the latest draw submittal was made by the DB Contractor (in this reporting period), actual schedule percent complete was 27% (as measured by the Primavera performance based cost loaded schedule submittal). This is behind the Planned Schedule Percent Complete of 32%. Similarly, earned value reported by the DB Contractor and included in Table 2.3 of this report shows that overall progress is behind what was originally estimated and included in the form of the maximum payment curve. Earned value in the most recent six months has trailed off as the DB Contractor appears to be challenged by staffing issues related to hiring enough workers to make full production on key tasks, including earthwork.

As reported in the construction progress report for the third quarter, Version 2 of the Project Baseline Schedule submitted by the DB Contractor had made provisions for construction work to initiate in Segment H-1C as well as adjusted activities to occur later than what was planned under the maximum payment curve. Doing this allowed for recovery of 46-day delay to

Substantial Completion that was reported in the progress report submitted for the second quarter of 2019. Projected Substantial Completion as of this reporting period is expected to occur on February 27, 2022. The DB Contractor continues to be monitored closely and will be required to submit a recovery schedule should any activity on the Critical Path be delayed greater of 30-days or a number of days equal to 5% of the days remaining until a completion deadline.

Commencement of toll revenues is anticipated to occur at Substantial Completion, which is before the Revenue Commencement date included in the T&R study. The GPTC System T&R forecast and CDM Smith 2018 Bring Down Letter assume that Segments H, I-1 and I-2B will be open to tolled traffic on May 22, 2022.



Note:
Future dates are subject to change

Figure 5.1: H and I Project Milestones

As was the case with the schedule, there are no material problems encountered with costs. As reported in the last quarterly report, one issue of concern was the escalation in domestic steel prices affecting reinforcement steel and guard rail. The DB Contractor had made a request for partnering discussion in accordance with the provisions of the DBA to discuss whether there is any entitlement to a relief through change order. These discussions were held and TxDOT’s position was that DB Contractor is not entitled to such relief under the DBA. The DB Contractor may consider escalating the partnering discussions to the next level as allowed under the DBA. Various other requests for partnering has been made by the DB Contractor where the DB Contractor initiated changes are in initial review or have been rejected by TxDOT. These include changes associated with unidentified utility at Bridge 17 in Segment 2, column aesthetics requirement for flared columns, toll charges from toll road usage and Bridge span-length requirement at US90 pertaining to UPRR right of way.

6.0 Delivery Status of Equipment

No issues with equipment deliveries from the DB Contractor or the Toll System Integrator are currently anticipated. DB Contractor will procure the ITS and Traffic Signal equipment which is routine for such project.

TransCore is responsible for installing Tolling Equipment such as transponder readers and cameras, and has done so on other projects for TxDOT on a statewide basis.

7.0 Change Orders

7.1 Approved Change Orders

No additional change orders were approved in this reporting period. Appendix B provides the overall list of approved change orders. With the approval of change orders as listed in Appendix A, the total construction cost for the DBA has increased from \$894,701,621.55 to \$900,424,486.88 and total days have increased from 1,674 to 1,693.

7.2 Pending Change Orders

A change order comprising revisions to Bridge #8 configuration over Rail Yard/Speer Property is pending approval. TxDOT issued a directive letter to DB Contractor to describe the scope of work and to lock the already negotiated Change Order amount. Anticipated value of this pending change order is as follows:

Pending Change Order #3

- Bridge Over Rail Yard/Speer Property
 - Amount = \$17,600,000
 - Days = 0

8.0 Right of Way Acquisition

TxDOT carried out early right of way acquisition activities prior to issuance of NTP2. With the issuance of the NTP2, the DB Contractor is made responsible for all right of way acquisitions. Based on progress reporting from the DB Contractor, to date status of acquisitions is as follows:

Table 8.1: Progress on Right of Way Acquisitions

ROW Status	
Estimated Total Number of Parcels ¹	235
Surveys Submitted for TxDOT Approval ²	235
Right-of-Entry—Signed or verbal ³	217
Parcels in Possession and cleared for construction ⁴	138

Notes:

1. Estimated total number of parcels represents most recent estimate of total acquisitions required based on the status of design development.
2. Surveys submitted for TxDOT approval represents approved surveys and those pending approvals as of the report period. Surveys previously submitted but requiring modifications are not included in the count until resubmitted.
3. Right-of-Entry figures represent active verbal or signed right of entries excluding those that may have expired.
4. As of reporting period, 138 out of the estimated total parcels to be acquired, or 59% are cleared for construction.

The DB Contractor right of way acquisition activities are on track as indicated by the earned value reporting and actual percent complete discussed in Sections 2 and 5 respectively. Sufficient number of parcels have been cleared for construction to progress.

9.0 Discussion of Other Matters

A site visit is planned by FHWA and TIFIA representatives in the next quarter. Visit is planned for September 4, 2019.

APPENDIX A – Construction Photos for the Quarter



Figure A.1: Concreting Operations at Bridge 203 in Segment H-1A



Figure A.2: Embankment Construction at Abutment of Bridges 203 and 204 in Segment H-1A



Figure A.3: Drilled Shaft Construction at Bridge 236, Bent 5 in Segment H-1C



Figure A.4: View of Luce Bayou in Segment H-1C



Figure A.5: Wing Wall at Luce Bayou in Segment H-1C



Figure A.6: Embankment Construction in Segment I-1A



Figure A.7: Column Construction at Bridge 15, Bent 15 in Segment I-2A1



Figure A.8: Embankment Construction East of FM 1405 in Segment I-2B1



Figure A.9: MSE Wall Construction at FM1405 in Segment I-2B1



Figure A.10: View of Bridge 21, Bent 2 in Segment I-2B2

APPENDIX B – Change Orders List

Change Order No.	Description	Status	Date Executed	Time Impact (days)	Cost Impact (\$)
1	Hurricane Harvey Impact & NTP2 Delay	Executed	11/20/18	19	-
2a	Castle Hill CH Partners Utility Casings	Executed	9/18/18	0	849,097
2b	Remove RR Track from UPRR Structures	Executed	9/18/18	0	73,941
4	CWA Siphon at Luce Bayou	Executed	5/3/19	0	4,799,827
Subtotal for Executed Change Orders				19	5,722,865
3	Bridge Over Rail Yard/Speer Property	Pending	NA	0	17,600,000
Subtotal for Pending Change Orders				0	17,600,000
Total for Executed and Pending Change Orders				19	23,322,865

Figures shown may not add to totals due to rounding.

Note:

With the approval of change orders 1, 2a, 2b and 4 the total construction cost for the DBA has increased by \$5,722,865.33 from \$894,701,621.55 to \$900,424,486.88 and total days have increased from 1,674 to 1,693.

APPENDIX C – Acronyms and Abbreviations

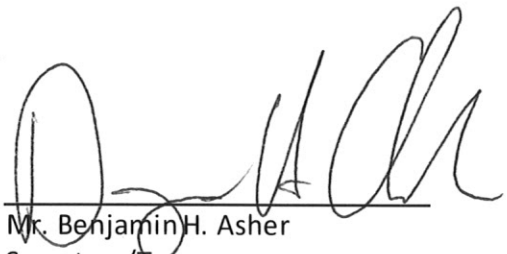
ATC	Alternate Technical Concept
AUA	Abbreviated Utility Agreement
CPM	Critical Path Method
DB	Design Build
DBA	Design Build Agreement
ED	Eminent Domain
ESA	Environmental Site Assessment
FHWA	Federal Highway Administration
FM	Farm to Market Road
GEC	General Engineering Consultant
GPI	Grand Parkway Infrastructure, LLC (DB Contractor)
GPTC	Grand Parkway Transportation Corporation
IH	Interstate Highway
IP	Individual Permit
ITS	Intelligent Transportation Systems
MSE	Mechanically Stabilized Embankment
NCR	Non-Conformance Report
NEPA	National Environmental Policy Act
NTP	Notice to Proceed
NWP	Nationwide Permit
PUA	Possession and Use Agreement
PUAA	Project Utility Adjustment Agreement
RFC	Released for Construction
RFI	Request for Information
ROE	Right of Entry
ROW	Right of Way
SH	State Highway
SI	Systems Integrator
SW3P	Storm Water Pollution Prevention Plan
TTC	Texas Transportation Commission
UPRR	Union Pacific Railroad
US	United States Highway
USCG	United States Coast Guard
USACE	United States Army Corps of Engineers
T&R	Toll and Revenue
TxDOT	Texas Department of Transportation
UAAA	Utility Adjustment Agreement Amendment

GRAND PARKWAY TRANSPORTATION CORPORATION
UNITED STATES DEPARTMENT OF TRANSPORTATION
TIFIA LOAN

Authorized Representative Certificate

I, Benjamin Asher, Secretary/Treasurer of the Grand Parkway Transportation Corporation, hereby certify that the Quarterly Construction Progress Report to Grand Parkway Transportation Corporation has been prepared in connection with Section 23 of its TIFIA Loan Agreement with the United States Department of Transportation dated February 21, 2019.

The undersigned has executed this Authorized Representative Certificate as of the date set forth below.



Mr. Benjamin H. Asher
Secretary/Treasurer
Grand Parkway Transportation Corporation
Borrower's Authorized Representative

10/18/19
Date