



**Route 264 – Interchange
Improvements – 64 WB Ramp to
264 EB
Financial Plan Annual Update**

December 31, 2019

State Project Numbers: 0264-122-108, P107, R204,
C508, B602, B603, B604, B605, B616, D604, D605
UPCs: 57048, 108042

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EXECUTIVE SUMMARY

This Design-Bid-Build project is phase 1 of the I-64/I-264 Interchange Improvements in Hampton Roads, Virginia. The proposed improvements will increase capacity, improve safety, and traffic operations along westbound I-64 and eastbound I-264 in the vicinity of the I-64/I-264 interchange in the City of Norfolk.

The project is currently under construction and is projected to be completed on April 20, 2020. Project activities in 2019 included:

- Completed Phase 3, B-603 and B-605; I-64 WB CD Roads to Newtown Road
- Completed Phase 4, B-602; I-64 WB to I-264 EB Flyover
- Completed Box Culvert 8-34 a 1,054 feet long 8x6 foot box
- An Engineering Alternative/ Value Engineering Proposal

The current total project cost estimate is \$158,730,023, unchanged since the last Financial Plan Annual Update. Ten change orders have been processed as of September 30, 2019, equaling a total amount of \$479,269.

The RW Phase expenditures have exceeded the original budget. A significant number of parcels went through eminent domain procedures and the amounts awarded to the original property owners exceeded expectations and estimates. There remains one parcel which has not been completely settled as of this date. The settlement is anticipated to be completed by end of CY 2019.

The project Right of Way and Construction phases are funded from non-federal sources. The allocations are from Hampton Roads Transportation Accountability Commission (HRTAC) Hampton Roads Transportation Fund (HRTF).

1. PROJECT DESCRIPTION

The proposed I-64/I-264 Ramp Improvement project is one of two adjacent projects which, when completed, will provide approximately 4 miles of interstate improvements from the I-64 Twin Bridges in Norfolk to the I-264 Witchduck Road interchange in Virginia Beach. The improvements will provide additional capacity, relieve daily congestion, reduce crash rates, and improve safety and traffic operations along the corridor.

The proposed I-64/I-264 improvements include adding a second exit lane on westbound I-64 and introducing a new two lane Collector-Distributor (C-D) roadway from I-64 to the Newtown Road interchange mainly on elevated bridge structures. The existing one lane exit ramp will be replaced with a new two-lane flyover ramp from westbound I-64 tying into the existing eastbound I-264. The adjacent I-264/Witchduck Road Interchange & Ramp Improvements project (UPC 17630) includes extending the new C-D roadway from the Newtown Road interchange to the Witchduck Road interchange, reconfiguring the

south side of both interchanges to eliminate the weave movements, and constructing an overpass to connect Greenwich Road on the south side of I-264 and Cleveland Street on the north side. Below figures show the project location map and project improvements.

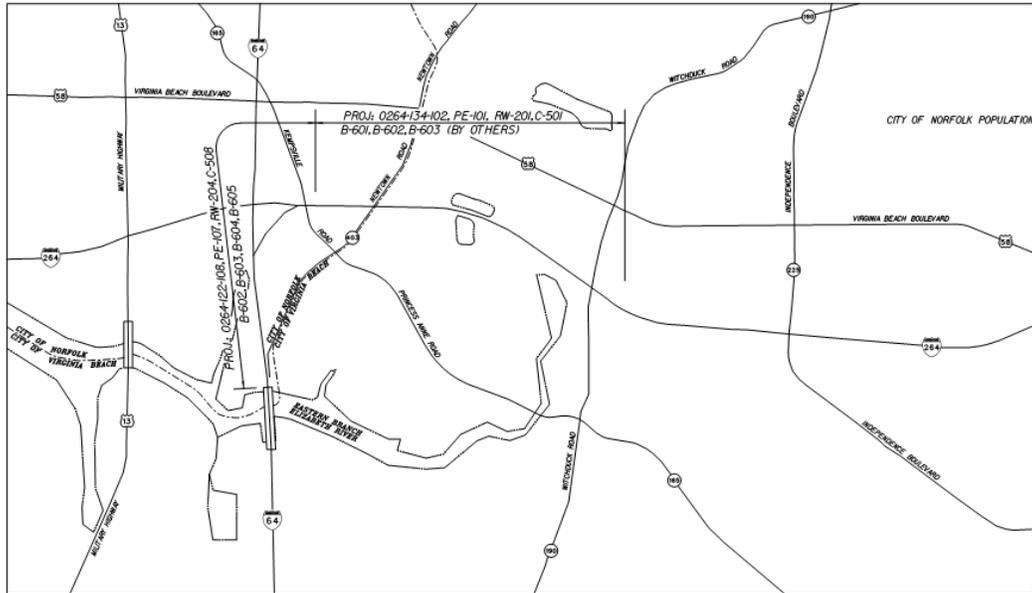


Figure 1 - 64/264 Ramp Improvement Projects



Figure 2 - UPC 57048 Ramp Improvements Map

A Categorical Exclusion (CE) NEPA document was approved by the Federal Highway Administration (FHWA) on February, 19, 2008. The CE evaluated an area encompassing the project limits for both UPC 57048 and UPC 17630 under one environmental

document. An Interchange Modification Report was approved by FHWA on November 14, 2011. A combined Location and Design Public Hearing was held on July 14, 2011.

The project website is available at the following link: www.i64i264improvements.org

2. SCHEDULE

The Commonwealth Transportation Board (CTB) awarded the construction contract to the lowest bidder, Tutor Perini Corporation, on September 21, 2016. Notice to Proceed was issued to the contractor on October 17, 2016, and the construction began on November 21, 2016. Major items that have been completed include: completing Phase 3 and Phase 4, and Box Culvert 8-34. The contract fixed completion date is October 24, 2019. The contract also includes an early completion incentive.

The initial financial plan schedule is shown in Table 1A with the Contractor’s current projected schedule shown in Table 1B.

Table 1A – Initial Financial Plan Project Schedule Overview (Calendar Year)

	2015	2016	2017	2018	2019
Task	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D
PE - Design					
RW/Utilities					
Construction					

Table 1B – Current Project Schedule Overview (Calendar Year)

	2016	2017	2018	2019	2020
Task	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D
Pe-Design					
RW/ Utilities					
Construction					

3. PROJECT COST

Narrative of Project Cost

The original total project estimate was \$157,142,416. The current total project estimate is \$158,730,023. The project will be completed as a Design-Bid-Build project. The estimates, as well as current expenditures for Preliminary Engineering (PE), Right of Way (RW), and Construction (CN) costs as of September 30, 2019 are summarized in the table below. The project currently has active RW and CN phases. RW and CN phases are funded by Hampton Roads Transportation Accountability Commission (HRTAC) Hampton Roads Transportation Fund (HRTF). These expenditures are summarized under “child” UPC 108042 in Table 2. Combined preliminary engineering, right of way, and construction expenditures as of September 30, 2019, were \$142,559,700.

Table 2 - Project Cost by Phase

UPC	Phase	Estimate	Current Expenditure	Balance to Complete
57048	PE	\$6,635,307	\$6,635,307	\$0
	RW			\$0
	CN			\$0
	SUBTOTAL	\$6,635,307	\$6,635,307	\$0
108042	PE	\$3,500,000	\$3,500,000	\$0
	RW	\$11,571,063	\$20,430,879	(\$8,859,816)
	CN	\$137,023,653	\$111,993,514	\$25,030,139
	SUBTOTAL	\$152,094,716	\$135,924,393	\$16,170,323
57048 + 108042	PE	\$10,135,307	\$10,135,307	\$0
	RW	\$11,571,063	\$20,430,879	(\$8,859,816)
	CN	\$137,023,653	\$111,993,514	\$25,030,139
	SUBTOTAL	\$158,730,023	\$142,559,700	\$16,170,323

Cost Estimating Methodology

The preliminary engineering estimate includes field investigation costs for survey, geotechnical data collection, traffic counts, environmental support, and professional engineering design services to develop design plans and construction documents. The preliminary engineering estimate also includes right of way and utility charges prior to right of way notice to proceed.

The right of way phase estimate includes the actual 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 TrnsPort estimate program and includes all roadway, bridge, drainage, traffic, maintenance of traffic, lighting, traffic control devices, traffic management systems, landscape, and other items.

Four bids were received on July 6, 2016. The bids varied approximately -4 to +5% from the engineer’s estimate with the lowest bid of \$107,380,000 and the highest bid of \$117,245,598.

4. PROJECT FUNDS

The project is funded by multiple funding sources, including HRTF. Federal funds include Interstate Maintenance (IM), National Highway System (NHS), and National Highway Performance Program Funds (NHPP). State funds include the match for the federal funds

and Priority Transportation Funds (PTF). On April 16, 2015, HRTAC executed an Interim Project Agreement for Funding and Administration with VDOT which authorized \$15,071,063 of funding in support of this project. On March 17, 2016, HRTAC executed a Standard Project Agreement between VDOT and HRTAC to fund the construction phase of the project for \$137,023,653. The proposed contract assumes that HRTAC would fund costs out of the HRTF on a “pay as you go” basis. That approach is consistent with the initial funding plan approved by HRTAC.

Table 3 summarizes the current funding allocated to this project by fund source and year.

Table 3 - Summary of Project Funding by Source

Funding Source		Previous	FY 2020	TOTAL
UPC 57048 / 108042	Interstate Maintenance	\$ 676	\$ -	\$ 676
	National Highway System	\$ 3,925,491	\$ -	\$ 3,925,491
	National Highway Performance Program (MAP-21)	\$ 727,684		\$ 727,684
	Federal Subtotal	\$ 4,653,851	\$ -	\$ 4,653,851
	State Match	\$ 981,456	\$ -	\$ 981,456
	Priority Transportation Funds	\$ 1,000,000		\$ 1,000,000
	State Subtotal	\$ 1,981,456	\$ -	\$ 1,981,456
	HRTAC *	\$ 143,985,880	\$ 8,108,836	\$ 152,094,716
	Other Subtotal	\$ 143,985,880	\$ 8,108,836	\$ 152,094,716
	TOTAL	\$ 150,621,187	\$ 8,108,836	\$ 158,730,023

* HRTAC funding is under UPC 108042.

Federal Fund Sources and Special Funding Techniques

The HRTPO has included all phases of this project in its Long Range Transportation Plan. The PE, RW, and CN phases of this project have been included in HRTPO’s TIP as well as the Commonwealth’s FFY18-21 STIP, which was approved by FHWA September 29, 2017.

Preliminary engineering associated with this project was authorized by the Federal Highway Administration (FHWA) on February 1, 2001.

Table 4 – Summary of Project Authorizations

Project Authorization Summary as of September 30, 2019						
Federal Project	UPC(s)	Phase Classification	Cost	Federal Funds	Advance Construction	Project Status
2646098	57048	PE	\$6,635,307	\$4,653,851	\$0	Closed

5. FINANCING ISSUES

A Standard Project Agreement between VDOT and HRTAC was executed on March 17, 2016, to fund the construction phase of the project for \$137,023,653.

With respect to the RW expenditures exceeding the original budget, the Project Agreement for PE and RW includes the following language: “If the Additional Costs cannot be absorbed in the initial budget by modifying or reducing the scope or design of the Initial Project Services, then, such Additional Costs shall be paid from HRTAC-Controlled Moneys and state and federal funds prorated based on the respective proportionate share of HRTAC-Controlled Moneys and state and federal funds in the Initial Project Services budget”. Based on the project funding proportions, the HRTAC portion of the overage would be 75% and the VDOT portion would be 25%. HRTAC is advised on the expenditure status for the project each month and the District continues to manage the project to reduce overall project costs to the greatest extent possible.

6. CASH FLOW

I-64/I-264 Ramp Improvement project annual cash expenditures are based on the project schedule developed by VDOT and the design team. As indicated in Section 5, the project RW budget currently has a shortfall of \$8,859,816.

Table 5 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.

Table 5 - Cash Flow Analysis

Expenditures		Thru FY 2019	FY 2020	FY 2021	Total
57048	PE	\$6,635,307	\$ -	\$ -	\$6,635,307
	Right of Way	\$0	\$ -	\$ -	\$0
	Construction	\$0	\$ -	\$ -	\$0
108042	PE	\$3,500,000	\$ -	\$ -	\$3,500,000
	Right of Way	\$20,430,879	\$ -	\$ -	\$20,430,879
	Construction	\$111,993,514	\$25,030,139	\$ -	\$137,023,653
Cumulative Expenditures		\$142,559,700	\$167,589,839	\$ -	\$167,589,839
Total Annual Allocations		\$150,621,187	\$8,108,836	\$ -	\$158,730,023
Cumulative Allocations		\$150,621,187	\$158,730,023	\$ -	\$158,730,023
Cash Flow per Year		\$8,061,487	(\$8,859,816)	\$ -	(\$8,859,816)

7. P3 ASSESSMENT

Alternate Project Delivery Office reviewed the project and determined that the project is not a good candidate for a Design-Build procurement or a P3 delivery.

8. RISK AND RESPONSE STRATEGIES

The Hampton Roads (HR) District adopted the statewide color coded (Green, Yellow, Red) statewide Erosion and Settlement Control (ESC) coding system. This project has consistently been rated as Green and Yellow by HR permitting and NPDES respectively.

Particular emphasis was placed on educating and training the contractor to exercise best practices; to stabilize denuded areas, lessen risk of sediment discharges from the site and to prosecute work adjacent to permitted Waters of the United States (WOTUS).

The CEI team has a full time Environmental Monitor (EM) assigned to the project to review work plans and inspect work as it is prosecuted near WOTUS. The completion of Box Culvert 8-34 (8x6 and 1,054 feet long), for example, required additional ESC/ BMP

bypasses be employed to maintain water flow, allow passage of aquatic wildlife to while work was prosecuted “in the dry”.

One hundred forty four (144) bridge columns supported by drilled shafts foundations were erected. Of particular interest was the risk involved with Bridge B-602 Pier 4 which was constructed under live 237 kV Dominion Power lines and over the Hampton Roads Transit (HRT) “The Tide” light rail line. Close coordination with Dominion Power and HRT to provide additional inspection and light rail closure windows over a weekend.

Safety to the traveling public during both Phases 3 and 4 required that Hampton Roads Traffic Operations approve detailed detour and signage plans for weekend closures of the interchange. In addition, risk to public safety was mitigated through the Hampton Roads Public Information Office. Motorists were provided sufficient notice of new traffic patterns and to slow down while traveling through them as they were opened.

The contractor proposed a shotcrete fascia nailed wall alternative to replace a top down drilled shaft wall “Wall R”. Wall R also included a structural section to be built on the existing I-64 EB Bridge over Curlew Drive and the HRT light rail line.

The Department reviewed the alternative and it became a formal Value Engineering Proposal (VEP) that included the removal of the structural section of the wall. Shared cost and time savings associated with the VEP are currently under negotiation with the contractor.

The CEI team resolved closure conflicts, prosecution of specific of work activities at the I-64/ I-264 Witchduck boundary that included the roadway tie-in and drainage features between the two projects.

The RW costs increased significantly due to higher than projected settlement costs in several condemnation cases. A majority of cases have been settled and the costs are included in the current expenditures of \$20,430,879. The remaining risk is associated with one outstanding parcel. Given the unpredictability of settlement amount, the project RW costs will need to be adjusted once actual costs are available. It is anticipated that the remaining one parcel will be settled by the end of 2019.

9. ANNUAL UPDATE CYCLE

The submission date of the Initial Financial Plan was December 31, 2015. This annual update is based on a "data as of" date of September 30, 2019. Future annual updates will be submitted by December 31 of that year, with a "data as of" date of September 30 of that year.

10. SUMMARY OF COST CHANGES SINCE LAST YEAR'S FINANCIAL PLAN

The current total project estimate is \$158,730,023. The RW phase expenditures currently exceeded the \$11,571,063 budget by \$8,859,816. Additional expenditures are expected as the remaining eminent domain cases are settled.

Ten change orders have been processed as of September 30, 2019 totaling \$479,269.

11. COST AND FUNDING TRENDS SINCE INITIAL FINANCIAL PLAN

No trends have been identified that impact the project construction cost over the past three years of construction except for the RW costs as outlined above. The costs will continue to be monitored during the construction phase and trends will be identified in the 2020 annual update.

RW costs experienced a significant increase due to the ongoing eminent domain cases as discussed in the previous sections. One parcel remains to be settled.

12. SUMMARY OF SCHEDULE CHANGES SINCE LAST YEAR'S FINANCIAL PLAN

There have been no changes since last year.

13. SCHEDULE TRENDS SINCE INITIAL FINANCIAL PLAN

The contractor has indicated that their projected completion date of April 20, 2020, was a result of not being compensated to accelerate to meet the needs of additional manpower and resources to finish the project by the October 24, 2019, Fixed Completion Date. The schedule will continue to be monitored during project construction.