



Hampton Roads Bridge-Tunnel

VDOT



February 2020 Project Report

I-64 HAMPTON ROADS BRIDGE-TUNNEL EXPANSION

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Report #11



Table of Contents

1. Executive Summary	1
1.1 Reporting Period.....	1
1.2 Project Accomplishments	1
1.3 Priorities.....	1
1.4 Schedule.....	2
1.5 Budget and Cost.....	2
1.6 Environmental Management.....	3
1.7 Quality.....	3
1.8 Operations	4
1.9 Safety.....	4
1.10 DBE & SWAM Business Activities.....	4
1.11 Public Outreach	5
2. Project Accomplishments	6
2.1 Overview and Look Ahead	6
3. Project Schedule	8
3.1 Schedule Status	8
3.2 Longest Path.....	9
3.3 Impact Analysis	10
4. Budget and Cost	11
4.1 Overall Budget.....	11
4.2 Design-Build Cost Status.....	12
4.3 Budget by Funding Source	13
4.3.1 HRTAC and Smart Scale.....	13
4.3.2 VDOT	13
4.4 Contingency	14
5. Environmental Management	15
6. Operations	16
7. DBE & SWaM Business Activities.....	18
8. Public Outreach	20

Issue date: March 13, 2020

1. Executive Summary

1.1 Reporting Period

This report, prepared by the Virginia Department of Transportation (the Department), provides an overview of accomplishments and activities for the Hampton Roads Bridge-Tunnel Expansion project (the Project) from January 19, 2019 – February 22, 2020. The Design-Builder for the Project is Hampton Roads Connector Partners (HRCP), a consortium that includes Dragados, Vinci, Flatiron, and Dodin Campenon Bernard.

The current reporting period is aligned with HRCP's fiscal-month structure, on which the Project's design-build schedule updates and invoiced construction progress are based. Reporting periods typically close on the Saturday on or preceding the 24th of each month.

1.2 Project Accomplishments

During this reporting period, the following project accomplishments were recorded:

- HRCP provided responses to the US Army Corps of Engineers (USACE) Request for Information (RFI) for the Section 408 Request on February 7, 2020. The US Coast Guard (USCG) issued a concurrence letter for the HRCP Section 408 Information Submission on February 13, 2020.
- The USACE re-Public Notice, required due to changes in the dredging footprint, ended February 20, 2020.
- The consultation package for the US Fish and Wildlife Service (USFWS) was finalized by HRCP and provided to the Federal Highway Administration (FHWA) who submitted it to USFWS.

1.3 Priorities

The Department's priorities for the Project are to achieve the following objectives:

- To provide mobility enhancements and travel-time reliability along the Project corridor
- To minimize Project impacts on adjacent communities
- To improve transportation operations and safety throughout the Project corridor
- To develop public infrastructure in a financially responsible manner

1.4 Schedule

Schedule updates for this reporting period include:

- No significant changes to the critical path were made this period.
- HRCP remains on track to achieve Substantial Completion in advance of the contract milestone of September 1, 2025.
- Final Completion remains as scheduled for November 1, 2025.
- Approximately 13.5% of the contract time has progressed to date.

1.5 Budget and Cost

The budget and cost updates for this reporting period are as follows:

- Project budget overview (through February 2020 payment application):

Total project budget:	\$3,861,997,227
Total charges for efforts to date:	\$193,543,125
Remaining project budget:	\$3,668,454,102

- Design-build contract overview (through February 2020 payment application):

Total contract amount:	\$3,296,997,227
Total charges for efforts to date:	\$176,184,677
Total work orders:	(\$3,000,000)

- Design-build progress to date (through February 2020 payment application):

Overall:	5.34%
Mobilization:	10.81%
General Requirements (incl. Project Management):	4.90%
Design:	38.84%
Physical Progress:	0%

1.6 Environmental Management

During this reporting period, HRCP took the following steps in support of permit acquisition for the project:

- The consultation package for the US Fish and Wildlife Service (USFWS) was finalized by HRCP and provided to the Federal Highway Administration (FHWA) who submitted it to USFWS.
- HRCP conducted an agency meeting on January 22, 2020, with the Virginia Department of Environmental Quality (DEQ) Tidewater Regional Office to review the submitted Virginia Pollutant Discharge Elimination System (VPDES) permit application and to discuss the submitted testing results.
- HRCP conducted a monthly meeting with the permitting agencies on January 29, 2020. Subsequently, HRCP provided several RFI responses to agencies, including information requested during the January 29, 2020 meeting with the permitting agencies and the USACE re-Public Notice.
- HRCP provided responses to the National Oceanographic and Atmospheric Administration (NOAA) request for additional information for the Incidental Harassment Authorization (IHA) and submitted the revised IHA request document.
- HRCP submitted the Industrial Wastewater Permit Application to the Hampton Roads Sanitation District (HRSD) on January 31, 2020.
- HRCP provided responses to the US Army Corps of Engineers (USACE) Request for Additional Information for the Section 408 Request on February 7, 2020. The US Coast Guard (USCG) issued a concurrence letter for the Section 408 Request on February 13, 2020.

1.7 Quality

Quality updates for this reporting period include:

- HRCP's Design Quality Management Plan has been reviewed and conditionally accepted. HRCP's updated Quality Management System Plan has been reviewed and conditionally accepted. HRCP's updated Construction Quality Management Plan has been reviewed and conditionally accepted. Quarterly updates are due in March.
- VDOT conducted audit DQ-02 on January 30, 2020, which covered a design submission. HRCP responded to the audit comments on February 14, 2020 with corrective actions/plans.
- Other Quality activities included reviews of Material Book Documentation and QA/QC Daily reports and conducting weekly Quality Status meetings.

1.8 Operations

The following operations activities took place during this reporting period:

- Shoulder closures and lane closures were conducted for geotechnical exploration and survey work.
- Corridor-wide field work was performed for drainage structure cleanouts.
- Landside geotechnical borings are 63% complete.
- Marine geotechnical explorations continue.
- Paving on the South Island is complete.
- Stone placement over areas that could not be paved on the South Island is complete.

1.9 Safety

Safety procedures and activities during this reporting period include:

- Daily field safety meetings are held on site with all field staff.
- All personnel are urged to use caution entering/exiting the tunnel islands, be aware of traffic conditions and have an adequate gap in traffic to accelerate safely into the travel lane.
- Safety orientations and trainings are ongoing.
- VDOT's Safety Manager started full-time on February 17, 2020.

1.10 DBE & SWAM Business Activities

The following DBE & SWAM Business Activities occurred during this reporting period:

- USDOT's Bonding Education Program's (BEP) 4-day training held on February 4, 6, 11, and 13, 2020
- Monthly Civil Rights Compliance Meetings were held on January 21, 2020 and February 18, 2020
- The Peninsula Workforce Development Meeting with the City of Newport News on January 16, 2020
- Women in Defense (WID) of the Greater Hampton Roads Chapter's Industry on February 19, 2020

1.11 Public Outreach

Public outreach updates for this reporting period are as follows:

- Members of VDOT's HRBT Expansion Team have participated in more than 100 outreach events to date.
- Of specific note in this period, the following project updates were provided:
 - Coliseum Central Business Group in Hampton
 - Norfolk City Council
 - Bank of America Executive Board
 - CHROME Club at Churchland Middle School in Portsmouth
 - Willoughby Bay Racers

2. Project Accomplishments

2.1 Overview and Look Ahead

Milestones

The LNTP1 completion milestone was achieved on September 24, 2019. LNTP2 and LNTP3 were issued to HRCP on September 25, 2019.

Project Management Plans

HRCP developed both a Project Management Plan and a Risk Management Plan to support a timely and quality project delivery.

Geotechnical Investigation

The marine geotechnical investigations are on-going, as are landside drilling and laboratory testing for soil classification in Norfolk and Hampton. VDOT is evaluating HRCP's Scope Validation documents related to geotechnical investigations.

Environmental Permitting

As HRCP advanced the project design, adjustments were necessary to the overall footprint and configuration of environmental impacts originally presented in the August 2019 JPA submission. These revisions required a re-Public Notice of the permit application by the USACE, which was initiated on February 3, 2020, and ended on February 20, 2020. HRCP provided several RFI responses to agencies, including:

- Information requested during the January 29, 2020 meeting
- Information to support the USACE re-Public Notice
- USACE's December 10, 2019 HRCP Commitments Table
- December 11, 2019 Agency Meeting Action Items
- January 9, 2020 Agency Dredge Meeting.

An additional formal request of information for the JPA was provided by the USACE on February 13, 2020. HRCP is currently developing a response plan to appropriately address the request.

HRCP provided responses to the US Army Corps of Engineers (USACE) Request for Additional Information for the Section 408 Request on February 7, 2020. The US Coast Guard (USCG) issued a concurrence letter for the Section 408 Request on February 13, 2020. Coordination with USACE is ongoing.

Third Party Coordination

Post-award coordination with the U.S. Navy and the Federal Highway Administration (FHWA) started in April and is ongoing. FHWA participates in weekly coordination meetings with VDOT and HRCP.

3. Project Schedule

3.1 Schedule Status

Baseline Schedule

The Baseline Schedule has been accepted as the Schedule of Record. The current longest path for the project remains through the boring of the two new tunnels beginning with the design, permitting, and construction of the South Island Portal.

Permitting Schedule

The Project's USACE, Virginia Department of Environmental Quality (DEQ) and Virginia Marine Resources Commission (VMRC) permits include multiple administrative documents, including the Coastal Zone Management (CZM) consistency determination, the USACE Section 404/10 permit, USACE Section 408 Permission Letter, the DEQ water protection permit, and the VMRC subaqueous land permit.

The VMRC permit information is scheduled to be present at the VMRC Board during the last week of March. The DEQ Virginia Water Protection (VWP) permit is scheduled for public notification in April and a mid-May permit issuance is projected. The USACE has completed their public notification period (ended February 20, 2020) and are evaluating all comments received. HRCP is targeting June to receive the permits, provided the Section 408 review is completed. HRCP continues to work with the USCG with the goal of having bridge permits issued around June 2020.

Key Dates

The following table depicts key milestone dates outlined in the contract requirements. HRCP's submitted Baseline Schedule reflects the early stages of HRCP's planning sequence and will be substantially refined and further detailed as the design advances. This table will be updated to reflect these dates and used as a benchmark to track milestone achievements.

Key Dates	Contract Requirement	Schedule of Record Dates	February 2020 Update	Actual
LNTP1		April 12, 2019	April 12, 2019	April 12, 2019
LNTP1 Completion Milestone		September 25, 2019	September 24, 2019	September 24, 2019
LNTP2		September 29, 2019	September 25, 2019	September 25, 2019
LNTP3		October 9, 2019	September 25, 2019	September 25, 2019
NTP		October 10, 2020	October 8, 2020	
Substantial Completion	September 1, 2025	July 18, 2025	July 18, 2025	
Final Completion	November 1, 2025	November 1, 2025	November 1, 2025	

3.2 Longest Path

The longest-path activities for the Project schedule include:

- Design of the South Portal Launching Pit Package 1 for Early Works and Utility Relocations
- Installation activities for slurry and water treatment plans on site
- Completion of the Slurry Walls for Cell 1 of the launching pit
- Completion of the South Portal launching pit
- Assembly of the Tunnel Boring Machine (TBM) in the launching pit
- TBM drive in the HOT tunnel, U-Turn then drive in GP tunnel
- Finishing works and MEP works in HOT tunnel
- Commissioning and integration tests

3.3 Impact Analysis

Several elements of work are near-critical and could affect Project progress if they are not addressed diligently. The Department and HRCP are closely monitoring these activities. The following work elements have been identified as near critical, meaning there is less than one month of float in the Baseline Schedule:

- JPA Process
- Design of Stage 2 Launching Pit Slurry Walls
- Design and construction of permit-dependent structures at Oastes Creek and Bay Avenue
- Space proofing report for the TBM procurement
- Utility relocations

Achieving the initial public-notice milestone for the project's JPA allowed LNTP2 and LNTP3 to be issued. LNTP2 enables procurement of the TBM, while LNTP3 allows commencement of construction work for the launching pit and ground improvement on South Island. Receipt of the project's Corps of Engineers, DEQ and VMRC permits will allow full NTP for the Project.

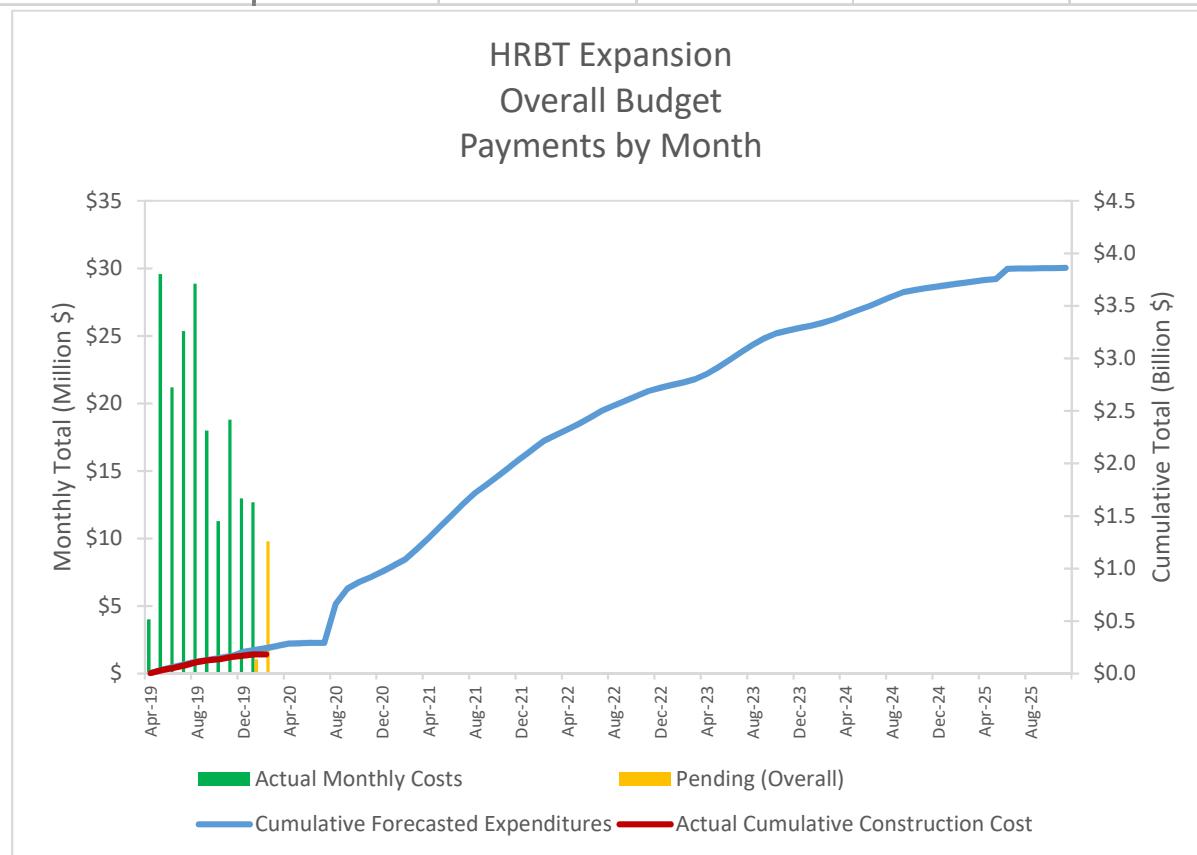
4. Budget and Cost

4.1 Overall Budget

The overall budget outlined in this report is based on the terms and conditions of Article 3 (Project Funding) in the Project Agreement for Funding and Administration (PAFA). The cost curve is based on Exhibit 6 of the CA (monthly maximum cumulative compensation amount).

Amounts this period reflects payouts for Construction, Engineering Administration, Right of Way, and Contingency between January 19, 2020 – February 22, 2020.

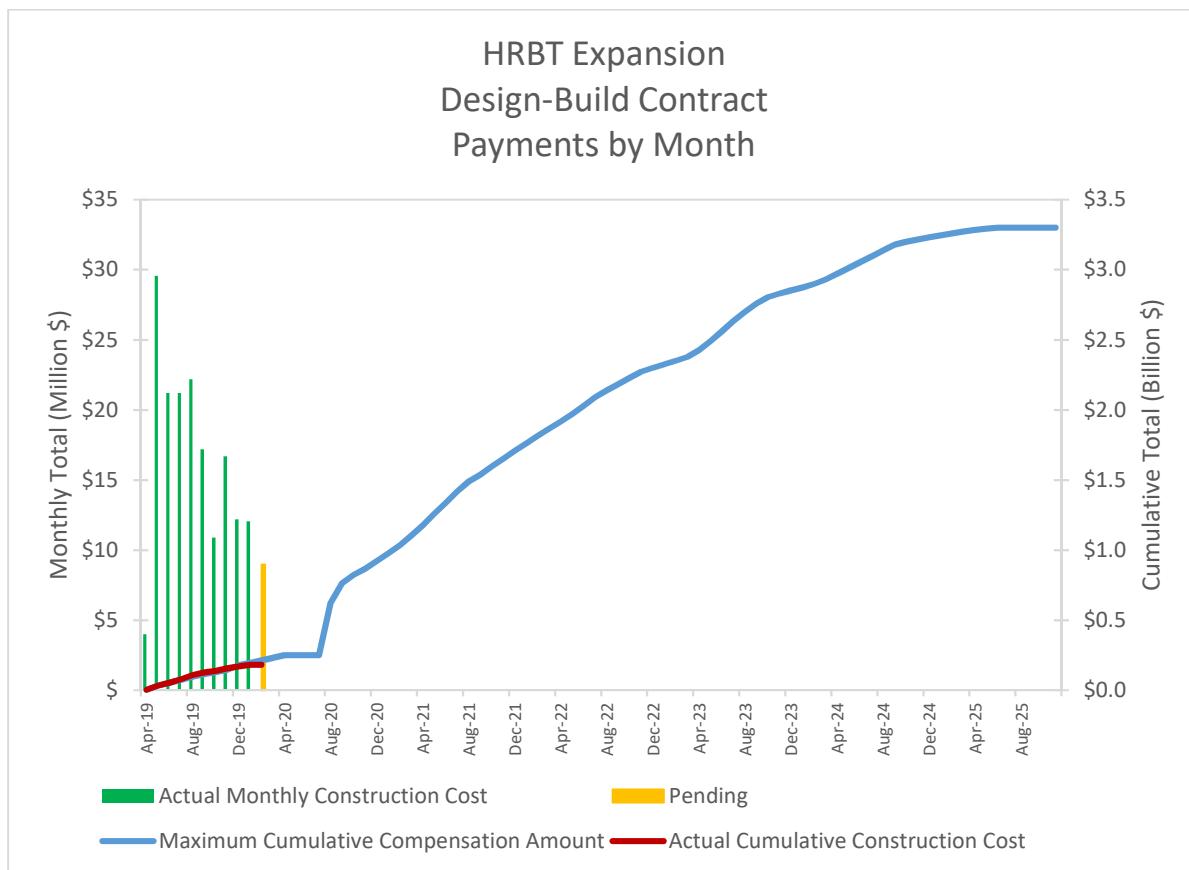
	Amount this period:	Total to Date:	Total Budget:	Total Remaining Budget:	Percent Spent To-date:
Comprehensive Agreement					
Construction	\$12,040,079.57	\$167,134,259.87	\$3,299,997,227.19	\$3,132,862,967.32	5.06%
Owner Costs					
Administration	\$0.00	\$5,145,046.92	\$122,000,000.00	\$116,854,953.08	4.22%
Right of Way	\$0.00	\$6,349,338.56	\$15,000,000.00	\$8,650,661.44	42.33%
No-Excuses Incentive	\$0.00	\$0.00	\$90,000,000.00	\$90,000,000.00	0.00%
Contingency	\$0.00	\$4,000,000.00	\$335,000,000.00	\$331,000,000.00	1.19%
Total	\$12,040,079.57	\$182,628,645.35	\$3,861,997,227.19	\$3,679,368,581.84	4.73%



4.2 Design-Build Cost Status

The construction budget and planned cost have been established based on the maximum cumulative compensation amount. For this period, the following tasks are associated with the invoiced expenditures (actual construction cost):

- Project management
- Design surveys
- Environmental permitting
- Geotechnical investigation
- Design work



4.3 Budget by Funding Source

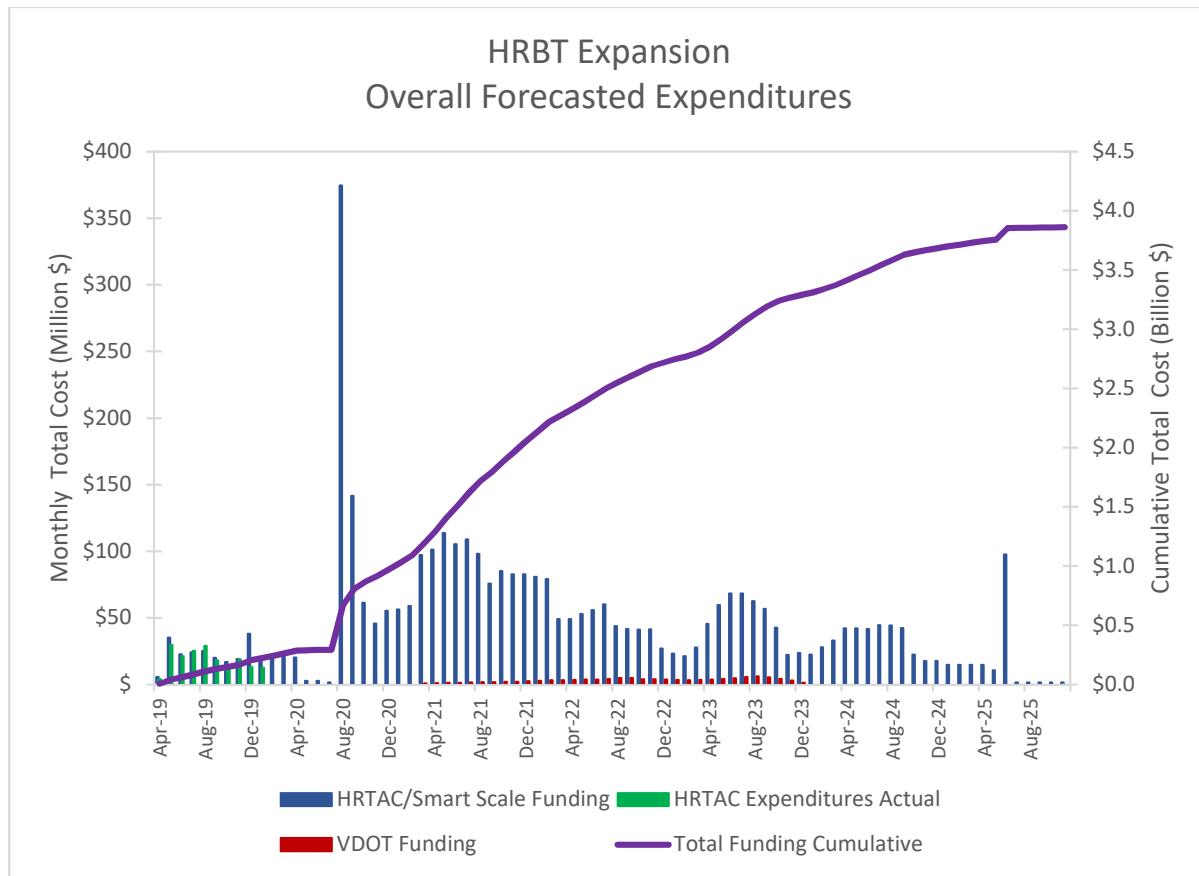
The budget for expenditures by funding source is based on the terms and conditions of Article 3 (Project Funding) and Exhibit 5 of the PAFA. This section outlines planned expenditures by both HRTAC and VDOT. The cost curve has been developed based on the monthly maximum cumulative compensation amount in the CA and will be updated as HRCP refines its design, construction means-and-methods, activity sequences, and project resourcing.

4.3.1 HRTAC and Smart Scale

	Amount this period:	Total to Date:	Total Budget Including Smart Scale:	Total Remaining Budget:	Percent Spent To-date:
Comprehensive Agreement					
Construction	\$12,040,079.57	\$167,134,259.87	\$3,204,569,251.14	\$3,037,434,991.27	5.22%
Owner Costs					
Administration	\$0.00	\$5,145,046.92	\$118,472,054.00	\$113,327,007.08	4.34%
Right of Way	\$0.00	\$6,349,338.56	\$15,000,000.00	\$8,650,661.44	42.33%
No-Excuses Incentive	\$0.00	\$0.00	\$90,000,000.00	\$90,000,000.00	0.00%
Contingency	\$0.00	\$4,000,000.00	\$325,428,276.00	\$321,428,276.00	1.23%
Total	\$12,040,079.57	\$182,628,645.35	\$3,753,469,581.14	\$3,570,840,935.79	4.87%

4.3.2 VDOT

	Amount this period:	Total to Date:	Total Budget:	Total Remaining Budget:	Percent Spent To-date:
Comprehensive Agreement					
Construction	\$0.00	\$0.00	\$95,427,976.00	\$95,427,976.00	0.00%
Owner Costs					
Administration	\$21,940.00	\$21,940.00	\$3,527,946.00	\$3,506,006.00	0.62%
Right of Way	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
No-Excuses Incentive	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
Contingency	\$0.00	\$0.00	\$9,571,724.00	\$9,571,724.00	0.00%
Total	\$21,940.00	\$21,940.00	\$108,527,646.00	\$108,505,706.00	0.02%



4.4 Contingency

- 1 work order to date
 - Change Order #1 (executed February 11, 2020): \$3,000,000 reduction in Contract Price due to Department's acquisition of Willoughby Staging Area.
- \$0 material price adjustments (asphalt, steel, & fuel) to date

5. Environmental Management

During this reporting period HRCP provided responses to various RFIs for the JPA, VPDES permit application, and the Section 408 request. This included information required for the USACE re-Public Notice, which closed on February 20, 2020. The VMRC posted their public notice on November 29, 2019 and requested that public comments/inquiries be submitted within 15 days. On February 13, 2020, the USACE provided a formal RFI for the JPA, and HRCP is currently developing a comment response spreadsheet to address this request.

HRCP is working through the Nesting Bird Management Plan, and implementation of management measures on the South Island, as outlined in the management plan. HRCP continues to coordinate with VDOT concerning revisions to the limits of disturbance, DEQ discharge permitting for the bridge/tunnel construction, updates to the SWPPP, and modification to the Construction General Permit (VAR10L793).

6. Operations

Field activities continued this period to support Scope Validation and early design efforts. Shoulder closures and lane closures were conducted for geotechnical exploration and survey work. Corridor-wide field inspections were also performed for existing drainage structures. Landside geotechnical borings are 63% complete.

Marine geotechnical explorations continued. Two self-propelled lift boats, three smaller barges, and a tug supported spud barge are mobilized to complete the more than 400 marine borings along the HRBT trestle bridges and Willoughby Bay Bridge. This program is expected to last through April 2020.

Other geotechnical investigations in wetlands governed by the NW-6 permit continued during this period. This work requires the use of a mud buggy/track rig to access boring locations located in environmentally sensitive areas.

South Island paving was completed during this period. Additional stone placement over areas that could not be paved on the South Island was also completed.



Additional stone placement on South Island

HRCP held several meetings to begin coordinating the development of several plans that will be implemented at Notice to Proceed. The Maintenance Management Plan will govern how they perform required maintenance in the corridor. The Incident Management Plan will govern how traffic incidents in the corridor are responded to, including having wreckers staged and established detour routes.

VDOT's project team maintains close coordination with the Hampton Roads Harbor Tunnels (HRHT) facility staff in order to communicate ongoing project work as well as coordinate upcoming planned work at the facility.

The weekly coordination meeting between VDOT and HRCP continues to provide a forecast of upcoming field activities and ensures concurrent activities are properly coordinated. All field work and traffic impacts are being reported through VDOT's Lane Closure Advisory Management System (LCAMS), which enables coordinating traffic operations across the region.

7. DBE & SWaM Business Activities

During the reporting period, HRCP met with small businesses to discuss opportunities available on the project. VDOT continued to review certified payrolls and other required compliance submittals from the Design-Builder.

USDOT's Bonding Education Program's (BEP) 4-day training was held on February 4, 6, 11 and 13, 2020. The Program was hosted by the South Atlantic Region Small Business Transportation Resource Center (SBTRC), Virginia Department of Transportation (VDOT), and Hampton Roads Connector Partners (HRCP). The program consisted of four sessions featuring curriculum aimed to assist participating firms with building capacity. During each five-hour session, participants learned from subject matter experts and sessions on Construction Accounting, Project Management, and Safety. Firms also had the opportunity to meet one-on-one with bonding surety producers from Construction Bonds Inc. and Centennial Surety Associates. The program attracted DBE firms from the region ranging from Washington, DC to North Carolina. A total of 20 firms graduated from the BEP program.



Hampton Roads Bridge Tunnel Expansion
Bond Education Program (BEP)
2020 DBE Participants



Hampton Roads Bridge Tunnel Expansion
BEP Program Stakeholders



Hampton Roads Bridge Tunnel Expansion
2020 Bond Education Program

VDOT and HRCP held Monthly Civil Rights Compliance Meetings on January 21, 2020 and February 18, 2020. Meeting highlights included:

- Hiring Outreach Event previously planned for May has been postponed until the upcoming Fall
- Proposed formation of a Community Roundtable for the Project
- 4-Week Construction Look-Ahead identifying DBEs active on the Project
- Submission of quarterly Good Faith Effort reports
- Reporting all vendor payments to VDOT

VDOT and HRCP participated in a meeting on January 21, 2020 hosted by the Peninsula Workforce Development Council in Newport News as a follow-up to previous discussions on workforce development initiatives in the region. The Council remains interested in assisting HRCP in identifying qualified workers when employment classifications and opportunities are identified.

VDOT and HRCP partnered in hosting an information table during the Women in Defense (WID) of the Greater Hampton Roads Chapter's Industry Day held on February 19, 2020 at the Westin Virginia Beach Town Center. Participants learned about business opportunities available on the HRBT Expansion Project while obtaining information on doing business with VDOT and other contracting opportunities available throughout the Hampton Roads District.

8. Public Outreach

January 28, 2020 – VDOT representatives Ha Koehler and Paula Miller presented the project to the Coliseum Central Business Group in Hampton.



Ha Koehler of VDOT's Outreach Team explains the expansion project to members of the Coliseum Central Business Group in Hampton on January 28.

February 4, 2020 – HRBT Deputy Project Director Pete Reilly provided Norfolk City Council members with the latest milestones on the HRBT project. City Council is briefed approximately twice a year, in addition to quarterly briefings provided to the city managers of Norfolk and Hampton.

February 12, 2020 – VDOT representatives Paula Miller and Delceno Miles briefed members of the Bank of America Executive Board on plans for the project.

February 19, 2020 – Communications Manager Paula Miller joined members of Women in Transportation (WTS-Hampton Roads Chapter) to explain the HRBT Expansion Project to students of the CHROME Club at Churchland Middle School in Portsmouth.

February 20, 2020 – Communications Manager Paula Miller and HRCP Communications Manager Stephen Meyers met with members of the Willoughby Bay Racers to discuss potential project impacts to the boat owners who race near the area HRCP plans to use as a construction staging area.