

I-64 Hampton Roads Express Lanes (HREL) Segment 4C

Initial Financial Plan

October 31, 2021

State Project Number 0064-114-374 UPC 117841/119638

Table of Contents

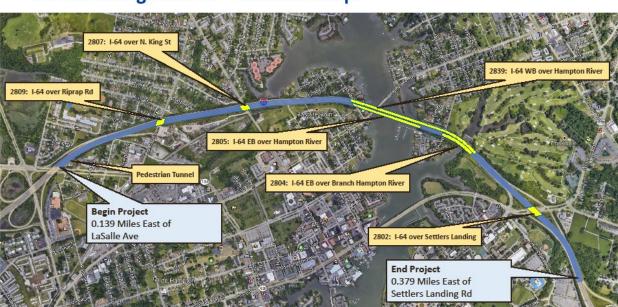
1.	Project Description	. 3
2.	Schedule	4
	Project Schedule Overview	
3.	Project Cost	5
	Project Cost by Phase	
4.	Project Funds	6
5.	Financing Issues	7
6.	Cash Flow	7
7.	P3 Assessment	8
8.	Risk and Response Strategies	8
	Annual Update Cycle	

1. PROJECT DESCRIPTION

This project is located in the City of Hampton and is part of the Hampton Roads Express Lanes (HREL) Network. The scope includes widening eastbound (EB) and westbound (WB) I-64 from 0.139 miles East of LaSalle Ave (MM265.5) to 0.379 miles East of Settlers Landing Rd (MM267.8). The proposed improvements include rehabilitation of the existing lanes and an additional 12-ft wide travel lane in each direction. The three existing eastbound (EB) and westbound (WB) general purpose (GP) lanes will be converted into two express lanes managed lanes, and two GP lanes. This will extend the full roadway section of the Hampton Roads Bridge Tunnel (HRBT) Expansion project to the west for 2.4 miles.

This section of interstate includes six mainline bridges, one pedestrian underpass and one triple 48" RCP (reinforced concrete pipe) section carrying Brights Creek beneath I-64. The two EB Hampton River bridges will be replaced with a single bridge. The WB Hampton River bridge will be widened and rehabilitated. The EB and WB portions of the bridge over King Street will be widened and rehabilitated. The EB and WB portions of the bridge over Settlers Landing will be rehabilitated, and the WB bridge will be widened. The bridge over Rip Rap Road will be rehabilitated with no widening.

The widening is expected to occur mostly in the median of the existing interstate. This limits the amount of right of way required to construct the project and avoids impacts to existing interchanges. Interstate ramps will be realigned as needed. It is anticipated that right of way and/or easements will be acquired along the EB and WB directions with approximately 59 parcels impacted. The number of impacted parcels is pending on final design of drainage ditches, roadway embankments, retaining walls, noise barrier wall, and potential utility relocations.



I-64 HREL Segment 4C – Location Map

In accordance with the requirements of the National Environmental Policy Act (NEPA) and other Federal and state laws and regulations, environmental studies assessing the project's potential impacts will be documented in a Categorical Exclusion (CE) for this project. NEPA Document Concurrence was received on December 22, 2020.

A project website has been established at the following location: http://www.64expresslanes.org/under-design/hampton.asp

This website provides a project summary, cost, schedule overview, location map and a link to the Request for Qualifications (RFQ) website.

2. SCHEDULE

The RFQ was advertised on April 30, 2021. The Request for Proposals (RFP) will be released to the three short-listed teams on November 10, 2021. The anticipated notice to proceed date for the design-build contract is June 24, 2022. Based on a preliminary schedule, the remaining design efforts are estimated to take place between June 2022 and June 2024. Remaining right of way acquisitions and utility relocations are anticipated to occur between June 2022 and December 2024. Construction activities are anticipated to begin in June 2022. The final completion date is December 19, 2025, or the Offeror's proposed early completion date.

Below is a listing of milestone dates for this design-build contract:

Milestone	Milestone Date			
RFP release	November 10, 2021			
Technical Proposal due	April 7, 2022			
Price Proposal due	May 17, 2022			
Open Price Proposal	May 19, 2022			
Notice of Intent to Award	May 24, 2022			
Award	June 15, 2022			
Design Build Contract Execution	June 21, 2022			
Notice to Proceed	June 24, 2022			
Final Project Acceptance & Final Payment	December 19, 2025			

Below is an approximate anticipated schedule for the selected design-build team:

PROJECT SCHEDULE OVERVIEW

Task		Start	Finish	2022	2023	2024	2025	2026
Notice to Proceed		06/22	06/22	•				
Н	PE- Design	06/22	06/24					
UPC 117841	RW/Utilities	n/a	n/a					
UP 11	Construction	n/a	n/a					
80	PE- Design	06/22	06/24					
JPC 19638	RW/Utilities	06/22	12/24					
UPC 1196	Construction	06/22	12/25					
Construction Complete		12/25	12/25					

3. PROJECT COST

Narrative of Project Cost

The current total project estimate is \$429,754,878. The project will be completed as a Design-Build project. The estimates, as well as current expenditures for Preliminary Engineering (PE), Right of Way (RW) and Construction (CN) costs are summarized in the table below. The project will be funded by the Hampton Roads Transportation Accountability Commission (HRTAC) using Hampton Roads Transportation Funds (HRTF). Authorization to complete advanced PE work (Phase 1 PE) to complete tasks necessary to include this project in the 2045 Long Range Transportation Plan (LRTP), the Transportation Improvement Program (TIP)/Statewide Transportation Program (STIP) and to advance this design-build project was approved by HRTAC per the Standard Project Agreement between VDOT and HRTAC executed on April 1, 2021. PE expenditures as of July 31, 2021 are \$3,133,444. Work to execute a Standard Project Agreement between VDOT and HRTAC for the remaining PE, RW and CN activities is currently underway.

PROJECT COST BY PHASE

UPC	Phase	Estimate	Expenditures as of 7/31/21	Balance to Complete
11	PE (Phase 1 PE)	\$15,421,200	\$3,138,444	\$12,282,756
117841	SUBTOTAL	\$15,421,200	\$3,138,444	\$12,282,756
	PE	\$4,578,800	\$0	\$4,578,800
119638	RW	\$9,625,000	\$0	\$9,625,000
119	CN	\$400,129,878	\$0	\$400,129,878
	SUBTOTAL	\$414,333,678	\$0	\$414,333,678
GRAND TOTAL		\$429,754,878	\$3,138,444	\$426,616,434

Cost Estimating Methodology

Work elements associated with the HREL Segment 4C project can be summarized in two components: (1) PE Advanced Activities (Phase 1 PE) and (2) the full build Remaining PE, full RW and CN.

PE Advanced Activities (Phase 1 PE) UPC 117841: The work associated with this component is to complete tasks necessary to include this project in the 2045 Long Range Transportation Program (LRTP), the Transportation Improvement Program (TIP)/Statewide Transportation Improvement Program (STIP) and to advance this design-build project to a Public Hearing. The Phase 1 PE tasks include field investigation costs for survey, aerial mapping, subsurface utility designation, bridge investigation, traffic studies, scoping plan development, risk analysis & matrix, pavement design, noise wall investigations and schedule and estimate refinements.

Full Build Remaining Activities (Remaining PE, Full RW and CN) UPC 119638: This work includes the remaining activities to develop design plans and construction documents. The right of way phase estimate includes the estimated cost of right of way and easements acquisition, miscellaneous fees associated with real estate closings as part of the project and oversight of the right of way acquisition, payment, and condemnation process. The right of way phase also includes utility design and public utility relocation fees. The project construction cost estimate was developed through VDOT's Preconstruction (PRECON) estimate program and includes all roadway, bridge, drainage, traffic, maintenance of traffic, lighting, traffic control devices, traffic management systems, landscape and other items.

4. PROJECT FUNDS

The project will be funded through Hampton Roads Transportation Funds (HRTF). The current total project cost estimate is \$429,754,878. On April 1, 2021, the Hampton Roads Transportation Accountability Commission (HRTAC) executed a Standard Project Agreement for Funding and Administration with VDOT that authorized \$15,421,200 of funding for Phase 1 PE project costs.

The remaining PE, RW and CN funding is anticipated to be funded entirely from HRTAC. The VDOT-HRTAC resolution and a Standard Project Agreement to fund the remaining PE and Right of Way phases of the project for \$14,203,800 is planned to be executed in December 2021 and the amendment to add the Construction phase to the Agreement in the amount of \$400,129,878 is planned for June 2022.

The below table summarizes the funding allocated to the HREL 4C project improvements by fund source and year.

SUMMARY OF PROJECT FUNDING BY SOURCE AND YEAR

Funding Source		Duovious	FY 2023	FY 2024	FY 2025	FY 2026	TOTAL
UPC	Funding	Previous	F1 2023	F1 2024	F1 2025	F1 2026	TOTAL
Other Source							
117841	HRTAC	\$8,719,987	\$6,701,213	\$0	\$0	\$0	\$15,421,200
119638	HRTAC	\$9,305,319	\$117,211,954	\$118,344,874	\$113,381,268	\$56,106,955	\$414,350,370
GRAND TOTAL		\$18,025,306	\$123,913,167	\$118,344,874	\$113,381,268	\$56,106,955	\$429,771,570

Federal Fund Sources and Special Funding Techniques

The Hampton Roads Transportation Planning Organization (HRTPO) has included all phases of this project in its Long Range Transportation Plan. The PE Phase 1 phase of this project is included in HRTPO's TIP as well as the Commonwealth's FFY21-24 STIP to include \$15,421,200 of HRTF funding authorized by HRTAC.

VDOT is working with the HRTPO to include the remaining PE, RW and CN in the HRTPO's TIP and the Commonwealths STIP which should be finalized in November 2021 which is anticipated to be funded entirely with HRTF funds.

5. FINANCING ISSUES

Expenditures currently being accrued under the Advanced Activity UPC (UPC 117841). Work to execute a Standard Project Agreement between VDOT and HRTAC to fund the remaining PE and Right of way phases of the project for \$14,203,800 is planned to be executed in December 2021 and the amendment to add the Construction phase to the Agreement in the amount of \$400,129,878 is planned for June 2022. No financing issues are anticipated at this time.

6. CASH FLOW

The HREL Segment 4C project annual cash expenditures are based on the project schedule developed by VDOT and the design team. The below table summarizes the cash flow analysis for the project, and it will be updated annually as expenditures are incurred. It shows the comparison of previously expended and projected expenditures by fiscal year by phase against the total annual allocations.

CASH FLOW ANALYSIS

Expenditures		Thru FY 2022	FY 2023	FY 2024	FY 2025	EV 2026	TOTAL
UPC	Phase	111ru F 1 2022	F1 2023	F1 2024	F1 2025	FY 2026	IOIAL
	PE	\$7,117,697	\$6,701,213	\$1,602,290	\$0	\$0	\$15,421,200
117841	RW	\$0	\$0	\$0	\$0	\$0	\$0
117041	CN	\$0	\$0	\$0	\$0	\$0	\$0
	Total	\$7,117,697	\$6,701,213	\$1,602,290	\$0	\$0	\$15,421,200
	PE	\$0	\$1,938,763	\$1,868,563	\$514,280	\$257,194	\$4,578,800
119638	RW	\$0	\$3,609,361	\$4,812,481	\$1,203,158	\$0	\$9,625,000
113030	CN	\$9,305,319	\$111,663,830	\$111,663,830	\$111,663,830	\$55,849,761	\$400,146,570
	Total	\$9,305,319	\$117,211,954	\$118,344,874	\$113,381,268	\$56,106,955	\$414,350,370
Cumulative Expenditures		\$16,423,016	\$140,336,183	\$260,283,347	\$373,664,615	\$429,771,570	\$429,771,570
Total Annual Allocations		\$13,284,572	\$123,913,167	\$118,344,874	\$113,381,268	\$56,106,955	\$429,771,570
Cumulative Allocations		\$18,025,306	\$141,938,473	\$260,283,347	\$373,664,615	\$429,771,570	\$429,771,570
Cash Flow per Year		\$1,602,290	\$1,602,290	\$0	\$0	\$0	\$0

7. P3 ASSESSMENT

The project was evaluated for various delivery methods including alternative delivery methods. A Finding of Public Interest was signed by the Commissioner on April 27, 2021 determining that a design-build delivery for the proposed project will best serve the public interest. The project was identified as one of the Hampton Roads Regional Priority Project by HRTAC and HRTPO in March 2021. The HRTPO and the HRTAC have been committed to seek a plan to fund the project through HRTF.

8. RISK AND RESPONSE STRATEGIES

A risk assessment has been performed and associated risk mitigation strategies have been developed to address the risk items identified for this project. The most significant risks are noted below.

- A. FHWA Approval of Design Exceptions: Due to the existing and proposed geometry, multiple Design Exceptions are required, which require approval by FHWA. Some of the more critical Design Exceptions include substandard stopping sight distance due to the vertical and horizontal geometry as well as substandard proposed shoulder widths along both the roadway and bridge within the entire Project Limit. Should these design exceptions not be approved by FHWA, the risk of significant impacts to the project scope, schedule, cost and right of way footprint will be high.
 - Mitigation Strategy: Design Exceptions are currently being coordinated with VDOT District and Central Offices. VDOT will coordinate with FHWA to obtain their input/concerns prior to an official approval submittal by VDOT.
- B. Constructability of the Hampton River Bridges: Phased construction of the Hampton River bridges will be very constrained. The Design Builder will be working between the high voltage power lines and residential properties for the construction of these bridges. Erecting beams and picking materials over the water without impacting traffic or violating

clearance requirements for power lines will be challenging. Total takes of two residential properties is expected to be required in order to widen the WB Hampton River Bridge. This could pose risk to the Design Builder and increase cost and schedule implications.

Mitigation Strategy: VDOT will account for bridge complexity and constructability challenges in project schedule and estimate. RFP will allow flexibility for the Design Builders to develop innovative constructability solutions. If total takes are deemed unavoidable, VDOT will begin Right of Way acquisition coordination with property owners in advance of NTP.

C. Traffic Impacts during Construction: In order to construct this project, the Design Builder will need to reduce I-64 to two (2) through lanes in the EB and WB directions during Construction. This will be a reduction of one (1) through lane in each direction. Traffic backups and delays are expected to increase in the work zone due to this reduction. Construction of the adjoining HRBT and Segment 4B projects are also expected to contribute to backups and delays in this corridor.

Mitigation Strategy: VDOT is developing a Work Zone Traffic Analysis to determine the specific impacts due to the reduction of one lane in each direction during construction of the I-64 Mainline. VDOT will consider including specific requirements in the RFP to ensure adjacent project Transportation Management Plans (TMPs) are coordinated. Additionally, VDOT will implement a corridor-wide multi-project Maintenance of Traffic (MOT)/TMP review protocol for all corridor projects along with implementing an enhanced partnership with the City of Hampton to mitigate effects to the adjoining primary system. VDOT will increase public awareness of the planned reduced capacity in the project corridor through a coordinated Public Outreach and Communication Plan. In addition to providing project updates, this Plan will advise the travelling public to use alternate routes or allow for additional time in their commute during project construction.

D. Approval of Converting One General Purpose Lane to a HOT Lane: The Public Hearing and approval of the proposed HOT Lane conversion are outstanding. This item poses risk to the project scope and schedule.

Mitigation Strategy: VDOT will discuss the addition of HOT Lanes on I-64 with the Public using a corridor wide approach. The entire Hampton Roads Express Lanes Network will be provided to the public for input. This public outreach will be performed prior to and in addition to the Public Hearing.

9. ANNUAL UPDATE CYCLE

The submission date of the Initial Financial Plan is October 31, 2021. The first annual update will be submitted by October 31, 2022, and will be based on a "data as of" date of July 31, 2022. Future annual updates will be submitted by October 31 of that year, with a "data as of" date of July 31 of that year.